Borel-Hänni, F.; Agulló-Calatayud, V.; Llopis-Goig, R. (2019). Anabolic Steroids and their Effects on Health: A Case Study of Media Social Responsibility. *Journal of Sport and Health Research*. 11(2):187-198.

**Original** 

# ESTEROIDES ANABOLIZANTES Y SUS EFECTOS SOBRE LA SALUD: LOS MEDIOS DE COMUNICACIÓN FRENTE A SU RESPONSABILIDAD SOCIAL

# ANABOLIC STEROIDS AND THEIR EFFECTS ON HEALTH: A CASE STUDY OF MEDIA SOCIAL RESPONSIBILITY

Borel-Hänni, François<sup>1</sup>; Agulló-Calatayud, Víctor<sup>2</sup>; Llopis-Goig, Ramón<sup>3</sup>.

<sup>1</sup>Associate researcher at URePSSS (EA7369), University of Lille, France.

<sup>2</sup>Lecturer in Sociology and Social Anthropology, University of Valencia, Spain.

<sup>3</sup>Associate Professor in Sociology and Social Anthropology, University of Valencia, Spain.

Correspondence to: **François Borel-Hänni**University of Lille, France
84 rue des Stations, 59000 Lille, France
+33 6 60 70 48 57
Email: pacoborel@yahoo.fr

Edited by: D.A.A. Scientific Section Martos (Spain)



Received: 01/06/18 Accepted: 12/11/18

# **RESUMEN**

Los esteroides anabolizantes son una de las formas más antiguas de dopaje en el deporte de tal manera que el uso de estos productos prohibidos en la mayoría de los países se ha trasladado a otros ámbitos de la sociedad. Hoy en día, no sólo se consumen esteroides con el propósito de mejorar el rendimiento o por diversión. Las autoridades hacen frente al tráfico de estas sustancias pero en esta lucha, los traficantes van siempre un paso por delante de la policía, valiéndose de los mercados paralelos que abundan en Internet. Sin embargo, el uso de esteroides podría ser abordado desde otros frentes como, por ejemplo, el que atañe a las consecuencias que los mismos tienen en la salud de los consumidores. En este contexto, los medios de comunicación juegan un papel determinante. Una parte de su misión es proporcionar información completa y veraz. En el caso de los esteroides, el gran público debe ser informado acerca de los efectos de su consumo en la salud. ¿Es esto lo que está sucediendo? Esa es la pregunta que intentamos responder a través de la presente revisión de cómo fue tratado el tema de los esteroides en la prensa española entre 2007 y 2011. Descubrimos que abunda el sensacionalismo, enfatizándose la información más amarillista en detrimento de la que alertaría sobre sus efectos sobre la salud, por ejemplo, lo que proporciona una descripción incompleta del tema y podría estar incidiendo en los efectos nocivos a largo plazo, además de ir contra la deontología periodística.

**Palabras clave:** Esteroides. Dopaje. Periodismo deportivo. Responsabilidad social. España.

#### **ABSTRACT**

Anabolic steroids are among the oldest performanceenhancing drugs in sport and their use has spread into many other layers of society. The use and sale of steroids are illegal in most parts of the world, and authorities who attempt to combat trafficking in them find themselves engaged in ceaseless, yet ultimately futile efforts: traffickers are always a step ahead of them. However, an effective way to combat steroid use could be to inform people about these drugs' advantages and disadvantages. The mainstream media can play an important part in this process. They have a social responsibility to provide exhaustive information about the long-term damage caused by these substances. Do journalists uphold this responsibility? Through a study of the headlines the Spanish press devoted to the issue between 2007 and 2011, we have examined the following question: did journalists actually inform their audience about all aspects of this public health problem? We found that they easily fall prey to sensationalism, emphasizing catchier facts to the expense of others, health-related for instance, which provides an incomplete depiction of the matter and may have harmful long-term effects, as well as going against journalism deontology.

**Keywords:** Steroids. Media. Journalism. Responsibility. Sport.

# INTRODUCTION

For centuries, human beings have been seeking to increase their physical capacities. The unprecedented intellectual and economic exchanges between chemistry and medicine in the twentieth century provided us with unexpectedly effective solutions. Among these were anabolic steroids, lab-created, hormone-like substances that mimic testosterone. Used on a regular basis, anabolic steroids have a spectacular impact on muscle development, stamina and aggressiveness, all qualities that are attractive to young athletes and many others. Aesthetics and endurance are also appreciated by young people in general (Thorlindsson & Halldórsson 2010; Murray et al. 2016; Vorona & Nieschlag 2018), and especially by men, who feel the need to perform well in society, whether in recreational activities (clubbing) or in their professional duties (Agulló-Calatayud 2013).

Consequently, anabolic steroid use has expanded far beyond the realm of sport, leading to an illegal traffic fuelled both by the growing cult of the image (Shilling 1993; Petrocelli, Oberweis & Petrocelli 2008; Avilez, Zeballos & Taype, 2017) and by the shadow economy that is linked to the 'dark web', a secret, deregulated segment of the internet (Cordaro, Lombardo & Consentino, 2011; Agulló-Calatayud 2013). Addiction to steroids has nowadays become an important public health issue in several countries such as the U.K. (McVeigh & Begley 2017). But why were the sale and use of anabolic steroids made illegal in the first place? This was done principally as part of a broader struggle against performanceenhancing drugs in sport. Yet at the same time that sport was trying to get rid of anabolic steroids, they were becoming a drug of choice, albeit a prohibited one, for both athletes and non-athletes (Breivík, Hanstad & Loland 2009). The fact that they have long-term harmful side effects on mental and physical health does not seem to matter to those who use them. By interfering with the hormonal balance, anabolic steroids disrupt the metabolism. The reason for this is quite simple: provided with heterogenic testosterone, the body stops producing it and shuts down some hormonal mechanisms, thus leading to severe complications in middle age, including death.

Health professionals no longer deny that, for both athletes and non-athletes, the disadvantages of using

anabolic steroids outweigh their advantages. Do the mainstream media raise the public's awareness of this? They have a social responsibility to do so, which means 'respecting the truth no matter what consequences it may bring about [...] because the right of the public is to know the truth' (article 1 of the Munich Declaration of the Duties and Rights of Journalists). According to this principle, media coverage of anabolic steroids should emphasise every aspect of the matter: criminal, sport-related but also public health concerns. Is this issue covered thoroughly and responsibly? Readers may be more interested in criminal issues and doping scandals linked to steroids than in the threat of addiction. If journalists think so and act accordingly, this would be a violation of their responsibility.

Starting from these premises, the present article focuses on the coverage of anabolic steroids issues in Spanish press over a five-year period (2007-2011). The research presented here tries to determine if journalists uphold their social responsibility of reporting on trafficking and doping cases, and also on the long term damages these substances cause on health.

# **METHODS**

Since the end of the nineteenth century, competitive sport has been governed by the Olympic slogan 'citius, altius, fortius' (faster, higher, stronger). These three words not only call upon athletes to continue to improve their performance, but also symbolise the main argument that is used in marketing elite sports (Arribas 2007). The Summer Olympics' 100-meter dash final is among the most watched televised events throughout the world, not only for the thrills that it provides but also for the perpetual quest for world records in speed. Without the prospect of everfaster runners, sprint races would not exert the same emotional attraction on sport fans. The same goes for a variety of other events, such as cycling (the Tour de France), soccer, ice hockey or American football, which regularly ramp up their pace in order to suit the standards of television. Not only does the speed of the game increase, thus presumably making it more appealing, but more games are also played during a calendar year. For instance, a typical ice hockey season in the North American professional league (the NHL) consists of more than 70 games packed into a few months. Soccer has also steadily

increased the number of both games and participants in its major competitions. The World Cup morphed from a 16 to a 32-team tournament between 1978 and 1998, and the tally will be raised to 48 by 2026.

Confronted with the never-ending pressure to deliver more quantity and quality, athletes have long turned to performance-enhancing substances, even before the word 'doping' and the struggle against it had become institutionalised (Todd 1987; Hermann & Henneberg 2014; Kanayama & Pope 2018). It is common knowledge that cyclists who competed in the Tour de France in the 1920s were only able to stand the ordeal through the help of cocaine and painkillers. True, the search for elixirs of eternal youth (or strength, in this case) is as old as humanity, but modern sports have added their own impetus to this quest.

In the aftermath of a series of amphetamine-related tragedies occurred during sporting events, the main ones being the deaths of two cyclists (Knud Jensen while competing in the 1960 Olympics cycling race, Tom Simpson in a Tour de France 1967 mountain stage), the International Olympic Committee (IOC) implemented its first anti-doping rules prior to the 1968 Olympics in Mexico. However, although the introduction of such testing sent a clear message to athletes, a constant stream of doping scandals throughout the following decades made it clear that performance-enhancing drugs were endemic in sport (Møller 2015). As a consequence, the IOC, national governments and sports associations worldwide decided to join forces. Testimony of this, the creation in 1999 of the World Anti-Doping Agency (WADA) which aim is to enforce more stringent regulations against doping. These new rules were put to paper in 2003 when the first-ever World Anti-Doping Code (WADC) was published.

Anabolic steroids trials on humans, on the other hand, began even before their discoverers were awarded the Nobel Prize in 1939. Weight lifters were the first category of athletes to take them on a regular basis before the substance was banned in 1976 by the IOC, more on ethical grounds than out of health concerns, even if it had already been admitted that anabolic steroids led to hormonal disorders with visible and lasting side effects.

Anabolic steroids then followed a similar route within the broader society. From being a niche product, used either by professional weightlifters, as a therapy against extreme cases of anaemia or muscle atrophy, or as a recreational product, anabolic steroids became commonplace among other categories of people: not only night clubbers, but also private security agents, bodyguards, firemen and, most notably, the police and members of the armed forces. As soon as demand for anabolic steroids shrank in sport because of effective blood testing (which paved the way for more sophisticated performance-enhancing drugs such as erythropoietin or EPO, López 2011), dealers began to look for new customers, especially among those who knew very little about the lethal effects of these drugs. Anabolic steroid use by non-athletes can be explained by the contemporary 'cult of the body', but other motives are involved when, for example, members of the security forces feel compelled to harm themselves in order to do their jobs. Indeed, as anabolic steroid use has expanded, so has the knowledge of the damages it causes to the body. Therefore we cannot suggest that these users are unaware of the dangers they face, or that extended steroid use may not become a major public health problem in the decades to come. Hence the magnitude of the challenge posed by steroids consumption, which therefore cannot be regarded only as a sanitary issue, but also as a sociological as psychological one. As with other illegal drugs, there is a concerted international effort to dismantle networks that traffic in anabolic steroids (Yesalis et al. 1993; Lundholm et al. 2014), but clandestine labs can flourish in countries with laxer law enforcement systems (Eastern Europe, South America, South-Eastern Asia), just as drug dealers can operate through the dark web. Therefore, a less costly and more effective way to struggle against steroid addiction would involve raising public awareness about the dangers of such substances, as it has been done with other drugs and tobacco.

The media could play a leading role in this process. Detailed and thorough information about anabolic steroids has so far been scarce because this is a relatively new phenomenon, considerably more recent than addiction to tobacco or opioids. Until now, this issue has only caught the public eye when top athletes (or criminals) are involved. Hard truths about anabolic steroids, especially the damage they

cause to long-term health (Sagoe et al. 2014; Griffiths et al. 2016), are seldom brought to the public. Nevertheless, journalists have the responsibility to explore all the aspects of an issue, not just those that are the most sensational. This is especially crucial in countries that are at the centre of anabolic steroid trafficking. If large numbers of these drugs were to end up being consumed on their own territories, these nations would face a public health nightmare that could not be ignored (Agulló-Calatayud et al. 2012). This is the case of Spain, which has not only long served as a point of entry for drug dealers in Europe – as the 'Operation Puerto' has confirmed – but which also has a level of steroid use that has been widely documented (Agulló-Calatayud et al. 2008).

Before the 21st century, scholarly publications on doping were few and far between. Moreover, all of them tackled the issue from a physiologic or (Woodland pharmacologic perspective Donohoe & Johnson 1986; Voy 1991; Hoberman 1992). Nonetheless, a massive doping scandal burst in the summer of 1998 during the Tour de France proved a turning point. The following year, Barrie Houlihan (1999) provided a valuable contribution to the understanding of the political dimensions of the issue. Then, the sociologist Ivan Waddington (2000) offered a thorough analysis of the relationship between drug use in sports and several public health issues. Both authors focused on the several triggers leading to doping behaviour but still very little was known about the extension of the issue, a void filled in the following years by a flurry of quantitative research.

Official data from the WADA set aside – mainly because the figures provided only document on the athletes who have tested positive (Mottram, 2003) –, a range of methods have been tried to assess the incidence of doping among athletes: self-reported surveys (Lentillon-Kaestner & Ohl 2011; Mottram 2011; Dimeo & Taylor 2013); surveys on perceived drug use in one's own sport or across all sports (Waddington et al. 2005; Thomas et al. 2011; James et al. 2013; Moston, Engelberg & Skinner 2015); surveys on public opinion about the incidence of drug use in sports (Schwerin & Corcoran 1992; Van Raalte, Brewer & Cusimano 1993; Nocelli et al. 1998; Stamm et al. 2008; Moston, Engelberg & Skinner 2012).

According to athletes' estimates, the incidence of drug use in sports ranges from 1% to 39% (Lentillon-Kaestner & Ohl 2011), but these surveys on perceived drug use have been criticized for producing inflated results (Mottram 2003; James et al. 2013). Simultaneously, the wider public's perception of doping in sports is patchy at best. Opinions about the issue can vary widely from one country to another or from one sport to another (García-Ferrando & Llopis-Goig 2011). Considering that official statistics may suggest against some evidence that doping is an isolated phenomenon, and that the ordinary folk generally has no doped athlete among its relatives, public perception of doping relies on other sources, most notably the media, who have been consistently in the forefront of doping scandals in the latest decades. Thus in order to understand how the public feels about performance-enhancing drugs, anabolic steroids first among them, it is necessary to pore through media reports on the issue. Even if their audience is dwindling steadfastly, mainstream media still have the power to set the agenda (McCombs 2004) on how policy-makers respond to doping and to raise public awareness on a given issue. This is where their social responsibility takes root.

The concept of the social responsibility of journalists appeared as soon as professionals started to make a living by informing the public. A French law from 1881, which established freedom of the press and is widely viewed as a cornerstone of free speech, is based on the moral principle of individual responsibility: 'freedom fosters responsibility and if, under the common law, one is responsible because one is free and one is free because one is responsible, how could we condemn anyone who gives a speech or holds a pen if, in full respect of his or her dignity, he or she would repudiate any opportunity to act irresponsibly?'(Agniel as quoted in Sapiro 2011). In other words, in order to grant citizens freedom of speech and information, we must first grant them the presumption of responsibility. Journalists are the first beneficiaries of this principle. We trust them to report the world as it is, so that we can develop specific opinions and a general idea of the society we live in. This particular form of journalistic responsibility is close to the definition of responsibility given by the French philosopher Paul Ricœur (1994, 24-25), who wrote that 'one is responsible if one is given something precious and fragile to look after'. An



individual who takes care of something precious must adapt his or her behaviour accordingly; journalists therefore are responsible for their audience's need for information and knowledge.

As with any issue, when confronted with the matter of anabolic steroids, journalists must deal with numerous constraints, only one of which is social responsibility. It should be remembered that, more often than not, they are employees who also must report to their bosses and, sometimes, to shareholders, whose (financial) interests contradict those of the larger public. Milton Friedman made an infamous statement about the responsibility of a company which should only be to 'increase its profits' (1970, 122-126). Under the weight of this principle and in institutions in which reporting fully and thoroughly about an issue risks alienating part of their audience, and thereby lessening their employer's profits, journalists constantly have to choose between their social responsibility and their responsibility as wage earners. The study of journalistic social responsibility can be articulated in a single question: on the basis of an examination of a comprehensive and balanced sample of media archives, limited in space and time, can their coverage of a given issue be judged to be complete? The more complete the coverage, the more socially responsible journalists will be considered to be.

On a quantitative level, we selected all the 581 articles devoted, over a period of five years (2007-2011), to the topic of steroids in four Spanish daily newspapers. We focused on these five years in particular because they encompass a stretch of time during which struggle against steroids was at its peak. For an article to be considered relevant, it had to contain the Spanish equivalent of one of the following words or group of words: 'anabolic', 'steroids' and 'anabolic steroids'.

The four newspapers are located in Madrid (*El País*), Barcelona (*La Vanguardia*) or in the area of Valencia. Known locally as '*Comunitat Valenciana*' or 'País Valenciano' (*Levante-El Mercantil Valenciano*, *LEMV* and *Las Provincias*), this region is a centre for drug use and trafficking (Agulló-Calatayud et al. 2012). Actually, in the past five years, according to the Spanish police authorities, *Comunitat Valenciana* has witnessed three major

police operations against illegal traffic of anabolic steroids which led to 78 arrests (Reche 2017).

Figures released by the *Oficina de Justificación de la Difusión* (OJD, a committee that specialises in auditing newspaper circulation and the media sector) show that in 2011, *El País* was the most widely circulated newspaper in Spain overall, while *La Vanguardia* came in third, *Levante-EMV* in fifteenth, and *Las Provincias* in eighteenth. It is worth noting that the Spanish media landscape, like many other aspects of public life, is shaped by fierce regionalism.

Once we had selected these 581 articles, we analysed each of them in relation to the following set of characteristics: the information source cited by the author (police, the judiciary, other media); the section of the newspaper in which it was published (crime, health, sport, etc.); and the location of the story, in case a particular area of the country was overrepresented.

Data analysis in the present article derives from our theory of media and journalistic responsibility. The same methodology has been applied in our previous studies of the media coverage of football refereeing (Borel-Hänni 2015a, 2015b). It allows the researcher to analyse the meanings and connotations (Hall 1973) contained in mainstream discourse on any given issue, in this case, anabolic steroids. Once we accept that objectivity is both a necessary ideal and impossible to reach in reality, connoted speech becomes inevitable in journalism. There is an unavoidable mismatch between the world depicted by journalists and the world as it is, and a journalist's duty is to narrow that gap. The degree to which readers can be influenced by the media's presentation of the world is almost impossible to determine (Esquenazi 2003). Nonetheless, there is undeniable degree of performativity (Austin 1962) in all utterances; however inaccurate they may be, as long as they are repeated often and widely enough. Thus, if we detect a bias in the treatment of anabolic steroids by the Spanish media, we will be able to say that journalists have not been socially responsible, for their articles have noticeable connotations. Moreover, as William Thomas said (1928, 572), 'a situation defined as real in a society will be true in its consequences' any connoted discourse has the potential to turn falsehood into reality, at least in a handful of situations.



In their role as opinion leaders (Lazarsfeld, Berelson & Gaudet 1944; Champagne 1990), media and journalists have enough clout to influence public perception of what is 'defined as real'. In the final analysis, connoted speech may not only indicate a reduction in the level of social responsibility, but may also create problems if it has an impact on people's behaviour. This is why we chose to analyse anabolic steroids in terms of the social responsibility of journalists: it is of the utmost importance for citizens to know not only about the judicial and criminal aspects of this problem, but also about the dangers they or their relatives could face if they were become addicted to substances (Vega Fuente 1996).

### **RESULTS**

In order not to overburden this section, we shall focus our attention only on the headlines of the articles, which are written in such a way as to capture the readers' attention, so they aptly sum up the articles' contents.

First, *El País*, the only national newspaper among our panel, appeared to outnumber the others in terms of the quantity of articles it devoted to steroids (Table 1, below). This tends to confirm that anabolic steroids were not considered merely to be a local issue, even if the Valencian *Las Provincias* published three times more pieces on the topic than *La Vanguardia*, its Catalan counterpart. On the other hand, *Levante-EMV*, the other Valencian newspaper, remained relatively silent. Local sensitivity to an issue may be as decisive as editorial policy in the decision to cover it

**Table 1**. Articles dealing with anabolic steroids per newspaper and year.

N	GC	2007	08	09	10	11	Total	AAY
P	Sp	62	38	36	56	47	239	47.8
V	Ca	18	15	11	12	11	67	13.4
L	Va	24	17	17	17	19	94	18,8
LP	Va	21	37	20	49	54	181	36.2
T		125	107	84	134	131	581	116.2

N= Newspaper; GC= Geographical coverage; AAY= Average of articles per year; P= El País; V= La Vanguardia; L= Levante-EMV; LP= Las Provincias; T= Total; Sp= Spain; Ca= Catalan; Va: Valencian

Source: AGULLÓ-CALATAYUD (2013)

This local parameter is also reflected in the angle chosen to report stories on anabolic steroids. El País (Table 2, below) confined them to the 'Sport' section or, significantly, to the Sunday supplement (a day in which sport receives increased attention) or even treated them as a merely 'Valencian' affair. It seems that, when a newspaper's audience may span the whole country, performance-enhancing drugs are confined to the realm of sport. Although social and public health implications do not disappear, they remain outside the article's focus. Not only did La Vanguardia (Table 3, below) give less information about steroids, it also labelled them as 'sportsrelated'. Because steroids are not considered a scourge in Catalonia, journalists in La Vanguardia treated the topic in the same way that El País did.

**Table 2**. Number of articles on steroids published in *El País* (2007-2011) per section

Section	N° Articles	%
Sport	140	58.6
<b>Current Affairs</b>	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

4	4	1
	*	N

Obituaries	3	1.3
Business	2	0.8
<b>Basque Country</b>	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

Source: AGULLÓ-CALATAYUD (2013)

**Table 3**. Number of articles on steroids published in *La Vanguardia* (2007-2011) per section

Section	N° Articles	%
Sport	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

Source: AGULLÓ-CALATAYUD (2013)

The Valencian newspapers, however, had a different approach to the issue. It should be remembered that the *Comunitat Valenciana* was a hotbed of steroid trafficking in the 1990s and that investigators working on 'Operation Puerto' – a massive drugrelated scandal uncovered in 2006 involving athletes of various sports, medics and traffickers – described the area as a nerve centre of steroid trafficking. Therefore, both *Levante-EMV* (Table 4, below) and *Las Provincias* (Table 5, below), without discarding the strong link between sport and steroids, classified the issue as being of general public interest, addressing it in the 'Current Affairs' (*Levante-EMV*) or 'Society and Crime' (*Las Provincias*) sections.

**Table 4**. Number of articles on steroids published in *Levante-EMV* (2007-2011) per section

Current Affairs  Sport  Front Page	33 21 20	35.1 22.3 21.3
-		
Front Pogo	20	21.3
From rage		
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

Source: AGULLÓ-CALATAYUD (2013)

This last point is of particular interest since we have already suggested in previous studies (Borel-Hänni 2015a) that, when assigned to report about sport, journalists tend to downplay their own social



responsibility and indulge in easy polemics. Consequently, coverage of anabolic steroids may increase in quality if the issue is considered to be of particular relevance to the newspaper's geographical zone.

**Table 5.** Number of articles on steroids published in *Las Provincias* (2007-2011) per section

Section	N° Articles	%
Society and Crime	69	37.3
Sport	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

Source: AGULLÓ-CALATAYUD (2013)

#### DISCUSSION

Journalists have a responsibility to 'respect the truth'. This is obvious, and charters and texts of reference remind us of this, but nothing clearly says which 'truth' journalists must respect. Whatever the topic, truth is too broad a concept; steroids are not an exception to this rule. Thus journalists are responsible, more than anything else, for choosing among a wide range of angles, without excluding any, and highlighting the most important ones. In this study, we can see that what is labelled 'important' depends on the scope of the newspaper the journalist is working for. El País and La Vanguardia, given their geographical areas, have difficulty in treating steroid use in any way other than in relation to sportrelated news, and thus as set apart from the ordinary lives of their readers. Las Provincias and Levante-EMV respectfully disagree when they present steroid trafficking as a series of criminal cases and their

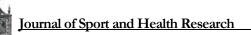
journalists go in search of the roots of what must be considered a social disease. Their coverage appears more comprehensive, closer to the truth and more in line with journalistic social responsibility. However, we may wonder how much this choice is dictated by ethical principles or only comes as a reaction to the legitimate concerns of the local Valencian population. Social responsibility, in this context, may just be an effect of economic interests.

#### **CONCLUSIONS**

Social responsibility in journalism is a concept that can only be applied in the best of circumstances. Journalistic independence, as it stands, is a useful principle but it is toothless as long as it cannot be enforced. Therefore, freedom of information - a concept that does not have the same meaning for the reader and the journalist – is heavily dependent on contingencies. The employees of the four newspapers surveyed certainly tried to do their best, but their social responsibility was limited by what their media think will appeal to readers. Other limitations included the money and time allotted to journalists. The result is that information is viewed through a lens or rather through a selection of filters. Further, two readers' approaches to the same issue can be entirely different, even if they live only 200 miles apart, the distance separating Valencia from Barcelona. Nonetheless, public health problems like drug use know no borders and journalists have a social responsibility to ensure that every reader is aware not only of the judicial side of this issue, but also of the implications for health, which are even more crucial. However, when called to choose between the two angles, journalists seem to privilege the one that is easier to cover and is more palatable as a story, regardless of both the general interest and their responsibility to provide thorough information. One can therefore ask: is social responsibility only optional in journalism? Our study is only a first approach, devoted to a single topic, limited in time and space, but it may bring significant enough results to call for broader studies, involving other fields and types of media, in which social responsibility may be embraced differently.

#### REFERENCES

 Agulló-Calatayud, V.; Aguilar-Serrano, J.; Aleixandre-Benavent, R.; Valderrama-Zurián, J.C.; Vidal-Infer, A. (2012). El consum



- recreatiu d'esteroides anabolitzants entre els joves valencians. *TSNova*.6: 19–34.
- Agulló-Calatayud, V.; Aleixandre-Benavent, R.; González-Alcaide, G.; Valderrama-Zurián, J.C. (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): 103–109. Doi: 10.1136/bjsm.2007.036228
- 3. Agulló-Calatayud, V. (2013). Recreational Anabolic Steroids Consumption: A Sociological Perspective (PhD diss.). Valencia: Universitat de València.
- 4. Arribas, C. (2007). El público quiere gladiadores. *El País*, December 17.
- 5. Austin, J. L. (1962). *How to do things with words*. Oxford: Urmson.
- 6. vilez, J. L.; Zevallos-Morales, A.; Taype Rondán, A. (2017). Use of enhancement drugs amongst athletes and television celebrities and public interest in androgenic anabolic steroids. Exploring two Peruvian cases with Google Trends. *Public Health*. 146: 29-31. Doi: 10.1016/j.puhe.2017.01.011
- 7. Borel-Hänni, F. (2015a). Information through a Lens: Media and Journalists' Social Responsibility French Football towards Referees. European Journal for Sport and 397-419. Society. 12 (4): Doi: 10.1080/16138171.2015.11730365
- 8. Borel-Hänni, F. (2015b). La performativité des representations médiatiques à l'épreuve du terrain sportif: l'exemple de l'arbitre de football. *Questions de Communication*. 27: 279-299.
- 9. Breivík, G.; Hanstad, D.V.; 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): 737–754. Doi: 10.1080/17430430902944183
- 10. Champagne, P. (1990) Faire l'opinion: le nouveau jeu politique. Paris: Minuit.
- 11. Cordaro, F.; Lombardo, S.; Cosentino, M. (2011). Selling androgenic anabolic steroids by the pound: Identification and analysis of popularwebsites on the Internet. *Scandinavian Journal of Medicine and Science in Sports.* 21: 247–259. Doi: 10.1111/j.1600-0838.2010.01263.x
- 12. Dimeo, P.; Taylor, J. (2013). Monitoring drug use in sport: The contrast between official statistics and other evidence. *Drugs: Education, Prevention & Policy*. 20(1): 40-47. Doi: 10.3109/09687637.2012.713412
- 13. Donohoe, T.; Johnson, N. (1986). *Foul Play: Drug Abuse in Sport*. Oxford: Basil Blackwell.
- 14. Esquenazi, J. P. (2003). *Sociologie des publics*. Paris: La Découverte.
- 15. Friedman, M. (1970). The Social Responsibility of Business is to Increase its Profits. *The New York Times Magazine*, September 13.
- García-Ferrando, M.; Llopis-Goig, R.; (2011).
   Ideal democrático y bienestar personal.
   Encuesta de hábitos deportivos en España 2010.
   Madrid: Centro de Investigaciones Sociológicas.
- 17. Goulet, V. (2010). Médias et classes populaires. Les usages ordinaires des informations. Paris: Ina.
- Griffiths, S.; Murray, S.; Mitchison, D.; Mond, J. (2016). Anabolic steroids: Lots of muscle in the short term, potentially devastating health consequences in the long-term. *Drug and Alcohol Review*. 35: 375-376. Doi: 10.1111/dar.12433
- 19. Hall, S. (1973). Encoding and Decoding in the Television Discourse. Birmingham: University of Birmingham.



- 20. Hermann, A.; Henneberg, M (2015). Long term effects of doping in sporting records: 1886-2012. *Journal of Human Sport and Exercise*. 9 (3): 727-743. Doi: 10.14198/jhse2014.93.05
- 21. Hoberman, J. (1992). Moral Engines: The Science of Performance and the Dehumanization of Sport. New York: Free Press.
- 22. Houlihan, B. (1999). Dying to Win: Doping in Sport and the Development of Anti-Doping Policy. Strasbourg: Council of Europe Publishing.
- 23. James, R.; Nepusz, T.; Naughton, D.; Petróczi, A. (2013). A potential inflating effect in estimation models: Cautionary evidence from comparing performance enhancing drug and herbal hormonal supplement use estimates. *Psychology of Sport and Exercise*. 14(1): 84-96. Doi: 10.1016/j.psychsport.2012.08.003
- 24. Kanayama, G.; Pope Jr., H. (2018). History and epidemiology of anabolic androgens in athletes and non-athletes. *Molecular and Cellular Endocrinology*. 15;464:4-13. Doi: 10.1016/j.mce.2017.02.039
- 25. Lazarsfeld, P.; Berelson, B.; Gaudet, H. (1944). *The People's Choice: How The Voter Makes Up His Mind in a Presidential Campaign.* New York: Columbia University Press.
- 26. Lentillon-Kaestner, V.; Ohl, F. (2011). Can we measure accurately the prevalence of doping? *Scandinavian Journal of Medicine & Science in Sports.* 21(6): 132-142. Doi: 10.1111/j.1600-0838.2010.01199.x
- 27. López, B. (2011). The Invention of a 'Drug of Mass Destruction': Deconstructing the EPO Myth. *Sport in History*. 31 (1): 84–109. Doi: 10.1080/17460263.2011.555208
- 28. Lundholm, L.; Frisell, T.; Lichtenstein, P.;Långström, N. (2014). Anabolic androgenic steroids and violent offending: confounding by polysubstance abuse among 10365 general population men. *Addiction*. 110 (1): 100-108. Doi: 10.1111/add.12715

- 29. McCombs, M. (2004). *Setting the Agenda: The Mass Media and Public Opinion*. Cambridge: Polity Press.
- 30. McVeigh, J.; Begley, E. (2017). Anabolic steroids in the UK: an increasing issue for public health. *Drugs: Education, Prevention and Policy*. 24(3): 278-285. Doi: 10.1080/09687637.2016.1245713
- 31. Møller, V. (2015). Doping in Sport. In Giulianotti, R. (ed.) *Routledge Handbook of the Sociology of Sport*. London: Routledge.
- 32. Moston, S.; Engelberg, T.; Skinner, J. (2015). Perceived incidence of drug use in Australian sport: a survey of athletes and coaches. *Sport in Society.* 18 (1): 91-105. Doi: 10.1080/17430437.2014.927867
- 33. Moston, S.; Engelberg, T.; Skinner, J. (2012). Perceived incidence of drug use in Australian sport: A survey of public opinion. *Sport in Society.* 15 (1): 64-77. Doi: 10.1080/03031853.2011.625277
- 34. Mottram, D. (2003). Prevalence of Drug Misuse in Sport. In Mottram, D. (ed.) *Drugs in Sport*. Milton Park, UK: Routledge.
- 35. Mottram, D. (2011). Prevalence of drug misuse in sport. In Mottram, D. (ed.) *Drugs in sport* (5<sup>th</sup> edition). New York: Routledge/Taylor & Francis Group.
- 36. Munich Declaration of the Duties and Rights of Journalists. (1971). Munich, November 23-24
- 37. Murray, S.; Griffiths, S.; Mond, J.; Kean, J.; Blashill, A. (2016). Anabolic steroid use and body image psychopathology in men: between appearancedelineating versus performance-driven motivation. Drug and Alcohol Dependance, Doi: 10.1016/j.drugalcdep.2016.06.008
- 38. Nocelli, L.; Kamber, M.; François, Y.; Gmel, G.; Marti, B. (1998). Discordant public perception of doping in elite versus recreational sport in Switzerland. *Clinical Journal of Sport Medicine*. 8:195-200.



- 39. Petrocelli, M.; Oberweis, T.; Petrocelli, J. (2008). Getting huge, getting ripped: A qualitative exploration of recreational steroid use. *Journal of Drug Issues*. 38 (4): 1187–1205. Doi: 10.1177/002204260803800412
- 40. Reche, C. (2017). Anabolizantes. Yonquis en el gimnasio. *Valencia Plaza*, January 19.
- 41. Ricœur, P. (1994). Éthique et responsabilité. Neuchâtel: Éditions de la Baconnière.
- 42. Sagoe, D.; Molde, H.; Andreassen, C.; Torsheim T.; Pallesen, S. (2014). The global epidemiology of anabolic-androgenic steroid use: a meta-analysis and meta-regression analysis. *Annals of Epidemiology*. 24 (5): 383-398. Doi: 10.1016/j.annepidem.2014.01.009
- 43. Sapiro, G. (2011). *La responsabilité de l'écrivain*. Paris: Seuil.
- 44. Schwerin, M.; Corcoran, K. (1992). What do people think of male steroid users? An experimental investigation. *Journal of Applied Social Psychology*. 22: 833-840.
- 45. Shilling, C. (1993). *The Body and Social Theory*. London: Sage.
- Stamm, H. P.; Lamprecht, M.; Kamber, M.; Marti, B.; Mahler, N. (2008). The public perception of doping in sport in Switzerland. *Journal of Sports Sciences*. 26: 235-242. Doi: 10.1080/02640410701552914
- 47. Thomas, J.; Dunn, M.; Swift, W.; Burns, L. (2011). Illicit drug knowledge and information-seeking behaviours among elite athletes. *Journal of Science and Medicine in Sport.* 14 (4): 278-282. Doi: 10.1016/j.jsams.2011.02.001
- 48. Thomas, W. (1928). *The Child in America*. New York: Alfred Knopf.
- 49. Thorlindsson, T.; 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): 1–11. Doi: 10.1186/1747-597X-5-32

- 50. Todd, T. (1987). Anabolic Steroids: The Gremlins of Sport. *Journal of Sports History*. 14 (1): 87–107.
- 51. Van Raalte, J.; Cusimano, K.; Brewer, B. (1993). Perceptions of anabolic steroid users. *Journal of Applied Social Psychology*. 23: 1214-1225.
- 52. Vega Fuente, A. (1996). ¿Los medios de comunicación educan sobre las drogas? *Comunicar*. 6: 115-120.
- 53. Vorona, E.; Nieschlag, E. (2018). Adverse effects of doping with anabolic androgenic steroids (AAS) in competitive athletics, recreational sports and bodybuilding. *Minerva Endocrinologica*. 19 Feb. Doi: 10.23736/S0391-1977.18.02810-9
- 54. Voy, R. (1991). *Drugs, Sport and Politics*. Champaign, IL: Leisure Press.
- 55. Waddington, I. (2000). Sport, Health and Drugs: A Critical Sociological Perspective. London: Routledge.
- Waddington, I.; Malcolm, D.; Roderick, M.; Naik, R. (2005). Drug use in English professional football. *British Journal of Sports Medicine*.
   Doi:10.1136/bjsm.2004.012468
- 57. Woodland, L. (1980). *Dope: Use of Drugs in Sport*. Newton Abbot, UK: David and Charles.
- 58. Yesalis, C.; Kennedy, N.; Kopstein, A.; Bahrke, M. (1993). Anabolic-androgenic steroids use in United States. *The Journal of the American Medical Association*. 270 (10): 1217–1221.