

Beyond elite sports: Analysis of the coverage of anabolic steroids in the Spanish press (2007–2011)

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Abstract

This article explores how the issue of anabolic steroids has been covered by the Spanish press in a period when doping/drug abuse in sport has attracted considerable attention in the media. We analysed news and opinion pieces about this topic in the Spanish written press over a period of five years (2007–2011) on the basis of the agenda-setting theory. A total of 581 items linked to the consumption of steroids were identified, mainly in the sports sections of a statewide newspaper and in the society and crime sections of Valencian and Catalan regional newspapers. In the vast majority of cases, the source and producer of the news is the police or the judicial system and the primary focus is on penal aspects, while a health and social integration perspective is neglected. Press releases from the police reveal the spread of the doping phenomenon, among both professional and amateur athletes, and also among security and emergency bodies.

Keywords

anabolic steroids
drugs in sports
media representation of drugs
press coverage
Spanish press
substance abuse

Introduction

Anabolic steroids are laboratory-created substances that mimic the effects of testosterone, the natural male hormone. They induce both anabolic (development of the skeletal muscle) and androgynous (development of male sexual features) effects. Depending on the specific chemical composition, one type of action may take precedence over the other. Steroids are used in elite sports to increase muscle mass, physical strength and endurance, making the athlete more aggressive in training and in competition (Todd 1987; Yesalis et al. 1993; Skårberg and Engström 2007). The use of this kind of substance has grown considerably over the last decades. Several studies have documented both the increase in the amount consumed and in the variety of new formulations. However, in the last fifteen years, patterns of recreational steroid use have emerged outside the sphere of competitive sport (Agulló et al. 2008; Petrocelli et al. 2008; Breivik et al. 2009; Bojsen-Møller and Christiansen 2010; Rosenberg and Rodríguez 2010; Christiansen and Bojsen-Møller 2012; Agulló-Calatayud 2013).

In addition to the notable increase in steroid use among recreational athletes, it is worth pointing out that consumption is being initiated at a younger age. The low-risk perception of steroids, their wide availability and the normalization of their use are accompanied by a great deal of misinformation (Agulló et al. 2012), making anabolic

steroid consumption a social and health problem and a sports-related issue (Thorlindsson and Halldorsson 2010).

In the Spanish context, research on the role of the media in relation to the social image of drugs is scarce, including anabolic steroids or other doping substances, even though these are increasingly affecting large sectors of society and acquiring increasingly more social impact.

In this context, our article aims to analyse the prevalence and content of articles, including news and opinion pieces, dealing with anabolic steroids in four Spanish dailies: two major newspapers published in Valencia (*Levante-El Mercantil Valenciano* and *Las Provincias*), a state-wide newspaper (*El País*) and a prominent regional daily published in Barcelona (*La Vanguardia*). It is the first exploration, based on the agenda-setting theory, of how the Spanish press covers the consumption of anabolic steroids.

Theoretical approach

Newspapers, radio stations, television channels and the Internet are intermediaries and interpreters of social reality, representing the world through their approach to certain issues. The mass media provide important orientation to individual thought by offering different topics on which to reflect (Lang and Lang 1983; Saperas 1987). Following the main assumption of the agenda-setting theory (McCombs and Shaw 1972; Dearing and Rogers 1996), the emphasis of the media on certain issues influences the priority given by the public to these issues. However, beyond the thematic agenda, each theme has many attributes or topics, characteristics and properties, which make up the understanding of each issue. Thus, as each theme varies according to its salience, so do its attributes: the media offer a thematic agenda, but also an attribute agenda, which guides public thought on the issue. Thus, we face an analysis at two levels (McCombs 1994, 2004; McCombs and Evatt 1995): first, focusing on the transmission of object salience and, second, also called framing (Goffman 1974; Gamson 1989; Ghanem 1997), focusing on the transmission of attribute salience. With this twofold analytical approach, it is pertinent to review the formulation of Cohen (1963), derived from the first level of analysis, according to which the media do not dictate to us what to think but what to think about. At the second level of analysis, focusing on attributes, it is suggested that the media also tell us how to think about certain objects (Reese et al. 2001).

Furthermore, news outlets target their message to large groups of people, exercising a powerful social role by proposing models of action (Snow et al. 1986; Gamson et al. 1992; Gamson 2004); these media then become sources of conformity, control and social reproduction. They operate on a cognitive level, selectively developing world-views that are then presented to the population (Rekalde and Romani 2002).

The media's approach to health-related topics, and especially to drugs, tends to diverge in two directions: first, towards sensationalism, and second, towards the decontextualization of the information presented (Costa 2008). News on drug addiction is often found within the crime section and focuses on punishment rather than prevention or treatment (Martínez et al. 2000).

The mass media have been identified as agents of tertiary socialization, playing an increasingly important role in the education of the younger segments of the population. Coronado and López (2006) show that it is actually teenagers who denounce the mass media for not faithfully reflecting the real issues surrounding drug use. In this sense, the

news covering drug seizures by the Spanish national police or the Guardia Civil (Civil Guard) achieve more salience and immediacy than the stories analysing the advances made in the prevention of drug abuse or clinical practice. Several studies have shown that there are few or no quality control mechanisms to either ensure or promote responsible and accurate reporting of drug-related issues in the print media (Coomber et al. 2000).

Nowadays, it can hardly be questioned that the social image of drugs is considerably influenced by the way in which they appear in the media (Berrio 2000; Taylor 2008), but the portrayals differ between drugs as these are approached differently (Noto et al. 2006; Hughes et al. 2011). Just two decades ago, drug users were usually identified as criminals or social outcasts; however, in the case of anabolic steroids, recreational users are usually integrated into society, even including celebrities such as some professional athletes. The mass media often project a highly positive image of the muscular man who flaunts his body on beaches, pools and stages and is constantly surrounded by beautiful women. He may also be associated with partying, nightlife and the use of other psychotropic drugs. Numerous commercials and television series contribute towards disseminating the stereotypical image of a young man with large 'pecs' who succeeds in life thanks to his body and apparent virility. In modern-day culture, the body has become the temple of one's identity (Entwistle 2002). In contemporary postmodern societies, identity and life projects no longer revolve primarily around the productive or the political sphere, nor towards classic social institutions, but around the body. The subjects set or establish body itineraries (Esteban 2004) or corporal projects (Shilling 1993). The centrality of the body nowadays involves hypertrophic and hyperbolic statements such as those studied in this work.

The media exalt celebrities from the world of music, cinema and sports who confess that they used drugs when they were young, anecdotes that other young people may interpret to mean that they can do the same (Martínez et al. 2000), just like the on-screen diva they admire. The relation between media and doping was studied by Bernat López (2011, 2012), who focused on the use of EPO and Growth Hormone. Similarly, Bryan Denham (1999, 2004) studied the impact and influence of the mainstream press in their steroids coverage when a sports star publically confesses to doping, as in the case of American footballer Lyle Alzado or baseball player Ken Caminiti.

The media are increasingly called upon to perform important functions in the field of public health. According to Rekalde and Romani (2002) and Vega (2004), if the educational system does not react critically and responsibly to media manipulation of the drug phenomenon, the result is a net benefit for the economic and ideological interests of the established power structure, to the detriment of students, who will remain 'illiterate' on an issue that has much to do with their development as free and responsible individuals.

In short, even the professionals in drug interventions recognize the hegemony of the media in terms of creating a discourse that affects not only people's daily lives and perceptions but also their political decisions. In this context, the prevention of drug addiction can be highly complicated as long as the role of the media does not change (Vega 1996; Hastings and Stead 1999).

Our research deals with the role of the Spanish media in the construction of the social image of anabolic steroid consumption. We focus on the salience of this issue and the preeminence of some attributes. In this sense, we wanted to know whether the news pays

attention to dimensions of public health or endorses a healthy sports culture, or whether it prefers to focus on police and judicial aspects. Similarly, does it project a positive image of a steroid-using film or sports celebrity, for example, or is it more interested in criminals of low social extraction? Finally, we were also interested in uncovering any territorial difference in the coverage of the issue, comparing the Valencian with the other regional and statewide newspapers.

Context and methodology

In order to explore the two levels of the agenda-setting theory, we carried out a double analysis: a quantitative one, related to the first level, and a qualitative one, related to the second level or framing (attributes).

Considering the scope of the subject matter, we focused on a finite time period of five years, from 2007 to 2011, and on articles published in four newspapers: Madrid's *El País*, Barcelona's *La Vanguardia* and Valencia's *Levante-El Mercantil Valenciano* and *Las Provincias*. The latter two have occupied a prominent place in the history of Valencian journalism since the mid-nineteenth century, and have stood out as the two most widely read Valencian newspapers since the post-war period. The comparison between the two main Valencian newspapers and a sample of prominent newspapers published in other Spanish regions provided us with data on the territorial distribution of news generated about anabolic steroids. Table 1 summarizes the basic information of the analysed newspapers.

In accordance with data from the Oficina de Justificación de la Difusión (OJD) (Spanish equivalent to the Audit Bureau of Circulations), *El País* occupied first place in the ranking of statewide newspapers of general circulation from January to December of 2011. *La Vanguardia* comes in third place, while *Levante-EMV* and *Las Provincias* follow at fifteenth and twentieth, respectively. All of the newspapers are published daily. In the Valencian Region, from October 2011 to May 2012, *Levante-EMV* occupies first place, *El País* third and *Las Provincias* fourth.

Table 1: Print run, dissemination and ranking of the analysed newspapers, 2011.

Newspaper	Average print run	Average dissemination	Spanish ranking ¹
<i>El País</i>	461,788	365,117	1
<i>La Vanguardia</i>	227,764	190,033	3
<i>Levante-EMV</i>	40,763	31,081	15
<i>Las Provincias</i>	36,010	28,253	20

Source: Authors' compilation based on data from the Oficina de Justificación de la Difusión from January to December 2011.

^[1] General circulation dailies.

Amongst the selected newspapers, *El País* is the most widely read, non-sports newspaper in Spain. The paper is considered the most trustworthy with respect to the credibility of its sources on drug issues in Spain (García del Castillo et al. 2011). *La Vanguardia* is the most circulated and most read newspaper in Catalonia, with 816,000 daily readers in 2011, according to the Estudio General de Medios (quarterly Spain-wide

survey on media and cultural consumption habits). In terms of the two Valencian dailies, *Levante-EMV* was founded in 1834 under the name *Diario Mercantil Valenciano*, as a defence of Valencian business interests. In 1989, its title was changed to the present one. In more recent years, it has further specialized in producing numerous publications promoting Valencian topics. Although the paper undeniably has a progressive tilt, it has also maintained a certain distance from politics, striking a tone that could be described as an ideology of professionals. It aims to cover news and publish analysis while accepting a wide range of external collaborations (Casero 2009; Xambó 2012). *Levante-EMV* belongs to the Editorial Prensa Ibérica (EPI) publishing group; in contrast to *Las Provincias*, the group has drawn a clear line between news and opinion (Xambó 2001). This group also owns a radio station and a television channel, and *Levante* was the first Valencian daily to have an online edition. Finally, *Las Provincias* was founded in 1866 under the guidance of the Valencian writer and poet Teodor Llorente, who was a champion of the interests of the Valencian bourgeoisie. Today, *Las Provincias* is still strongly aligned with conservative points of view. This publication was owned for many years by the Doménech-Reyna family (Laguna 1990), but currently its main shareholder is the Vocento multimedia group.

We analysed news and opinion pieces in these dailies that contained the words ‘anabolic’, ‘steroids’ and ‘anabolic steroids’, considering two of the following:

1. on a quantitative level, the information sources of the relevant articles, in order to know the origin of the reporter’s perspective, whether police, judicial, journalistic sources, news agencies, etc.; the section of the newspaper, in order to allocate the article to the sphere of health, safety, sport, etc. Finally, we were also interested in knowing whether there is an unequal geographical distribution in the coverage of anabolic steroid consumption, for which we took as reference the Valencian Region, and compared it with the Spanish state.¹
2. on a qualitative level, as a first approximation to the framing of the issue by the analysed newspapers, the attributes used in the headline and body of the story, paying attention to any sensationalism in their treatment, the presence of celebrities or crime or whether there was decontextualization of the reported events.

This double approach allowed us to analyse several aspects, including the number of articles on anabolic steroids per newspaper and year, the newspaper section where they were published, differences according to the geographical area and the sources used.

Results

Quantitative results

In our quantitative analysis, we calculated the number of articles dealing with the intake of anabolic steroids ($n=581$), along with the section in which the articles were found – usually the sports section in the statewide *El País* and the Catalan *La Vanguardia*, and the society and crime sections in the Valencian regional press. We also analysed the sources used, among which the press agencies EFE and Europa Press stand out. Finally, we recorded the geographical area where the events in question took place and the information in reports involving security forces, amongst which operations in the Valencian Region stand out.

In the four newspapers analysed, the news stories notably outnumber any articles and opinion pieces that could shed light on the issue by sharing the perspective of consumers, trainers, doctors, sociologists, psychologists, educators, economists, political scientists and philosophers. Rather, most articles focus on the police or judicial aspects of the issue, reflecting the origin of the information. In the light of our reading, we also noticed that anabolic steroid coverage not only related the issue with elite sports but also to other actors, such as members of the armed forces, security guards, affiliates of extreme right parties or artists of pornographic cinema.

Table 2 shows the number of articles per year per newspaper over the 2007–2011 period. *El País* stands out for its coverage of the topic, with an average of 48 articles per year, three times as many as *La Vanguardia*. At a regional level, *Las Provincias* published an average of 36 stories per year, almost twice as many as *Levante-EMV*, which comes in with an average of just under 19. With respect to years, steroids featured in the news most often in 2010, with 134 articles, coinciding with several prominent anti-doping police investigations.

Table 2: Articles dealing with anabolic steroids per newspaper and year.

Newspaper	Dissemination	2007	2008	2009	2010	2011	Total	Average articles/year
<i>El País</i>	Statewide	62	38	36	56	47	239	47.8
<i>La Vanguardia</i>	Catalan	18	15	11	12	11	67	13.4
<i>Levante-EMV</i>	Valencian	24	17	17	17	19	94	18.8
<i>Las Provincias</i>	Valencian	21	37	20	49	54	181	36.2
Total		107	84	134	131	581	116.2	

The coverage of steroids in *El País* has a pronounced focus on sports, given that nearly six out of ten articles on steroids are related to doping cases. It is also worth noting the scarcity of articles on steroids found in the opinion (2.1%), medicine (0.8%) and culture (0.4%) sections of the paper. The section dedicated to news in the Valencian Region ranks fourth in the number of articles on steroids, with 5% of the relevant documents (Table 3); this fact reflects the importance that the newspaper assigns to steroid-related events occurring in that particular region.

Table 3: Number of articles on steroids published in *El País* (2007–2011) per section.

Section	Number of articles	Per cent
Sports	140	58.6
Current Affairs	18	7.5
Sunday supplement	14	5.9
Valencia	12	5
Society	9	3.8
Andalusia	6	2.5
Madrid	6	2.5
Opinion	5	2.1

Television	5	2.1
Catalonia	4	1.7
Spain	3	1.3
Crime	3	1.3
Obituaries	3	1.3
Business	2	0.8
Basque Country	2	0.8
Medicine	2	0.8
Cinema	1	0.4
Culture	1	0.4
Galicia	1	0.4
International	1	0.4
Front page	1	0.4
Total	239	100

Most of the relevant articles (58.6%) were published in the sports section. A total of 55 athletes were linked to steroid use in doping scandals. The most prominent include cyclist Alberto Contador, track & field athletes Marion Jones and Ben Johnson, and American baseball player Barry Bonds. Men clearly predominate among the implicated athletes, numbering 43 compared to twelve women. In terms of nationalities, American athletes led by far in the number of alleged offences (25), followed by Spain (eleven) and Germany (five); fourteen athletes from other countries were also implicated. In terms of sport, the bulk of the news linked to steroid doping was concentrated in track & field, with almost 37% of the suspected athletes. Cycling came in second, with 23.6% of the athletes. Together, these two disciplines occupied 60% of all news related to steroids. Baseball, a sport with scant following in Spain, ranked third, followed by football and tennis.

A total of 62 journalists wrote about steroids in *El País* during the study period. The sports specialist Carlos Arribas is the absolute leader on this list, with 79 articles under his name. This quantity of in-house produced information distinguishes *El País* from the other newspapers studied, which depend more on news agencies as sources of content. However, *El País* did use some agency content: Agencia EFE was the main external provider of news on steroids, with 24 registered items. The generic 'Agencias' (news agencies) was cited in twelve articles, whereas Otr Press, Reuters and Associated Press only contributed one article each. Finally, we can simply note that a considerable number of journalists and collaborators wrote articles about steroids, which reflects the extension and importance of the phenomenon.

Another aspect that attracted our attention, due to the importance of role models in television and the cinema (and their influence on young people), is related to movie stars. Prominent Hollywood actors like Sylvester Stallone, Arnold Schwarzenegger, Steven Seagal and Bruce Willis, among others, have generated news about their alleged link to the consumption of steroids. Some, like Sylvester Stallone, have even openly admitted as much (Weise 2008), a growing trend in terms of candour on the topic.

In addition, we analysed the news about seizures and arrests connected to steroid use. In accordance with statistics from the Spanish Anti-Doping Agency Annual Report (2011), in 2011 the Guardia Civil executed Operation Master, the 58th intervention

against doping in sport by national security forces since 2004. The Guardia Civil's Central Operative Unit in the Valencian Region has undertaken many of these investigations. The fact that so much of the news on seizures or robberies related to steroids has an epicentre in the Valencian territory, even surpassing other regions with a greater demographic or economic weight like Andalusia, Catalonia and Madrid, is an aspect that stands out among the results of our study. It is surprising, moreover, that of the 32 cities featured in news reports, fourteen are Valencian, with a particular incidence in the province of Alicante (Alacant, Alfàs del Pi, Benidorm, Elda, Elx, Orihuela, Petrer, Sant Vicent del Raspeig, Santa Pola and Sax). Incidents in this region range from robberies of steroids from La Fe Hospital to the dismantling of clandestine laboratories in Gandia, Elx or Montcada, to high-flying operations involving pharmacies in Valencia, and arrests of criminal groups that operate in this territory and traffic in steroids and other illicit substances like cocaine, hash, growth hormone, speed and Viagra.

Between 2007 and 2011, the Catalan newspaper *La Vanguardia* published a total of 66 articles directly related to the topic of anabolic steroids, an average of fourteen articles per year (Table 4). Most were written by staff writers, collaborators and specialists in doping. At times, material from news agencies (especially EFE) was also used.

Table 4: Number of articles on steroids published in *La Vanguardia* (2007–2011) per section.

Section	Number of articles	Per cent
Sports	35	53.03
Trends	7	10.61
Medicine	4	6.06
International	4	6.06
TV and Radio Programming	3	4.55
Living	3	4.55
Society	2	3.03
Books	2	3.03
Culture	2	3.03
Editorial	1	1.52
Obituaries	1	1.52
Opinion	1	1.52
Front page	1	1.52
Total	66	100

Articles on steroids published in *La Vanguardia* over the five-year study period generally fall into two categories. In the first, which may be described as more socially conscious, sports celebrities confess to having used steroids or become the objects of suspicion. Over the five-year period, two Americans monopolized the paper's attention more than any other athlete: the baseball player Barry Bonds, who held the world record in homeruns at 756 (Robinson 2007: 40), and Marion Jones, who had an excellent track record in the long jump, 100-metre dash, 200-metre dash and 400-metre relay.

The second type of story focuses on people who use these products recreationally for the sole purpose of improving their physique; predictably, gyms and bodybuilders are the

main subject. Articles also report on arrests of dealers by the Mossos d'Esquadra (Catalan police), Guardia Civil or local police. The confiscated merchandise is displayed for the cameras.²

A good number of articles provide the names of the substances (Gonadotropine, growth hormone, Clenbuterol), and one explains the effects that they have on health (9 June 2007, p. 35). The journalists who write on this subject most frequently include Sergio Heredia, Norberto Gallego, Andy Robinson and Marc Bassets.

Between 2007 and 2011, Valencian *Levante-EMV* featured a total of 94 articles related to steroids. The section of current affairs outranks sports in terms of the amount of coverage offered on the topic, contrary to what occurs in *El País* and *La Vanguardia*. Moreover, steroids appeared on the front page twenty times. Nevertheless, a greater presence in the sections Health and Living and Science and Health (where steroids only appear twice) would still be desirable (Table 5).

Table 5: Number of articles on steroids in the newspaper *Levante-EMV* (2007–2011) per section.

Section	Number of articles	Per cent
Current Affairs	33	35.1
Sports	21	22.3
Front page	20	21.3
Opinion	6	6.4
People	3	3.2
Lifestyle	2	2.1
Sunday supplement	2	2.1
Society	2	2.1
Alicante	1	1.1
Festivals and Traditions	1	1.1
Technology	1	1.1
Science and Health	1	1.1
Health and Living	1	1.1
Total	94	100

A total of 34 journalists wrote stories related to steroids. Most articles have an agency by-line: EFE was by far the main contributor of stories, followed by 'Redacción' and Europa Press. The most prolific staff writer on the topic was Teresa Domínguez. In addition, there were 29 stories linked to arrests and seizures of steroids by different Spanish security forces. The national police feature in eighteen operations, while the Guardia Civil are the protagonists in eight, and the local police and Interpol appear in one story each. In one other story, no corps is named.

With respect to the geographical area featured in the news, the city of Valencia ranks the highest, with eleven documents, compared to five pertaining to Alacant, and four to Elx and Castelló, respectively. News was also produced in six other cities in the province of Valencia: Gandia (three articles), Burjassot (two), and Alboraiá, Algemesí, Aldaia and Manises (one each). Six cities in the province of Alacant also featured in the paper: Benidorm (two) and Dénia, Elda, l'Alfàs del Pí, Sant Joan d'Alacant and Petrer (with one

each). Finally, two documents reporting events in the city of Vinaròs, in the province of Castelló, also appeared.

Outside the Valencian Region, *Levante* reported on news related to steroids trafficking that took place in other locations: Madrid (four); Malaga, the Balearic Islands and Murcia (two each); and Zaragoza, Almería, Granada, Barcelona, Huelva, the Canary Islands, Cadiz and Paris (one each).

Table 6 breaks down the total number of articles on anabolic steroids that were identified in the Valencian newspaper *Las Provincias* (185) per section. Stories appear most often in the section entitled Society & Crime, with nearly four out of ten articles on the subject. Next, the sports section accounts for 31.4% of the documents and the Valencia section has 22.2%. Together, these three sections include 91% of the paper's coverage of steroids. The rest of the sections, including health, politics and culture, have less than 3% of the articles.

Table 6: Number of articles related to steroids in *Las Provincias* (2007–2011) per section.

Section	Number of articles	Per cent
Society and Crime	69	37.3
Sports	58	31.4
Valencia	41	22.2
People and TV	5	2.7
Health	5	2.7
Opinion	4	2.2
Politics	1	0.5
Culture	1	0.5
Front page	1	0.5
Total	185	100

A total of 32 athletes were associated with doping by steroids. The cyclist Alberto Contador and the track athlete Josephine Onya (from the Athletic Club València Terra i Mar) stand out, with eight articles each on their respective high-profile cases in 2010. Cycling and track & field account for over eight out of ten news items related to steroids. Other sports, including swimming, judo, football, tennis, boxing and weight lifting, only have a token representation in the analysed articles.

A total of 53 journalists wrote about news related to steroids. However, the profusion of articles based on news agency material is striking; EFE was the main source, but Europa Press also made significant contributions. The generic 'Redacción' occupies third place, while the journalist who made the single biggest contribution was Amador Gómez.

There were 52 news items linked to steroids involving arrests and seizures by national police and security forces – 23 more than in *Levante-EMV*. The national police appear in 32 operations, compared to seventeen operations by the Guardia Civil, two by the Mossos d'Esquadra and one joint operation between the national police and the Guardia Civil. With respect to the geographical location of the news, the regional capital of Valencia leads the ranking with thirteen documents, compared to eight in Alacant, four in both Castelló and Benidorm and three in Gandia. Other Valencian cities appear twice: in l'Alfàs del Pí, Borriana, Burjassot, Dénia, Elda, La Nucia, Torrevella and Vinaròs.

Algemesí, Altea, Benicarló, Canals, Castalla, Guardamar, Ibi, Oriola, Sant Joan d'Alacant, Santa Pola, Sax, Torrent, La Vila Joiosa, Xàbia and Xàtiva appear once each. Other Spanish cities outside the region also appear in the news: Madrid (six), Barcelona (five), Malaga (three) and Murcia (two). A Coruña, Abarán, Adra, Alcanar, Archena, Badalona, Cádiz, Cartaya, Ceutí, Eivissa, El Ejido, Estepona, Granada, Gipuzkoa, La Línea de la Concepción, Molina de Segura, Roquetas de Mar and Terrassa also appear once each.

Qualitative results

In our qualitative analysis, we paid attention to the topics mentioned in the headline and body of the story, also considering semantics, sensationalism, the presence of celebrities or crime, or whether the reported events were decontextualized. We thus explored how the news was framed as part of the second level of agenda setting.

The analysis of more than 200 articles in *El País* reveals details about the reality and complexity of steroid consumption. The paper interviews journalists, doctors, sociologists, physiotherapists, physiology professors, biomechanics, politicians, pharmacists, educators, writers, film-makers, athletes, etc., and it also uses news from agencies, especially EFE, in describing the phenomenon.

The first thing that stands out about the headlines is the absence of verbs at the beginning.³ Although other newspapers use the verb forms of 'disband' (*cae*), 'rob' (*roban*), 'convict' (*condenan*), 'arrest' (*detienen*), 'falsify' (*falsifican*) and others, in the case of *El País*, this semantic construction only appears once in the 242 headlines analysed. Likewise, other newspapers tend to lead headlines with the words Guardia Civil, Policía Nacional (national police), Mossos d'Esquadra, but *El País* does so only on one occasion.

The headlines of *El País* usually start with a common or a proper noun, often preceded by a determiner (usually a definite or an indefinite article): 'Los interrogantes de un caso cerrado'/'The unanswered questions of a closed case' (Hernández and Arribas 2007: 71); 'El público quiere gladiadores'/'The public wants gladiators' (Arribas 2007a: 66); 'El perfil sanguíneo prueba de dopaje'/'The blood profile, proof of doping' (Arribas 2007b: 69); 'Marion Jones, seis meses de cárcel'/'Marion Jones, six months of prison' (Reuters-EFE 2008: 48); 'El jefe de la trama de Coslada tenía en su casa cinco pistolas y tres escopetas'/'The boss of the Coslada plot had five handguns and three shotguns in his home' (Barroso 2008: 18); 'El clan del geranio'/'The Geranium clan' (Arribas 2009a: 57); 'La ATP encubrió el dopaje de Agassi'/'The ATP concealed Agassi's doping' (Mateo Ruiz-Gálvez 2009: 52); and many others. Thus *El País* forces the reader to focus on the subject, mostly consumers, dealers or accessories, of a criminal action. Thus, *El País* frames subjects and hold them responsible.

At times, no determiner precedes the leading noun, creating a semantic impression of directness and urgency – a stylistic choice resulting in a faint resemblance to the titles of some films. Examples include 'Dopaje de costa a costa'/'Doping coast to coast' (Fernández 2007: 84) and 'Millonarios en un día'/'Millionaires in one day' (Giovio 2008: 37).

Sometimes, the verb form is a more prominent feature of the headline to centre the attention on the action: 'Hay que ganar credibilidad, pero ¿cómo?'/'You have to earn credibility, but how?' (Arribas 2009b: 66); 'Legalizar el dopaje'/'Legalizing doping'

(Abad Faciolince 2008: 52); ‘Si no quieres sufrir, no puedes ganar’/‘If you don’t want to suffer, you can’t win’ (Arribas 2010: 48); ‘Me da asco mi deporte’/‘My sport disgusts me’ (Anon. 2010a: 65). Verbs are related to the suffering caused by sports and legitimacy in the use of steroids in a manner that seems to exonerate them.

An interest in the adjective ‘juiced up’ is also apparent in articles on cinema, such as in Jordi Costa’s film review ‘Esparta anabolizada’/‘Sparta, juiced up’: ‘Synder is loyal to the essence of *300*, but he has injected the form with so many steroids that he has condemned the end result to the paralysis of a hyperrealistic (and somewhat ridiculous) wax figure’ (Costa 2007: 72).

Ultimately, the treatment offered by *El País* acquires shades of neutrality based on the newspaper’s inhouse style.

In *La Vanguardia* news on steroids is usually found in the sports section, either in news briefs or in longer reports. From the very first line, writers want the reader to know who or what the subject is and the action that the subject performs. The main character of the opening sentence may be the acronym of an agency or organization like Asociación de Futbolistas Españoles/Spanish Soccer Players Association (AFE), Agencia Mundial Antidopaje/World Anti-Doping Agency (AMA) or International Association of Athletics Federations (IAAF). The articles also name athletes (Bonds, Johnson, Jones, Contador, Domínguez) or security forces (Mossos d’Esquadra, national police, Guardia Civil). What follows is a verb: expand (*ampliar*), request (*pedir*), provide (*aportar*), investigate (*investigar*), dismantle (*desarticular*), confess (*confesar*), declare (*declarar*), etc. Finally, the direct object: a network, a quantity of confiscated drugs, an arrest, a bodybuilder, a pharmacy, a judge, a sentence, etc.

Some sample headlines include the following: ‘Una leyenda con asterisco/A legend with an asterisk’ (Robinson 2007: 40); ‘La confesión de Jones condena al deporte’/‘Jones’s confession condemns the sport’ (Bassets 2007a: 72); ‘Ni Bush sabe qué hacer’/‘Not even Bush knows what to do’ (Bassets 2007b: 65); ‘Un positivo de estado’/‘A positive state’ (Luque 2008: 64); ‘Te lo vendo sin receta’/‘I’ll sell it to you without a prescription’ (Gutiérrez 2009: 23); ‘La campeona tiene barba’/‘The [woman] champion has a beard’ (Agence France-Presse 2009: 48).

La Vanguardia follows treatment guidelines similar to those of *El País*, although with less apparent neutrality, partly due to the greater presence in their news of law enforcement interventions.

The analysis of the headlines in *Levante-EMV* revealed that verbs are often the first word; these are used in the third-person singular or plural and often lack a specific subject. The English translations, while different semantically, still convey the relative importance of the action or the result over the agent: ‘Detienen a dos vigilantes por tráfico de anabolizantes’/‘Two security guards arrested for trafficking in anabolic steroids’ (Ros 2007); ‘Roban hormonas del crecimiento en La Fe’/‘Growth hormone stolen in La Fe Hospital’ (Agencia EFE 2007a); ‘Falsificaban recetas para traficar con anabolizantes’/‘Prescriptions falsified to sell steroids’ (Anon. 2007a: 17); ‘Cae una red que vendía anabolizantes’/‘Gang that illegally sold steroids disbanded’ (Domínguez 2008a); ‘Condenan a Mister Universo por tráfico de anabolizantes’/‘Mr Universe sentenced for dealing steroids’ (Europa Press 2008); ‘Cae una banda que distribuía anabolizantes’/‘Gang that distributed steroids disbanded’ (Domínguez 2009). Analysis of

over 100 articles shows a clear tendency to reiterate the word ‘disbanded’ (*cae*), which – in Spanish – opens the headline on twelve occasions.

In other cases, the newspaper focuses its attention on the security force that dismantles a network of dealers: ‘La Guardia Civil intervino un millón de dosis a la red de tráfico de anabolizantes’/‘The Guardia Civil seizes a million doses from steroid-trafficking network’ (Domínguez 2008b); ‘La policía intercepta 2000 dosis’/‘Police intercept 2.000 doses’ (Europa Press 2009a); ‘La policía detiene a dos hombres con 11.200 dosis de anabolizantes’/‘Police detain two men with 11,200 doses of steroids’ (Contrí 2011).

There are also many instances in which a common or a proper noun immediately becomes the centre of the story: ‘Pereiro justifica el uso de anabolizantes’/‘Pereiro justifies his use of steroids’ (Ferrari 2007); ‘Aitor: Tan solo bebí dos copas’/‘Aitor: “I just had two drinks”’ (Agencia EFE 2007b); ‘El pasatiempo nacional se tambalea’/‘The national pastime staggers’ (Zamora 2007); ‘Semena tiene el triple de testosterona’/‘Semena’s testosterone levels tripled’ (Europa Press 2009b); ‘Floyd Landis admite doparse’/‘Floyd Landis admits to doping’ (Agencia EFE 2010a); ‘España tiene un problema con el dopaje’/‘Spain has a doping problem’ (Agencia EFE 2010b); ‘El filete contaminado’/‘The contaminated fillet’ (Año 2010); ‘El retiro tranquilo de Eufemiano’/‘Eufemiano’s quiet retirement’ (Guerra 2010); ‘Un edil de España 2000 está imputado en una operación contra la extrema derecha’/‘Council member of España 2000 charged in an operation against the extreme right’ (Vázquez 2011).

In addition, there are news pieces like ‘Un estudio revela que el 22% de los hombres que van al gimnasio toman anabolizantes’/‘Study reveals that 22 per cent of men who attend gyms take steroids’ (Anon. 2007b: 19); ‘El abuso de los esteroides anabólicos’/‘The abuse of anabolic steroids’ (Volkow 2007), a text that may be considered one of the best contributions to the study of steroids, written by reputed international expert Nora Volkow; ‘Anabolizados’/‘Juiced up’ (Piera 2008); ‘El 8% de los jóvenes de 18 años ha tomado anabolizantes alguna vez’/‘Eight percent of 18 year-old men have tried steroids’ (García-Nieves 2010).

The tone used by *Levante-EMV* is more informal than the one used by *La Vanguardia* and *El País*. The articles come from various sources, which avoids an excessive focus on the police or the judicial sphere. *Levante-EMV*’s coverage of steroid use is characterized by its plurality of perspectives, but a greater analytical depth, which could shed light on the causes that influence steroid use and ways to prevent it (e.g., through family interventions), is still missing.

Las Provincias mainly covers news on the consumption and illegal market for steroids in the crime section. Dozens of articles have headlines that logically attempt to capture readers’ interest, but at times the tone is alarmist, as our analysis reveals. In a considerable number of headlines, a third person, an impersonal verb or the past participle leads off. As in the case of *Levante-EMV*, the English translations differ syntactically, but the same urgency and emphasis on action is conveyed: ‘Cae una red que distribuía anabolizantes’/‘Network that dealt in steroids disbanded’ (Agencia EFE 2007c); ‘Asesinan a un joven’/‘Young man murdered’ (Martínez 2007); ‘Desmantelan una red internacional que distribuía anabolizantes’/‘International network of steroids dealers dismantled’ (Europa Press 2010); ‘Escondía 1000 pastillas de anabolizantes en su coche’/‘A thousand steroid pills hidden in his car’ (Anon. 2008); ‘Toman anabolizantes por su imagen’/‘Steroids taken for reasons of image’ (Anon. 2010b); ‘Tres detenidos por

vender anabolizantes en Burjassot’/‘Three arrested in connection with the sale of steroids in Burjassot’ (Marrahí 2007); ‘Desmantelado un laboratorio clandestino de anabolizantes en Gandia’/‘Clandestine laboratory that made steroids, dismantled in Gandia’ (Agencia EFE 2008a). In most cases, a national security force or judicial authority is the subject of the body’s opening sentence or the subtitle.

Articles are narrated from the perspective of whoever provided the information, which in many cases are the national security forces. Thus, most of the articles are led by actors related to police corps: ‘National police officers...’ (Anon. 2007c); ‘Officers from senior police headquarters...’ (Anon. 2007d); ‘National police have arrested...’ (Marrahí 2007); ‘A Guardia Civil operation against trafficking in steroids...’ (Agencia EFE 2008b), etc. This pattern confirms the predominant focus on the police and judicial sphere.

The other aspect of steroid-related news has to do with the athletes implicated in doping scandals. The cyclist Alberto Contador and two track athletes, Marta Dominguez and Josephine Onyia, stand out: ‘El dopaje mancha a Marta Domínguez’/‘Doping tarnishes Marta Dominguez’ (Gómez 2010a); ‘La red de dopaje alcanza a una veintena de atletas’/‘Doping network touches twenty athletes’ (Gómez 2010b); ‘Al entrenador de Marta Domínguez le llamaban el camello de la Blume’/‘Marta Dominguez’s trainer: “the Blume dealer”’ (Gómez 2010c); ‘Josephine Onyia, suspendida dos años por el TAS’/‘Josephine Onyia, suspended for two years by Court of Arbitration for Sport’ (Agencias 2009); ‘Contador, el último de la larga lista del clenbuterol’/‘Contador, the last on Clenbuterol’s long list’ (Agencias 2010). The most repeated adjective is ‘hard’ (*duro*), which modifies the noun ‘hit’ (*golpe*) that the police or the Guardia Civil give to a group of dealers. A great number of articles also indicate that steroids are distributed in gyms and among bodybuilders, suggesting that this is a common practice among regulars of these kinds of businesses. The words ‘pharmacy’ (*farmacia*), ‘hospital’ (*hospital*), ‘Internet’ (*Internet*) and ‘trafficking network’ (*red de tráfico*) also form part of the basic lexicon for these articles. Once again, we see reports about the ease with which these products are bought at pharmacies, stolen from hospitals, acquired online and distributed through networks of dealers. The key term ‘steroids’⁴ dominates the information: ‘Casi 3.200 positivos por anabolizantes’/‘Almost 3,200 test positive for steroids’ (Anon. 2010c); ‘Operación de la Guardia Civil contra el tráfico de anabolizantes’/‘Guardia Civil operation against trafficking in steroids’ (Agencia EFE 2008b). Of course, the Spanish words derived from the French *dopage* and *doper* (*dopaje* and *dopar*, respectively), and the Anglicism *doping*, also recur in the reports.

On numerous occasions, the seizures and arrests also reveal that the drug networks also dealt cocaine, hash, Viagra, amphetamines, benzodiazepines, methadone, heroin, crack, tobacco, marijuana and other illegal substances. In the photos that accompany the text, one type of image stands out among the rest: that of police officers or members of the Guardia Civil, either with their backs turned or wearing dark glasses that hide their identity. In the article, ‘Entre los arrestados en la operación contra el tráfico de anabolizantes hay campeones y jueces de culturismo’/‘Champions and judges of bodybuilding competitions among those arrested in the operation against trafficking in steroids’ (Europa Press 2009c), the badges of the Guardia Civil officers can be plainly seen, as can the detainee and the two officers themselves, whose faces are blurred. In ‘Detenidos en Alicante cuatro miembros de la banda del monstruo de Grbavica’/‘Four members of the *Monster of Grbavica*’s gang, arrested’ (Agencia EFE 2010c), there is a

photo displaying an arsenal of guns, money and jewellery that was seized by the police. A young Guardia Civil officer is the subject of the photo that illustrates ‘Intervenidas 25.000 dosis de anabolizantes’/‘Twenty-five thousand doses of steroids seized’ (Agencia EFE 2009). In conclusion, the qualitative analysis suggests that *Las Provincias* plays on readers’ fear and does not have journalists specialized in social matters, who might explain the underlying reasons for consuming anabolic steroids.

Concluding note

The work carried out has shed light on how the Spanish press treats the use of anabolic steroids by examining the section where the news is placed, the source of information, attributes, etc.

In the vast majority of cases, the origin and producer of the news is the police or the judicial system, and these texts focus primarily on penal aspects, rather than granting prominence to health and social integration perspectives. The sources used in the analysed articles are mainly press agencies, particularly EFE and Europa Press, and reports and press releases from the national police or other security forces.

The topic of anabolic steroids occupies headlines and front pages only when a famous athlete is implicated or when there is a high-profile police operation. The news related to anabolic steroids usually appears in the sports section or in articles referring to crime, whereas aspects of health and substance abuse prevention are notably absent.

The fact that the majority of the articles were found in the society and crime sections in the regional press reveals that, in geographical contexts like the Valencian Region, we are not primarily dealing with a doping-in-sport issue but rather with a public health problem. Future studies would be desirable to confirm this tendency in other similar geographical contexts.

Our research shows that the media reports on the use of anabolic steroids not only by gym regulars or elite athletes, but also among professionals of the armed forces, security guards, affiliates of extreme right parties or artists of pornographic cinema. Moreover, in recent years, popular athletes eager to improve their performance have become prominent steroid users, especially in sports or professions that require a large muscle mass.

Our study highlights that the Valencian Region features strongly as a location for seizures, arrests and clandestine laboratories associated with anabolic steroids. It is by far the Spanish region that generates the most steroid-related news.

In a nutshell, this body of evidence confirms that the Spanish press generally presents anabolic steroids within an interpretive framework related to the law and police, neglecting the public health dimension. However, some differences have been found between the different media analysed, with *El País* and *La Vanguardia* exhibiting a more neutral style than the Valencian press, which features more informal frameworks.

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References

Abad Faciolince, Héctor (2008), 'Legalizar el dopaje'/'Legalizing doping', *El País*, 18 August, p. 52.

Agence France-Presse (2009), 'La campeona tiene barba'/'The [woman] champion has a beard', *La Vanguardia*, 28 October, p. 48.

Agencia EFE (2007a), 'Roban hormonas del crecimiento en La Fe'/'Growth hormone stolen in La Fe Hospital', *Levante-EMV*, 10 May, <http://http://www.levante-emv.com>. Accessed 15 July 2012.⁵

____ (2007b), 'Aitor: Tan solo bebí dos copas'/'Aitor: I just had two drinks', *Levante-EMV*, 8 August, <http://www.levante-emv.com/deportes/2007/08/08/aitor-bebi-copas/329159.html>. Accessed 15 July 2012.

____ (2007c), 'Cae una red que distribuía anabolizantes'/'Network that dealt in steroids disbanded', *Las Provincias*, 23 January, <http://www.lasprovincias.es/valencia/20080613/sucesos/distribuia-anabolizantes-20080613.html>. Accessed 6 August 2012.

____ (2008a), 'Desmantelado un laboratorio clandestino de anabolizantes en Gandia'/'Clandestine laboratory that made steroids, dismantled in Gandia', *Las Provincias*, 12 June, <http://www.lasprovincias.es/valencia/20080612/local/safor/desmantelado-laboratorio-clandestino-anabolizantes-200806121036.html>. Accessed 6 August 2012.

____ (2008b), 'Operación de la Guardia Civil contra el tráfico de anabolizantes'/'A Guardia Civil operation against trafficking in steroids...', *Las Provincias*, 16 September, <http://www.lasprovincias.es/>. Accessed 6 August 2012.

____ (2009), 'Intervenidas 25.000 dosis de anabolizantes'/'Twenty-five thousand doses of steroids seized', *Las Provincias*, 25 May, <http://www.lasprovincias.es/valencia/20090525/local/sucesos/intervenidas-dosis-anabolizantes-operacion-200905251453.html>, Accessed 6 August 2012.

____ (2010a), 'Floyd Landis admite doparse'/'Floyd Landis admits to doping', *Levante-EMV*, 21 May, <http://www.levante-emv.com/deportes/2010/05/20/floyd-landis-admite-doparse-acusa-armstrong-ayudarle/707131.html>. Accessed 15 July 2012.

____ (2010b), 'España tiene un problema con el dopaje'/'Spain has a doping problema', *Levante-EMV*, 3 October, <http://www.levante-emv.com/deportes/2010/10/03/espana-problema-dopaje-dice-uci/744273.html>. Accessed 15 July 2012.

____ (2010c), 'Detenidos en Alicante cuatro miembros de la banda del monstruo de Grbavica'/'Four members of the monster of Grbavica's gang, arrested', *Las Provincias*, 25 March,

<http://www.lasprovincias.es/videos/actualidad/comunitat/680149141001-detenidos-alicante-cuatro-miembros-banda-monstruo-grbavica.html>. Accessed 6 August 2012.

Agencia Estatal Antidopaje (2011), 'Memoria Anual'/'Annual Report', <http://www.aepsad.gob.es/aepsad/dms/microsites/aepsad/agencia/memoria-anual/MemoriaAnual2011.pdf>. Accessed 1 July 2014.

Agencias (2009), 'Josephine Onyia, suspendida dos años por el TAS'/'Josephine Onyia, suspended for two years by Court of Arbitration for Sport', *Las Provincias*, 7 October, <http://www.lasprovincias.es/valencia/20091007/deportes/mas-deportes/josephine-onyia-suspendida-anos-200910071826.html>. Accessed 6 August 2012.

____ (2010), 'Contador, el último de la larga lista del clenbuterol'/'Contador, the last on Clembuterol's long list', *Las Provincias*, 30 September, <http://www.lasprovincias.es/rc/20100930/deportes/mas-deportes/contador-ultimo-larga-lista-201009301604.html>. Accessed 6 August 2012.

Agulló-Calatayud, V. (2013), 'Recreational anabolic steroids consumption: A sociological perspective', Ph.D. thesis, València: Universitat de València.

Agulló-Calatayud, V., González-Alcaide, G., Valderrama-Zurián, J. C. and Aleixandre-Benavent, R. (2008), 'Consumption of anabolic steroids in sport, physical activity and as a drug of abuse: An analysis of the scientific literature and areas of research', *British Journal of Sports Medicine*, 42:2, pp. 103–09.

Agulló-Calatayud, V., Aguilar-Serrano, J., Vidal-Infer, A., Valderrama-Zurián, J. C. and Aleixandre-Benavent, R. (2012), 'El consum recreatiu d'esteroides anabolitzants entre els joves valencians'/'The recreational consumption of anabolic steroids among young Valencians' *TSNova*, 6, pp. 19–34.

Añó, V. (2010), 'El filete contaminado'/'The contaminated fillet', *Levante-EMV*, 10 October, <http://www.levante-emv.com/deportes/2010/10/10/filete-contaminado/746327.html>. Accessed 15 July 2012.

Anon. (2007a), 'Falsificaban recetas para traficar con anabolizantes'/'Prescriptions falsified to sell steroids', *Levante-EMV*, 20 June, p. 17.

____ (2007b), 'Un estudio revela que el 22% de los hombres que van al gimnasio toman anabolizantes'/'Study reveals that 22 per cent of men who attend gyms take steroids', *Levante-EMV*, 17 February, p. 19.

____ (2007c), 'La Policía Nacional desarticula una red y detiene a 13 personas que distribuían cocaína y sustancias dopantes en locales de ocio'/'National police officers dismantled a network and arrested 13 people who distributed cocaine and performance-enhancing drugs in entertainment centers', *Las Provincias*, 23 January, <http://www.lasprovincias.es/>. Accessed 6 August 2012.

____ (2007d), 'Agentes de la Jefatura Superior detienen a un policía local por traficar con drogas y anabolizantes'/'Officers from senior police headquarters arrest a local policeman for dealing with drugs and steroids', *Las Provincias*, 16 March, <http://www.lasprovincias.es/>. Accessed 6 August 2012.

____ (2008), 'Escondía 1000 pastillas de anabolizantes en su coche'/'A thousand steroids pills hidden in his car', *Las Provincias*, 5 April, <http://www.lasprovincias.es/>. Accessed 6 August 2012.

____ (2010a), 'Me da asco mi deporte'/'My sport disgusts me', *El País*, 10 December, p. 65.

____ (2010b), 'Toman anabolizantes por su imagen'/'Steroids taken for reasons of image', *Las Provincias*, 5 November, <http://www.lasprovincias.es/v/20101105/alicante/toman-anabolizantes-imagen-20101105.html>. Accessed 6 August 2012.

____ (2010c), 'Casi 3.200 positivos por anabolizantes'/'Almost 3,200 test positive for steroids', *Las Provincias*, 22 November, <http://www.lasprovincias.es/v/20101122/gente/casi-positivos-anabolizantes-20101122.html>. Accessed 6 August 2012.

Arribas, C. (2007a), 'El público quiere gladiadores'/'The public wants gladiators', *El País*, 17 December, p. 66.

____ (2007b), 'El perfil sanguíneo prueba de dopaje'/'The blood profile, proof of doping', *El País*, 18 November, p. 69.

____ (2009a), 'El clan del geranio'/'The Geranium clan', *El País*, 19 October, p. 57.

____ (2009b), 'Hay que ganar credibilidad, pero ¿cómo?'/'You have to earn credibility, but how?', *El País*, 22 January, p. 66.

____ (2010), 'Si no quieres sufrir, no puedes ganar'/'If you don't want to suffer, you can't win', *El País*, 6 October, p. 48.

Barroso, F. J. (2008), 'El jefe de la trama de Coslada tenía en su casa cinco pistolas y tres escopetas'/'The boss of the Coslada plot had five handguns and three shotguns in his home', *El País*, 10 May, p. 18.

Bassets, Marc (2007a), 'La confesión de Jones condena al deporte'/'Jones's confession condemns the sport', *La Vanguardia*, 7 October, p. 72.

____ (2007b), 'Ni Bush sabe qué hacer'/'Not even Bush knows what to do', *La Vanguardia*, 15 December, p. 65.

- Berrio, J. L. (2000), 'Medios de comunicación y drogas', in X. Arana, I. Markez Alonso and A. Vega Fuente (eds), *Drogas, cambios sociales y legales ante el tercer milenio/ 'Drugs, social and legal changes to the third millennium'*, Madrid: Dykinson, pp. 219–34.
- Bojsen-Møller, J. and Christiansen, A. V. (2010), 'Use of performance-and image-enhancing substances among recreational athletes: A quantitative analysis of inquiries submitted to the Danish anti-doping authorities', *Scandinavian Journal of Medicine & Science in Sports*, 20:6, pp. 861–67.
- Breivik, G., Hanstad, D. V. and Loland, S. (2009), 'Attitudes towards use of performance-enhancing substances and body modification techniques. A comparison between elite athletes and the general population', *Sport in Society*, 12:6, pp. 737–54.
- Casero, A. (2009), 'Transparency in the structure of the Catalan communication system: The communication and culture barometer', *Catalan Journal of Communication & Cultural Studies*, 1:1, pp. 111–17.
- Christiansen, A. V. and Bojsen-Møller, J. (2012), 'Will steroids kill me if I use them once? A qualitative analysis of inquiries submitted to the Danish anti-doping authorities', *Performance Enhancement & Health*, 1:1, pp. 39–47.
- Cohen, B. (1963), *The Press and the Foreign Policy*, New York: Harcourt.
- Contrí, V. X. (2011), 'La policía detiene a dos hombres con 11.200 dosis de anabolizantes'/'Police detain two men with 11,200 doses of steroids', *Levante-EMV*, 24 July, <http://www.levante-emv.com/sucesos/2011/07/24/policia-detiene-hombres-gandia-11200-dosis-anabolizantes/827002.html>. Accessed 15 July 2012.
- Coomber, R., Morris, C. and Dunn, L. (2000), 'How the media do drugs: Quality control and the reporting of drug issues in the UK print media', *International Journal of Drug Policy*, 11:3, pp. 217–25.
- Coronado, J. M. and López, J. M. (2006), 'Comunicación y salud pública desde los adolescentes'/'Public health and communication from adolescents', *Comunicar*, 14:26, pp. 63–71.
- Costa, C. (2008), 'Medicina y salud en la prensa. Las noticias de salud en los principales diarios de Galicia'/'Medicine and Health in the press. The health news in major newspapers of Galicia', *Revista Latina de Comunicación Social*, 63, pp. 15–21.
- Costa, Jordi (2007), 'Esparta anabolizada'/'Sparta, juiced up', *El País*, 23 March, p. 72.
- Dearing, James W. and Rogers, Everett M. (1996), *Agenda-Setting*, Thousand Oaks, CA: Sage Publications.

Denham, B. (1999), 'Building the agenda and adjusting the frame: How the dramatic revelations of Lyle Alzado impacted mainstream press coverage of anabolic steroid use', *Sociology of Sport Journal*, 16:1, pp. 1–15.

____ (2004), 'Sports illustrated, the mainstream press and the enactment of drug policy in major league baseball: A study in agenda-building theory', *Journalism*, 5:1, pp. 51–68.

Domínguez, T. (2008a), 'Cae una red que vendía anabolizantes'/'Gang that illegally sold steroids disbanded', *Levante-EMV*, 17 September, <http://www.levante-emv.com/portada/2008/09/17/cae-red-vendia-anabolizantes-gimnasios-farmacia-valencia-alicante/495947.html>. Accessed 15 July 2012.

____ (2008b), 'La Guardia Civil intervino un millón de dosis a la red de tráfico de anabolizantes'/'The Guardia Civil seizes a million doses from steroid-trafficking network', *Levante-EMV*, 20 September, <http://www.levante-emv.com/sucesos/2008/09/20/guardia-civil-intervino-millon-dosis-red-trafico-anabolizantes/497122.html>. Accessed 15 July 2012.

____ (2009), 'Cae una banda que distribuía anabolizantes'/'Gang that distributed steroids disbanded', *Levante-EMV*, 20 May, <http://www.levante-emv.com>. Accessed 15 July 2012.

Entwistle, J. (2002), *El cuerpo y la moda/The Fashioned Body: Fashion, Dress and Modern Social Theory*, Barcelona: Paidós.

Esteban, M. L. (2004), *Antropología del cuerpo. Género, itinerarios corporales, identidad y cambio*/'Anthropology of the body. Gender, body routes, identity and change', Barcelona: Ediciones Bellaterra.

Europa Press (2008), 'Condenan a Mister Universo por tráfico de anabolizantes'/'Mr Universe sentenced for dealing steroids', *Levante-EMV*, 31 December, <http://www.levante-emv.com/vida-y-estilo/gente/2008/12/30/condenan-mister-universo-2003-2-anos-prision-trafico-anabolizantes/537340.html>. Accessed 15 July 2012.

____ (2009a), 'La policía intercepta 2000 dosis'/'Police intercept 2.000 doses', *Levante-EMV*, 21 August, <http://www.levante-emv.com/comunitat-valenciana/2009/08/21/policia-intercepta-2000-dosis-hormona-crecimiento-china/623216.html>. Accessed 15 July 2012.

____ (2009b), 'Semanya tiene el triple de testosterona'/'Semanya's testosterone levels tripled', *Levante-EMV*, 25 August, <http://www.levante-emv.com/deportes/2009/08/25/semanya-triple-testosterona-mujer/624225.html>, Accessed 15 July 2012.

____ (2009c), 'Entre los arrestados en la operación contra el tráfico de anabolizantes hay campeones y jueces de culturismo'/'Champions and judges of bodybuilding competitions among those arrested in the operation against trafficking in steroids', *Las Provincias*, 19 September, <http://www.lasprovincias.es/valencia/20080919/local/sucesos/entre-arrestados-operacion-contra-200809191155.html>. Accessed 6 August 2012.

____ (2010), 'Desmantelan una red internacional que distribuía anabolizantes'/'International network of steroids dealers dismantled', *Las Provincias*, 25 January, http://www.lasprovincias.es/20100125/comunitatvalenciana/provincia_alicante/desmantelan-internacional-distribuia-anabolizantes-201001251809.html. Accessed 6 August 2012.

Fernández, J. J. (2007), 'Dopaje de costa a costa'/'Doping coast to coast', *El País*, 4 March, p. 84.

Ferrari, F. (2007), 'Pereiro justifica el uso de anabolizantes'/'Pereiro justifies his use of steroids', *Levante-EMV*, 20 January, <http://www.levante-emv.com/deportes/3409/pereiro-justifica-anabolizantes/265357.html>. Accessed 15 July 2012.

Gamson, W. A. (1989), 'News as framing', *American Behavioral Scientist*, 33:2, pp 157–61.

____ (2004), 'On a sociology of the media', *Political Communication*, 21:3, pp. 305–07.

Gamson, William A., Croteau, David, Hoynes, William and Theodore, Sasson (1992), 'Media images and social construction of reality', *Annual Review of Sociology*, 18, pp. 373–93.

García del Castillo, J. A., Gázquez, M. and García del Castillo-López, A. (2011), 'Importancia de la credibilidad de las fuentes mediáticas en materia de drogas'/'Importance of the credibility of media sources on drugs', *Miguel Hernández Communication Journal*, 2, pp. 174–96.

García Nieves, J. L. (2010), 'El 8% de los jóvenes de 18 años ha tomado anabolizantes alguna vez'/'Eight percent of 18 year-old men have tried steroids', *Levante-EMV*, 30 May, <http://www.levante-emv.com/comunitat-valenciana/2010/05/30/8-jovenes-18-anos-tomado-anabolizantes-vez/709884.html>. Accessed 15 July 2012.

Ghanem, S. I. (1997), 'El segundo nivel de composición de la agenda: la opinión pública y cobertura del crimen'/'The second level in the composition of the agenda: public opinion and crime coverage', *Comunicación y Sociedad*, 10:1, pp. 151–67.

- Giovio, (2008), 'Millonarios en un día'/'Millionaires in one day', *El País*, 19 July, p. 37.
- Goffman, E. (1974), *Frame Analysis*, Cambridge: Harvard University Press.
- Gómez, A. (2010a), 'El dopaje mancha a Marta Domínguez'/'Doping tarnishes Marta Domínguez', *Las Provincias*, 10 December, <http://www.lasprovincias.es/v/20101210/deportes/mas-deportes/dopaje-mancha-marta-dominguez-20101210.html>. Accessed 6 August 2012.
- ____ (2010b), 'La red de dopaje alcanza a una veintena de atletas'/'Doping network touches twenty athletes', *Las Provincias*, 10 December, <http://www.lasprovincias.es/rc/20101210/deportes/mas-deportes/guardia-civil-interroga-nuria-201012101606.html>. Accessed 6 August 2012.
- ____ (2010c), 'Al entrenador de Marta Domínguez le llamaban el camello de la Blume'/'Marta Domínguez's trainer: "the Blume dealer"', *Las Provincias*, 10 December, <http://www.lasprovincias.es/>. Accessed 6 August 2012.
- Guerra, P. (2010), 'El retiro tranquilo de Eufemiano'/'Eufemiano's quiet retirement', *Levante-EMV*, 12 December, <http://www.levante-emv.com/deportes/2010/12/12/retiro-tranquilo-eufemiano/764928.html>. Accessed 15 July 2012.
- Gutiérrez, M. (2009), 'Te lo vendo sin receta'/'I'll sell it to you without a prescription', *La Vanguardia*, 8 January, p. 23.
- Hastings, G. and Stead, M. (1999), *Using the Media in Drugs Prevention*, London: Great Britain Home Office Drugs Prevention Advisory Service (DPAS).
- Hernández, J. A. and Arribas, C. (2007), 'Los interrogantes de un caso cerrado'/'The unanswered questions of a closed case', *El País*, 20 March, p. 71.
- Hughes, C. E., Lancaster, K. and Spicer, B. (2011), 'How do Australian news media depict illicit drug issues? An analysis of print media reporting across and between illicit drugs, 2003–2008', *International Journal of Drug Policy*, 22:4, pp. 285–91.
- Laguna, A. (1990), *Historia del periodismo valenciano: 200 años en primera plana*/'Valencian journalism history: 200 years in the front page', València: Generalitat Valenciana.
- Lang, G. E. and Lang, K. (1983), *The Battle for Public Opinion: The President, The Press, and The Polls During Watergate*, New York: Columbia University Press.
- López, B. (2011), 'The invention of a "Drug of Mass Destruction": Deconstructing the EPO myth', *Sport in History*, 31:1, pp 84–109.

- _____ (2012), 'Creating fear. The social construction of human growth hormone as a dangerous doping drug', *International Review for the Sociology of Sport*, 48:2, pp. 220–37.
- Luque, X. (2008), 'Un positivo de estado'/'A positive state', *La Vanguardia*, 29 June, p. 64.
- Marrahí, J. A. (2007), 'Tres detenidos por vender anabolizantes en Burjassot'/'Three arrested in connection with the sale of steroids in Burjassot', *Las Provincias*, 25 May, http://www.lasprovincias.es/alicante/prensa/20070525/sucesos/tres-detenidos-vender-anabolizantes_20070525.html, Accessed 6 August 2012.
- Martínez, I., Nieto, M. A. and del Pueyo, B. (2000), *Medios de comunicación y drogodependencias'/'Media and drug abuse'*, Madrid: Delegación del Gobierno para el Plan Nacional sobre Drogas-Ministerio del Interior.
- Martínez, J. (2007), 'Asesinan a un joven'/'Young man murdered', *Las Provincias*, 1 June, <http://www.lasprovincias.es/>. Accessed 6 August 2012.
- Mateo Ruiz-Gálvez, J. J. (2009), 'La ATP encubrió el dopaje de Agassi'/'The ATP concealed Agassi's doping', *El País*, 29 October, p. 52.
- McCombs, M. (1994), 'Influencing the pictures in our heads: Two dimensions of Agenda-setting', *Journal of Mass Communication Studies*, 45, pp. 171-81.
- _____ (2004), *Setting the Agenda: The Mass Media and Public Opinion*, Cambridge: Polity Press.
- McCombs, M. and Evatt, D. (1995), 'Los temas y los aspectos: explorando una nueva dimensión de la agenda-setting'/'Themes and aspects: exploring a new dimension in the agenda-setting', *Comunicación y Sociedad*, 8:1, pp. 7–32.
- McCombs, M. and Shaw, D. L. (1972), 'The agenda-setting function of mass media', *Public Opinion Quarterly*, 36:2, pp. 176–87.
- Noto, A. R., Pinsky, I. and Mastroianni, F. C. (2006), 'Drugs in the Brazilian print media: An exploratory survey of newspaper and magazine stories in the year 2000', *Substance Use Misuse*, 41:9, pp. 1263–76.
- Petrocelli, M., Oberweis, T. and Petrocelli, J. (2008), 'Getting huge, getting ripped: A qualitative exploration of recreational steroid use', *Journal of Drug Issues*, 38:4, pp. 1187–205.
- Piera, E. (2008), 'Anabolizados'/'Juiced up', *Levante-EMV*, 20 September, <http://www.levante-emv.com/opinion/2008/09/20/anabolizados/497059.html>. Accessed 15 July 2012.

- Reese, S. D., Grandy, O. H. and Grant, A. E. (eds) (2001), *Framing Public Life: Perspectives on Media and Our Understanding of Social World*, Mahwah, NJ: Lawrence Erlbaum Associates.
- Rekalde, A. and Romani, O. (2002), *Los medios de comunicación social ante el fenómeno de las drogas: un análisis crítico*/'Media and drugs: a critical analysis', Vitoria-Gasteiz: Servicio Central de Publicaciones del Gobierno Vasco.
- Reuters-EFE. (2008), 'Marion Jones, seis meses de cárcel'/'Marion Jones, six months of prison', *El País*, 12 January, p. 48.
- Robinson, A. (2007), 'Una leyenda con asterisco. Las acusaciones de dopaje empañan el histórico récord de 756 "homeruns" de Barry Bonds'/'A legend with an asterisk: Doping accusations tarnish Barry Bonds 756 homeruns record', *La Vanguardia*, 9 August, p. 40.
- Ros, M. J. (2007), 'Detienen a dos vigilantes por tráfico de anabolizantes'/'Two security guards arrested for trafficking in anabolic steroids', *Levante-EMV*, 16 March, <http://www.levante-emv.com>. Accessed 15 July 2012.
- Rosenberg, L. and Rodríguez, A. (2010), '¿Nuevas drogas? ¿Nuevas adicciones? consumo de drogas de performance entre barriletes y fierros'/'New drugs? New addictions? Performing enhancing drugs consumption among youngs', *Margen: Revista de Trabajo Social y Ciencias Sociales*, 56, pp: 1–11.
- Saperas, E. (1987), *Los efectos cognitivos de la comunicación de masas*/'Cognitive effects of mass communication', Barcelona: Ariel Comunicación.
- Shilling, C. (1993), *The Body and Social Theory*, London: Sage.
- Skårberg, K. and Engström, I. (2007), 'Troubled social background of male anabolic-androgenic steroid abusers in treatment', *Substance Abuse Treatment, Prevention, and Policy*, 2, pp. 2–20.
- Snow, D. A., Rochford, R. D., Worden, S. K. and Benford, R. D. (1986), 'Frame alignment processes, micromobilizations and movement participation', *American Sociological Review*, 51:4, pp. 464–81.
- Taylor, S. (2008), 'Outside the outsiders: Media representations of drug use', *Probation Journal*, 55:4, pp. 369–87.
- Thorlindsson, T. and Halldórsson, V. (2010), 'Sport, and use of anabolic androgenic steroids among Icelandic high school students: A critical test of three perspectives', *Substance Abuse Treatment, Prevention and Policy*, 5:32, pp. 1–11.

Todd, T. (1987), 'Anabolic steroids: The gremlins of sport', *Journal of Sports History*, 14:1, pp. 87–107.

Vázquez, M. (2011), 'Un edil de España 2000 en Silla está imputado en una operación contra la extrema derecha'/'Council member of España 2000 charged in an operation against the extreme right', *Levante-EMV*, 1 June, <http://www.levante-emv.com/comarcas/2011/06/01/edil-espana-2000-silla-imputado-operacion-extrema-derecha/811855.html>. Accessed 15 July 2012.

Vega Fuente, A. (1996), '¿Los medios de comunicación educan sobre las drogas?'/'Media educates on drugs?', *Comunicar*, 6, pp. 115–20.

____ (2004), 'Las drogas y los medios de comunicación ¿prohibir o domesticar? Apuntes para una nueva enseñanza-aprendizaje'/'Media and drugs: domesticate or ban? Notes for a new teaching and learning process', *Enseñanza*, 22, pp. 369–89.

Volkow, N. (2007), 'El abuso de los esteroides anabólicos'/'The abuse of anabolic steroids', *Levante-EMV*, 28 June, p. 66.

Weise, E. (2008), 'Stallone puts muscle behind human growth hormone, but some doctors doubt its effectiveness, safety', *USA Today*, 2 December.

Xambó, R. (2001), *Comunicació, política i societat: El cas valencià*/'Communication, politics and society: the Valencian case', València: Edicions 3 i 4.

____ (2012), 'The media in the Valencian Country', *Catalan Journal of Communication & Cultural Studies*, 4:1, pp. 107–22.

Yesalis, C. E., Kennedy, N. J., Kopstein, A. N. and Bahrke, M. S. (1993), 'Anabolic-androgenic steroids use in United States', *The Journal of the American Medical Association*, 270:10, pp. 1217–21.

Zamora, D. (2007), 'El pasatiempo nacional se tambalea'/'The national pastime staggers', *Levante-EMV*, 14 October, <http://www.levante-emv.com>. Accessed 15 July 2012.

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Notes

¹ In the absence of quantitative epidemiological studies on steroid use, the prevalence in the news can serve as a first indicator to evaluate its social presence and incidence.

² The products come to Spain through different channels, although the port cities of Barcelona, Valencia, Malaga and Algeciras are the most popular. The merchandise originates in countries such as China, the United States, India, Bulgaria, Colombia and Turkey, and other regions such as the Maghreb in North Africa, among others.

³ A common semantic construction in Spanish, which emphasizes the importance of the verb over that of the subject noun.

⁴ In Spanish, the adjective *anabolizante*, or anabolic, is used to refer to anabolic steroids in general.

⁵ The authors want to state that some of the links to the studied news has been lost and are not currently working.