

Characterizing Cross-Platform Engagement Strategies of Brazilian Online Gaming Content Creators

Arthur Gonçalves de Moraes
agmoraes@sga.pucminas.br
Pontifical Catholic University of
Minas Gerais – PUC Minas
Belo Horizonte, MG, Brazil

Jamille M. S. Ferreira
jamille.ferreira@sga.pucminas.br
Pontifical Catholic University of
Minas Gerais – PUC Minas
Belo Horizonte, MG, Brazil

Humberto T. Marques-Neto
humberto@pucminas.br
Pontifical Catholic University of
Minas Gerais – PUC Minas
Belo Horizonte, MG, Brazil

ABSTRACT

Digital content creators increasingly use multiple online platforms as complementary spaces for audience engagement and sustained interaction. In the gaming ecosystem, creators commonly combine Twitch, YouTube, and Discord for content distribution, livestreaming, and community interaction. This work investigates cross-platform engagement patterns associated with *Call2Go*, understood as a strategy that supports audience interaction across platforms over time. Rather than directly observing audience migration, we analyze patterns of creator activity and engagement associated with cross-platform strategies. We curated and enriched a dataset of gaming influencers using public metadata from Twitch and YouTube. Discord is considered as part of the broader ecosystem but is excluded from the quantitative analysis due to data limitations. Preliminary findings reveal complementary platform usage and asymmetries in cross-platform activity and engagement, providing exploratory evidence of how gaming creators structure their presence across platforms.

KEYWORDS

Cross-Platform Engagement, Call2Go, Twitch, YouTube, Discord, Gaming Content Creators, Streaming, Social Media, Children Online

1 INTRODUCTION

The digital entertainment landscape has undergone a significant transformation with the rise of content creators who build audiences across multiple platforms. In the gaming ecosystem, this multi-platform presence has become a common characteristic of creator activity, with live streaming on Twitch, video publishing on YouTube, and community interaction through platforms such as Discord serving complementary purposes [13]. Rather than treating each platform as an independent channel, creators often use them in a complementary way, directing audiences across platforms to maintain engagement through different content formats and interaction modes.

At the same time, recommendation systems and algorithmic amplification mechanisms shape how audiences discover,

consume, and interact with content online [17, 22]. Recent studies suggest that engagement-driven optimization can reinforce behavioral asymmetries, audience segmentation, and polarization dynamics in digital ecosystems [1, 4, 15, 23, 25]. Together, these dynamics highlight the importance of studying audience retention not only within isolated platforms, but across interconnected creator ecosystems.

This cross-platform dynamic raises an important question: *do gaming creators deliberately structure their activity to create a loop of audience retention, and does this strategy differ depending on whether the content targets children or adults?* Children’s content represents a particularly relevant context for this investigation, as younger audiences may be more susceptible to parasocial relationships with creators and may have a more limited capacity to critically evaluate engagement mechanisms designed to sustain attention [5]. Understanding how creators organize their presence across platforms in this context has implications beyond platform analytics, including digital well-being, online safety, and responsible content design [7]. In gaming communities, these cross-platform dynamics are particularly relevant because audiences frequently consume content across multiple formats, including live streams, edited videos, short clips, and real-time community interactions.

In this work, we investigate cross-platform activity and engagement patterns among Brazilian gaming creators, with a quantitative analysis focused on Twitch and YouTube. We use the concept of *Call2Go* to describe cross-platform engagement strategies in which creators encourage or support continued interaction across different online environments over time [3]. Although *Call2Go* may involve the intention to direct audiences from one platform to another, the data analyzed in this study do not track individual users and, therefore, do not directly observe or demonstrate audience migration. Instead, our analysis focuses on structural patterns of creator activity and engagement that may be associated with cross-platform strategies. Discord is considered as part of the broader creator ecosystem, but it is not included in the quantitative analysis due to limitations in the availability of comparable public data. Our main contributions are:

- **Cross-platform engagement characterization:** We characterize patterns of creator activity and engagement across Twitch and YouTube using behavioral indicators, including posting regularity, audience penetration rate, inter-platform activity balance, and the proposed Flow Index. These indicators are used to identify structural

patterns associated with cross-platform engagement rather than to directly measure individual audience migration.

- **Dataset:** We curated a dataset of 36 Brazilian gaming creators enriched with activity and engagement meta-data collected from the YouTube Data API and the Twitch API.
- **Exploratory empirical analysis:** We conduct an exploratory analysis of cross-platform behavior and compare the observed patterns between creators classified according to the predominant type of content they produce.

While prior work has studied viewer motivations on individual platforms [18], engagement metrics [20], recommender systems [15, 17, 25], and risks of social media content targeting children [5, 7], no study to our knowledge has examined cross-platform behavioral patterns of Brazilian gaming creators across YouTube, Twitch, and Discord, nor incorporated content classification as a dimension of engagement analysis. Our approach treats creator activity across platforms as a unified behavioral signal rather than analyzing each platform in isolation.

Our analysis reveals a clear asymmetry between content groups: 12 out of 17 adult-content creators (70.6%) maintain active biplatform presence, compared to 7 out of 19 children's content creators (36.8%). The median inter-platform ratio is 0.785 for adult creators and 0.425 for children's content creators, suggesting that adult creators distribute activity more evenly across platforms, while children's content creators concentrate predominantly on YouTube. These results indicate that cross-platform engagement patterns are not uniformly distributed across the sample and that content classification is associated with differences in engagement behavior in gaming creator ecosystems. More broadly, this work contributes a replicable methodology for studying cross-platform engagement patterns in multi-platform creator ecosystems, with implications for platform design, recommender systems, child safety policy, and attention economy research.

The remainder of this paper is organized as follows: Section 2 reviews related work on streaming platforms, engagement metrics, recommender systems, and influencer marketing. Section 3 describes the dataset and methodology. Section 4 presents the results and discussion. Finally, Section 5 concludes and points out future work.

2 RELATED WORK

The consumption of live game streaming has grown substantially over the past decade, establishing platforms such as Twitch as central nodes of digital entertainment [6]. Sjöblom and Hamari [18] and Hilvert-Bruce et al. [8] investigated the motivations of Twitch viewers through a uses and gratifications framework, identifying cognitive, affective, social integrative, personal integrative, and tension release motivations as key drivers of consumption. Their findings indicate that tension release and social integrative motivations are the strongest predictors of hours watched, while social motivations are the primary driver of subscription behavior.

Alongside live streaming, YouTube has consolidated itself as the dominant platform for on-demand gaming content, with creators frequently maintaining a presence on both platforms simultaneously [24]. Studies on multi-platform content creation show that creators actively shift their prioritized platforms based on audience growth dynamics, with some reporting that Twitch offers a stronger environment for community building while YouTube provides broader discoverability [13]. The economic dynamics of streaming further reveal high inequality across platforms, with top streamers able to diversify their revenue and renew their audiences at rates unavailable to smaller channels [9]. Cross-platform social media promotion has also been shown to correlate with streamer popularity, suggesting that activity beyond a single platform influences audience growth [14].

Audience engagement serves as a central determinant of content success across digital platforms. Trunfio and Rossi [20] conducted a systematic literature review conceptualizing social media engagement as a multidimensional construct encompassing behavioral, cognitive, and emotional dimensions, highlighting the absence of consensus on a single measurement standard. Building on this, Kamal and Aziz Bablu [10] identify click-through rate, view duration, likes, shares, comments, and bounce rate as the core quantifiable metrics for assessing how users interact with content and how effectively platforms retain attention over time. Kaushik [11] further situates these metrics within a broader analytics framework, arguing that behavioral data must be interpreted alongside audience intent to yield actionable insights. Whether platform choice or content strategy is the stronger driver of engagement has also been debated, with evidence suggesting that the platform itself shapes audience interaction independently of content [16]. Collectively, this body of work establishes that retention is not a single metric but a pattern of consistent interaction between creator output and audience response.

More recently, recommender systems have become fundamental components shaping content visibility and user interaction in digital ecosystems. Silva et al. [17] propose a graph-based recommendation framework capable of improving topic representation and recommendation quality, while Zhao et al. [25] discuss how recommendation systems may reinforce visibility asymmetries and reduce content diversity. Similarly, Santos and Comarela [15] investigate fairness-oriented recommendation approaches designed to mitigate depolarization effects in online systems. Research on polarization and information propagation further suggests that algorithmic optimization mechanisms may intensify behavioral reinforcement and audience segmentation in social platforms [1, 4, 22, 23]. Collectively, these studies indicate that audience retention is increasingly mediated by algorithmic systems operating both within and across platforms.

The professionalization of content creation has positioned influencer marketing as a significant economic and cultural industry, yet its social implications remain underexplored. De Veirman et al. [5] examined how influencer marketing targets children, finding that minors are particularly susceptible to parasocial relationships with creators and may not

recognize sponsored content as advertising [19]. Lee et al. [12] further demonstrate that parasocial bonds with streamers exist on a continuum of reciprocity and are shaped by the interactive affordances of live-streaming platforms. Bishop [2] contextualizes this phenomenon within the broader undervaluation of content creation as a profession, arguing that the social and economic impact of creators exceeds what institutional frameworks currently account for. These concerns become especially relevant in gaming ecosystems targeting younger audiences. Gonçalves et al. [7] demonstrate that children may be exposed to age-inappropriate content on Twitch despite platform moderation mechanisms, highlighting risks associated with recommendation systems, engagement loops, and cross-platform audience dynamics involving minors.

While existing research addresses viewer motivations, engagement metrics, and influencer impact in isolation, no study to our knowledge has examined cross-platform behavioral patterns of Brazilian gaming creators across YouTube and Twitch while considering differences between children's and adult-oriented content. This work contributes a computational methodology for measuring posting regularity, audience penetration rate, platform balance, and cross-platform flow, applied to a curated corpus of Brazilian gaming creators. By comparing these metrics across content classifications, we provide empirical evidence on whether creators exhibit differentiated cross-platform strategies, conceptualizing *Call2Go* as a measurable pattern of cross-platform engagement rather than direct evidence of audience migration between platforms.

3 METHODOLOGY

We investigate cross-platform engagement patterns among Brazilian gaming content creators using a curated dataset, the data collection pipeline shown in Figure 1, and computational metrics capturing activity across platforms. Ethical, legal, and data governance considerations are discussed in Section 6.

3.1 Dataset Construction

A dataset of 36 Brazilian gaming influencers (Table 1) was manually curated following a set of criteria designed to capture creators with active cross-platform presence. Selection was based on four criteria: (i) game category, prioritizing titles with significant Brazilian viewership across both YouTube and Twitch; (ii) presence in curated recommendation lists from both platforms; (iii) evidence of cross-platform migration intent, meaning creators who began their presence on one platform and subsequently expanded to the other; and (iv) content classification, distinguishing between children-oriented and adult-oriented creators.

Content classification used the age rating of the games predominantly featured in each creator's content as a proxy for content orientation, following Brazil's age classification guidelines. Creators whose content consisted predominantly of games rated up to 12 or 14 years were classified as children's content creators; those featuring games rated above this threshold were classified as adult-oriented creators. The resulting dataset contains 19 creators classified as children's

content and 17 as adult-oriented. This proxy does not capture factors such as language, content style, or actual audience demographics. Creators were selected with an emphasis on active channels to minimize data quality issues arising from inactive or abandoned accounts.

For each creator, the dataset records: the channel name, links to their YouTube, Twitch and Discord channels where applicable, the primary game category, and the content classification. All 36 creators maintain a YouTube presence, while 19 also operate active Twitch channels, forming the *biplatform* subset used in our cross-platform analysis. Only 12 creators maintain Discord communities.

Table 1: Creator sample by platform presence and content category. YT = YouTube, TW = Twitch, DC = Discord.

Creator	YT	TW	DC	GAME	KIDS
Cellbit	Y	Y	Y	Variety	N
Core	Y	N	N	Variety	Y
Feuripe	Y	Y	N	Minecraft	Y
Geleia	Y	Y	N	Minecraft	Y
Jazzghost	Y	N	N	Variety	Y
Julia MineGirl	Y	N	N	Roblox	Y
Lingonz	Y	Y	N	Minecraft	Y
LipaoGamer	Y	N	Y	Variety	N
LipaoBlox	Y	N	Y	Roblox	Y
Canal Clash War	Y	N	Y	Roblox	Y
malena010102	Y	Y	Y	Minecraft	Y
MelzinhaMel Games	Y	N	N	Variety	Y
Mendrake	Y	N	N	Minecraft	Y
MoonKase	Y	Y	N	Minecraft	Y
Nait	Y	N	N	Minecraft	Y
Paulinho o Loko	Y	Y	N	GTA	N
Problems	Y	N	Y	Minecraft	Y
Robin Hood Gamer	Y	Y	N	Minecraft	Y
Alanzoka	Y	Y	N	Variety	N
Amy Scarlet	Y	N	N	Roblox	Y
Bagi	Y	Y	Y	Minecraft	Y
Baiano	Y	Y	N	LoL	N
BRKsEDU	Y	N	N	Variety	N
Davi	Y	N	N	Minecraft	Y
Gameplayrj	Y	Y	N	Variety	N
Fallen	Y	Y	N	CS2	N
Games EduUu	Y	N	N	Variety	N
Gaules	Y	Y	Y	CS2	N
LOUD Coringa	Y	Y	Y	Variety	N
Nobru	Y	N	N	Free Fire	N
Saiko	Y	N	N	Variety	N
Vinicius13	Y	N	N	Minecraft	Y
blackoutz	Y	Y	Y	Fortnite	N
Sacy	Y	Y	Y	Valorant	N
Yoda	Y	Y	N	LoL	N
wastzera	Y	Y	Y	CS2	N

3.2 Data Collection and Processing Pipeline

Figure 1 illustrates the pipeline. Starting from the manually curated CSV, data is collected in parallel for each creator via two official APIs: the YouTube Data API v3 and the

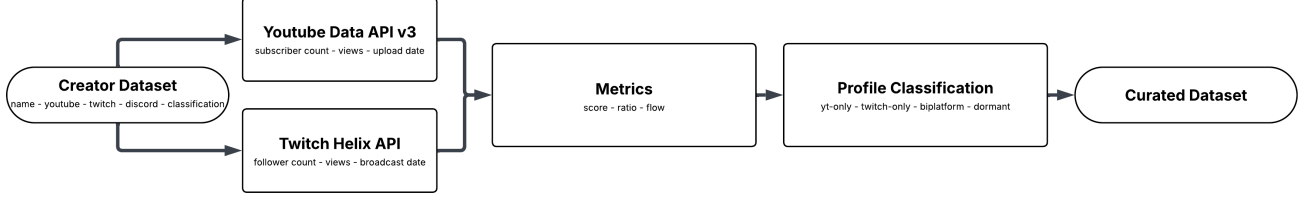


Figure 1: Data collection and analysis pipeline.

Twitch Helix API. From YouTube, the pipeline retrieves the 90 most recent uploaded videos, including publication date, view count, and like count, as well as the channel’s current subscriber count. From Twitch, it retrieves the 90 most recent archived streams (VODs), including broadcast date and peak viewer count, as well as the channel’s current follower count. Rather than a fixed calendar period, this content-based window allows the temporal span to vary according to each creator’s posting cadence. Collection uses four concurrent workers while respecting API limits, and all timestamps are normalized to UTC.

3.3 Metrics

The organization of the metrics follows the conceptual framework introduced by Call2Go [3], which models creator activity as a cross-platform audience retention loop, and by recent studies on multi-platform content creation, which highlight publishing consistency, audience conversion, and platform coordination as key factors in sustaining creator ecosystems [13]. Engagement studies also indicate that creator performance should be assessed through complementary dimensions rather than absolute reach alone [20]. Guided by these perspectives, we define three complementary metrics: (i) a platform score capturing engagement quality within each platform, (ii) a cross-platform ratio measuring cadence equilibrium, and (iii) a flow index summarizing cross-platform symmetry.

3.3.1 Platform Score. The platform score combines two components into a single indicator of engagement quality:

$$\text{score} = \text{regularity} \times \text{penetration} \quad (1)$$

Posting regularity captures the consistency of a creator’s publishing cadence. Given the sequence of inter-posting intervals $\Delta t_i = t_{i+1} - t_i$, regularity is defined as:

$$\text{regularity} = \frac{1}{1 + \sigma_{\Delta t}} \quad (2)$$

where $\sigma_{\Delta t}$ is the standard deviation of the intervals. A creator with a consistent cadence approaches a regularity of 1; irregular posting yields a high standard deviation and consequently a lower score.

Audience penetration measures the fraction of a creator’s potential audience activated per piece of content:

$$\text{penetration} = \frac{\bar{v}}{A} \quad (3)$$

where $\bar{v}$ is the mean view count across posts in the observation window and A is the current audience size (subscriber count for YouTube, follower count for Twitch). This formulation is structurally identical for both platforms, enabling direct comparison. We acknowledge two limitations: YouTube view counts are cumulative over the lifetime of a video; Twitch viewer counts represent peak concurrent viewers rather than accumulated views. Both are treated as approximations of relative audience engagement within the constraints of the available public APIs.

The score is computed using a sliding window of 7 days over the collected post history. This choice reflects two considerations: a global computation would treat sporadic hiatuses as equally harmful as permanently irregular cadences, obscuring typical behavior; and a 7-day window aligns with the natural weekly content cycle that most gaming creators follow. For each non-empty window, regularity and penetration are computed using only the posts within that window. The final score is the mean across all non-empty windows.

3.3.2 Cross-Platform Ratio. For creators active on both platforms, the cross-platform ratio is defined as:

$$\text{ratio} = \frac{\bar{\Delta t}_{YT}}{\bar{\Delta t}_{TW}} \quad (4)$$

where $\bar{\Delta t}_{YT}$ and $\bar{\Delta t}_{TW}$ are the mean inter-posting intervals on YouTube and Twitch, respectively. A ratio close to 1 indicates balanced activity across both platforms. A ratio greater than 1 indicates higher posting frequency on Twitch; a ratio less than 1 indicates the inverse. This metric quantifies the equilibrium dimension of the Call2Go loop: a creator who actively maintains both platforms is hypothesized to be more deliberately structuring a cross-platform audience retention cycle.

3.3.3 Flow Index. The Flow Index is a single scalar measure of cross platform structural symmetry, combining score balance and cadence balance. It is designed to characterize the extent to which a biplatform creator maintains balanced engagement and posting activity across YouTube and Twitch. It is defined as:

$$\text{flow} = \text{balance} \times f\text{ratio} \quad (5)$$

where:

$$\text{balance} = \frac{\min(\hat{Y}T, \hat{T}W)}{\max(\hat{Y}T, \hat{T}W)} \quad (6)$$

$$f\text{ratio} = \frac{1}{1+|\text{ratio} - 1|} \quad (7)$$

and $\hat{Y}T$, $\hat{T}W$ are the platform scores normalized by the maximum score observed across all creators on each platform, respectively:

$$\hat{Y}T = \frac{YT}{\max(YT)} \quad \hat{T}W = \frac{TW}{\max(TW)} \quad (8)$$

The normalization step is necessary because YouTube and Twitch scores operate on different absolute scales, as discussed in Section 3.3.1. Without it, the balance term would systematically favor creators with stronger YouTube scores, since YouTube view counts are cumulative while Twitch viewer counts are simultaneous.

The balance term ranges from 0 to 1, reaching 1 when both normalized scores are equal and approaching 0 when one platform dominates. The cadence term $f\text{ratio}$ also ranges from 0 to 1, reaching 1 when the inter-posting ratio is exactly 1 and decreasing as the ratio deviates in either direction. The flow index is only defined for biplatform creators; creators active on a single platform receive no flow value.

Importantly, the flow index is independent of absolute audience size or engagement volume. A creator with modest but symmetrical engagement across both platforms will score higher than a creator with strong performance on one platform and negligible presence on the other. This design reflects the research question: the index measures whether a creator is sustaining cross-platform presence, not how influential they are. In practical terms, higher Flow Index values indicate greater balance in platform engagement and posting cadence, while lower values indicate stronger concentration or asymmetry between platforms.

4 RESULTS

This section presents the findings across the three analytical dimensions defined in the methodology: platform presence and profile classification, engagement scores, and the Call2Go flow index.

4.1 Platform Presence and Profile Classification

As shown in Figures 2 and 3, 19 of the 36 creators were classified as *biplatform* and 17 as *yt-only*. No creator was classified as *twitch-only*, confirming that YouTube functions as the universal entry point in the Brazilian gaming creator ecosystem.

A pronounced asymmetry emerges when biplatform presence is examined by content classification. Among adult-content creators, 12 out of 17 (70.6%) maintain active channels on both platforms. Among children's content creators, only 7 out of 19 (36.8%) do so. This difference suggests that adult-oriented creators in our sample are more frequently represented among biplatform creators.

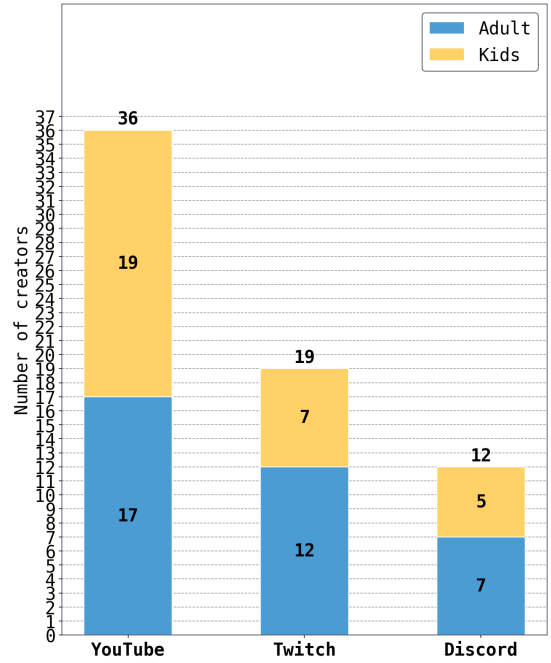


Figure 2: Distribution of platform presence by content category (children's vs. adult)

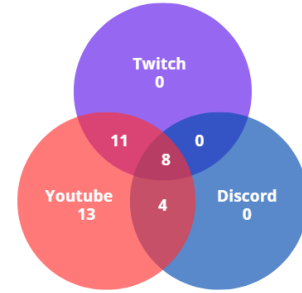


Figure 3: Distribution of cross-platform presence

4.2 Engagement Scores

Figures 4 and 5 show all content creators scores across platforms, while Table 2 summarizes the mean and median platform scores by content group.

Table 2: Platform scores by content group (biplatform creators only for Twitch).

Group	YouTube score		Twitch score	
	Mean	Median	Mean	Median
Children	0.229	0.076	0.201	0.129
Adult	0.105	0.095	0.074	0.032
All	0.170	0.077	0.123	0.041

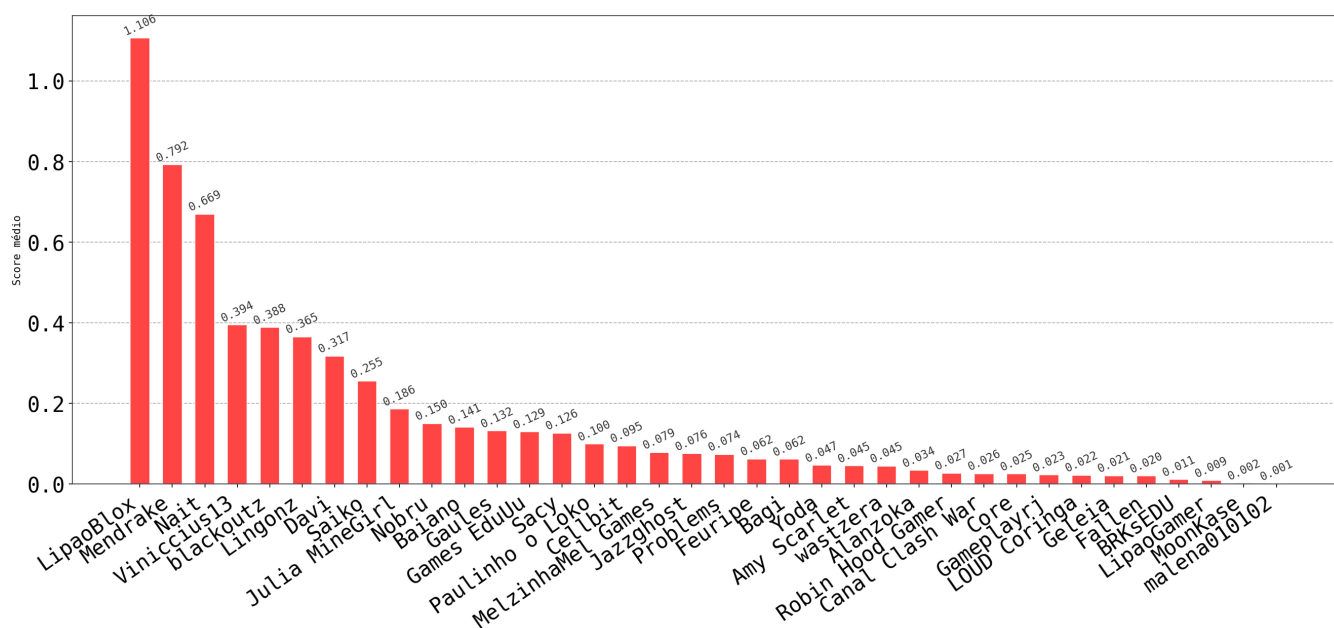


Figure 4: YouTube scores.

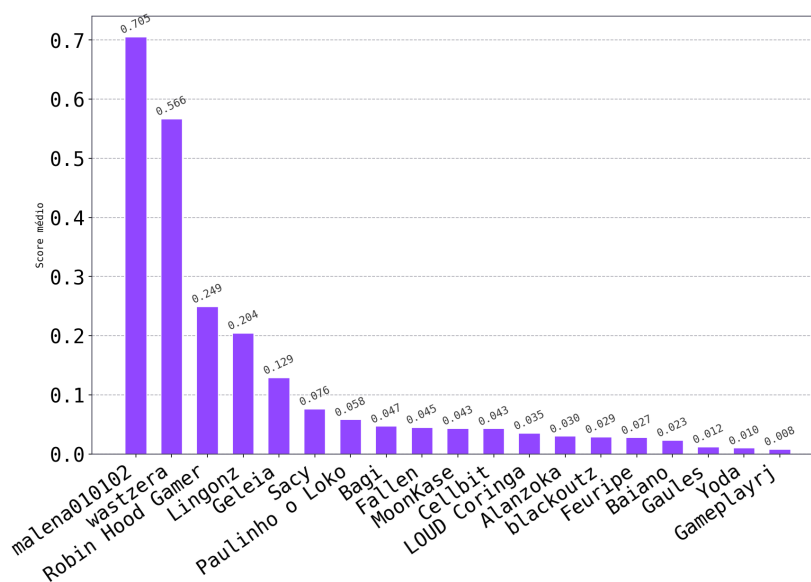
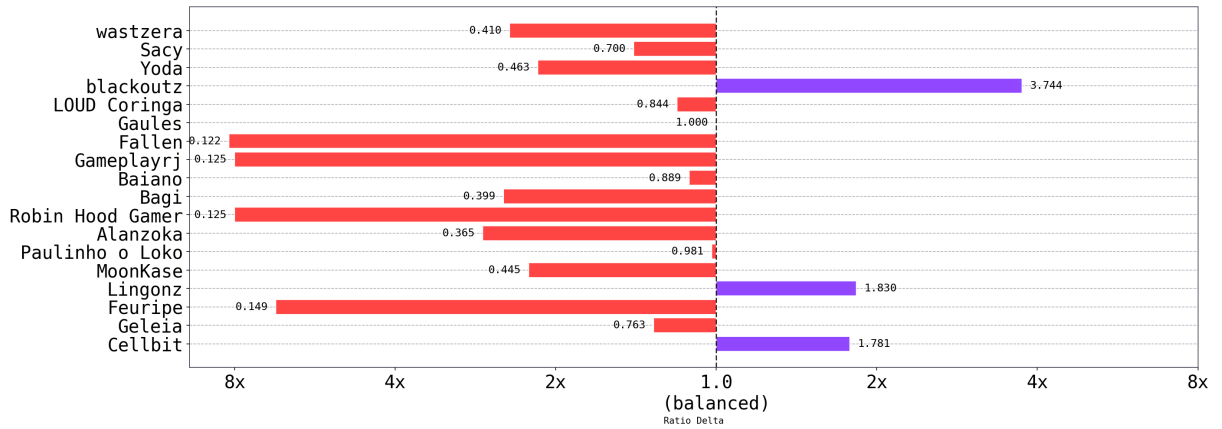


Figure 5: Twitch scores.

The high standard deviation relative to the mean in both platforms (YouTube: $\sigma = 0.242$; Twitch: $\sigma = 0.124$) indicates a right-skewed distribution, with a small number of high-engagement creators pulling the mean upward. The median is therefore a more representative measure of typical behavior.

Children's content creators show lower median YouTube scores than adult creators (0.074 vs. 0.095). On Twitch, however, children's content creators show substantially higher

median scores than adult creators (0.129 vs. 0.032). This suggests that, among biplatform creators, children's-content channels active on Twitch tend to exhibit stronger cross-platform audience overlap or penetration than their adult-oriented counterparts.

Figure 6: Cross-platform posting ratio (log₂ scale).

4.3 Cross-Platform Ratio

The cross-platform posting ratios are shown in Figure 6. Among biplatform creators, the mean ratio is 0.825 and the median is 0.599, indicating a general tendency toward higher posting activity on YouTube than on Twitch. Only 4 of the 19 *biplatform* creators (21%) exhibit a relatively balanced posting cadence, defined as a ratio between 0.8 and 1.2.

When disaggregated by content group, children’s content creators present a lower median ratio (0.425) than adult creators (0.785). This difference reinforces the platform specialization pattern observed previously: although some children’s creators maintain a presence on Twitch, their publishing activity remains predominantly concentrated on YouTube, whereas adult creators tend to distribute their activity more evenly across the two platforms.

4.4 Call2Go Flow Index

Table 3 shows the creators from highest to lowest flow index values.

The flow index, which combines score balance and posting cadence balance into a single measure of cross-platform symmetry, yields a mean flow index of 0.301 and median of 0.261 across all biplatform creators. Adult creators show a higher mean flow (0.325 vs. 0.253), consistent with the pattern observed across all previous metrics. These values indicate that most creators, even those active on both platforms, do not operate them symmetrically.

The top-ranked creators share two characteristics: moderate but balanced scores across both platforms and a ratio close to 1. Paulinho o Loko achieves the highest flow (0.893) with a near perfect ratio of 0.981, indicating almost identical posting cadence on both platforms. Notably, high absolute scores are not required for a high flow index: Bagi and Alanzoka both rank in the top five despite low absolute scores, illustrating that the index measures cross-platform symmetry rather than overall influence.

The bottom-ranked creators reveal two distinct failure modes. The first is platform concentration: wastzera, Robin

Table 3: All biplatform creators ranked by flow index. YT = YouTube score, TW = Twitch score, Ratio = Inter-posting ratio, K = Children’s content.

Creator	Flow	YT	TW	Ratio	K
Paulinho o Loko	0.893	0.100	0.058	0.981	N
Sacy	0.727	0.126	0.076	0.700	N
Bagi	0.527	0.062	0.047	0.399	Y
Lingonz	0.479	0.365	0.204	1.830	Y
Alanzoka	0.447	0.034	0.030	0.365	N
Cellbit	0.397	0.095	0.043	1.781	N
Feuripe	0.372	0.062	0.027	0.149	Y
LOUD Coringa	0.346	0.022	0.035	0.844	N
Gameplayrj	0.288	0.023	0.008	0.125	N
Baiano	0.233	0.141	0.023	0.889	N
Yoda	0.214	0.047	0.010	0.463	N
Fallen	0.151	0.020	0.045	0.122	N
Gaules	0.141	0.132	0.012	0.999	N
Geleia	0.084	0.021	0.129	0.763	Y
Robin Hood Gamer	0.037	0.027	0.249	0.125	Y
wastzera	0.032	0.045	0.566	0.410	N
blackoutz	0.031	0.388	0.029	3.744	N
MoonKase	0.021	0.002	0.043	0.445	Y
malena010102	—	0.001	0.705	—	Y

Hood Gamer, and Geleia have strong Twitch scores but weak YouTube scores, indicating audience engagement largely confined to one platform. The second is cadence imbalance: blackoutz has a strong YouTube score but posts on Twitch at a frequency 3.7 times lower, while MoonKase has minimal activity on both platforms. These cases suggest that a high flow index requires both score balance and cadence balance simultaneously; excelling in only one dimension is insufficient.

The case of malena010102 is excluded from the flow and ratio calculations, as her Twitch channel retains only the most recent VOD, providing insufficient posting history to compute inter-posting intervals.

4.5 Discord: Data Availability Constraints

Although 12 of the 36 creators in the dataset maintain Discord communities, data collection from this platform was not possible for the majority of channels. The Discord API restricts access to server content to members who have joined the server and hold the appropriate permissions; public data endpoints are limited to basic guild metadata and do not expose message history, member counts, or activity logs for servers that have not explicitly enabled such access. Of the 12 Discord communities identified, only 2 maintain publicly accessible servers from which any structural data could be retrieved. The remaining 10 operate as private or invite-only communities, preventing systematic data collection within the scope of this study.

As a result, Discord is excluded from the quantitative engagement analysis presented in this section. This limitation is not incidental: the prevalence of private Discord servers among gaming creators may itself reflect a deliberate community management strategy, in which Discord functions as a gated interaction space reserved for highly engaged or paying audience members rather than a publicly accessible platform. A full characterization of the Call2Go loop therefore remains an open problem, contingent on future access to Discord community data.

5 CONCLUSION AND FUTURE WORK

This work investigates cross-platform engagement patterns associated with Call2Go by Brazilian gaming content creators on YouTube and Twitch. We propose a computational methodology based on posting regularity, audience penetration, and cross-platform balance to characterize multiplatform engagement patterns.

The results show that adult-oriented creators maintain a stronger and more balanced biplatform presence, while children-oriented creators concentrate activity mainly on YouTube. Overall, most creators do not exhibit symmetrical cross-platform behavior, suggesting uneven adoption of multiplatform engagement strategies in the gaming ecosystem.

We introduce the Flow Index as a quantitative measure of cross-platform symmetry, enabling the identification of creators with balanced engagement and posting cadence independent of audience size.

This study contributes a conceptual discussion of Call2Go and a replicable framework for analyzing multiplatform engagement. A key limitation is the exclusion of Discord: although some creators maintain communities there, limited API access prevents systematic analysis. As a result, the study is restricted to the YouTube–Twitch axis, while the results should be interpreted as exploratory and within the analyzed sample.

Future work will expand the dataset to platforms such as TikTok, Instagram, and YouTube Shorts, which exhibit distinct engagement dynamics for short-form content [21]. We also plan to investigate Discord data collection through partnerships with creators, analyze temporal relationships between livestreams and derived content, and examine video

and stream transcripts to quantify cross-platform references. This would enable behavioral validation of Call2Go beyond structural metrics.

6 FINAL DECLARATIONS

Data Availability: The data used in this study were collected exclusively from publicly accessible creator profiles and channels on YouTube and Twitch through their official APIs (YouTube Data API v3 and Twitch Helix API). The dataset includes only information intentionally made public by the platforms, such as channel metadata, publication timestamps, view counts, and engagement indicators. To ensure transparency and reproducibility, the processed dataset, derived metrics, and analysis scripts will be made publicly available in a dedicated repository, subject to compliance with the terms of service and data usage policies of the respective platforms, if the work is accepted. Any shared dataset will exclude raw identifiers not necessary for reproducibility and will be limited to derived or aggregated information when appropriate.

Ethical and Legal Considerations: This study uses exclusively publicly accessible data collected from official platform APIs and does not involve direct interaction with human participants. No private communications, restricted-access data, or sensitive personal information were collected. The research complies with applicable Brazilian legal and ethical frameworks, including the LGPD (Law No. 13.709/2018), Marco Civil da Internet (Law No. 12.965/2014), and Resolution No. 510/2016. Only data necessary to compute engagement and activity metrics were collected, following principles of data minimization and purpose limitation. Although public creators may be identifiable, no sensitive attributes were inferred and results are presented in aggregate form whenever possible. Data were collected and stored according to platform policies and used exclusively for academic purposes. Any future public release of processed data will follow aggregation and minimization practices to reduce re-identification risks.

Research Transparency: All methodological procedures, including creator selection criteria, data collection pipeline, metric definitions, and analytical steps, are described in sufficient detail to enable independent replication. Limitations related to API restrictions, data availability, and platform constraints are explicitly discussed in the paper. The limited access to Discord data (due to the platform's permission model) was treated as a methodological constraint and not bypassed through unauthorized data collection practices.

Use of Artificial Intelligence Tools: Generative Artificial Intelligence (GenAI) tools were used exclusively to support language revision, grammar correction, and improvements in textual clarity during manuscript preparation. All research design decisions, data collection procedures, metric definitions, analyses, interpretations, and conclusions were developed and validated by the authors.

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