RESEARCH POSTER

Framing Farmers: A Content Analysis of YouTube Farming Vlogs

Hannah L. Ford
Department of Agricultural Education and Communications
Texas Tech University
Box 42131
Lubbock, TX 79409-2131
806-742-1505
hannford@ttu.edu

Austin R. Moore
Department of Agricultural Education and Communications
Texas Tech University
Box 42131
Lubbock, TX 79409-2131
405-714-3715
austin.r.moore@ttu.edu

Framing Farmers: A Content Analysis of YouTube Farming Vlogs

Introduction/Need for Research

The National Science Board (2018) reported that 69% of Americans preferred learning about scientific issues and topics from the internet. With the demand of online information, science communicators are now confronted with challenges and opportunities as they attempt to best utilize this medium when disseminating information and influencing the public (Brossard, 2013). Online video blogs, *vlogs*, are an increasingly popular form of media content (Stein et al., 2020).

YouTube was founded in 2005, and rapidly expanded to be the second most visited site worldwide (Arthurs et al., 2018). Mike Thelwell (2016) described the benefit of computational research methods and digital research usefulness for YouTube as a platform. The platform's content, user-generated videos, has become a valuable informational source and can be utilized by activists to recruit new followers and engage online communities (Arthurs et al., 2018). YouTube viewers utilize the platform for both entertainment and information (Shao, 2009).

An analysis of agricultural checkoff programs by Holt-Day et al. (2020) found that agricultural videos on the platform that held sentimental framing were highly viewed. The researchers also recommended future studies be completed to determine framing in other agricultural YouTube videos (Holt-Day et al., 2020). Agricultural presence and leveraging on YouTube have been studied in commodity check-off programs (Holt-Day et al., 2020) as well as water-related topics in state Farm Bureaus (LeGrande et al., 2019). However, few research studies have looked specifically at how agricultural farm vlogs are framed. This study sought to explore how farm vlogs are creating user-generated content to share information through YouTube videos.

Conceptual Framework

The research was guided by Goffman's (1974) framing theory to guide the analysis and categorization of visual framing for vlog and video media. Framing theory investigates how a message is presented or told to a specific audience (Goffman, 1974). An audience is more likely to accept visual representation of information as truth, due to the low cognitive load of interpreting it visually (Rodriguez & Dimitrova, 2011). A codebook modeled from LeGrande et al. (2019) was utilized to categorize the videos from each YouTube channel into one or more of the following frames: *step-by-step instruction*, *innovation*, *farm business facts*, *handling crops and livestock*, *product nutrition*, and *sentimental.*

Methodology

This research study is a content analysis focused on framing user-generated media from farming vlogs into categories. A Google search was performed using keywords *farming*, *vlog* and *top.* The search results yielded a number of blog posts ranking top agricultural vlogs. Channels which appeared on multiple blog lists were then considered for the study. Researchers selected channels based on total views, demonstration of agricultural practice, and demonstration of common vlogging style. Through YouTube's popularity tool, researchers identified each channel's top four videos ($N = 20$). The agricultural farming vlogs ($N = 5$) that were sampled are as follows: MN Millennial Farmer, Cole the Cornstar, Welker Farms Inc, How Farms Work, and Larson Farms. The channels' descriptive information can be found in Table 1.

Table 1
*Information Regarding Farming Vlog YouTube Channels (*N = *5)*

Channel Name	Total Views	Subscribers	Videos	Year Established
MN Millennial Farmer	171,153,997	*731,000	376	2016
Cole the Cornstar	103,519,254	*460,000	398	2018
Welker Farms Inc	94,697,954	*468,000	414	2011
How Farms Work	88,167,861	*278,000	1039	2007
Larson Farms	44,329,167	*212,000	213	2010

Note. Data with asterisks approximated by YouTube

The analysis occurred over two days in February 2021 to control for channel updates and varying data. The researchers also gathered the following information from each channel: year established, total channel views, subscribers, and video count. The title, description, views, comments, positive likes, and negative likes were also recorded for each video. Two researchers independently coded each YouTube video. In the few cases of discrepancies, researchers reached a consensus upon discussion.

Findings

Researchers found that step-by-step instruction and farm business fact videos were most common, each framed in 80% (n = 16) of videos. An innovation frame was identified in 55% (n = 11) of sampled videos. Handling crops and livestock was a framing topic in 45% (n = 9) of videos, matching the 45% (n = 9) rate of sentimental framing. Only 5% (n = 1) of videos incorporated product nutrition.

Conclusions

Platforms, like YouTube, have changed the way people access scientific information (Huang & Grant, 2020). The five channels chosen for the sample have a combined total of over 2 million subscribers, disseminating agricultural and science communication with over 500 million combined video views. This study confirmed Holt-Day et.al (2020), who concluded sentimental videos account for some of the most popular videos on the platform. Researchers hypothesize that redefining the sentimental frame into a broader category of "emotional content" to include such items as comradery, frustrations and playfulness would increase this percentage significantly and better fit blog coding.

Recommendations for Future Research

Through the coding process, researchers found evidence of several emerging themes not listed in the original codebook. Future research in this topic is encouraged, with emphasis in refining the codebook and adding additional categories including equipment care, consumer information, safety, farm economics, community, weather, and non-farm activity. Researchers also determined the necessity to analyze media in a broader sense than solely narrative content. Narrative style, including story-telling, day in the life, and music video framing should also be considered. Production content is also an important factor, and researchers recommend coding camera style, narration, on-screen graphics, and camera angles such as point-of-view shots.

References

Altinay, Z. (2017). Visual communication of climate change: Local framing and place attachment. *Coastal Management, 45*(4), 293-309. https://doi.org/10.1080/08920753.2017.1327344

Arthurs, J., Drakopoulou, S., & Gandini, A. (2018). Researching YouTube. *Convergence*, *24*(1), 3–15. https://doi.org/10.1177/1354856517737222

Brossard, D. (2013). Science and new media landscapes. Proceedings of the National Academy of Sciences*, 110*. https://doi.org/10.1073/pnas.1212744110

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience.* Harvard University Press

Holt-Day, J., Curren, L. & Irlbeck, E. (2020). USDA agricultural checkoff programs' YouTube presence and video quality. *Journal of Agricultural Education, 61I*(1), 190-202. https://doi.org/10.5032/jae.2020.01190

Huang, T., & Grant, W. J. (2020). A good story well told: Storytelling components that impact science video popularity on YouTube. *Frontiers in Communication*, *5*(1), 86. https://doi.org/10.3389/fcomm.2020.581349

LaGrande, L., Lawson, C., & Meyers, C. (2019). Framing agricultural water use: A content analysis of state farm bureau YouTube videos. *Proceedings of the American Association for Agricultural Education, 46*(1), 708-723.

National Science Board (2018). *Chapter 7 science and technology: public attitudes and understanding.* Science and Engineering Indicators 2018.

Rodriguez, L., & Dimitrova, D.V. (2011). The levels of visual framing. *Journal of Visual Literacy, 30*(1), 48-65.

Shao, G. (2009). Understanding the appeal of user-generated media: a uses and gratification perspective. *Internet Research*, *19*(1), 7-25. https://doi.org/10.1108/10662240910927795

Stein, J.-P., Koban, K., Joos, S., & Ohler, P. (2020). Worth the effort? Comparing different YouTube vlog production styles in terms of viewers' identification, parasocial response, immersion, and enjoyment. *Psychology of Aesthetics, Creativity, and the Arts.* Advance online publication. https://doi.org/10.1037/aca0000374

Thelwell, M. (2017, February, 24). Mike Thelwell - Middlesex University YouTube Part 1 [Video]. YouTube. https://www.youtube.com/watch?v=1pFV4E27_ok