

Audiovisual consumption and streaming among Portuguese higher education students: media coexistence and algorithmic mediation

  **Filomena Antunes Sobral**

Department of Communication and Art, Center for Studies in Education and Innovation (CI&DEI) and Research Centre for Communication and Culture (CECC, UCP) Polytechnic Institute of Viseu, School of Education Viseu, Portugal

 **Teresa Sofia de Almeida Gouveia**

Department of Communication and Art, Center for Studies in Education and Innovation (CI&DEI) Polytechnic Institute of Viseu, School of Education Viseu, Portugal

Abstract

The contemporary audiovisual landscape is frequently narrated as a process of linear substitution: the inexorable death of linear television and the triumph of streaming. Yet this study challenges this narrative through empirical analysis of media consumption habits among 89 Portuguese higher education students. Findings reveal not substitution, but functional coexistence wherein 54.3% of respondents still prefer free-to-air (FTA) television while 53.5% are streaming subscribers. Within the subscriber segment, platform hegemony is observed whereby Netflix achieves 88.6% penetration, suggesting a transition from broadcaster monopoly to algorithm-mediated platform monopoly. The drivers of this migration are structural: temporal flexibility (89.9%) and advertising rejection (65.2%) reflect a generational rupture with the "appointment viewing" model. Yet the autonomy perceived by users occurs within spaces deliberately designed to constrain choice, instantiating the concept of conditioned activity. The specific Portuguese context—with 92.1% access to Pay-TV—transforms the "cord-cutting" narrative into one of strategic service accumulation, evidencing how platformisation unfolds differently according to national infrastructures. The study contributes to critical understanding of contemporary algorithmic culture, challenging simplistic dichotomies between "passive" and "active" audiences and proposing that media power, despite technological transformations, persists under new forms of intermediation.

Keywords: streaming; linear television; media coexistence; algorithms; platform hegemony; conditioned activity

1. Introduction

The audience for audiovisual content finds itself at a historical crossroads, where linear and internet-distributed models coexist rather than simply replacing one another (Lotz, 2017). Contemporary media narratives frequently present the transition from linear television to streaming as an inexorable and unidirectional process, aligning with debates on cord-cutting in the United States (Strangelove, 2015; Statista, 2024). Yet empirical studies across diverse European contexts point to a more complex reality, marked by the coexistence and complementarity between linear television and over-the-top services (Evens et al., 2023; Merikivi et al., 2020). In markets such as Portugal, Italy, and Spain, linear television persists as a significant cultural force while streaming platform penetration grows simultaneously. In the Portuguese case, regulatory data show that linear viewing remains the dominant consumption modality for television audiences, with TVI emerging as the most-viewed generalist channel, while streaming and on-demand services continue to grow (ERC, 2024). At the same time, audience research indicates that more than half of the Portuguese population now uses video streaming platforms, with 52.1% of individuals aged 15+ declaring at least one active streaming subscription (Markttest, 2025a). This pattern suggests service accumulation and functional coexistence rather than straightforward substitution of traditional television.

Portugal presents a particularly relevant case for understanding this dynamic because Pay-TV penetration in residential households is among the highest in Europe, reaching around 96% of families in 2024 (ANACOM, 2024; Pekic, 2024). In other words, almost all Portuguese households maintain a Pay-TV subscription—typically bundled with broadband—at the same time as streaming adoption accelerates, reinforcing the interpretation of accumulation of audiovisual services rather than their mutual replacement (Lotz, 2017).

European data confirms this pattern: despite 93% of subscription growth between 2015-2020 coming from SVOD services, pay-TV subscriptions continued to grow, with both services coexisting rather than inducing cord-cutting across EU markets (European Audiovisual Observatory, 2021). Media consumption studies, however, remain heavily dominated by North American perspectives centred on cord-cutting, necessitating a geographically informed approach that places European contexts, such as the Portuguese one, at the centre of analysis (Lotz, 2017; Strangelove, 2015).

Beyond the question of coexistence, critical questions emerge regarding the character of contemporary media choice, specifically how interfaces and recommendation algorithms condition user navigation within hybrid ecosystems of linear television and streaming (Gillespie, 2018; Hallinan & Striphas, 2016). In this context, whilst streaming narratives frequently emphasize "user liberation"—flexibility, temporal control, advertising absence—critical analyses of platformed economy (Gillespie, 2018; Striphas, 2015) propose that this perceived autonomy occurs within algorithmic intermediation structures that systematically constrain choice. The recommendation algorithm, autoplay, and visual interface function as "nudge" mechanisms that transform conscious choice into compulsive continuity (Thaler & Sunstein, 2009). Understanding this dynamic—wherein autonomy and constraint coexist—is central to critical analysis of contemporary media culture.

This study empirically examines these questions through a survey of 89 higher education students in Communication and Media at a Portuguese institution. The study addresses three complementary objectives: (1) map the distribution of preferences between linear television and streaming; (2) analyse the concentration of platform choice and the hegemony mechanisms sustaining it; (3) identify the behavioural drivers motivating streaming adoption and traditional television rejection. Results are interpreted through theoretical frameworks on media transformation, algorithmic culture, and platformed economy, enabling critical reflection on how technology mediates (but does not eliminate) power relations in the cultural sphere.

2. Literature Review

2.1. Television, "Flow," and Temporal Reconfiguration

The history of television is often narrated as a sequence of technological innovations—from analogue broadcast to digital, from live reception to recording, from linearity to on-demand access. Lotz (2017) argues, however, that such a progress narrative tends to obscure deeper structural continuities: across these phases, television remains a central cultural intermediary, filtering, curating, and distributing content to large audiences. What changes is not the fundamental social role of television, but the mode of mediation, which shifts from schedule editors to recommendation algorithms.

Jordheim and Ytreberg (2021) conceptualise broadcasting as a "synchronising tool," emphasising that schedules not only distribute content but also organise shared social time. Simultaneous broadcasting creates a common experience, as millions watch the same content at the same time. Streaming disrupts this synchrony by allowing asynchronous access to extensive catalogues, fragmenting "television time" into individualised experiences. Yet Merikivi et al. (2020) show that such fragmentation is not absolute: media rituals persist, now reconfigured around season premieres, finales, and special events, amplified by online fan communities and social media.

Williams's (1974) notion of flow helps to connect these continuities and ruptures. In traditional television, the viewing experience is less about discrete programmes than about a continuous flow of shows, promos, and advertising, sequenced by broadcasters. This flow is structurally imposed: viewers follow a sequence determined externally, with limited temporal control. Binge-watching—viewing multiple episodes in one continuous session—appears to reproduce this flow. However, Matrix (2014) and Starosta and Izydorczyk (2020) argue that it is qualitatively distinct, because it rests on the user's ability to decide when to start, pause, or stop watching.

Yet this autonomy is ambivalent. In principle, users control their time; in practice, platform design steers that control. Features such as autoplay, short countdown timers, and personalised thumbnails act as nudge mechanisms (Thaler & Sunstein, 2009), minimising friction between episodes and encouraging almost automatic continuation. Binge-watching thus becomes less a purely deliberate choice and more a mode of conditioned activity, in which technical and visual architectures make some behaviours—such as watching "just one more episode"—far more likely than others.

2.2. Platforms, Algorithms, and Network Effects

Whereas linear television was organised through schedules and human programmers, internet-distributed television depends increasingly on algorithmic recommendation systems. Gillespie (2018) describes these systems as a new form of gatekeeping, with decisions about visibility and cultural relevance delegated to opaque models processing vast quantities of data. Hallinan and Striplas (2016) add that algorithms do not merely reflect pre-existing tastes; they actively construct them, as repeated exposure to specific content types stabilises consumption profiles that come to feel "natural" to users.

Work focused on Netflix explores this logic in depth (Jenner, 2018). Gaw (2022) and Pajkovic (2022) demonstrate that the primary objective of the recommendation system is not to maximise cultural diversity or serendipity, but to minimise churn and maximise dwell time on the platform. The discourse of "personalised recommendation" thus conceals a corporate optimisation logic in which individual choice and corporate goals align: interfaces surface the content most likely to keep users engaged, rather than that which would most broaden their cultural horizons.

These algorithmic logics intersect with the economic structure of platform markets. The concept of network effects, formalised in economics by Katz and Shapiro (1985), helps explain the tendency of such markets toward concentration and hegemony. According to these authors, network externalities generate demand-side economies of scale: the greater the number of users on a platform, the higher the social value of joining it, creating a positive feedback loop wherein consumers converge on the network they expect to become dominant. In the streaming context, this clarifies Netflix's enduring hegemony despite the emergence of competitors such as Disney+, HBO Max, or Amazon Prime Video. Concentration is driven not merely by

catalogue size or interface design, but by the gravitational pull of the network—it is where “everyone is,” making participation almost mandatory for those wishing to follow mainstream cultural discourse.

Platform hegemony, then, does not rely primarily on formal monopoly but on a social crystallisation of preference, reproducing structural inequalities in visibility and circulation of content. By controlling catalogue, interface, and algorithmic logic, dominant platforms assume the role of cultural gatekeepers able to define what becomes mainstream, what remains niche, and what effectively disappears from users’ horizons of choice.

2.3. National Context, Platformisation, and Advertising

A substantial portion of the literature on television transformation relies on US-based data and cases, where cord-cutting—the abandonment of Pay-TV subscriptions in favour of over-the-top alternatives—is particularly pronounced (Strangelove, 2015; Statista, 2024). European media scholars, however, argue that the European reality is better captured by recognition of functional coexistence between linear broadcasting and streaming services. Analyses of media transformation must be geographically sensitive, avoiding the universalisation of dynamics that are specific to a single national market (Chalaby, 2025). Europe’s fragmented linguistic, cultural, and regulatory landscape prevents direct replication of US-centric narratives of “cord-cutting,” resulting instead in overlapping consumption models where linear and streaming services serve complementary functions (Alaveras et al., 2015).

Portugal exemplifies this need. Data from ANACOM and market reports indicate that Pay-TV penetration in Portuguese households is around 96%, among the highest in Europe (ANACOM, 2024; Pekic, 2024). Rather than substituting traditional services, streaming platforms tend to layer on top of them, creating media ecologies in which the same viewers combine cable/fibre television with multiple digital subscriptions (Lotz, 2017). European data confirms this “stacking” behaviour: RTL Ad Alliance’s 2025 multi-country study found 45% of respondents watching linear TV daily and 36% viewing SVOD daily, with consumers “seamlessly switching between platforms” (RTL Ad Alliance, 2025). This service accumulation suggests that the ongoing transition is not a straightforward “death of TV” narrative but a reallocation of functions: linear channels retain centrality for news (59%), live sports (44%), and entertainment (44%), whilst streaming dominates movies and series consumption (63%) (RTL Ad Alliance, 2025).

A second critical axis concerns advertising economics. Cortés-Quesada et al. (2024) show that the initially promoted “ad-free” model is entering a new phase, as leading platforms introduce cheaper ad-supported tiers, gradually converging toward the logic of traditional television. The perceived advantage of streaming for younger audiences—often associated with the ability to avoid advertising interruptions—may thus prove historically transitional. What currently appears as a rupture with the interruption model is increasingly reabsorbed by monetisation imperatives in mature markets, where pressure for profitability leads to the reintroduction of advertising, albeit in more segmented and algorithmically targeted formats.

Within this framework, the ‘platformisation’ of audiovisual media in Portugal (Poell et al., 2019) cannot be read merely as a technological process, but as a reconfiguration of relations between national infrastructures, business models, and cultural practices. It is at this intersection—between model coexistence, algorithmic governance, and advertising transformation—that the consumption practices analysed in this study are situated.

3. Methodology

This study adopted a cross-sectional design based on a self-administered questionnaire survey, developed to characterise audiovisual consumption habits and map preferences between linear television and streaming platforms. Data collection took place at a public higher education institution in the central region of Portugal, targeting a convenience sample of 89 undergraduate students in the fields of Communication and Arts. The questionnaire was available from May 20, 2024, to June 15, 2024. The deliberate selection of media-literate students operates as a least-likely critical case strategy (Flyvbjerg, 2006): if platform-driven structural constraints are observable even among populations equipped with critical media awareness, this suggests that such mechanisms are robust and deeply embedded in the media system, rather than contingent upon individual ignorance or low media literacy. In addition, the intentional selection of this profile is supported by research on young adults as early adopters of emerging technologies, whose practices often anticipate broader shifts in the media ecosystem (Strangelove, 2015).

The instrument consisted of 31 questions of mixed typology (closed, semi-open, and open-ended), organised into thematic blocks covering: (1) sociodemographic characterisation; (2) frequency, duration, and context of linear television viewing; (3) viewing devices and locations; (4) perceptions of programming quality and variety; (5) preference between free-to-air television and subscription services; (6) inventory of active streaming subscriptions; (7) preferred programming types; (8) live content viewing; and (9) perceptions of the future of free-to-air television. The questionnaire was administered online through the Microsoft Forms platform, with dissemination via institutional channels and academic social media, ensuring participant anonymity and informed consent.

It should be noted that, for the purposes of this analysis focused on the linear television versus streaming dichotomy and the drivers of migration between models, not all 31 survey questions were statistically processed. Only variables directly relevant to the study's three objectives were selected: (1) mapping the distribution of preferences (Q19: "Do you watch more free-to-air television or subscription television?"); (2) analysing platform concentration (Q20-Q21: subscription and identification of streaming services); and (3) identifying choice motivations, inferred from patterns observed in questions Q6 (viewing frequency), Q18 (agreement scales on advertising, flexibility, and variety), and thematic analysis of open-ended responses.

Data were processed through descriptive analysis (frequencies and cross-tabulations) to identify patterns of audiovisual consumption, complemented by manual thematic coding of open-ended responses to deepen understanding of users' subjective motivations. Although the non-probabilistic nature of the sample and its disciplinary homogeneity prevent statistical generalisation to the Portuguese population, the results offer ecological validity for understanding media choice dynamics in a sociodemographic segment strategically positioned to observe the reconfiguration of the audiovisual ecosystem.

Table 1: Characterization of the participants

Feature	Category	Number of Responses	Percentage
Gender	Female	60	67.4%
	Male	25	28.1%
	Other	4	4.5%
Age Group	From 17 to 19 years old	27	30.3%
	From 20 to 22 years old	49	55.1%
	From 23 to 25 years old	8	9.0%
	26 years or older	5	5.6%
Academic Degree	Undergraduate degree	88	98.9%
	Master's degree	1	1.1%
Year of Study	1st year	21	23.6%
	2nd year	36	40.4%
	3rd year	32	35.9%

Source: Author's survey.

The sample (N=89) is predominantly female (67.4%), concentrated in the 20–22 age range (55.1%), reflecting the typical profile of an undergraduate student population. Nearly all respondents (98.9%) were enrolled in bachelor's programmes, with balanced distribution across the three years of study, with 40.4% in the second year (Table 1). This demographic composition is relevant for the analysis, insofar as young adults, particularly university students, constitute an early-adopter segment for emerging media technologies and exhibit audiovisual consumption patterns distinct from the general population.

4. Results

The survey results offer a descriptive and sequential overview of the observed patterns in the relationship between linear television and streaming, the distribution of platform subscriptions among the surveyed students, and the main factors that sustain migration to, or persistence within, each of these media ecosystems.

4.1. The media diet: coexistence of systems

The analysis of television consumption habits reveals a complex scenario where traditional and digital models coexist. Contrary to the assumption of a massive and total migration to streaming, the data indicates a balanced distribution between different forms of access and viewing preferences.

Table 2 presents the detailed results regarding subscription to streaming services and the preference between free-to-air (FTA) and subscription-based television, distinguishing between the total sample and valid responses to ensure analytical accuracy.

Table 2: Streaming Subscription and TV Viewing Preferences

Variable	Category	Frequency	% Total (N=89)	% Valid	Response Rate
Streaming Subscription (Q20: Are you a subscriber?)	Yes	46	51.7%	53.5%	96.6%
	No	40	44.9%	46.5%	
	No Answer	3	3.4%	—	
Viewing Preference (Q19: Which do you watch more?)	Free-to-Air (FTA)	44	49.4%	54.3%	91.0%
	Pay-TV	37	41.6%	45.7%	
	No Answer	8	9.0%	—	

Source: Author's survey. Note: 'No Answer' includes participants who previously stated they "Never" watch national TV, considering the question irrelevant. "Pay-TV" refers exclusively to subscription-based linear television services (e.g., cable or fibre bundles), excluding streaming platforms (SVOD), which are analysed separately.

Regarding streaming adoption (Q20), 53.5% of the respondents with valid answers (46 out of 86) indicated being subscribers to at least one service, while a portion of 46.5% (40 students) stated they are not subscribers. The response rate for this question was notably high (96.6%), with only 3 participants not answering individuals who, in previous questions, had declared they "Never" watch national TV, rationally skipping the section.

In terms of viewing preference (Q19), the results challenge the narrative of an imminent death of linear television. Among the valid responses, 54.3% (44 students) expressed a preference for Free-to-Air television, compared to 45.7% (37 students) who prioritize subscription-based television (Pay-TV). The non-response rate for this specific question (9.0%) corresponds to the segment of participants who claimed to never watch TV, reinforcing the consistency of the data.

These findings suggest that cord-cutting is not a universal phenomenon among this demographic. Instead of a complete substitution, we observe a media diet characterized by duality: while streaming has a consolidated presence (used by more than half of the students), traditional television—particularly in its free-to-air modality—retains an important role in the preferences of a slight majority. This persistence may be attributed to factors such as zero cost, social routines (family viewing), or the specific demand for live content, such as news and sports.

4.2. Streaming subscribers: hegemony of one platform, fragmentation of others

The 53.5% of students who declare themselves streaming service subscribers do not constitute a homogeneous group in terms of platform preference distribution. On the contrary, a detailed analysis of subscribed platforms (Q21) reveals a scenario of concentration around Netflix, combined with competitive fragmentation among secondary players (Table 3).

Among the 44 identified subscribers, Netflix presents an influential presence: 88.6% (39 respondents) maintain an active subscription. This number does not simply represent a preference, but a near-inevitability—Netflix functions, within this sample, as an important utility service for accessing narrative entertainment content. The gap between Netflix's leadership and the second platform is evident: Amazon Prime Video, despite a respectable presence, reaches only 34.1% (15 respondents), representing an absolute difference of 24 subscribers.

Below this division, HBO Max and Disney+ emerge as technically equivalent competitors, both at 31.8% and 29.5%, respectively. Niche platforms, such as Apple TV+ (4.5%), Opto/SIC (2.3%), and other thematic services such as Sport TV and Benfica TV (representing 6.8% of subscribers), occupy marginal positions.

Table 3: Distribution of Streaming Platforms

Platform	Frequency (n)	Percentage of Subscribers (N=44)	Percentage of Total Sample (N=89)
Netflix	39	88.6%	43.8%
Amazon Prime Video	15	34.1%	16.9%
HBO Max	14	31.8%	15.7%
Disney+	13	29.5%	14.6%
Apple TV+	2	4.5%	2.2%
Opto (SIC)	1	2.3%	1.1%
Sport TV	2	4.5%	2.2%
Benfica TV	1	2.3%	1.1%
Stremio (unofficial)	1	2.3%	1.1%
Total Subscriptions	87	197.0*	---
Average per User	2.0	---	---

Source: Author's survey (Q21 - Multiple choice).

*Total percentage exceeds 100% because each respondent could select multiple platforms.

A critical aspect emerges from cross-sectional analysis: the 44 subscribers collectively maintain 87 active subscriptions, resulting in an average of 2.0 services per user. This finding evidences a strategy of service stacking: rather than choosing one single platform, students tend to accumulate Netflix as a central element, complementing it with one or two additional services to expand catalogue diversity. The distribution does not follow a logic of direct competitive substitution, but of strategic complementarity.

Netflix's supremacy is not accidental. The service combines an extensive and globalised catalogue, aggressive original content production strategies, and an intuitive interface that reduces content discovery friction. Conversely, secondary platforms carry structural disadvantages: Amazon Prime Video offers streaming as a secondary benefit of a multi-segment subscription; Disney+ is heavily associated with children's content and franchises; HBO Max competes for a niche of premium cinema and quality adult series.

The fact that none of these secondary platforms reaches half of Netflix's penetration is symptomatic of a market where network effects—the more popular a platform, the greater the social incentive to subscribe—crystallise hegemony. For students, subscribing to Netflix is not a discrete choice; it is a precondition for participating in social conversations about series and films. The service stacking strategy (2.0 services per user) also reveals something critical: students do not view these platforms as direct substitutes, but as complementary. Netflix provides the "core" (general content), while other services fill specific niches (sports, premium cinema, children's content). This configuration suggests that, contrary to the "infinite choice" scenario that streaming discourse often promotes, users face a reality of choice constrained by economics and concentrated supply.

4.3. Flexibility as a driver of migration to streaming

Student adoption of streaming services (Table 4) is underpinned by a significant valuation of temporal autonomy. Data from Q24 indicate that temporal flexibility ("Watch when I want") is, by far, the most determinant attribute, selected by 89.9% of respondents (80 students). This result signals a generational break with the linear schedule model, favouring asynchronous consumption adapted to individual routines.

Secondarily, the absence of advertising emerges as a notable factor, valued by 65.2% of the sample (58 students), evidencing growing intolerance towards the commercial interruption's characteristic of FTA television. Content variety (58.4%) and portability (42.7%) complement the demand profile of this audience, which prioritises vast and mobile access over channel curation.

Table 4: Attributes most valued in streaming vs. traditional TV

Attribute (Q24 - Multiple Choice)	Frequency (n)	Percentage (N=89)
Temporal flexibility (Watch when I want)	80	89.9%
Absence of advertising	58	65.2%
Content variety (catalogue size)	52	58.4%
Portability (Watch on mobile/tablet)	38	42.7%
Audio/subtitle options	22	24.7%

Source: Author's survey (N=89).

Qualitative analysis of responses to the open-ended question Q27 ("Indicate the main reasons for watching less traditional television") corroborates these quantitative data. Students recurrently identify schedule rigidity ("having to be there at the right time", "not being able to pause") and excessive advertising ("breaks are too long", "constant interruptions") as the main push factors driving them away from linear broadcasting and towards digital platforms. This structural rejection of the interruption model suggests a shift in consumption expectations, where temporal sovereignty and fluid access emerge as non-negotiable requirements for this generation.

5. Discussion

The findings presented in the preceding sections reveal a media ecosystem undergoing functional transformation, not simple linear substitution. This section interprets these data considering theoretical frameworks on media transformation, algorithmic culture, and platformed economy, arguing that the changes observed reflect not merely technological shifts, but dynamic reconfigurations in power relations between users, intermediaries, and content producers.

5.1. Functional reconfiguration: from flow to files

The results presented demonstrate that the transition in audiovisual consumption habits among higher education students in Portugal does not constitute a wholesale abandonment of television, but rather a functional reorganisation of media practices in accordance with new technological affordances and user expectations. The valuation of temporal flexibility, manifested by 89.9% of respondents who agree that streaming services allow them to watch television when and how they want, including on portable devices, is not merely a convenience; it represents a rupture in the structuring of the relationship between time and media.

As argued by Lotz (2017) and Merikivi et al. (2020), the shift from "flow" (continuous streaming) to "files" (on-demand access) reflects an inversion in the temporal priorities of this generation. While linear television imposed a fixed, synchronised schedule—serving as a "national cultural clock" (Bourdon, 2018)—streaming allows media consumption to adapt to the fragmented rhythms of academic and professional life. Students do not reorganise their time around television; they reorganise media consumption around the demands of their time.

This finding aligns with the literature on binge-watching, where the viewing of multiple episodes in continuous sessions represents not deviant behaviour, but a normalised mode of consumption. Matrix (2014) and Starosta and Izydorczyk (2020) sustain that binge-watching represents a new form of "flow"—conceptually distinct from Williams' (1974) notion—where the user exercises temporal control over serialised content. Yet this control is simultaneously facilitated and constrained by platform architecture: autoplay, 5-second countdown timers, and personalised thumbnails function as nudge mechanisms that transform conscious choice into compulsive continuity. The phenomenology of this experience, therefore, is not one of absolute freedom, but of mediated autonomy circumscribed by design decisions that privilege prolonged engagement.

5.2. Perceived autonomy, mediated choice: the paradox of invisible governance

A critical interpretation of the findings requires acknowledging a central tension: while 89.9% of respondents value "flexibility" and 58.4% cite "variety," the observed concentration around a single platform (Netflix at 88.6% of subscribers) suggests that perceived variety masks a reality of constrained choice. Gaw (2022) and Pajkovic (2022) state that Netflix's recommendation algorithms do not simply reflect user preferences; they actively construct taste. The algorithm operates as a cultural intermediary that prioritises content minimising churn risk (cancellation), not content maximising cultural diversity.

The perception of autonomy—"I choose what to watch and when"—coexists with a reality of invisible governance, where the interface (autoplay, Top 10 lists, personalised thumbnails) systematically mediates user choices. This observation repositions the classical dichotomy between "passive" (linear TV) and "active"

(streaming) audiences. As Hallinan & Striphas (2016) and Gillespie (2018) argue, the distinction is not between passivity and activity, but between two modes of mediation: scheduler-mediation (editor deciding for the mass) versus algorithm-mediation (predictive model deciding for the profiled individual). In both cases, the audience engages with content through structural constraints.

Within this sample, the convergence of choice around Netflix (88.6%), in a scenario of supposed variety, empirically validates network effects theory: the more popular Netflix is, the greater the social incentive to subscribe, reinforcing its hegemony. For students, Netflix is not simply a choice among several equivalent options; it is the choice that enables social participation. This is not autonomy in the classical sense; it is conditioned activity—genuine choice exercised within structural constraints that make certain pathways more probable, visible, and socially valued than others.

5.3. The rejection of advertising as a structural factor

The rejection of advertising, manifested by 65.2% of respondents who agree that advertising on traditional linear television is excessive and interferes with their viewing experience, requires particular attention, as it signals a potentially structural shift in media economics. Although this data refers specifically to the FTA television experience, the pronounced cognitive dissonance with advertising (65.2%) suggests a decisive push factor for migration. This finding dialogues with contemporary critiques of the linear advertising model, as highlighted by Cortés-Quesada et al. (2024, 2025).

However, a critical note of significance: recent developments in the streaming ecosystem—the introduction of ad-supported tiers by Netflix, Disney+, and Amazon Prime Video—suggest that this competitive advantage may be temporary. The re-commercialisation of streaming represents a colonisation of traditional advertising logic into non-linear environments, challenging the notion of streaming as an "ad-free utopia." If the industry succeeds in normalising advertising on streaming platforms, the structural differential that currently motivates this sample to prefer streaming may evaporate. The rejection of advertising, therefore, should not be interpreted as a lasting victory against commercialisation, but as a temporal window of competitive advantage that may close as monetisation strategies of platforms evolve.

5.4. Coexistence, not substitution: the specific Portuguese context

An aspect frequently neglected in studies on streaming is the importance of national market context. Portugal presents a structural particularity: Pay-TV penetration in residential households is among the highest in Europe, reaching approximately 96% (ANACOM, 2024). In our sample, 92.1% of respondents have access to such services. This high penetration contrasts dramatically with markets such as the USA, where streaming is framed as substitution via "cord-cutting" (I cancel paid TV, I subscribe to streaming). In Portugal, the reality is more stratified: streaming adds to traditional Pay-TV, it does not replace it.

This finding has significant theoretical implications. Streaming adoption does not here reflect substitution of one technology by another, but accumulation of services in a logic of functional complementarity. Traditional TV persists for news, live sports, and family rituals (such as dinner); streaming fills the "gap" of narrative entertainment that generalist channels leave open. Contemporary evidence suggests that linear (flow) and non-linear (on-demand) models coexist, serving different communicative and social functions. European broadcasters are responding through hybrid models that blend live and on-demand content, with platforms like the UK's "Freely" and Germany's ZDF-Mediathek exemplifying this convergence strategy (ITU, 2024).

The implication is that technological history does not follow a linear pattern of progressive substitution, but a more complex trajectory of stratification, where old and new technologies find functional niches and persist side by side.

5.5. Service stacking and the illusion of choice

The fact that subscribers maintain an average of 2.0 services per person (87 subscriptions / 44 subscribers) reveals something important about the perception of "infinite choice" that streaming discourse frequently promotes. Students do not view platforms as direct competitive substitutes, but as complementary in a division of curation labour. Netflix provides the "core" (series, general films); Disney+ specialises in children's content; HBO Max offers premium cinema; Sport TV covers sports. This functional division is rational from the perspective of economy and variety.

However, this service stacking strategy also signals economic and supply constraints that contradict the abundance narrative. Despite the appearance of abundance (multiple platforms, vast catalogues), users face a reality of constrained choice: to access diverse content, they must subscribe to multiple services, multiplying costs and contractual obligations. A family subscribing to Netflix (€15/month, market price at time of study), Disney+ (€8/month), HBO Max (€10/month), and Amazon Prime (€5/month shared with benefits) faces annual costs approaching or exceeding traditional cable TV. This is not the "liberation" of the user that disintermediation rhetoric frequently promotes; it is a fragmentation of power where various platformed intermediaries regulate access to content and, fundamentally, exercise control over data flows and consumption behaviour.

6. Conclusions

This study demonstrates that the transition in audiovisual consumption habits among this higher education students in Portugal does not constitute an absolute abandonment of traditional television, but rather a functionally and technologically mediated reorganisation of consumption practices. The findings reveal a complex landscape where different platforms serve distinct communicative purposes.

While 54.3% of respondents report watching free-to-air television more frequently than subscription-based linear television (Pay-TV), 53.5% are also subscribers to streaming services, evidencing a pattern of media coexistence rather than substitution. This points to a duality where linear TV retains the function of ritual and information, while streaming assumes narrative entertainment.

Second, platform hegemony is observed. The convergence of 88.6% of subscribers on Netflix suggests a transition from broadcaster monopoly to platform monopoly, where choice is conditioned by network effects. Third, rejection of advertising (65.2%) and temporal flexibility (89.9%) emerge as the main structural drivers of migration, signalling a generational rupture with the interruption model.

The interpretation of these data must consider significant methodological constraints. The sample (Communication and Arts students from a single institution) is not representative of the general population and exhibits higher-than-average media literacy, constituting a limitation in terms of statistical generalisation. At the same time, precisely because of this profile, the sample operates as a least-likely critical case (Flyvbjerg, 2006): if even users with elevated media literacy are subject to these nudge

mechanisms and network effects, this reinforces the ubiquity of algorithmic governance beyond this specific group.

To mitigate these gaps, future research should: (1) expand sampling to multiple disciplinary areas and geographical regions; (2) adopt longitudinal methodologies to distinguish age effects from generational effects; and (3) conduct direct audits of recommendation algorithms to contrast "perceived choice" with "effective offer."

The contemporary media ecosystem is characterised not by total freedom, but by conditioned activity. Understanding how the "invisible governance" of algorithms shapes cultural consumption is the central challenge for media literacy in the coming decade.

Acknowledgements / Funding

The author(s) received no financial support for this research.

Conflict of interest

The author(s) declare no conflict of interest.

Ethical statement

This study was conducted in accordance with the principles of scientific research and did not require additional ethics committee approval.

Declaration of AI usage

The manuscript was originally written in Portuguese and subsequently translated into English with the support of an AI tool. The use of AI was exclusively linguistic (translation) and did not involve the production of scientific content.

Data availability

The data supporting the findings of this study are available upon request.

Author contributions

	Filomena Antunes Sobral	Teresa Sofia de Almeida Gouveia
Conceptualization	x	x
Data curation	x	x
Formal analysis	x	x
Funding acquisition	–	–
Investigation	x	x
Methodology	x	x
Project administration	x	x
Resources	x	x
Software	–	x
Supervision	x	x
Validation	x	x
Visualization	x	x
Writing - original draft	x	x
Writing - review & editing	x	x

References

- Alaveras, G., Gomez-Herrera, E., & Martens, B. (2015). *Market fragmentation in Video-on-Demand Services in the EU28* (JRC Digital Economy Working Paper 2015/12). Joint Research Centre, European Commission. <https://hdl.handle.net/10419/202213>
- ANACOM. (2024). *Relatório sobre o estado das comunicações 2023*. Autoridade Nacional de Comunicações. <https://www.anacom.pt>
- Bourdon, J. (2018). Is the end of television coming to an end? *VIEW: Journal of European Television History and Culture*, 7(13), 80–95. <https://doi.org/10.18146/2213-0969.2018.jethc144>
- Chalaby, J.-K. (2025). The rise and fall of European media: EU policy in the streaming era. *European Journal of Communication*. <https://doi.org/10.1177/02673231251340801>
- Cortés-Quesada, J. A., Fernández-Gómez, E., & Feijoo, B. (2024). Inserción de publicidad tradicional en plataformas de contenido streaming: El caso de Netflix España. *Profesional de la Información*, 33(4). <https://hdl.handle.net/20.500.12766/658>
- Cortés-Quesada, J. A., Fernández-Gómez, E., & Feijoo, B. (2025). Transformando el entretenimiento: la inserción de spots publicitarios en las series de Netflix. *Comunicación y Medios*, 34(51), 93–106. <https://doi.org/10.5354/0719-1529.2025.77356>
- ERC. (2024). *Regulatory Report 2024*. Entidade Reguladora para a Comunicação Social. <https://www.erc.pt/en/about-erc-/news/-regulatory-report-2024-%E2%80%93-key-highlights/>
- European Audiovisual Observatory. (2021). *Trends in the VOD market in EU28*. Council of Europe. <https://rm.coe.int/trends-in-the-vod-market-in-eu28-final-version/1680a1511a>
- Evens, T., Henderickx, A., & Conradie, P. (2023). Technological affordances of video streaming platforms: Why people prefer video streaming platforms over television. *European Journal of Communication*. <https://doi.org/10.1177/02673231231155731>
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245. <https://doi.org/10.1177/1077800405284363>
- Gaw, F. (2022). Algorithmic logics and the construction of cultural taste of the Netflix Recommender System. *Media, Culture & Society*, 44(4), 706–725. <https://doi.org/10.1177/01634437211053767>
- Gillespie, T. (2018). *Custodians of the Internet: Platforms, content moderation, and the hidden decisions that shape social media*. Yale University Press. <https://doi.org/10.12987/9780300235029>
- Hallinan, B., & Striphas, T. (2016). Recommended for you: The Netflix Prize and the production of algorithmic culture. *New Media & Society*, 18(1), 117–137. <https://journals.sagepub.com/doi/10.1177/1461444814538646>
- ITU (International Telecommunication Union). (2024). *The future of television in Europe*. <https://www.itu.int/hub/2024/12/the-future-of-television-in-europe/>
- Jenner, M. (2018). *Netflix and the re-invention of television*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-94316-9>
- Jordheim, H., & Ytreberg, E. (2021). After supersynchronisation: How media synchronise the social. *Media, Culture & Society*, 43(6), 1023–1041. <https://doi.org/10.1177/0961463X211012507>
- Katz, M. L., & Shapiro, C. (1985). Network externalities, competition, and compatibility. *The American Economic Review*, 75(3), 424–440. <https://www.jstor.org/stable/1814809>
- Lotz, A. D. (2017). *Portals: A treatise on internet-distributed television*. Maize Books. <http://dx.doi.org/10.3998/mpub.9699689>
- Markttest. (2025a, fevereiro 4). *Utilização de plataformas de streaming atinge novo máximo em Portugal*. <https://www.markttest.com/wap/a/n/id~2b85.aspx>
- Markttest. (2025b, julho 22). *Subscrição de plataformas de streaming atinge novo máximo em Portugal*. <https://www.markttest.com/wap/a/n/id~2c05.aspx>

- Matrix, S. (2014). The Netflix effect: Teens, binge watching, and on-demand digital media trends. *Jeunesse: Young People, Texts, Cultures*, 6(1), 119-138. <https://doi.org/10.1353/jeu.2014.0002>
- Merikivi, J., Bragge, J., Scornavacca, E., & Verhagen, T. (2020). Binge-watching serialized video content: A transdisciplinary review. *Television & New Media*, 21(7), 697–711. <https://doi.org/10.1177/1527476419848578>
- Pajkovic, N. (2022). Algorithms and taste-making: Exposing the Netflix Recommender System’s operational logics. *Convergence: The International Journal of Research into New Media Technologies*, 28(1), 214–235. <https://doi.org/10.1177/13548565211014464>
- Pekic, B. (2024, September 9). *Portuguese: Pay-TV subs growth slows*. *Advanced Television*. <https://www.advanced-television.com/2024/09/09/portuguese-pay-tv-subs-growth-slows/>
- Poell, T., Nieborg, D. & van Dijck, J. (2019). Platformisation. *Internet Policy Review: Concepts of the digital society*, 8(4). <https://doi.org/10.14763/2019.4.1425>
- RTL Ad Alliance. (2025). *The new life of the living room*. <https://rtl-adalliance.com/article/new-life-living-room-study>
- Starosta, J., & Izydorczyk, B. (2020). Understanding the phenomenon of binge-watching—A systematic review. *International Journal of Environmental Research and Public Health*, 17(12), 4469. <https://doi.org/10.3390/ijerph17124469>
- Statista. (2024). *Cord-cutting in the United States*. Statista Research Department. <https://www.statista.com/study/53326/cord-cutting-in-the-us/>
- Strangelove, M. (2015). *Post-TV: Piracy, cord-cutting, and the future of television*. University of Toronto Press. <https://www.jstor.org/stable/10.3138/j.ctt14bthb3>
- Striphas, T. (2015). Algorithmic culture. *European Journal of Cultural Studies*, 18(4–5), 395–412. <https://doi.org/10.1177/1367549415577392>
- Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.
- Williams, R. (1974). *Television: Technology and cultural form*. Fontana.