Let me be brief: An analysis of length vs. views on extension YouTube channels

Molly McKettrick
Abraham Baldwin Agriculture College
1(352)514-1453
mmckettrick@stallions.avac.edu

Libba Johnson
Abraham Baldwin Agricultural College
(229)456-8009
Libbajohnson99@gmail.com

Dr. Austin Moore
Abraham Baldwin Agricultural College
(229) 391-4984
austin.moore@abac.edu

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Introduction & Literature Review

Extension communication units must continually navigate the rapid evolution of technology while staying engaged with their intended audience (Moore et al., 2015). Social media platforms, like YouTube, have become a large factor in informational or educational conveyance of information to the public (Vogels et al., 2022). Pew reports that half of all YouTube users utilize the platform to learn "how to do things they've never done before" (Smith et al., 2018, p. 2). Additionally, research has delved into the significance of video categories or genres, revealing that certain categories, such as 'how-to' tutorials and entertainment, tend to attract larger audiences (Smith et al., 2018). Recent studies on YouTube video content have shown a growing interest in understanding the factors that influence viewer engagement and views (Yang et al., 2022; Khan, 2017).

Extension video producers self-reported a majority of their products being 1-5 minutes in length with agricultural products remaining the most common content category (Moore et al. 2022). Others have considered complex combinations of features in science videos on YouTube such as theme, format, inclusion of editing effects, length, etc. (Velho et al, 2020) or have looked to analytic data normally available only to the owner of the content (Wu et al. 2018) as ways to predict engagement. However, there is a notable gap in the literature when it comes a simple investigation of publicly available data such as the impact of video length on total views. This study aims to address this gap by examining how video length and category interact to influence viewer engagement and contribute to the success of extension content on YouTube.

Theoretical Framework

This study was guided by the principles of media logic (Altheide & Snow, 1979) which describes a reciprocal relationship between media and audience where the production process decisions of the media and the product evaluation decisions of the audiences feed one another (Klinger & Svensson, 2015). This relationship encapsulates the logic pathways the media use to construct messages along with the pressures and assumptions of that process (Altheide & Snow, 1979). Such production decisions then help the audience identify and classify the products they encounter. To better understand the varied application of this logic across media with different audiences and intended uses, Altheide stated, "…empirical and conceptual mapping, tracking, incorporation, and transformation of organizational and interactional communication must occur across media and topics" (2013, p. 225). Therein lies the intent of this study: to track extension video products by a neatly measurable characteristic (length) and examine the association of that characteristic with audience metrics (views). This study looks to confirm the finding of previous research (Moore et al., 2022) that extension video producers report producing more short form video products, and further to confirm that this production logic is tied to audience expectations.

Methodology

Researchers identified YouTube channels for state-level extension communication units in ten southeastern states: Florida, Georgia, Alabama, Arkansas, Kentucky, Louisiana, Missouri, North Carolina, South Carolina, and Tennessee. Initial data was collected for each state's extension

YouTube channel including number of videos posted over the past year, September 2022 to September 2023. From this list, researchers opted to focus on three states (Alabama, Louisiana, and Mississippi) as these three had similar amount of content and represented a great variety of content across the length categories established in Moore et al. (2022). The research team returned to these channels to collect individual video data for length in seconds and total views. Allowing that online video may posted before promotional efforts begin, the decision was made to track online videos that been on the site for at least one month and up to one year, an eleven-month span.

A decision was made to exclude full episodes of broadcast series posted on these state's accounts but to leave individual clips from these shows in the frame. A standard broadcast episode for a half-hour television slot would run roughly 1600 seconds in length. Excluding these, videos ranged from 13 seconds in length to 955 seconds in length, slightly under 16 minutes, and a mean length of only 241.61 seconds. Indeed, 254 videos (63.5%) fell within the range of 60 seconds to 299 seconds (4:59). Researchers identified such full-length episodes as outliers not only in length, but also in that their number is likely to be considered in addition to broadcast data rather than as standalone YouTube products and the unlikely nature of these to be shared in similar ways as shorter videos. The resulting frame included 400 total videos.

Results

A Pearson correlation was conducted to examine the relationship between length of video in seconds, $M = 241.61$, $SD = 189.44$, and total number of views, $M = 304.28$, $SD = 557.42$. A significant negative relationship exists between the two variables of length and views, $r(398) = -.214$, $p < .01$.

Discussion

The negative relationship highlighted suggests the increasing video length will negatively impact the decision of YouTube users to watch the video. It is notable that this number represents total views rather than length of viewing. It suggests that the displayed length of the video will affect a viewer's initial decision to begin playback. Further research should examine these drivers, and if this factor is related to format, as Velho et al. (2020) presume. Acquiring additional analytic data from the channel owners, as was done by Wu et al. (2018), may shed light on the length of engagement over time. This study does show support for Moore et al. (2022) which found extension video producers self-reporting videos in the 1-5 minutes in length as the most common length of products produced. Within this study, 63.5% of videos examined fell within that length. Likewise, 400+ videos produced in one 11 month timeframe, and nearly 800 across 10 southeastern states, seems to support the findings of Vogels et al. (2022) that YouTube has become a major space for educational and informational video products.

An examination of studies utilized to inform this effort, suggests another area in need of clear definition: video categorization. Though these studies ranged from broad science video definitions to narrow extension communication terms, few utilized remotely similar categories. A more unified standard for video categorization would be beneficial for conferring results between studies.

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