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## Miscellaneous

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## The timeshifted viewing cycle of television programmes after their linear broadcast in Spain

### Abstract

This research examines the timeshifted viewing cycle of television shows in Spain after their (traditional) linear broadcast. Two hypotheses guide the study: H1: the timeshifted viewing cycle of TV programmes depends on the genre and it is shorter in the case of programmes dealing with news and current events; H2: the timeshifted viewing of fiction shows is the most distributed after their day of broadcast and this justifies extending of measurement of viewership beyond the eighth day. The study is based on the analysis of the 10 shows with the highest timeshifted audience in Spain of every day for nine months, which yielded a sample of 2,750 units. The results confirmed both hypotheses and led us to conclude that the timeshifted viewing of all genres decreases as the days pass by, and that this decrease is faster for current-events-based genres and non-existent for children's programming. We propose improvements for the current audience measurement system in Spain. Finally, the general objective of the research is to analyse for the first time the evolution of the timeshifted TV audience according to genres, taking into account that the data provided by Kantar Media registers audience over an eight-day period: the day of broadcast (VOSDAL: Viewing On The Same Day As Live) plus the following 7 days.

### Keywords

**Timeshifted audience, TV genres, viewing cycle, television, video on demand.**

### 1. Introduction

Television consumption has been traditionally measured with audiometers that quantify the number of people that watches a programme in its (traditional) linear broadcast in a given network.

However, the measurement of the success of a TV show must also consider two new parameters: the timeshifted audience and the social audience. On the one hand, the social audience measures the conversations and number of interactions that a TV show generates on Twitter. On the other hand, the timeshifted audience measures viewing after the first minute that a programme is broadcast on television, i.e., this measurement system does not wait for the end of the traditional broadcast to begin to measure the timeshifted viewing (Gallardo-Camacho & Sierra, 2017).

In Spain, Kantar Media is the company that measures traditional viewership, based on 4,755 households equipped with audiometers (Eurodata, 2018). Kantar Media began to measure the social audience since December 2014, through the Kantar Twitter TV Ratings service, and timeshifted audience since February 2015. However, timeshifted and social audience data should be considered supplementary to the linear audience data (González Neira & Quintas Froufe, 2016) since success in both measurements is usually not correlated (Gallardo-Camacho, Lavín & Fernández-García, 2016; González-Neira & Quintas-Froufe, 2014). In fact, Medina and Portilla (2016) advocate for a hybrid model that takes into account these three measurements, which Buzeta and Moyano (2013) consider it to be the challenge of dual measurement: digital and analogue.

This research study focuses on the measurement of the timeshifted audience, a phenomenon that has grown as a consequence of the greater use of the Internet and connected devices (smart TVs, tablets and smartphones), which have substantially modified consumption habits (Hernández-Pérez & Rodríguez Mateos, 2016). In Spain, half of the audience consumes Video on Demand (VOD) according to Nielsen (2016), and timeshifted television viewing has gone from three minutes per person and day in 2016, to four minutes in 2017, and six minutes by September 2018 (Barlovento Comunicación, 2016, 2017, 2018). This behaviour is generating the fleeing of young viewers who have stopped watching traditional television (Santiago González, 2015): three out of ten young viewers claimed they have stopped watching it, according to the Interactive Advertising Bureau (IAB, 2015). In addition, 95% of Spanish Internet users aged 16 to 65 watch videos on the Internet (i.e., more than 24 million users), and it is mainly the timeshifted viewing of music videos, series, movies, animation and comedy (IAB, 2018). The possibility of watching content broadcast on television later on demand could suppose, as Bury and Li (2013) claim, the decay of the medium. Some authors recognise that there has been a decline in television viewing in young targets. Guerrero Pérez (2018), for example, speaks of a remarkable and constant flight of millennials away from traditional linear television. However, others are more cautious and conclude that “the decrease is insufficient to diagnose a significant decline, so that the alleged change of trend cannot be confirmed as long as there is no data available on the connection of media” (Núñez, Núñez & Irisarri, 2018, p. 205).

On the other hand, these changes in the mode of consumption are also generating a new phenomenon, according to Jenner (2015): binge watching. To this we must add that young people are getting used to the simultaneous consumption of several screens. For example, Guerrero, Diego and Kimber (2017) point out that six out of ten people who consume online content usually use a second screen during viewing.

With regards to international studies, Nielsen’s analysis of the timeshifted audience in the United Kingdom, France, Italy and the United States (2017a) concludes that 16% of the timeshifted viewing corresponds to entertainment, 16% to fiction (series, drama and comedies) and 5% to sports. On the other hand, a study of the non-linear consumption of television in 62 countries detected a transfer of the audience to the new on-demand television services, except in the case of live transmissions in traditional broadcast (Becker, Abreu, Nogueira & Cardoso, 2018; Abreu, Nogueira, Becker & Cardoso, 2017). In the particular case of the United Kingdom, according to Statista (2018), timeshifted viewing is outstanding in the case of fiction series (37%), documentaries (26%), entertainment and movies (22%), music (18%), children’s content (15%), sports (14%) and newscasts (5%).

### **1.1. *Studies on the viewing cycle of television programmes***

Research on the timeshifted audience phenomenon in Spain is very scarce and the studies focused on the viewing cycle of TV programming after their linear broadcast are non-existent. Hence, the innovative nature of the research presented here. In Spain, a report issued by Optimedia (2015) pointed out that the UK is the most developed market in the field of

timeshifted viewing (14% vs. 8% in Spain). The report concludes that it is necessary for the advertising industry to reach a consensus to establish new advertising marketing formulas and new periods for the invoice closing process. With regards to the studies analysing the timeshifted viewing of television programmes, Gallardo-Camacho and Sierra Sánchez (2017, p. 185) analysed the 300 television programmes with the highest timeshifted audience over a month (November 2016) and concluded that “the programmes broadcast in thematic channels have a higher increase in linear audience when taking into account the timeshifted viewing” and that the most viewed thematic channels are those dedicated to fiction. Gallardo-Camacho and Lavín (2018) concluded that fictional contents reach the highest timeshifted audience ratings with 84% and that Spanish TV series stand out with 41% of all accumulated viewership.

González Neira and Quintas Froufe (2016) focus on the timeshifted viewing of Spanish fiction series and highlight the lack of correlation with the success in linear broadcast audience ratings. Other studies point out that some productions are already more successful in terms of timeshifted audience ratings than in traditional audience. For example, Madinaveitia and Merchante (2015) argue that the timeshifted audience of some (mostly American) TV series triples the live audience. It is precisely in the United States where there is a greater tradition in timeshifted measurements due to the great popularity of digital recorders in households (Roca, 2014). In the United States, timeshifted viewership increased 100% in just one year between 2016 and 2017. For example, according to Nielsen (2017b), in 2017, three television programmes experienced an increase of more than 9 million viewers through timeshifted viewing: *The Good Doctor* (ABC, + 9,278,000), *This is Us* (NBC, + 9,024,000) and *The Walking Dead* (AMC, + 9,011,000).

In Spain and in almost all countries, the timeshifted audience of a programme is measured on the day of broadcast and the following seven days. In the UK and Australia, however, timeshifted measurements take into account up to 28 days. So far, there are no studies analysing the viewing cycle of television programmes after their broadcast in a context where there is a redefinition of the concept of the audiovisual viewing cycle. Álvarez Monzoncillo and López Villanueva (1999, p. 5) have argued that “television fiction has a fairly fast viewing cycle” in a saturated market that has reinforced the speed of the product’s life cycle. Our research will examine the consumption of television programmes after their traditional (linear or live) broadcast precisely to observe the new viewing cycle in this audiovisual context, based on a classification of television genres. There are neither studies on the timeshifted viewing of television across genres, except for an IAB report (2015) that focuses on televisions connected to the Internet and establishes the following market share (both linear and timeshifted): movies 12%, foreign series 12%, Spanish series 9%, YouTube 8%, sports 8%, TV on demand 8%, and cartoons 5%.

But why do some genres have a longer timeshifted viewing cycle than others? According to the uses and gratifications theory (Katz, Blumler & Gurevitch, 1974), audiences use television to satisfy some of their needs of: amusement and evasion, information or knowledge, pleasurable experiences, etc. Therefore, the “new view” of this theory argues that users decide what select and how to use the media “to gratify their needs and desires” (Grandío, 2009, p. 22). Faced with this situation, we must keep in mind that the possibility of being able to consume TV contents in timeshifted mode could create a new gratification depending on the genre. In this way, there are researchers who link television genres with the theory of uses and gratifications, such as Lacalle and Gómez (2017), who argue that there is a sustained increase in the use of fiction over the Internet, although the TV set is still the preferred device; and Flores-Ruiz (2014, p. 152), who concludes that “the preference for entertainment genres stands out in the television diet of young people.”

## 1.2. Research hypotheses and objectives

The main objective of this research is to analyse television genres according to the evolution of their timeshifted audience: on the day of broadcast and on the following seven days. Therefore, this research has an instrumental purpose to serve as the basis for comparative studies because, so far, no research has been published about it in Spain.

In view of this context of expansion of the timeshifted viewing of television programmes, we have formulated two hypotheses that will allow us to obtain novel results in the area of communications by correlating television genres with their timeshifted viewing cycle:

H1. The timeshifted viewing cycle of TV programmes depends on their genre and it is shorter in the case of programmes dealing with news and current events in comparison to fiction and entertainment programming. Therefore, most of the timeshifted viewing of news programmes takes place on the same day of broadcast.

H2. The timeshifted audience should be measured beyond the eighth day in the case of fiction programmes, whose viewing cycle is longer than news programmes and even than entertainment contents.

## 2. Methods<sup>1</sup>

A descriptive and analytical prospective cohort study is proposed to achieve the research objectives. In order to be able to test the hypotheses we use a method based on the initial collection of audience data of the 10 television programmes with the highest timeshifted audience in each day over a nine-month period.

In this way, the population of study are the television programmes with the largest timeshifted audience and the observation units are the 10 most watched programmes each day over a period of 9 months. The extraction of the 10 programmes is justified because in the initial phase of the research we observed that after that number of programmes the timeshifted audience significantly declined from a quantitative point of view. With regards to the data collection period, it was carried out daily from 25 March 2016 to 25 December 2016, with the application Kantar Media's Infosys (2018). We think that the study period is broad enough to draw conclusive results to analyse the timeshifted viewing cycle of television genres. In fact, the analysis period covers from the mid-season of the television programmes (which is usually broadcast in March) to the first three months of the start of the new season (which begins in September) in Spanish networks. Thus, we estimate that the extracted results are significant. This research applies the same methodological basis employed by Gallardo-Camacho and Lavín (2018), with the exception that those authors quantified the importance of the timeshifted audience in comparison to the linear audience in the Spanish television market based on the cumulative viewership of the programmes and did not analyse the viewing cycle of the contents as we do in this article. Another study uses a similar method, but it is limited to the analysis of the 10 most watched programmes over just one month and the observation of the timeshifted audience of the thematic and mainstream channels (Gallardo-Camacho & Sierra-Sánchez, 2017).

Therefore, our research sample is composed of 2,750 programmes obtained from the 10 programmes with the highest timeshifted audience according to Kantar Media over 275 days (instead of 276 because data were not available on one day of the sample due to failures in the system: 11 December 2016). From each of the ten most watched programmes every day, we extracted the following variables, listed in order of importance for our research: Programme name; number of timeshifted viewers distributed from the day of broadcast up to a week later; number of viewers in linear broadcast; number of viewers in timeshifted mode; date of broadcast and position in the top ten list.

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<sup>1</sup> The research design has been reviewed by Paula Fernández-García, Professor of Research Methods at the Psychology Department of the University of Oviedo, Spain.

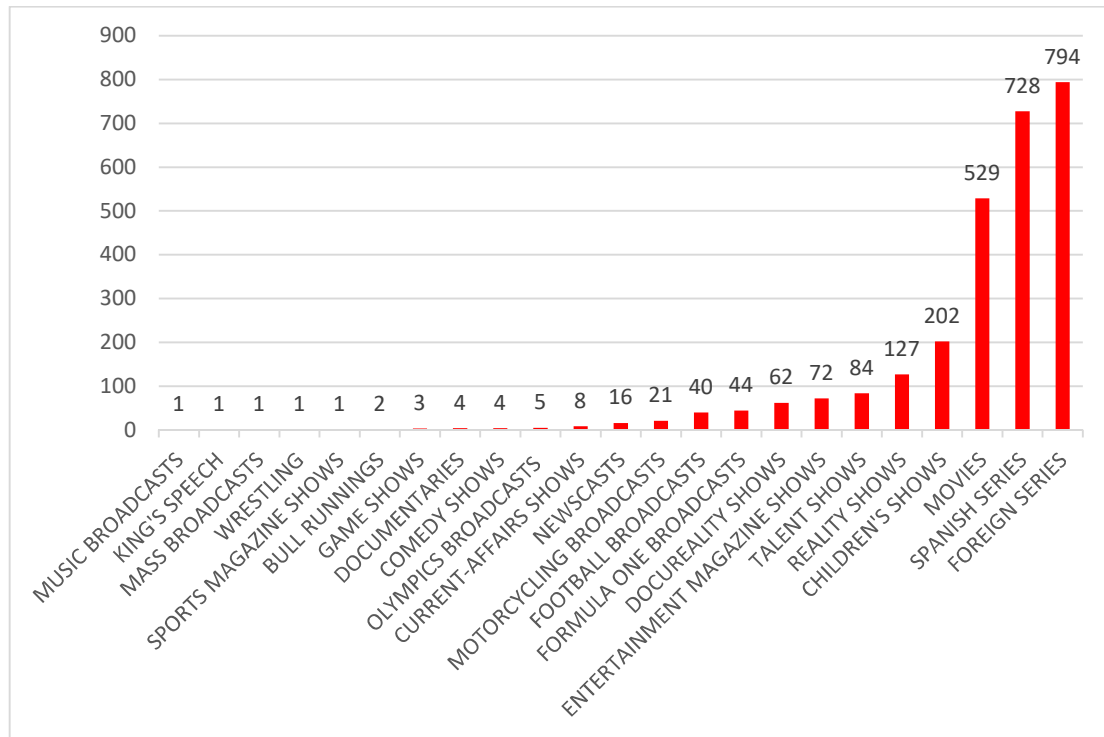
In view of the research design, it is necessary to consider that the timeshifted audience is published one week after the linear broadcast and that it takes into account the reproduction of contents from the first minute after of its start time up to seven days later. In other words, the timeshifted audiences analysed in our sample have been distributed in their linear broadcast from 18 March 2016 to 18 December 2016. With respect to the unit of measure, Kantar Media measures the non-linear “Viewing on the same day as live” (VOSDAL) until 2:30 in the morning and the following seven days (+1, +2, +3, +4, +5, +6 and +7). Therefore, our research has collected these eight data from each of the 2,750 analysed programmes to represent the quantified viewing cycle. The timeshifted audience is also counted in two places at the same time (measurement concepts): the timeshifted audience at the time of viewing and the timeshifted audience at time of broadcast. The first refers to the exact time at which a content was viewed in timeshifted mode and the second is added as part of the timeshifted audience corresponding to the source programme (Optimedia, 2015). Our research logically focuses on the timeshifted audience at the time of broadcast.

The system used to measure this non-linear audience is called audiomatching: the audiometer constantly analyses what is broadcast in all TV sets in the households included in the sample and recognises the audio of the broadcasts and identifies the content through the audio recorded in a database (regardless of the method with which the viewer consumes that content: computer connected to the TV, a digital recorder, etc.). But how are screens other than the traditional television screen measured? After contacting it, Kantar Media informed us that they use a Virtual Meter: An audiometer software that is installed on devices and is capable of receiving television and is based on the audiomatching identification system but, in addition to sound, identifies the application used for viewing and the URL to determine the origin of the television content. On the other hand, television networks are also putting digital tags on the content they offer on the Internet so that they can be measured by the company that measures online audiences: Comscore. However, none of the results of these two measuring methods is being offered in the data provided on timeshifted audience. Therefore, the Kantar Media system does not take into account, at the moment, what we watch in devices other than the TV, i.e., it is not measuring the phenomenon Gillan (2010) calls “placeshifting,” which is a new term that refers to the ability of the audience to transfer the consumption of television programmes to their mobile devices. In this sense, we find limitations linked to the audience measurement system on which this research is based. In this sense, there are authors, like Hernández-Pérez and Rodríguez Mateos (2016), who highlight the need for new audience metrics that are more centred on users than on media. However, we believe that these data are legitimised by the large media groups and that the conclusions drawn from them are decisive to demonstrate our hypotheses, which are of academic and professional interest.

In order to carry out this research it is necessary to classify the 2,750 programmes according to genres, which is the only way to organise audiovisual texts according to a series of distinctive features and textual and inter-textual properties (Wolf, 1984). Wolf himself is aware that the limits of these genres are not rigid and so we have created our proposal for classification based on the taxonomies developed by other authors (Barroso, 1996; Bustamante, 2008): news or current-events genres (news or newscasts, current affairs shows, documentaries, sports magazine shows, broadcasts of sporting and non-sporting events), fictional genres (Spanish series, foreign series, movies, children’s programming) and entertainment genres (reality shows, docureality shows, talent shows, comedy, game shows and entertainment magazine shows). In addition, some nuances must be taken into account: for example, the category children’s programmes mainly correspond to animation series, although it includes some fictional films. In this sense, we think it is relevant to make this distinction to know the weight of the content directed exclusively to future viewers. For their part, non-sports broadcasts include the broadcasts of religious events, musicals, the festival

of San Fermín and the Christmas speech of the Spanish King. Finally, sports broadcasts have been sub-divided into football, Formula One, motorcycling, wrestling and Olympics. Figure 1 shows the frequency of the genres in the sample during the 9-month period of analysis.

**Figure 1:** Frequency of most watched TV programmes in timeshifted mode by genres.



Source: Own elaboration with data from Kantar Media.

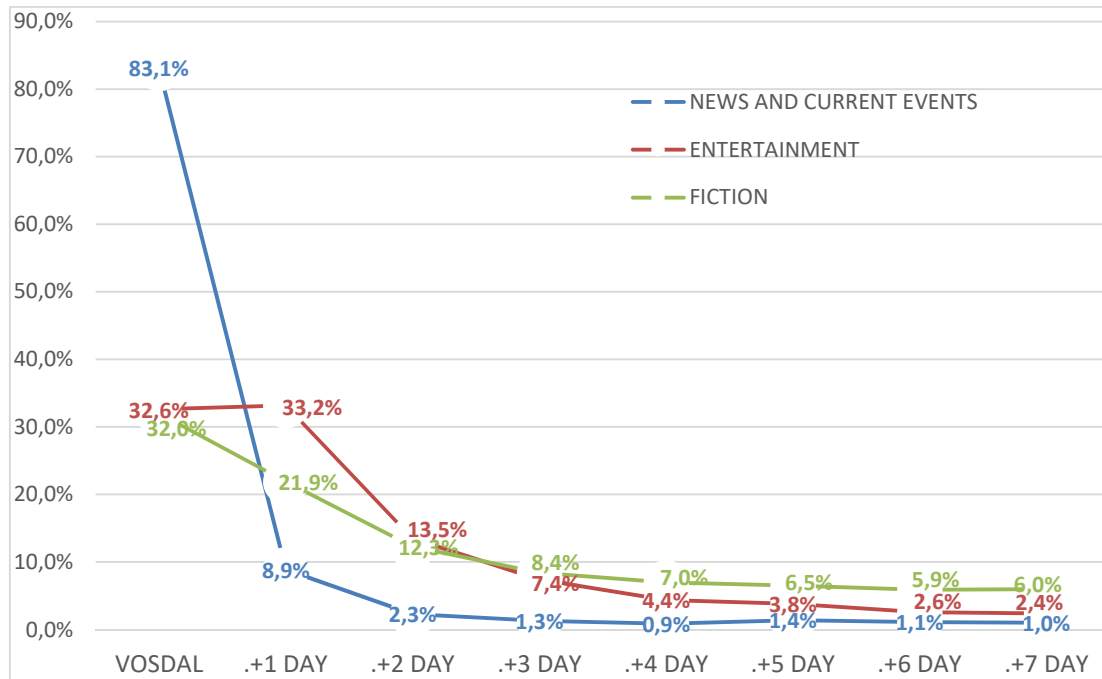
Figure 1 shows the genre-based classification of the 10 most watched programmes in timeshifted mode, according to their frequency over the 275-day period. This classification will be considered to examine the timeshifted viewing cycle of these programmes over the eight days of measurement. The presentation of results by subgenres will not consider programmes with a frequency less than 8 since they could distort the possible conclusions of the research.

### 3. Research results

Having classified the programmes in the sample (N=2,750) according to their genre (Figure 1), we will proceed to the presentation of the research results necessary to address the two hypotheses. It should be noted that the greater frequency of any genre among the 10 most viewed programmes in timeshifted mode in each day of the period of analysis is not necessarily correlated with the behaviour of the viewer throughout its viewing cycle.

In order to establish a comparative among the television programmes, the classification of genres was simplified in three large blocks, as explained in the methods section: news and current events, fiction and entertainment. In this way, Figure 2 shows the distribution of viewership in Spain during the measurable cycle of the most watched programmes in timeshifted mode over the 9-month period according to their genre. In other words, the sum of the eight measured days is the 100% of the timeshifted viewership for each genre.

**Figure 2:** Comparison of the distribution of the timeshifted viewing of programmes according to genre.



Source: Own elaboration with data from Kantar Media.

As Figure 2 shows, 83.1% of the timeshifted viewing of news programmes takes place on the same day as live (VOSDAL). On the following day viewing drops to 8.9% and then continues decreasing (2.3%, +2; 1.3, +3) and becomes stable at about 1% throughout the seventh day after the traditional broadcast (+7). With regards to the entertainment genre, 79.3% of the timeshifted viewing takes place on the same day as live (32.6%) and the two subsequent days (33.2% and 13.5%, respectively). Viewing is then distributed in a decreasing way among the rest of the days to reach 2.4% on the last day of analysis. On the other hand, 66.3% of the timeshifted viewing of the sample of fiction shows takes place on the first three days, among which the same day of broadcast stands out (32%) with the highest percentage, followed by a decline of about 10 points in the following two days (21.9%, +1 and 12.3%, +2). Then viewing becomes stable over the rest of the days, reaching 6% (+7) on the eighth day of analysis.

From a methodological point of view, the percentages in Figure 2 have been obtained from the average values of all the programmes that are included in each genre (news and current events, entertainment and fiction) and not from the average values of the sub-genres by groups, since this would yield inaccurate results. Especially because there are ten sub-genres with a frequency less than eight in the sample (as we see in Figure 1) and that would render irrelevant the average results of Figure 2. Table 1 presents the distribution of the timeshifted viewing of sub-genres, with a frequency greater than 8, which includes news and current-events programmes (Table 1), entertainment (Table 2) and fiction (Table 3) in order to verify the hypotheses and fulfil the objective of this research. All the genres presented in the tables have been ordered according to the percentage of timeshifted viewing on the same day as live (VOSDAL) from highest to lowest.

**Table 1:** Distribution of the timeshifted viewing of news and current-events programmes.

GENRE	VOSDAL	+.1	+.2	+.3	+.4	+.5	+.6	+.7
NEWSCASTS	99.6%	0.0%	0.3%	0.0%	0.2%	0.0%	0.0%	0.0%
FOOTBALL BROADCASTS	91.4%	6.6%	1.1%	0.7%	0.0%	0.1%	0.0%	0.3%
FORMULA ONE BROADCASTS	83.1%	7.6%	1.8%	1.7%	0.2%	1.6%	2.3%	1.8%
MOTORCYCLING BROADCASTS	72.5%	19.0%	3.1%	0.7%	3.5%	0.5%	0.0%	0.7%
CURRENT-AFFAIRS SHOWS	72.4%	12.0%	3.0%	4.0%	2.5%	0.0%	4.0%	2.1%

Source: Own elaboration with data from Kantar Media.

News and current-events programmes represent 141 of the 2,750 units that comprise the sample of 10 most viewed programmes in timeshifted mode each day for nine months (Figure 1). With respect to Table 1, the observation of the news genre will be limited to those shown in the sample with a frequency greater than eight, which we believe is a significant number of programmes to be able to set a precise average. The criterion is arbitrary but is justified because it is the tipping point where the curve of timeshifted viewing becomes unstable and starts a very pronounced downward trend (Figure 1). In addition, it should be noted that the subgenres of current-events (8) and news programmes (16) are relevant in the face of the research objectives. Programmes with a frequency less than eight are: music broadcasts (1), the King's speech (1), mass (1), wrestling (1), bull runnings (2), Olympics (5); sports magazine shows (1) and documentaries (4). In this way, leaving out these results, we corrected anomalies and specific facts. For example, the only sports magazine of the sample is viewed in timeshifted mode practically only during the day after its broadcast. In this regard, Table 1 shows that there are genres, like newscasts, that are viewed almost entirely on the same day as live (99.6%). Sports broadcasts, like football matches (91.4%) and Formula One broadcasts (83.1%), also have a timeshifted viewing on the same day of broadcast higher or equal to the average of all news programmes in the sample (83.1%). For example, the pre and post Barcelona-Real Madrid match obtained 100% of its timeshifted viewing on the same day of broadcast. Motorcycling broadcast (72.5%) and current-affairs shows (72.4%) are below that average, but still have a very high viewing percentage during their first day of broadcast: For example, in average, 81% of the timeshifted viewing of La Sexta current-affairs show *El objetivo de Ana Pastor* takes place on same day as live (VOSDAL) in the six shows included in the sample. With respect to the last day of measurement, only Formula One broadcasts and current-affairs shows exceed 1% of the timeshifted viewing. Table 2 presents the distribution of the timeshifted viewing of entertainment programmes.

**Table 2:** Distribution of the timeshifted viewing of entertainment programmes.

GENRE	VOSDAL	+.1	+.2	+.3	+.4	+.5	+.6	+.7
DOCUREALITY SHOWS	42.4%	24.3%	10.9%	7.6%	3.3%	5.7%	3.0%	2.7%
REALITY SHOWS	32.3%	36.1%	14.8%	6.9%	4.0%	2.9%	1.9%	1.1%
ENTERT. MAGAZINE SHOWS	30.8%	35.8%	13.3%	5.0%	3.0%	4.6%	3.5%	4.1%
TALENT SHOWS	25.2%	34.8%	13.9%	9.6%	7.3%	3.5%	2.7%	2.9%

Source: Own elaboration with data from Kantar Media.

The entertainment shows included in the 10 most viewed programmes over the nine-month period represent 356 of the 2,750 (Figure 1) programmes in the sample. The analysis of the results in Table 2 excludes the programmes with a frequency less than eight in the sample for the above reasons: game shows (3) and comedy shows (4). In this way, docureality shows accumulate 42.4% of their timeshifted viewing on the day of broadcast and are above the average of all entertainment programmes of the sample (32.6%, Figure 2): *Salvados* (La Sexta) appears on 21 occasions in the sample and 60% of its timeshifted viewing corresponds, in average, to VOSDAL. Reality shows accumulate most of their timeshifted viewing on the day after their traditional broadcast with 36.1% (+1) against 32.3% on same day as live (VOSDAL). If



we focus on specific examples, *Big Brother* is the reality show with the greatest presence in the sample (56) and, in average, 32% of its timeshifted viewing takes places on the same day as live (VOSDAL) and 42% on the day after. The same goes for entertainment magazine shows which obtained 35.8% of their timeshifted viewing on the day after its first broadcast (+1) compared to 30.8% on the day of its traditional broadcast (VOSDAL). This is also the case of talent shows, with 25.2% (VOSDAL) and 34.8% (+1). For example, *The Voice* (Telecinco) stands out among other talent show for its frequency in the sample (23) and obtains 25% of its timeshifted audience in VOSDAL and 28% on the day after. Telecinco entertainment magazine show *Sálvame Deluxe* (34) obtained 27% of its timeshifted consumption in VOSDAL and 50% on the day after (we should take into account the fact that this programme is broadcast until the early morning so much of its timeshifted viewing is measured the day after).

This growth on the day after the traditional broadcast is also shown in Figure 2, which presents the average data of the 356 entertainment programmes. As for the last day of measurement of timeshifted viewing (+7), entertainment magazine shows obtained 4.1%, talent shows 2.9%, docureality shows 2.7% and reality shows 1.1%.

Table 3 shows the distribution of the timeshifted viewing of fiction programmes, which are the programmes with the strongest presence in the whole sample (N=2,750), with 2,253, as shown in Figure 2.

**Table 3:** Distribution of the timeshifted viewing of fiction programmes.

GENRE	VOSDAL	+.1	+.2	+.3	+.4	+.5	+.6	+.7
SPANISH SERIES	48.6%	22.2%	9.3%	6.1%	4.7%	3.7%	3.0%	2.4%
MOVIES	32.3%	20.2%	11.0%	7.0%	6.6%	7.0%	8.3%	7.7%
FOREIGN SERIES	21.4%	24.7%	15.7%	10.8%	8.4%	7.4%	5.5%	6.1%
CHILDREN'S SHOWS	12.5%	14.4%	13.3%	11.0%	11.3%	12.0%	11.6%	13.9%

Source: Own elaboration with data from Kantar Media.

As Table 3 shows, the accumulated timeshifted audience of Spanish series (48.6%, VOSDAL) and movies (32%, VOSDAL) is higher than the average of the rest of fiction programmes in the sample (Figure 2) on the same day as live. On the following days, the Spanish series accumulate less timeshifted audience and fall to 22.2% (+1), 9.3% (+2) and up to 2.4% in the last day of measurement (+7). The decrease in the audience of movies is more gradual, staying above 7% between the third and seventh days after the broadcast (7.7%, +7). In the case of foreign series, it is necessary to add the timeshifted audience of third first three days (VOSDAL, +1 and +2) to reach 50% of the consumption with 61.8% of the timeshifted audience. In the case of children's fiction content, there is a unique fact in the whole sample: the accumulation of timeshifted viewing on the last day (13.9%, +7) is higher than that of the same day of broadcast (12.5%, VOSDAL) and is well distributed across all the days of analysis. If we focus on the programmes in the sample that are the most representative of the analysed genres, we find the foreign series *Un camino hacia el destino* (50), which is broadcast by the Nova network, and whose timeshifted viewing is mainly distributed up to the third day after of its broadcast: 54% (VOSDAL), 30% (+1), 8% (+2), 5% (+3), 1% (+4), 1% (+5), 1% (+6) and 0% (+7%). With regards to the Spanish series, Antenna 3's *El Secreto de Puente Viejo* stands out (185) with the following distribution of its timeshifted audience: 54% (VOSDAL), 25% (+1), 8% (+2), 5% (+3), 4% (+4), 2% (+5), 1% (+6) and 1% (+7). On the other hand, *PAW Patrol* stands out among the children's contents (56) and confirms the fact that the last day of audience measurement accumulates a higher percentage of its timeshifted viewing: 6% (VOSDAL), 8% (+1), 12% (+2), 10% (+3), 14% (+4), 15% (+5), 13% (+6) and 21% (+7).

At this point we believe it is important to show the 10 most-popular programmes in timeshifted viewing accumulated on the same day of broadcast to better understand the behaviour of viewers according to genre.

**Table 4:** 10 programmes with the highest timeshifted VOSDAL.

TV NETWORK	PROGRAMME	GENRE	TIMESHIFTED	LINEAR
CANAL + PARTIDAZO	Football: Spanish League: Barcelona - Valencia	FOOTBALL BROADCASTS	91,000	789,000
MOVISTAR PARTIDAZO	Football: Spanish League: Sevilla - Barcelona	FOOTBALL BROADCASTS	81,000	1,402,000
MOVISTAR F1	Formula One: GP Monaco	FORMULA ONE BROADCASTS	78,000	302,000
MOVISTAR PARTIDAZO	Football: Spanish League: Barcelona - Espanyol	FOOTBALL BROADCASTS	77,000	1,164,000
MOVISTAR F1	Formula One: GP Russia	FORMULA ONE BROADCASTS	72,000	152,000
MOVISTAR PARTIDAZO	Football: Spanish League: R. Sociedad - Barcelona	FOOTBALL BROADCASTS	69,000	1,347,000
MOVISTAR MOTO GP	Motociclismo: Mundial Moto GP: GP GERMANY	MOTORCYCLING BROADCASTS	63,000	248,000
MOVISTAR F1	Post Formula One: GP Monaco	FORMULA ONE BROADCASTS	61,000	232,000
CANAL + PARTIDAZO	El Partidazo	FOOTBALL BROADCASTS	57,000	519,000
MOVISTAR F1	Post Formula One: GP EUROPE	FORMULA ONE BROADCASTS	57,000	92,000

Source: Own elaboration with data from Kantar Media.

Of the entire sample (N=2,750), 74 programmes were consumed only in timeshifted VOSDAL. Among the 74 programmes that accumulated 100% of their timeshifted audience on the day of broadcast, 36 belonged to the news and current-events genre. The 74 programmes were: 15 football broadcasts, 11 Formula One broadcasts, 9 motorcycling broadcasts, 1 Olympics broadcast, 14 news programmes, 1 current-affairs show, 2 entertainment magazine shows, 2 game shows, 1 reality show, 2 children's programmes, 12 movies and 4 series. Table 4 shows the 10 most-popular programmes in timeshifted mode, from higher to lowest (from 91,000 to 57,000). As we can see, all the programmes in Table 4 have also been rebroadcast in thematic channels and they are, mainly, football broadcasts, as well as Formula One and motorcycling broadcasts. For example, the Spanish league match between Barcelona and Valencia was consumed in timeshifted VOSDAL by 91,000 people, compared to the 789,000 viewers in traditional broadcast.

Table 5 presents a reversed version of the ranking of Table 4 to show the programmes with all their timeshifted viewing accumulated until the last day (+7).

**Table 5:** 10 programmes with the highest timeshifted viewing on the 7th day after broadcast (+7).

TV NETWORK	PROGRAMME	GENRE	TIMESHIFTED	LINEAR
CLAN	PAW Patrol	CHILDREN'S	100,000	264,000
CLAN	PAW Patrol	CHILDREN'S	37,000	200,000
NICK JR	PAW Patrol	CHILDREN'S	33,000	11,000
COMEDY CENTRAL	Rat Race	CINEMA	31,000	30,000
NICK	Maya the Honey Bee	CHILDREN'S	29,000	0
MOVISTAR COMEDIA	The Simpsons Movie	CINEMA	28,000	3,000
CLAN	Care Bears	CHILDREN'S	26,000	21,000
MOVISTAR COMEDIA	Summer of 84	CINEMA	20,000	7,000
AXN WHITE	Big Stan	CINEMA	20,000	30,000
AXN WHITE	Devious Maids	FOREIGN SERIES	17,000	0

Source: Own elaboration with data from Kantar Media.

It is important to note that in the whole sample (N=2,750), there are only 10 programmes whose timeshifted viewing on the 7<sup>th</sup> day after broadcast is the highest of the seven days after broadcast, and all of them belong to the fiction genre and half of them are children's content. All these programmes are also broadcast in thematic networks. As Table 5 shows, the programme with the largest timeshifted audience on the last day of analysis (+7) is PAW Patrol with 100,000 viewers accumulated, against the 264,000 viewers of its traditional linear broadcast. Table 5 also shows that seven of the ten programmes obtained more viewers in timeshifted than in traditional mode.

#### 4. Discussion of results

Having presented the results of our research, we will proceed to test our initial hypotheses. With regards to H<sub>1</sub>, it was confirmed that the genre influences the viewing cycle and that news and current-events programmes in the sample accumulate most of their timeshifted viewing

on the same day as live in comparison to the other two analysed genres: fiction and entertainment. In fact, we have observed that 83.1% of the timeshifted audience of news and current-events programmes takes place on the day of broadcast and that the following day (+1) there is a 4.2% decrease in viewership (Figure 2). In the case of the entertainment contents, we must add the first four days of timeshifted audience to reach the viewership of the first day of news programmes. In the case of fiction, it is necessary to add the viewership until day +5 to surpass the audience that news contents obtain on the same day of broadcast. Therefore, it is confirmed that the topicality of those contents shortens their life cycle in timeshifted mode. In fact, the nature of these contents would explain why they have the lowest frequency in the sample of the 10 most watched programmes in timeshifted mode over the nine-month period (141 of the 2,750, Figure 1). This reflection would also explain why newscasts stand out from all news and current-events content as they accumulate 99.6% of the timeshifted audience on the day of their broadcast (Table 1). On the other hand, sports broadcasts acquire a remarkable weight in the sample of news and current events programmes and also stand out for having a timeshifted viewing above 70% on the same day of broadcast: football (91.4%, VOSDAL), Formula One (84.1%, VOSDAL) and motorcycling (72.5%, VOSDAL). Hence, of the 74 programmes of the whole sample that were only viewed in timeshifted mode on the same day of broadcast: the first 10 are sports broadcasts (Table 4) and 36 (48.6%) are news programmes. This is a remarkable figure if we consider that news programmes only represent 141 of the 2,750 units in the sample.

With regards to H2, in order to confirm H1 we have answered, in part, this hypothesis by showing that the fictional programmes require up to six days to reach the same accumulation of timeshifted viewership that news contents get on the same day of broadcast (in terms of percentage, as shown in Figure 2). In other words, the analysis of the three large blocks of genres confirms that the timeshifted viewing of fictional programmes is the most distributed after the day of broadcast. In addition, objectively, fictional contents obtain 6% of their timeshifted viewing on the last day of analysis (+7) against the 1% of news programmes and the 2.4% of entertainment programmes. However, Spanish series are an exception within the fiction genres as almost half of their viewing takes place on the same day of broadcast (48.6%, VOSDAL). We believe that this could be because most of the Spanish series are broadcast on free-to-air television and generate great expectation among the audience, who want to watch new episodes as soon as possible (however, this is a line of research that remains open).

Another result that reaffirms H2 is found in Table 5, which shows that the only 10 programmes entirely consumed in the eighth day of analysis (+7) belong to the genre of fiction. However, we also found a remarkable phenomenon: of the whole sample, children's programmes distribute their timeshifted viewing the most, and get most of their timeshifted audience on the last day of analysis (13.9%, +7) against 12.5% on the day as live (VOSDAL), as reflected in Table 3. These results complement those of Walzer (2008), who claims that children are going back to watching television thanks to the access to thematic content targeting them. In short, the stable distribution of the consumption of children's contents over the eight days of analysis confirms the second part of H2, which raises the need to extend beyond a week the analysis of timeshifted viewing like in other countries such as the United Kingdom and Australia (Optimedia, 2015). Put differently, the timeshifted viewing cycle goes beyond the eight days of analysis and is more extensive than what is reflected in the current measurements in Spain. The larger life cycle of these fictional contents coincides with the results of Madinaveitia and Merchante (2015) who claim that this type of content tends to accumulate the largest audience.

## **5. Conclusions**

Having discussed the hypotheses, we conclude that news and current-events contents are more attractive for (traditional) linear consumption because most of them are broadcast live

and lose relevance in timeshifted mode, so their viewing cycle is reduced radically in comparison to entertainment and, above all, fiction. However, the fact that the relevance of news programmes expire sooner in timeshifted mode does not mean that they do not have their future secured on television. In fact, we wonder whether social networks have renewed the power of traditional channels as they have provided added value to the viewing of linear broadcasts despite offering them in timeshifted mode (Highfield, Harrington & Bruns, 2013). But this is another line of research that could be followed in future studies along with the reasons behind the post-live timeshifted viewing of sports broadcasts: Do viewers do it aware of the result to see the best plays or do they watch it in delay without knowing what happens in the end?

Therefore, fictional contents are the ones that distribute their timeshifted audiences the most (in comparison to news and current-events and entertainment programmes) one week after their linear broadcast, although 66.2% of this viewing takes place during the first three days (from VOSDAL to +2). That is, we conclude that there is a wear in the timeshifted viewing of all content as the days pass but that this decrease is more pronounced in the news genres. However, an exception must be taken into account with children's programmes whose timeshifted viewing is almost equally distributed between the eight days of analysis. Based on these conclusions, we wonder whether the future of television includes timeshifted viewing because it seems that it is through this way that television could recover the viewers who fled to other screens. It is certainly another line of research to be followed in future studies.

We have also detected a lack of correlation between the success of the (traditional) linear audience and timeshifted viewing. For example, tables 4 and 5 include cases in which the programmes have fewer viewers in their linear than non-linear broadcast. This conclusion coincides with that reached by other authors who found no correlation of success between the two audience types (Gallardo-Camacho & Sierra Sánchez, 2017; González Neira & Quintas Froufe, 2016).

With regards to the limitations of our research, the work analyses data that only capture the viewing that takes place in front of the TV set of every household. Therefore, we agree with those authors who are critical of the audience measurement system and demand its improvement by taking into account all the devices and the hybridisation of the three audience types: linear, social and timeshifted (Medina & Portilla, 2016; Buzeta Moyano, 2013). For example, it is striking that timeshifted viewing only reached an average of three minutes per person in 2016 and four in 2017 (Barlovento Comunicación, 2016, 2017). This could be explained by the fact that these figures do not include data from consumption through mobile devices. In addition, the weakness of the sample is supported by the demonstration of H2 when observing that the viewing cycle of certain genres goes beyond the eight days of analysis. Therefore, we conclude that to improve the measurement of the timeshifted audience it is necessary to take into account the other screens and analyse the data beyond a week after the day of traditional broadcast. Kantar Media claims that viewing figures beyond the 7 days after the day of broadcast go to a section called "unidentified" and therefore can no longer be analysed.

We believe it is relevant to link our conclusions with the theory of uses and gratifications (Katz, Blumler & Gurevitch, 1974) since the greater interest in fiction contents among the timeshifted audience could not only be motivated by the reward offered by this genre in comparison to the rest (Grandío, 2009), but also by the pleasure involved in the consumption, when the viewer wants, of a product whose life cycle last longer than the rest. The gratification generated by the consumption of live programmes is based on the fact that they keep the audience informed of what is happening and, therefore, this pleasure cannot be obtained from their delayed viewing. However, the timeshifted viewing of fictional content can give the viewer the pleasure of being able to catch up the linear broadcast as well as to watch the product at the desired time without depending on the schedule set by the broadcaster. This

seems more noticeable with children's content, as children might be used to watching their favourite shows whenever they want, on the fringe of traditional broadcast day. In short, viewers' preference for the timeshifted or linear viewing of one genre or another could be related to the theory of uses and gratifications.

What is clear is that the potential of timeshifted viewing opens new possibilities related to the life cycle and production of certain television programmes as the criterion of success varies and ceases to depend exclusively on its linear broadcast. Will the day come when a mainstream television network renews a show that fails in its linear broadcast but is a timeshifted success?

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