The Influence of Social Media Content Framing on Audience Perceptions of the Wild Horse and Burro Controversy

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Abstract

The central research question that guided this study was: how does the framing of written content on Facebook influence public perception of information regarding the management of wild horses and burros? This research was conducted using content analysis to examine 136 Facebook posts of six organizations communicating about the wild horse and burro controversy and 8,295 comments made by individuals to the organization's posts. There were eight major themes that emerged from the data, organized by the interaction of three frames: organization frame, audience frame, and organization-audience interaction frame. Organization frame themes included: organization positionality and its influence on framing posts for emotional appeal and audience action, and organization post style, post frequency, and response frequency and its influence on audience reception of the issued. Audience frame themes included: action-oriented responses, emotional responses, government responses, and management-related responses. Organization-audience interaction frame themes included: the influence of organization comments on audience's perception of the issue, and misinformation concerns.. These themes provide insight into how organizations and individuals are communicating about the wild horse and burro controversy using social media and illuminate opportunities for further research into social media communications to positively impact agricultural literacy. Recommendations for practice include: supplying necessary information to social media instead of relying on the audience to click links, keeping the perceived-cost and investment of requested audience participation low to encourage activism, and strategic planning regarding the frequency and types of post to maximize audience engagement.

Keywords: social media; framing; wild horse and burro; agricultural communications

Introduction

Social media platforms, traditionally a landscape for interpersonal connection and entertainment, have been increasingly used to disseminate and discuss information and current events by the public (Wagler & Cannon, 2015). Facebook, the social media platform examined in the study, is one of the most widely used, with 69% of U.S. adults having used the platform at least once (Perrin & Anderson, 2019). At the end of 2018, Facebook reported 2.32 billion monthly active members, with 74% of Facebook users visiting the site at least once a day (Chen, 2019). Of all the social media platforms, Facebook is the largest news platform, with 43% of U.S. adults receiving news through the site (Gramlich, 2019). As audiences shift toward using social media platforms for both entertainment and news, interest in traditional news sources, such as newspapers and

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television, have declined (Stroud, 2011). Social media usage is predicted to grow exponentially as internet access continues to expand (Ortiz-Ospina, 2019), which could also lead to more individuals relying on social media platforms as their primary news source.

However, not all information found on social media platforms are considered credible. The 2016 U.S. presidential election brought the rise of "fake news", which is the dispersion of deliberately false information, typically to shape political opinions (Allcott & Gentzkow, 2017). The "fake news" phenomenon became so widespread that both Google and Facebook announced new policies to prevent "fake news" sources from receiving advertising revenue (Wingfield et al., 2016). The rise of "fake news" is likely connected to the shift in news consumption preferences, as the environment of online news emphasizes speed and deemphasizes fact verification (Chen et al., 2015). "Fake news" and misinformation are not limited to political campaigns, this phenomenon can affect all industries, including agriculture (Pratley, 2018).

According to the American Association for Agricultural Education's (AAAE) National Research Agenda for 2016-2020, agriculture misinformation is a complex issue that must be addressed, as misleading information has the potential to drive public perception and impact consumer behavior (Roberts et al., 2016). Agricultural literacy is broadly defined as an individual's ability to navigate misinformation and make informed decisions on agricultural issues (Kovar & Ball, 2013). When consumers of agriculture are not literate about agricultural concepts and ideas, misinterpretations can occur and may influence the consumer's perception of modern agricultural practices (Specht et al., 2014).

Given the total number of individual users on social media platforms, especially those who use social media as a platform to receive news, it is not unreasonable to assume that social media platforms provide an opportunity to present accurate information on agricultural topics and encourage agricultural literacy. Currently, social media platforms are used in agriculture for various purposes including marketing (White et al., 2014), agritourism (Bowman et al., 2020), and education (Settle et al., 2011). While social media platforms are used to communicate agricultural topics, communications may not always be purposefully driven towards improving agricultural literacy, and are largely dependent on how the issues are framed.

The wild horse and burro controversy is an example of an agriculturally related issue, currently discussed on a variety of social media platforms, where the opportunity to educate the public on the issue and management options exists. Wild horses and burros are found in the Western U.S. and are legally protected by the Wild Free Roaming Horses and Burros Act (WFRHBA) of 1971 (Garrott, 2018). The Bureau of Land Management (BLM) is tasked with maintaining an ecological balance and controlling the herds, which the BLM states can grow at a rate of 20% annually if left unmanaged (BLM, 2019). It was estimated that 82,000 wild horses and burros were living on 26.9 million acres of public land across the western U.S. in 2018 (BLM, 2019). Numerous methods, such as roundups (for disposal, holding, or sale) and administering birth control to wild herds, are available to control the population of wild horses (Garrott, 2018). In addition to the numerous methods available to manage wild horse and burro populations, a variety of opinions exist on how they should be managed, ranging from leaving them completely untouched to drastically reducing populations (Scasta et al., 2018). The presence of this issue on social media platforms, multiplicity of opinions, varying levels of public knowledge, and opportunity to educate made this a suitable topic to examine.

The examination of social media marketing, and its use in formal online education, can be found throughout the literature (Felix et al., 2017; Greenhow & Lewin, 2016; Lapadat, 2006). Additionally, the use of social media to advance agricultural issues has also been examined (Bowman et al., 2020; Haller et al., 2019; White et al., 2014). However, research connecting the framing of written communication to the impact on audience perceptions within informal education

settings has yet to be explored. In this study written communication refers to organization's Facebook posts which communicate information specific to the wild horse and burro controversy to their audiences primarily or entirely through text. This study aims to contribute to the gap in research by connecting the framing of written communication to the influence on audience perception, specifically focusing on the wild horse and burro controversy.

Theoretical Framework

Entman (1993) defines framing as "to select some aspects of a perceived reality and make them more salient in a communicating text…" (p. 52). By analyzing frames, the process whereby influence is exerted through the transfer of information can be more clearly understood (Entman, 1993). Framing as a Theory of Media Effects was authored by Scheufele (1999) to clarify fragmented approaches to framing political messages and to compose a framing model applicable to research (Figure 1). Scheufele (1999) operationalizes framing based on social constructivism, a process concerning how individuals construct knowledge to make sense of their environment (Creswell & Poth, 2018).

Figure 1

Scheufele's (1999) Process Model of Framing Research
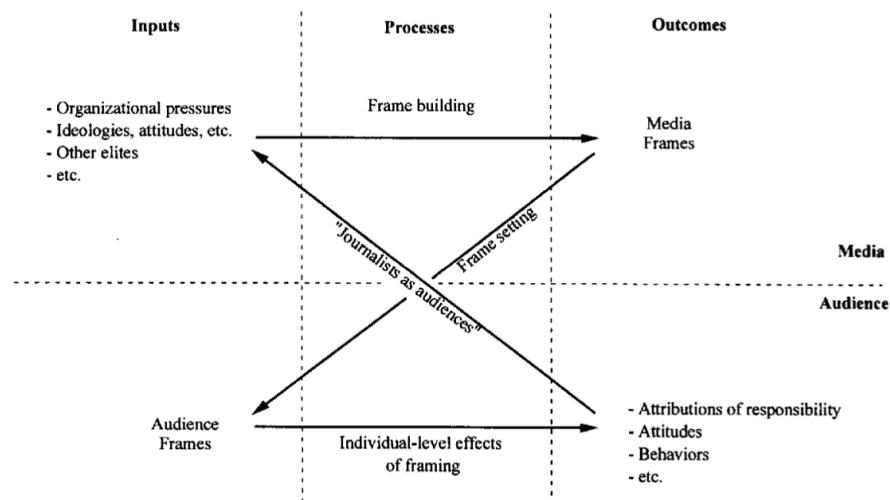
Scheufele (1999) discusses two major frames: media frames and individual frames. Media frames refer to the process whereby the media actively sets frames of reference that recipients then use to interpret and discuss events. Media frames also consider the author's conscious and unconscious intents, which in turn influences how recipients perceive the information being read. Conversely, individual frames, also referred to as audience frames, help explain how individuals process the same information differently based off individualized experiences, ideas, and beliefs (Scheufele, 1999). Media frames serve as the input for individual frames, which are then subject to individualized effects of framing resulting in varying attitudes and behaviors on a topic. Media frames and audience frames have a cyclical relationship, where the reaction of the audience can influence subsequent media frames. The study examined the Facebook posts of organizations communicating about the wild horse and burro controversy as media frames and the corresponding comments left by the audience as audience frames.

Scheufele's (1999) framework was utilized to understand the impact which the author has on the audience as well as the impact the audience, organization, and personal beliefs have on the author. Scheufele's (1999) focus when creating this framework was political communication. Scheufele's (1999) framework has been discussed in relation to agricultural topics in previous research (Barr et al., 2011; Goodwin et al., 2011; Schulze et al., 2012). Scheufele's (1999) framework was used in these studies for the purpose of examining factors which led to the selection of news stories (Barr et al., 2011), assessing how consumers interpret agricultural messages on websites (Goodwin et al., 2011), and identifying framing patterns used by agricultural lobby groups and animal/consumer rights groups (Schulze et al., 2012). Additionally, issues surrounding the management of wild horses and burros are interconnected with government agencies like the BLM and acts such as the WFRHBA of 1971. Therefore, Scheufele's (1999) theoretical framework on framing for political communication was appropriate to extend to agricultural topics like the management of wild horses and burros.

Purpose and Research Questions

The purpose of this qualitative study was to explore the effect of written communication on audience perceptions of the wild horse and burro controversy by examining Facebook posts and the accompanying comments. Thus, the following central research question was proposed: How does the framing of written content on Facebook influence public perception of information regarding the management of wild horses and burros? Additionally, three sub-questions were utilized to guide the study: 1) How do organizations communicating about the wild horse and burro controversy construct and frame Facebook posts related to the issue?, 2) How do audiences communicating about the wild horse and burro controversy construct and frame Facebook comments related to the issue?, and 3) How do organization and audience interactions influence framing patterns when communicating about the wild horse and burro controversy on Facebook?

Methods

This research was conducted using content analysis to identify patterns which emerge amongst the Facebook posts of organizations concerned with the wild horse and burro controversy and those reacting, in the form of comments, to these posts. Lauri and Kyngäs (2005) suggest using inductive content analysis when prior knowledge of the phenomenon is limited. Therefore, because the influence of social media content framing on audience perception of a topic is still an emergent area of research, an inductive approach was chosen. I approached this study from a social constructivist lens and my positionality lies in my background in agricultural communications and the equine industry. Social constructivism is a process whereby individuals actively construct knowledge to make sense of their environment (Adams, 2006). I have attempted to bracket my positionality to reduce bias (Creswell & Poth, 2018).

The content analysis was focused on six organizations which post about the wild horse and burro controversy on the social media platform Facebook. These organizations, whose names are reported as pseudonyms per IRB recommendation, include: American Wild Horse Advocates (AWHA), Government Horse and Burro Adoptions (GHBA), Wild Horse Information Center (WHIC), Protecting America's Wild Horses (PAWH), Western Wild Horse Sanctuary (WWHS), and the Local Horse Management Association (LHMA), see Table 1. These organizations were chosen based on Graneheim and Lundman's (2004) suggestion that units of analysis should be "large enough to be considered a whole and small enough to be possible to keep in mind as a context for the meaning unit" (p. 106).

Table 1

Summary of Six Facebook Organizations Sampled

Organization	Organization Type
AWHA	501C3 nonprofit
GHBA	Government agency
WHIC	501C3 nonprofit
PAWH	501C3 nonprofit
WWHS	501C3 nonprofit and wild horse sanctuary
LHMA	501C3 nonprofit which supports a specific herd

The time frame of Facebook posts included in this study was from September 29, 2019 to November 30, 2019. This timeframe represents a 30-day period before and after the October 29-31, 2019 meeting of the BLM's National Wild Horse and Burro Advisory Board (NWHBAB), which represents various interest groups related to the management of wild horses and burros and meets annually to discuss related issues and advise the BLM (BLM, 2019). While the management of wild horses and burros is a topic discussed on Facebook year-round, the meeting of the BLM's NWHBAB generated further discussion and thus made this an ideal timeframe to examine how organizations and individuals are using Facebook to discuss their positions.

Organizations were located by searching terms including wild horse, burro, management, advocate, control, sterilization, roundup, and BLM on Facebook's search bar and then selecting the "pages" tab. The initial search yielded organizations who are concerned with the wild horse and burro controversy. Organizations were then narrowed down for inclusion based on frequency of posts, type of posts, and positionality. For frequency, the organization must have posted at least once weekly during the October 29-31, 2019 timeframe. Since the study is focused on written communication, the type of post also had to be considered. Organizations whose posts contained text were selected for inclusion over those who only posted videos or photos with limited text to analyze. Positionality was also considered when choosing organizations, with the goal of selecting organizations with a variety of stances on wild horse and burro management.

Nvivo 12.6.0 was used as the data management software. Bengtsson's (2016) approach to content analysis was utilized. This approach involves four stages: decontextualization, recontextualization, categorization, and compilation (Bengtsson, 2016). First, decontextualization was achieved by open coding the organization's Facebook posts and accompanying comments into meaning units, which are groups of words or phrases which relate to the same central meaning (Graneheim & Lundman, 2004). Next, recontextualization was achieved by reviewing the data with another researcher to ensure all meaning units were coded correctly and removing content which did not contribute to meaning units. Categorization occurred when meaning units were grouped into homogenous and mutually exclusive categories. Lastly, compilation occurred through the process of analyzing and compiling the data for presentation while remaining neutral and objective (Bengtsson, 2016). This stage is demonstrated in the findings of my study and is represented through tables and participant quotes. After data analysis, there were 22,002 initial codes representing 391 meaning units.

Trustworthiness was addressed by considering dependability, credibility, and transferability of the study (Graneheim & Lundman, 2004). Dependability was addressed through the stability and non-reactivity of Facebook posts, which are available indefinitely unless the organization deletes them. Credibility was achieved by sharing my epistemology and positionality, actively bracketing my positionality to prevent bias, and consulting with another researcher

throughout the data analysis process. To facilitate transferability, data collection and analysis was explained in depth and followed Bengtsson's (2016) approach to content analysis.

Findings

Eight major themes emerged from the data after examining 136 Facebook posts and 8,295 comments across six organizations. I reported the themes according to the type of interaction that occurred: Organization Frame (aligns with research sub-question 1), Audience Frame (aligns with research sub-question 2), and Organization-Audience Interaction Frame (aligns with research sub-question 3). The themes were developed based on Scheufele's (1999) framework which outlines media frames (represented by organizations) and audience frames (represented by commenters). Together, these eight themes represent the holistic interaction and communication between organizations and individuals on Facebook about wild horse and burros.

Organization Frame

The six Facebook organizations explored in the study served as the catalyst for all subsequent audience interaction. While the participation of the audience does influence how the organization choose to position and deliver their messages related to the wild horse and burro controversy, it is important to examine the organization frame on its own as it serves as the input in this cyclical process. The two themes that emerged from the organization frame were: 1) Organization Positionality and its Influence on Framing Posts, and 2) The Influence of Organization Posts on Audiences' Reception of the Issue.

Organization Positionality and its Influence on Framing Posts

The positionality of the six organizations, greatly influenced the type of posts created and how written content was framed. AWHA communicates that the organization is opposed to most forms of management which other groups, including WWHS, have deemed to be humane. However, the organization finds some methods of fertility control of wild horses acceptable. The organization's most common posting method was a brief summary, approximately three sentences, with a link for more information and an image. The topic of the posts ranged from roundup reports, which detail the number of horses captured and any fatalities, to details on lawsuits the organization launched and donation requests. The organization's longest posts were most frequently donation requests. AWHA's positionality as a nonprofit dedicated to keeping wild horses and burros wild impacts their framing as they select events relevant to their cause to surface in their posts. AWHA also chooses to include links to direct followers to their website.

GHBA posts about opportunities to adopt wild horses and burros through adoption events and permanent adoption facilities. The posts are typically two to three paragraphs long, containing details about upcoming adoption events. Posts also contain photos, including flyers for the events and photos of adoptable horses and burros. GHBA's positionality as a government agency which supports and implements the management of wild horses and burros impacts how GHBA frames their posts as they focus on wild horse and burro adoption and stray from discussing more controversial management strategies.

LHMA's posts state that the organization wants to humanely maintain a specific population of wild horses by using fertility control, providing safe road crossings, and by removing and euthanizing horses when necessary. Most of LHMA's posts are very detailed, with many exceeding 10 paragraphs; however, some posts are shorter, like those that contain a video or share a related news article. The longer posts provided a detailed overview of issues facing local wild horses,

parties involved, organization efforts to solve the issue, and how followers can help (if applicable). On these posts, links were either not provided or were supplemental, all information required to develop an understanding of the issue was included in the post. LHMA's positionality as a nonprofit concerned with a specific population of wild horses impacts the framing of posts as LHMA communicates primarily about issues relating to the herd of interest, community contributions, and information about the transference of management strategies.

WHIC communicates through their posts that they disagree with roundups and hope for a humane, on-range solution to management. Like AWHA, WHIC's posts were frequently brief, two sentences to two paragraphs, with an accompanying link and photo. WHIC posted about roundup reports, mining reform, the organization's active lawsuits, and donation requests. WHIC's positionality as a nonprofit which opposes intervention through legal challenges and enhancing awareness impacts framing as the organization chooses to emphasize the negative impacts of current management strategies, like roundups, to their followers.

PAWH's posts are long, typically exceeding five paragraphs. The posts convey PAWH's positionality on the management of wild horses and burros, expressing a goal of increasing the number of horses and burros on public lands by releasing captive horses. PAWH claims that wild horses have ecological benefits, such as reducing wildfires by eating specific types of forage. The organization also shares adoption information, roundup reports, and their desire to reduce or eliminate grazing permits on public lands. PAWH's positionality as a nonprofit advocating for wild horses and burros impacted framing as PAWH focused on highlighting information which detailed the positive ecological impacts of wild horses and burros.

WWHS is a wild horse and burro sanctuary and frequently posts medium length posts, about three to five paragraphs. The posts concern horses and burros in WWHS's care, animals available for sponsorship, fertility control measures, and news about the Safeguard American Food Exports (SAFE) act, which would ban horse slaughter in the U.S. and prevent U.S. horses from being transported to foreign slaughterhouses. WWHS's positionality, being a wild horse and burro sanctuary, impacted the framing of posts as WWHS was focused on securing resources for animals in their care and communicating about issues related to the sanctuary population.

Organization's posts varied based on their positionality. For example, some organizations, like WWHS, WHIC, and PAWH posted about roundups, often highlighting casualties and fatalities to communicate that the practice of rounding up horses and burros was flawed and to elicit emotions of their target audience. This emphasis on emotional appeal by the organizations was used to lead the audience to believe that the highlighted management practices were cruel and needed to be changed. On the contrary, groups like GHBA utilized Facebook to promote wild horse and burro adoption through adoption events and to call their audience to action. This emphasis on audience action, often through the lens of fundraising and adoption efforts, was used by the organizations to encourage audiences to elevate their action beyond social media. Organizational positionality is important to consider due to the impact of the organization's positionality on their framing of Facebook posts to elicit audience responses.

The Influence of Organization Posts on Audiences' Reception of the Issue

Each organization also varied in their posting style, number of posts, types of responses, and the number of responses, which influenced audience reception of the wild horse and burro controversy, see Table 2. The number of posts and posting style of the organization influenced the amount of audience involvement while the frequency at which organizations responded and types of responses influenced organization/audience engagement.

AWHA elicited the highest number of comments, with an average of 121 comments in the 29 included posts. While AWHA's posts receive many comments from followers, the comments

are typically brief and elicit many emotional responses. LHMA received the second-highest number of comments, averaging 99 comments in the 15 included posts. LHMA's detailed posts led to more positive, in-depth comments compared to other organizations. Many commenters thanked the LHMA for their work related to the issue. WHIC received an average of 98 comments across 16 included posts. Comments to WHIC, like AWHA, tended to be short and related to negative emotions or negative views on roundups. GHBA received an average of 30 comments across 15 included posts. Comments to the GHBA's posts are split between inquiries about adopting and debates about wild horse and burro management strategies. PAWH averaged 25 comments over 40 posts, the highest number of posts included from a single organization. Comments to PAWH frequently disagree with the government's management strategy and convey resulting negative emotions. Comments to PAWH may be lower due to the high frequency of posts which could cause the audience to feel overwhelmed. The organization with the fewest comments was WWHS. While the number of comments to WWHS's posts are less than other organizations, the comments tend to be longer and more likely to lead to discussion.

Variations in the organization's posting strategy, such as the frequency and length of posts, directly impacted audience participation in the conversation in the form of comments and replies. The frequency of posts impacted audience involvement, as posting very frequently could overwhelm the audience but not posting frequently enough may lead to a withdrawal in audience interest. The length of posts impacted audience involvement as longer, more detailed posts led to more focused discussion while shorter, less detailed posts resulted in the audience discussing a wider variety of subjects in their comments.

Table 2

Organizational Post and Comment Distribution

Organization	Posts Included	Percentage of Total Posts *	Total Number of Comments	Average Comments Per Post **
AWHA	29	21.32%	3,515	121
GHBA	15	11.02%	443	30
WHIC	16	11.76%	1,564	98
PAWH	40	29.41%	1,000	25
WWH	21	15.44%	310	15
LHMA	15	11.02%	1,463	99

* Rounded to nearest hundredth
**Rounded to the nearest whole number

Audience Frame

The audience is widely involved in the wild horse and burro controversy, with an average of 62 comments per Facebook post included in the study. Additionally, the audience is impactful as their participation has the potential to shape how organizations choose to deliver their messages. The audience is also essential to all organizations, as organizations depend on the audience to tell others about the cause, contribute financially, or sponsor/adopt a wild horse or burro. The audience frame can be grouped into four themes based on the purpose of their responses, including: 1) Action-Oriented Responses, 2) Emotional Responses, 3) Government-Related Responses, and 4) Management-Related Responses.

Action-Oriented Responses

One theme which emerged from the audience's discussion of the issue were comments related to action, with 7.57% of comments referencing action in some way. More specifically, commenters either reported action that they had personally taken or discussed action that should be taken by other individuals, the organization, or other regulatory agencies. Of the 628 action-oriented comments, 54.3% reported actions taken and 45.7% referenced action that should be taken related to the wild horse and burro controversy, see Table 3.

Comments categorized as reporting actions taken included instances where commenters state they have shared the organizations posts, donated to the organization, or report other cause-related actions taken. For example, commenter Alex shared the following on the post of an organization which opposes intervention: "I commented on the page and [am] waiting for approval … I commented on the BLM link as well." In this example, Alex is sharing action she had already taken. Comments relating to action taken occurred both in response to a request for action by the posting organization as well as comments reporting action taken independent of the posting organizations' recommendations. Comments categorized as discussing action which *should* be taken included calling the organization to action, recommendations to contact the U.S. president or take legal action, calls to action independent of the organization's post, supporting the organization's call to action, and urging other commenters to act. After stating, "I commented on the page and [am] waiting for approval", Alex urges others to act by adding "everyone should do the same." In this example, Alex reports action she had taken and recommends action for others.

Table 3

Action-Oriented Comments Across Six Facebook Organizations

Category	Description of Meaning Unit *	Number of Posts Per Meaning Units	Number of Comments Per Meaning Units
Action Taken	C: Donated to Organization	12	76
	C: Shared Post	56	108
	C: Reports Personal Action Taken	51	117
	R: Reports Personal Action Taken	24	40
Action Should be Taken	C: Call to Action for Organization	3	5
	C: Contact President	5	5
	C: Independent Call to Action	60	185
	C: Legal Action	25	33
	C: Supports Organization's Call to Action	20	26
	R: Legal Action	11	16
	R: Urge Commenter to Action	12	17

* C stands for a direct comment while R stands for response or reply to an existing comment

Emotional Responses

The next theme which emerged from the audience frame were comments that included emotional responses. Emotional responses accounted for 23.06% of all comments included in the study, with responses being further categorized into positive or negative responses. Negative responses included those expressing emotions such as anger, frustration, or sadness, and positive reactions included expressions of happiness and approval. Table 4 displays each meaning unit which was categorized as being related to negative or positive emotional responses.

The largest category of emotional responses was negative emotional responses, which accounted for 64.72% of all emotional responses. Negative emotional responses included text and visuals which expressed a negative emotion such as sadness, anger, disappointment, and frustration. Linda, who commented on the post of an organization which supports contraception, expressed her sadness by saying "It is soo sad when a common sense approach to helping wildlife is completely ignored." Susan expressed her anger by commenting "Watching in disbelief still at this cruelty to innocent iconic wild horses. Very angry in CANADA." Ellie expressed sadness when she commented "Heartbreaking greed and slaughter." These comments provide examples of how commenters across three of the six organizations are communicating their negative emotions. Ellie's comment also surfaced several terms which are commonly used during the audience's discussion of the issue. These terms, which appear in expressions of emotion as well as other comments, include abuse, criminal, cruel, evil, greed, and slaughter. Additionally, mentions of taxpayers and the term "wild and free" also emerged. One or more commonly used terms appeared in 12.99% of comments.

Positive emotional responses accounted for 35.28% of total emotional responses. Positive emotional responses included text, and often visuals, which expressed a positive emotion such as happiness, hopefulness, gratitude, thanks, and excitement. Sally expressed a positive emotional reaction by saying, "Yay so excited to see the gentled yearlings in this event! Hoping to see more of that and hopefully all horses and burros get great homes!" Additional positive emotional responses included commenters thanking the organization for their work, illustrated in Paige's comment: "Thank you for the much needed (apparently) explanation to the community at large about the process you follow to make difficult decisions." Jessica expressed pride by saying, "Great status report! Proud of what this group does." These comments provide examples of the many ways commenters expressed positive emotions.

Table 4

Commenter's Emotional Responses Across Six Facebook Organizations

Category	Description of Meaning Unit *	Number of Posts Per Meaning Units	Number of Comments Per Meaning Units
Negative Emotions	C: Emotional Response Negative	74	1,043
	R: Emotional Response Negative	31	77
Positive Emotions	C: Emotional Response Positive	29	130
	C: Thanks Organization	55	527
	R: Emotional Response Positive	2	2
	R: Thanks Organization	15	16

*C stands for a direct comment while R stands for response or reply to an existing comment

Government-Related Responses

Comments which related to the government and the government's involvement in the wild horse and burro controversy was another theme which emerged from the audience frame. Comments classified as government-related responses include opinions on the BLM and government, and comments which mention the BLM's Wild Horse and Burro Advisory Board, acts or proposed acts (e.g. the 1971 WFRHBA and SAFE Act), and the U.S. president. Comments relating to the government accounted for 13.32% of total responses, see Table 5.

The largest group of government related responses were comments expressing a negative opinion of the BLM, representing 46.78% of total government-related responses. Negative opinions of the BLM typically expressed disagreement with the BLM's approach to management or expressed dislike. Alex's comment provides an example of a negative comment expressing disagreement with the BLM: "The BLM has refused to do a census and they have no idea what the actual population of wild horses actually is." Negative comments about the BLM appeared most frequently on the posts of organization's that oppose intervention. GHBA's posts also had commenters express their disagreement, but other commenters were quick to defend the BLM.

Table 5

Government Responses Across Six Facebook Organizations

Category	Description of Meaning Unit *	Number of Posts Per Meaning Units	Number of Comments Per Meaning Units **
Advisory Board	C: Advisory Board Neutrally	13	13
	C: Advisory Board Negative	3	7
	R: Advisory Board Neutrally	4	5
BLM Opinions	C: BLM Negative	82	517
	R: BLM Negative	42	101
	R: BLM Positive	6	8
Government	C: Government Negative	53	167
	R: Government Negative	33	98
Acts or Proposals	C: Mentions 1971 Act	13	13
	C: SAFE Act	9	9
	C: Path Forward Negative	5	5
	R: 1971 Act	11	14
	R: SAFE Act	6	13
U.S President	C: President Negative	31	46
	C: President Neutral	7	8
	R: President Negative	18	58
	R: Defending President	11	15
	R: President Neutral	6	8

* C stands for a direct comment while R stands for response or reply to an existing comment
** Only meaning units appearing in five or more comments are included in this table

Management-Related Responses

The next theme related to the audience frame was management-related responses. An integral part of the wild horse and burro controversy surrounds the multiplicity of potential management options. Comments related to management, which included discussion of management cost, fertility control, competing interests, meat consumption, and roundup, represented 15.66% of comments, see Table 6. Competing interests was the most frequently discussed topic related to management, representing 56.47% of total management-related responses. Of these responses, negative mentions of the impact of cattle on public lands accounted for 83.79% of competing interest comments. Alex's comment provides an example of the perceived impact of cattle: "Cattle hang around water sources causing damage with their cloven hooves damaging streambeds and areas around ponds." A common trend within the anti-cattle argument was individuals stating that wild horses are either less detrimental or beneficial to the land. Some argued that horses prevent wildfires due to consuming forage. Jim's comment provides an example: "No wonder you have wildfires cattle do not eat, travel the same way as horses nor sheep." Other competing interests mentioned include mining, 6.73%, and oil, 9.48%.

Table 6

Management-Related Responses Across Six Facebook Organizations

Category	Description of Meaning Unit *	Number of Posts Per Meaning Units	Number of Comments Per Meaning Units
Cost of Management	C: Cost of Management	8	11
Fertility Control	C: Fertility Control Negative	16	24
	C: Fertility Control Positive	27	93
	R: Fertility Control Negative	10	12
	R: Fertility Control Neutral	5	6
	R: Fertility Control Positive	15	18
Competing Interests	C: Cattle Negative	74	409
	C: Mining Impact	20	29
	C: Oil Impact	24	31
	R: Cattle Negative	53	201
	R: Mining Impact	16	20
	R: Oil Impact	22	38
Meat-Related	C: Go Vegetarian/Vegan	8	8
	C: Boycott Cattle	24	32
	C: Overseas Beef Consumption	2	2
	R: Go Vegan/Vegetarian	5	8
	R: Boycott Cattle	10	16
	R: Overseas Beef Consumption	6	12
Roundup	C: Anti Roundup	66	265
	C: Pro Roundup	3	3
	R: Anti Roundup	32	57
	R: Pro Roundup	3	4

* C stands for a direct comment while R stands for response or reply to an existing comment

Currently, the BLM is rounding up wild horses and burros and putting them up for adoption or in long-term holding pens (BLM, 2020). Roundup was discussed in 25.34% of management-related comments, with 97.87% of roundup related comments referring to roundup negatively. Alex states her opinion on roundup: "Removing these horses makes things worse." While Jim's comment shows a more emotional side of the anti-roundup argument: "This is beyond horrible how can you look at your children, friends, or my children and tell them we are the ones who slaughter all the horses and there are none for the children to see." Of the 2.13% of comments which regarded roundups positively, not every commenter agreed entirely with the management strategy. Taylor expressed her agreement with roundup but disagreement with the approach: "I wish they didn't use helicopters to round up yes. But mustangs need to be rounded up." Alex, Jim, and Taylor's comments provide examples of how commenters are communicating their opinions and how comments can fall into multiple meaning units.

Organization-Audience Interaction Frame

The interaction between the organization and the audience is where the two frames intersect and shape one another through a cyclical relationship. These interactions occurred in the form of organizations engaging in conversations with the audience, answering questions, and providing

clarification. The two emergent themes from this interaction are: 1) The Influence of Organization Comments on Audiences' Perception of the Issue and 2) Misinformation Concerns.

The Influence of Organization Comments on Audiences' Perception of the Issue

Organization's comments accounted for 3.24% of total comments. Every organization included in the study posted a comment or reply on at least one occasion, with LHMA commenting the most frequently. Organization-audience interactions can be further categorized into organizational comments and commenter questions; however, it is important to recognize that organization-audience interactions were not limited to organizations answering commenter's questions. Table 7 shows how organizations and audiences interacted in the comments, while Table 8 shows how frequently each organization responded to commenters.

Table 7

Instances of Organization-Audience Interaction Across Six Facebook Organizations

Category	Description of Meaning Unit	Number of Posts Per Meaning Units	Number of Comments Per Meaning Units
Organization Comments	Organization Comment (OC)	15	21
	OC: Photo	1	1
	OC: Posts Link	8	11
	OC: Thanks Supporters	4	4
	Organizational Reply (OR)	66	248
	OR: Corrects Commenter	12	14
	OR: Thanks Commenter	36	81
	OR: Thanks Commenter for Donating	7	48
	OR: Answers Question	32	55
Commenter Questions	Commenter Questions Organization	45	61
	Reply Questions Organization	13	13

The organization's comments are further divided into comments and replies to other commenters. Replies to existing comments were most common, accounting for 92.19% of total comments by the posting organization. Organization's comments included posting photos, links, and thanking supporters. An example of a direct comment from an organization thanking its supporters: "Thank you all so very much, we cannot do what we do best without your support." In contrast to organization's direct comments, replies covered a wider variety of topics. Organizational replies included correcting commenters, generally thanking commenters, thanking commenters for donating, and answering commenters' questions. An example of an organization's response which corrected a commenter is: "Only 3% of the nation's beef comes from public lands." Commenters asked questions in 7.98% of all comments, and organizations directly addressed questions. An example of an organization's reply to answer a commenter's question: "It still has yet to be voted on by the full Senate floor to make it into law." On Facebook, organizations can continue the conversation past the initial post through comments.

Table 8

Facebook Organization Commenter Response Frequency

Organization	Organizational Comments	Organizational Replies	Total Responses	Percentage*
AWHA	1	23	24	8.92%
GHBA	0	2	2	0.74%
WHIC	2	49	51	18.96%
PWA	8	76	84	31.23%
WWHS	0	21	21	7.81%
LHMA	10	77	87	32.34%

* Rounded to nearest hundredth

Misinformation Concerns

Another emergent theme within the organization and audience interaction frame was organizational posts and audience comments which referenced concerns about misinformation, also sometimes termed "fake news". A total of 44 comments and two organization's posts mentioned "fake news" or misinformation, which represents 0.53% of comments and 1.47% of the organizational posts examined. Of the comments, 6.82% mentioned "fake news", 36.37% mentioned misinformation, and 56.81% were replies to other commenters mentioning misinformation. Comments regarding misinformation included those which referenced general misinformation, misinformation from the organization, and misinformation from commenters.

Comments which referenced general misinformation, as opposed to accusing the organization or an individual of spreading misinformation, typically discussed the impact of misinformation. Paige's comment provides an example of this: "Hysteria by a misinformed public is never helpful, but calming their fears is." Paige's comment recognizes the impact of misinformation by first addressing how those who are misinformed can behave in a way which is not helpful to the cause, and then recognizes the efforts of the organization to quell misinformation. In contrast to Paige's comment, replies about misinformation most frequently accused other commenters of perpetuating misinformation. An example posted by Jane was: "You have been proven wrong time and time again. Stop spewing incorrect information on the GHBA's posts." Her comment provides an example of comments and replies which directly accuses the organization, or another commenter, of misinformation.

Discussion, Implications, and Recommendations

The eight major themes of the study, reported according to the three frames, demonstrate how organization and audience communication regarding the wild horse and burro controversy occur within Scheufele's (1999) framework. The findings also expand upon Scheufele's (1999) framework as they exemplify a new dimension of communication where the audience interacts with the media instead of simply consuming it due to the current nature of social media. The wild horse and burro controversy is an issue where action has the potential to influence change. The finding of action-oriented responses as a trend demonstrates that social media is being used in this issue as a platform to discuss action and activism. Valenzuela (2013) found evidence that digital platforms are being used to facilitate political action. However, it is difficult to determine the extent to which discussion surrounding action on social media leads to real-life action. This is demonstrated in comments that suggested someone, but not necessarily the commenter, should take action,

deflecting responsibility. These comments and other behaviors which don't demonstrably contribute to the cause could be categorized as "slacktivism".

The term slacktivism was developed to illustrate the disconnect between awareness and action on social media (Glenn, 2015). Social media users who are deemed to participate in slacktivism take part in low-risk and low-investment activities, such as liking a post, without creating impact towards social change (Glenn, 2015). Lee and Hsieh (2013) examined slacktivism in conjunction with subsequent actions taken by those participating to determine if the potential to influence change existed. They determined that it may be possible to improve the frequency of action by keeping requested subsequent actions clear and closely related to participants' original instance of slacktivism. These findings are likely transferable to social media. By keeping the perceived-costs of participating low and related to a low-risk investment, an organization may be able to encourage followers to move from slacktivism to activism.

Appealing to viewer's emotions is an established approach that attempts to influence the audience's beliefs, attitudes, and behaviors (Joffe, 2008). Similarly, instances of negative or positive emotional responses in this study were closely tied to variations in organization's posts. While some of the organization's posts were positive in tone, many reported negative news, such as how many horses died in a roundup. Negative news was often accompanied by potentially upsetting images, most frequently horses being rounded up with a helicopter. Posts reporting negative news with a brief description, often with a link and upsetting photo, had higher instances of negative emotional responses than posts which provided more detailed information. Posts which reported negative news in a more detailed fashion directly on Facebook, as opposed to relying on an external link, led to more productive and focused discussion. In these posts, audiences may still be upset about negative news, but instead of simply commenting about their personal anger, they frequently thanked the organization for their work despite difficult circumstances. One organization which exemplifies this pattern of posting detailed information being connected with a more positive and understanding response from the audience was the LHMA. The emotional response of the audience was highly dependent on the communication strategy and detail provided by the posting organization.

The connection between emotional reactions of the audience and organization's posts also connects to the concept of agricultural literacy. Kovar and Ball (2013) begin their definition of agricultural literacy with "an agriculturally literate population is able to see beyond emotional pleas and make informed decisions on [agricultural] these issues" (pp. 167-168). It was discovered that many of the organizations used appeals to emotion as part of their strategies to engage their audience. While the extent of the audience's agricultural literacy regarding the management of wild horses can't be determined conclusively without further information, inferences may be made based on the variation in comments. For example, if one comment to a post expressed negative emotions while another commenter wrote a more detailed overview of the issue as they understand it, it can be theorized that the commenter who provided detail beyond expressing emotion may be more agriculturally literate. The connection between the type of comment (emotional or providing specific detail) and the commenter's level of agricultural literacy is an area where the opportunity for further research is present.

While distinct themes in the findings, government and management related responses are closely interconnected as it relates to the discussion of wild horses and burros. This is because the management of wild horses is handled by the U.S. government, and desired changes must be made through interactions with the government. Like emotional responses, the audience discussion of government and management related issues was closely related to the organization's posts. Scheufele and Tewksbury's (2007) model of agenda setting, the correlation between emphasis placed on an issue and the importance which the audience attributes to the issue, may explain this finding. In most cases, there was a strong connection between the topic of the organization's posts

and the audience's concern or opinion regarding government action or management practices. The exception is when organization's posts were not detailed and didn't communicate a clear concern, audience responses to these posts contained greater variation. Using Scheufele and Tewksbury's (2007) model of agenda setting, organizations may be able to compose information in a way that influences the importance the audience places on an issue.

Organization-audience interaction is one unique characteristic of social media communication which did not exist when Scheufele (1999) authored his framework. Scheufele (1999) recognized the interconnected relationship between the media and its audience, but this relationship must be expanded upon as social media allows for direct discussion between parties. Figure 2 shows Scheufele's (1999) original Process Model of Framing Research (Figure 1) updated to include media-audience interaction as a central dimension of the framing process.

Figure 2

Updates to Scheuefele's (1999) Process Model of Framing Based on Findings
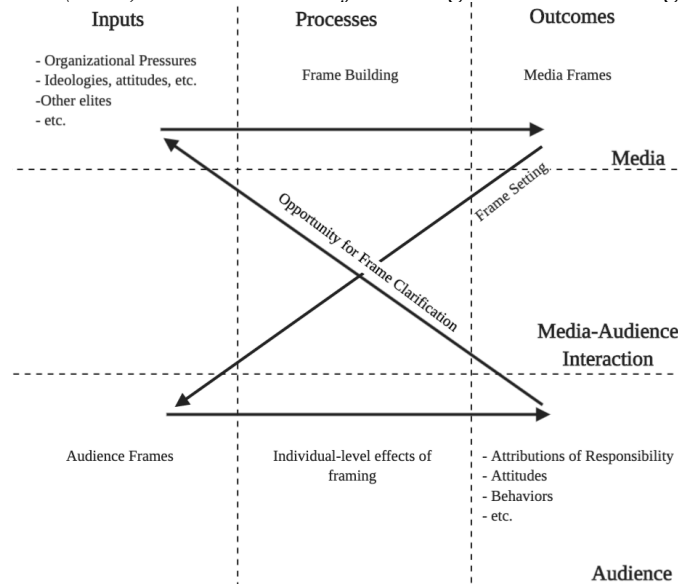
The diagonal arrow which connects the outcomes of the audience frame to the inputs of the media frame has been changed from "journalists as audience" to "opportunity for frame clarification". As the findings illustrate, organizations engage with their audience with varying frequency to answer questions, give thanks, and clarify misconceptions. The word opportunity was chosen as organizations may select to respond to all, some, or none of the audience's comments. Frame clarification refers to the unique opportunity this dialogue gives the organization to clarify their post without having to compose an entirely new post. The arrow follows the same direction as the original "journalists as audience" arrow as these media-audience interactions will serve as an input and influence the media's frame building process.

While the percentage of overall posts and comments which made references to misinformation and "fake news" are not overwhelming in terms of their percentages, the fact that these concerns are being voiced is significant. These concerns illustrate that misinformation on social media is not just a concern of companies like Facebook and Google, but misinformation is also a concern to individuals consuming social media (Wingfield et al., 2016). The finding of misinformation concerns also support Pratley's (2018) findings that "fake news" is not limited to political discussions but can also extend to a variety of industries, including agriculture. Most

followers agreed with the organization's opinions on the management of wild horses and burros. This consensus creates echo chambers within the groups, where audiences are exposed only to content in which they agree (Garimella et al., 2018). According to Törnberg (2018), there may be a connection between echo chambers and the viral spread of misinformation. In the case of the wild horse and burros, the potential for misinformation was most commonly seen through the perpetuation of information which isn't backed or disputed by scientific evidence but is convenient to the plight of the animals, such as stating that wild horses prevent wildfires. As others in the same echo chambers agree with this information, it spreads, despite a lack of evidence to validate the claim. The finding of potential misinformation being communicated by an organization and echoed by followers, supports Törnberg's (2018) suggestion of a connection between echo chambers and the spread of misinformation on social media platforms.

The major themes from the study highlight opportunities for future research into effective issue-related social media communication. First, examining the type of comment in combination with the level of the commenter's agricultural literacy is an opportunity for future research which could provide greater depth to the understanding of social media communication and assessing audience reactions. Additionally, there is a need for detailed and research-based approaches for effective communication for organizations. Areas could include the impact of images, videos, links, and post length and frequency. Compilations and use of discipline specific social media tool kits, as seen by Garcia et al. (2016), for a wider variety of industries could improve the quality of information on social media and combat misinformation and literacy concerns.

The themes which emerged from the study also highlight important considerations for organizations when communicating via social media. First, organizations should supply as much information as possible directly on social media platforms instead of relying on external links. The findings indicate that the more information provided to the audience directly on social media yielded a more focused comment section when compared to organizations that provided brief descriptions with an external link. Second, organizational requests for audience action should communicate a low perceived-cost of participation to the audience. The request for action should be closely related to the post and require a low-risk investment, like sending a pre-written email to an individual in power. This could help to transition audience members away from slacktivism and into activism, with the potential to encourage the audience to increase their involvement through eventual higher investment. Third, organizations should consider the frequency of posts, especially those requesting audience action. Posts should be frequent enough to keep the audience engaged, but not so frequently that the audience becomes overwhelmed and withdraws interest. By providing detailed content and strategic, low-risk calls to action, organizations should see an improvement in the audience's literacy regarding the issue being communicated as well as audience participation in calls to action.

References

Adams, P. (2006). Exploring social constructivism: Theories and practicalities. Education 3-13, 34(3), 243–257. https://doi.org/10.1080/03004270600898893

Allcott, H., & Gentzkow, M. (2017). *Social Media and Fake News in the 2016 Election*. National Bureau of Economic Research. https://doi.org/10.3386/w23089

Barr, K., Irlbeck, E., Meyers, C., & Chambers, T. (2011). Television Journalists' Perceptions of Agricultural Stories and Sources in Texas. *Journal of Applied Communications*, *95*(3). https://doi.org/10.4148/1051-0834.1165

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, *2*, 8–14. https://doi.org/10.1016/j.npls.2016.01.001

Bowman, B. L., Settle, Q., Tomas, S., & Riggs, A. (2020). Facebook Activity of Oklahoma Agritourism Facebook Pages. *Journal of Applied Communications*, *104*(2). https://doi.org/10.4148/1051-0834.2296

Bureau of Land Management. Programs: Wild Horse and Burro: About the Program. (2019, September 17). Bureau of Land Management. https://www.blm.gov/programs/wild-horse-and-burro/about-the-program

Bureau of Land Management. Programs: Wild Horse and Burro: Get Involved: Advisory Board. (2019, October 31). Bureau of Land Management. https://www.blm.gov/programs/wild-horse-and-burro/get-involved/advisoryboard

Bureau of Land Management. Programs: Wild Horse and Burro: Gathers and Removals. (2020, January 26). Bureau of Land Management. https://www.blm.gov/programs/wild-horse-and-burro/herd-management/gathers-and-removals

Chen, Y., Conroy, N. J., & Rubin, V. L. (2015). News in an online world: The need for an "automatic crap detector" *Proceedings of the Association for Information Science and Technology*, *52*(1), 1–4. https://doi.org/10.1002/pra2.2015.145052010081

Chen, J. (2019, July 10). *15 Facebook stats every marketer should know for 2019*. Sprout Social. https://sproutsocial.com/insights/facebook-stats-for-marketers/

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (Fourth edition). SAGE.

Entman, R. M. (1993). Framing: Toward Clarification of a Fractured Paradigm. *Journal of Communication*, *43*(4), 51–58. https://doi.org/10.1111/j.1460-2466.1993.tb01304.x

Felix, R., Rauschnabel, P. A., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research*, *70*, 118–126. https://doi.org/10.1016/j.jbusres.2016.05.001

Garcia, A. S., Dev, D., McGinnis, C. M., & Thomas, T. (2016). Impact of an Extension social media tool kit on audience engagement. *Journal of Extension*, *56*, 1-10.

Garimella, K., De Francisci Morales, G., Gionis, A., & Mathioudakis, M. (2018). Political discourse on social media: Echo chambers, gatekeepers, and the price of bipartisanship. *Proceedings of the 2018 World Wide Web Conference on World Wide Web - WWW '18*, 913–922. https://doi.org/10.1145/3178876.3186139

Garrott, R. A. (2018). Wild horse demography: Implications for sustainable management within economic constraints. *Human–Wildlife Interactions*, *12*(1), 46–57. https://doi.org/10.26077/z7w0-0w34

Glenn, C. L. (2015). Activism or "Slacktivism?": Digital media and organizing for social change. *Communication Teacher*, *29*(2), 81–85. https://doi.org/10.1080/17404622.2014.1003310

Goodwin, J. N., Chiarelli, C., & Irani, T. (2011). Is Perception Reality? Improving Agricultural Messages by Discovering How Consumers Perceive Messages. *Journal of Applied Communications*, *95*(3). https://doi.org/10.4148/1051-0834.1162

Gramlich, J. (2019, May 16). 10 facts about Americans and Facebook. Pew Research Center. https://www.pewresearch.org/fact-tank/2019/05/16/facts-about-americans-and-facebook/.

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, *24*(2), 105–112. https://doi.org/10.1016/j.nedt.2003.10.001

Greenhow, C., & Lewin, C. (2016). Social media and education: Reconceptualizing the boundaries of formal and informal learning. *Learning, Media and Technology*, *41*(1), 6–30. https://doi.org/10.1080/17439884.2015.1064954

Haller, L., Specht, A. R., & Buck, E. B. (2019). Exploring the Impact of Ohio Agricultural Organizations' Social Media Use on Traditional Media Coverage of Agriculture. *Journal of Applied Communications*, *103*(4). https://doi.org/10.4148/1051-0834.2264

Joffe, H. (2008). The power of visual material: Persuasion, emotion and identification. *Diogenes*, *55*(1), 84–93. https://doi.org/10.1177/0392192107087919

Kovar, K., & Ball, A. (2013). Two decades of agricultural literacy research: A synthesis of the literature. *Journal of Agricultural Education*, *54*(1), 167–178. https://doi.org/10.5032/jae.2013.01167

Lapadat, J. C. (2006). Written interaction: A key component in online learning. *Journal of Computer-Mediated Communication*, *7*(4), 1-10. https://doi.org/10.1111/j.1083-6101.2002.tb00158.x

Lauri S., & Kyngäs H. (2005) Developing Nursing Theories (Finnish: Hoitotieteen Teorian Kehitta¨minen). Werner So¨derstro¨m, Dark Oy, Vantaa

Lee, Y.-H., & Hsieh, G. (2013). Does slacktivism hurt activism?: The effects of moral balancing and consistency in online activism. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems - CHI '13*, 811. https://doi.org/10.1145/2470654.2470770

Ortiz-Ospina, E. (2019, September 18). The Rise of Social Media. Our World in Data. https://ourworldindata.org/rise-of-social-media

Perrin, A., & Anderson, M. (2019, April 10). *Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018*. Pew Research Center. https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-mediaincluding-facebook-is-mostly-unchanged-since-2018/.

Pratley, J. (2018, September 21). Glyphosate and fake news. Charles Sturt University. https://www.csu.edu.au/research/grahamcentre/news/feature-stories/feature-story/2018/glyphosate-and-fake-news

Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). American Association for Agricultural Education national research agenda: 2016-2020. Gainesville, FL: Department of Agricultural Education and Communication.

Scasta, D. J., Henning, J. D., & Beck, J. L. (2018). Framing contemporary U.S. wild horse and burro management processes in a dynamic ecological, sociological, and political environment. *Human-Wildlife Interactions*, *12*(1), 31–45. https://doi.org/10.26077/2fhw-fz24

Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication*, *49*(1), 103–122. https://doi.org/10.1111/j.1460-2466.1999.tb02784.x

Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models: Models of media effects. *Journal of Communication*, *57*(1), 9–20. https://doi.org/10.1111/j.0021-9916.2007.00326.x

Schulze, B., Deimel, I., Schulze, B., & Deimel, I. (2012). *Conflicts between agriculture and society: The role of lobby groups in the animal welfare discussion and their impact on meat consumption*. https://doi.org/10.22004/AG.ECON.269543

Settle, Q., Telg, R., Irani, T., Baker, L.M., Rhoades, E., & Rutherford, T. (2011). Instructors' social media use and preferences in agriculture classes. *North American Colleges and Teachers of Agriculture, 55(2), 78-83.*

Specht, A. R., McKim, B. R., & Rutherford, T. (2014). A little learning is dangerous: The influence of agricultural literacy and experience on young people's perceptions of agricultural imagery. *Journal of Applied Communications*, *98*(3). https://doi.org/10.4148/1051-0834.1086

Stroud, N. J. (2011). *Niche news: the politics of news choice*. Oxford: Oxford University Press.

Törnberg, P. (2018). Echo chambers and viral misinformation: Modeling fake news as complex contagion. *PLOS ONE*, *13*(9), e0203958. https://doi.org/10.1371/journal.pone.0203958

Valenzuela, S. (2013). Unpacking the use of social media for protest behavior: The roles of information, opinion expression, and activism. *American Behavioral Scientist*, *57*(7), 920–942. https://doi.org/10.1177/0002764213479375

Wagler, A., & Cannon, K. J. (2015). Exploring ways social media data inform public issues communication: An analysis of Twitter conversation during the 2012-2013 drought in Nebraska. *Journal of Applied Communications*, *99*(2). https://doi.org/10.4148/1051-0834.1047

White, D., Meyers, C., Doerfert, D., & Irlbeck, E. (2014). Exploring Agriculturalists' Use of Social Media for Agricultural Marketing. *Journal of Applied Communications*, *98*(4). https://doi.org/10.4148/1051-0834.1094

Wingfield, N., Isaac, M., & Benner, K. (2016, November 14). Google and Facebook take aim at fake news sites. *New York Times*. http://nyti.ms/2ezMPpS