

## Introduction and Literature Review

Land-grant universities are tasked with conducting formal education, research, and service-oriented outreach (McGrath, 2006). Within these systems, extension specialists are employees who work within a specific area of knowledge to evaluate and integrate current research and apply it to outreach efforts (Cullen, 2010; Woeste & Stephens, 1996). Such science communication is seen as an obligation and expectation of those in faculty roles at land-grant institutions including those with an extension appointment (McLeod-Morin, 2020). In an agency where time management is recognized as an important consideration (Fetcsch et al., 1984; Radhakrishna et al., 1991), these educators have made use of a wide variety of technologies to reach their clientele including printed fact sheets, demonstration field plots, fair exhibits, and even demonstration trains.

First utilizing radio in 1920, the United States Department of Agriculture recognized the value of broadcasting to reach rural communities (Wik, 1988). Even as commercial broadcasters were coming into being, the USDA was spreading market news into rural communities through Naval radio towers (Shurick, 1946). In 1923, Frank Mullen became the first full-time farm broadcaster (Brand, 2012), and his regular sources were USDA and extension personnel. Participation in radio broadcast efforts for extension programming continues today (Romero-Gwynn & Marshall, 1990) alongside the use of subsequent mass communication technologies including television and the internet (Fuhrman, 2016; Langworthy, 2017).

An environmental scan today finds a variety of broadcast activities involving extension specialists. In states like Mississippi and Oklahoma, traditional weekly broadcasts continue (Mississippi State University Extension, n.d.; Oklahoma State University, n.d.). Georgia and Iowa, meanwhile, are examples of states where extension specialists regularly contribute to a programming produced by outside groups, Georgia Farm Bureau and Iowa Public Television respectively (Georgia Farm Monitor, n.d.; Iowa PBS, n.d.). Still extension in other states including Alaska, Alabama, North Carolina, and Arizona each have active YouTube channels (Alcoopextensionvideo, n.d.; NC State Extension, n.d.; UAFExtension, n.d.; University of Arizona Cooperative Extension, n.d.), albeit with highly varied levels of activity.

Increasingly, video is an affordable and technologically accessible option for digital outreach (Case & Hino, 2010; Potter, 2013). It is also the medium through which online audiences are seeking information. A Pew Research (2018) survey found that 73% of all adults in the United States (and 59% of rural adults) use YouTube. Those numbers outpace Facebook (68% of all adults, 58% of rural adults) and dwarf alternative platforms such as Twitter (24% of all adults, 17% of rural adults).

To the online audience, video programming enables self-direction in both scope and time (Schober et al., 2016). Watching video has been identified as a preferred method of learning scientific information (Boellstorff et al., 2013). The conventions and standards used when communicating research-based information through broadcast have been established by a long history of such endeavors.

Self-produced video has become a viable and affordable option for specialists to reach varied audiences (Case & Hino, 2010) in addition to more traditional broadcast partnerships. Though the list of technologies and platforms available to share video is evolving rapidly, the fundamental message design and style for sharing research-based information will continue to be informed by the past century of broadcasting. Similarly, as communicators plan future strategies, previous efforts must advise expectations.

After exploring the science communication perceptions of agricultural research center leadership, McLeod-Morin et al. (2020) recommended further study of science communication participation by extension faculty. The adoption of any innovative technology or process has associated costs (Rogers, 2003). For extension specialists looking to incorporate video communications into their regular workflow, those costs may present themselves in time, training, and technology expenditures affecting both the individual and the organization (Langworthy, 2017). Ruth et al. (2019) reported an increasing frustration by faculty in the focus on journal publication as an outlet for science communication to the detriment of communicating with organizational stakeholders such as agricultural producers in the case of those with land-grant appointments. Participants in that study expressed a desire to communicate more often with the public, yet currently expending most energy on communication within academia holding the promotion and tenure process responsible for the disconnect (Ruth et al., 2019). Within this study, we will explore the motivation and perceived repercussions for faculty who broke that tradition.

This phenomenological case study initiates such a line of inquiry as it explores the costs and benefits of video participation through the examination of a group of individuals whose unique experiences may guide future studies. The individuals studied here all participated in a broadcast television program in order to fulfill their responsibilities as extension specialists.

Although limited research does exist into the effectiveness of broadcast programming in advancing the mission of extension (Rockwell & Randall, 1987; Wagenet et al., 2005), little can be found which explores the impact of program participation on the careers of extension specialists. Vines (2018) suggested educators may need validation and assurance that engaging in new behaviors are worthwhile. Biggam et al. (2019) recommended further qualitative study of perceptions of credibility which may impact communicator effectiveness.

This study uses a phenomenological lens to examine a unique communications experience. The effort is intended not to study a broadly occurring phenomenon, but rather a singular one which may: 1) document for posterity the experiences of this unique group of extension specialists, 2) inform behavior change decisions of established educators, and 3) assist similar agencies in evaluating the use of video communication tools. While online outlets for sharing video are still relatively new technologies and therefore difficult to evaluate for long-term effects, it may be possible to glean relevant information from the examination of broadcast programming, a related but more established channel.

## **Theoretical Framework**

Rogers (2003) defines the change agent as “an individual who influences clients’ innovation-decisions in a direction deemed desirable by a change agency” (p.27). This description aligns with perceptions of science communication by land-grant faculty McLeod-Morin et al. (2020) where the communication of science to stakeholder populations is the defined desirable outcome. Rogers (2003) suggests credibility is an important factor in change agent success with a positive relationship existing between client perception of change agent credibility and adoption. Here, credibility is broken into two main categories: competence credibility, related to perceived expertise, and safety credibility, related to the change agent’s trustworthiness (Rogers, 2003).

Defining credibility as the “communicator’s positive characteristics that affect the receiver’s acceptance of a message” (1990, p. 41), Ohanian went further in proposing a construct of expertise, trustworthiness, and relatability to measure source credibility of celebrity endorsers

(Ohanian, 1990). While this added dimension of relatability was found to influence attention to the message, it was not found to a significant predictor of adoption (Ohanian, 1991).

While this study was not designed to directly test for theory of cultivation put forward by Gerbner and Gross (1976), it does bare discussion here as a logic next step within this reach line. Cultivation theory suggests that with increased media use a viewer's perception of reality aligns itself more closely with the conceptualized reality presented through television (Gerbner & Gross, 1976). Though originally directed toward negative effects, namely the exposure to violence in television (Gerbner & Gross, 1976), more recent research has linked cultivation to public perceptions of professions (Pfau et al., 1995) and has shown that cultivation theory works in concert with source credibility when evaluating agricultural documentaries (Beam, 2017). The regular presentation of extension specialists as subject-matter experts through broadcast channels may then cultivate a stronger perception in viewers of the specialists as credible experts. Such perceptions may be evident to specialists when they interact with this audience.

Working together, cultivation theory and source credibility shape public perceptions of individuals representing those industries the public is unlikely to interact with regularly (Pfau et al., 1995) such as agriculture (Beam, 2017). By investing time and energy to appear on television, extension specialists may be seen as having greater credibility, not only within that medium but possibly at live events as well. Increased credibility may then lead to increased effectiveness with the key effort of sharing research-based information.

## **Purpose and Objectives**

The purpose of this study was to examine the perceived career effects on extension specialists resulting from broadcast television participation. In order to assess this value, the study focuses on four elements: the value of the work to the agency, the time requirements of the work, perceptions of impact on job effectiveness, and perceptions of impact on career-advancement. The study was guided by the following five research questions:

RQ1: How did the program format and the roles of the contributing specialists change over time?

RQ2: What is the internal perception of value assigned to this extension-produced broadcast program?

RQ3: How does participation in broadcast programming affect the schedule of extension specialists?

RQ4: How do extension specialists perceive the participation in broadcast programming as impacting their job effectiveness?

RQ5: How do extension specialists perceive the participation in broadcast programming as impacting their career advancement?

This study further seeks to preserve for history some record of the program studied and the contributions of the specialists interviewed herein as this reflects multiples decades of experience from each.

## Methodology

To initiate a line of inquiry into the value of video participation by individual extension specialists, a phenomenological case study was designed to explore these research questions with a targeted group of individuals who possess unique, long-term experiences and perspectives. Interviews were sought with extension content specialists who have regularly contributed to a land-grant produced, broadcast television program spanning the majority of their careers. The *SUNUP* program produced by the Oklahoma Cooperative Extension Service and the Oklahoma Agricultural Experiment Station was identified as a model example of such a program.

Broadcast on the statewide public broadcasting network (OETA) from 1986-2004 and 2008-present, the program supplements county agricultural extension meetings aimed at educating producers (Oklahoma State University, n.d.). For an understanding of the goals and the perceived value of the broadcast program, three individuals were identified for interviews: an extension administrator, a senior television producer from the 1986-2004 era, and a senior television producer from the 2008-present era. These are identified as *Administrator 1*, *Producer 1*, and *Producer 2*.

To examine the perceived impacts of long-term engagement with this product, three extension content specialists were identified for their association with *SUNUP* over multiple decades. Each individual has contributed segments on a weekly or bi-weekly basis over the past 30 years. Of equal importance to this study, each maintained an extension role requiring in-person engagement with extension clientele at local meetings over that same timeframe. Although many extension specialists have contributed to the program over the years (Oklahoma State University, n.d.), these three were selected as having a unique experience in maintaining such regular engagement for such an extended period of time. Those interviewed are identified here as *Specialist 1*, *Specialist 2*, and *Specialist 3*.

Three sets of interview questions were developed for the unique groups to be interviewed (extension administration, production staff, and content specialists) and submitted with a research proposal to the Institutional Review Board. Following approval, subjects were recruited via e-mail, and recorded interviews were conducted by phone. These interviews followed the prescribed outline with follow-up questions interjected as appropriate. Interviews varied in length from 15 minutes to just over one hour. Audio recordings were submitted to a transcription service, and transcripts were coded using the NVivo 12 software. Emergent themes related to the stated research questions are identified in Table 1.

**Table 1***Emergent Themes by Research Question Topic*

Programming Value	Time Costs	Job Effectiveness	Career Advancement
No ratings	Preparation	Interpersonal relationships	Administrative discouragement
Social metrics	Recording	Notoriety	Promotion and tenure
Anecdotal measurement	Travel	Credibility	Limited national benefit
Celebrity	Less with Time	Two-way communication	

Due to the constructivist paradigm of this study, trustworthiness and reliability were established through credibility, transferability, dependability, and confirmability (Anney, 2015; Creswell & Miller, 2000). Credibility was established through triangulation of multiple sources of data, peer debriefing, and member checking. Transferability was established through purposive sampling and thick descriptions of the data. Dependability was ensured by use of an audit trail for all data collected and peer review. Finally, confirmability was established through reflective journaling through which the researchers acknowledged how their own relationships and experiences may have influenced their perspective of the research.

The small scale and shared experience of those included in this study is a limitation. Although the subjects included have a unique experience worthy of documentation and examination, that experience may well be isolated to this set of circumstances. Shifts in administration attitudes, changing consumer media consumption habits, diverging consumer attitudes toward varied forms of media, and evolving broadcast technologies all suggest that elements of these experiences could not be fully replicated in future endeavors.

## Findings

### **RQ1: How did the Program Format and the Roles of the Contributing Specialists Change Over Time?**

*SUNUP* first aired in 1986 (“New OETA *SUNUP* program starts in January”, 1985). During this era, the program was a daily 15-minute show. *Producer 1* recalled the format when he joined the staff in the 1980s, “. . .was more story-based. We would go out and do stories with producers. And then we would get a content specialist to say something about the story, or they would even go on the story with us.” *Producer 1* stated the show was demonstrational and topical in nature, “We were not covering news. We were covering how to do things that the content specialists deemed important. That might be public policy, . . . it might be something agronomic or to do with cattle / livestock.”

State budgets and personnel changes led to gradual changes in the format. By the 1990’s a typical show featured roughly five minutes of news, five minutes of markets, and five minutes of a guest interview, typically with an extension specialist. *Producer 1* explained, “They typically drove the content. I would say 70% of it was subject matter specialists that were located

at the university. And then 30% were the extension professionals that were either county or regionally based.” However, a change in administrative priorities led to a brief cancellation of the program in 2004. It was restarted in 2008.

Reflecting on the period, *Specialist 3* pointed out how public demand for the information *SUNUP* provided had not declined. The cancellation of the program led this specialist into a weekly radio partnership and to the creation of a weekly digital newsletter with another extension specialist. All three content specialists reported involvement with *SUNUP* led to additional opportunities to contribute to alternative media forms including magazines, electronic newsletters, and radio.

*Producer 2* reported that the program was relaunched in 2008 as a weekly, half-hour program. It airs in that format today. *Producer 2* said, “It’s grown in audience over the past 10 years... We’ve grown a YouTube audience and we have people viewing our content from all over the world.” *Producer 2* identified two key changes to the format of the program in this second iteration. The first was a move away from the studio with the majority of recording now occurring in agricultural fields and pastures. *Producer 2* said they, “...ditched the studio for a field, for a pasture, for wherever the ag producers are because it makes it more relatable.”

*Producer 2* also pointed to a reduction in edited packages and an increase in as-live interview formats. He said this made the content more relatable and helped specialists with delivery. *Producer 2* said, “The way that we produce the two person interviews where we get the state specialist on, it allows it to be just a conversation between the person from the show and then the state specialist, that just happens to have a video camera there recording it for everybody else to hear. And it, yeah, I think that adds to the comfort level for the [state specialists] that we’re talking to.”

When the program was reformulated at that time, *Specialist 3* continued with all three activities taken up during the hiatus, looking for an overlapping outreach benefit from the repeated information. *Specialist 3* said:

Maybe when [you] go to the coffee shop and when the good old boy says, “Well, *they* say you ought to do it this way.” Well now, “*they*” hopefully is me and the land-grant institutions that did the research . . . he doesn’t know who “*they*” is when he’s saying that, but he’s got the idea right.

## **RQ2: What is the Internal Perception of Value Assigned to This Extension-produced Broadcast Program?**

The simplest way to measure the reach of any broadcast program is to use ratings as a measurable outcome. However, the prohibitive cost and questionable usefulness of Nielsen Ratings (Harari, 1994) leave the Oklahoma Cooperative Extension Service searching for alternative measurement scales, including the defined metrics provided by YouTube as segments are uploaded after broadcast. *Administrator 1* explains, “What I’m hoping is that as we’ve added to our YouTube library catalog that we will start to be able to see increased uptake numbers from that.”

Indeed *Producer 2* said YouTube analytics demonstrate a global reach as viewers are finding the channel from five different continents. However, *Producer 1* cautions a reliance on metrics alone, “What you will never know, no matter what anyone will tell you, is what them watching made that person do. Did that person go down to the extension office?” Speaking along similar lines, *Administrator 1* said, “I don’t know that we are going to be able to parse what kind

of audience is accessing *SUNUP* that way, in terms of demographics either agricultural or non-agricultural.”

However, each interviewee offered ample anecdotal evidence of program reach through experiences of limited celebrity. *Administrator 1* recalled an evening function with *Specialist 1*, “There was a young man there who was excited about being there at the banquet and the prospect of having his picture made with [*Specialist 1*], because he was such a celebrity because he was on TV.”

This sense of celebrity was a concern for *Specialist 3* in the early years. He questioned whether his role was that of educator or entertainer. That changed one night as he was preparing to address a county producer meeting. *Specialist 3* said:

A guy comes up to me and really, really challenges me with what I had said on the previous Tuesday on *SUNUP*. At that moment in time, I knew, okay, I'm no longer an entertainer. I am educating him. . . Now people are thinking about what we're saying rather than it's just somebody on television talking about cattle.

### **RQ3: How Does Participation in Broadcast Programming Affect the Schedule of Extension Specialists?**

The content specialists interviewed all reported a limited amount of time spent in preparation for a single appearance on the show. *Specialist 1* said it was not always that way. “When you're really young and naïve, you'd prepare for a day or so,” *Specialist 1* recalled, “But now, it's probably 30 minutes. . . If you've got somebody that's interviewing you that knows the industry and knows the market, you don't have to prepare at all. Just have a couple of ideas and go and tell them what you want the subject to be, and they ask the questions.” This sentiment is echoed by *Specialist 2*, “I spend time everyday keeping up with current data. It just becomes part of your life and that said, I can basically go do a *SUNUP* segment with very little additional preparation.”

All three content specialists reported spending one hour or less in preparation for taping a segment of *SUNUP* with an additional hour or less spent traveling and taping with the production crew. *Specialist 3* said by making use of broadcast opportunities like *SUNUP* he was able to reach a greater number of viewers in less time than, “. . . getting in a car, driving two and a half hours, giving a one-hour presentation and getting in that same car and driving back two and a half hours and seeing 20 people while I'm there.”

Speaking of both *SUNUP* and a bi-weekly magazine article, *Specialist 1* said, “It's just incredible what you can teach in 620-word stories twice a month or two-and-a-half to four-minute TV spots every week.”

### **RQ4: How do Extension Specialists Perceive the Participation in Broadcast Programming as Impacting Their Job Effectiveness?**

All three content specialists attend regular, in-person meetings at the county, regional, and state-level. Though each reported a reduction in the number of meetings they attend in recent years, all stated this was an important part of their career obligations. While evaluations of job effectiveness can vary by position and supervisor expectations, these content specialists spoke to a number of attributes which they identified as part of their effectiveness. In that regard, *Specialist 1* said being a known presence from television proved beneficial when he would first

meet an extension client. “It gives you name recognition,” he said, “. . .and because you're on the radio or you're on TV or you're in the press, you've got to be credible or you wouldn't be there. It gives you notoriety and it gives you credibility.” However, *Specialist 3* suggested the audience reaction went beyond recognition, “People would call you by your first name rather than just being Dr. [*Specialist 3*].”

*Specialist 2* said involvement with *SUNUP* improved the quality of face-to-face conversations he has with audience members. “Broadcast exposure allows me to maintain a stream of conversation with the producers that I see regularly,” he said, “I think it levers the time a little bit, in terms of there's not as much need to lay the ground work for a particular discussion when you have that ongoing stream of contact with them.” *Specialist 2* attributes this to a sense of camaraderie which develops between the audience and those on the program. “It's not a sterile environment once you get this ongoing relationship,” he said, “I think there's more of a familiar approach where you're talking to friends. You're talking to almost to family in some cases, and it allows you to have that communication with them.”

The program producers have similarly seen evidence of these relationships as they travel the state interacting with audience members. *Producer 1* said, “What I experienced was that the audience interest in the content specialists really was almost half professional, what they were saying, and half personal, who they were . . . rather than just being in a county once every quarter or once every half year, these people were in people's living rooms every week. And so, the personal really grew.” *Producer 2* said, “There is that level of connection with the folks who are the state specialist and then having that avenue through a television show to where the folks in the field actually feel like they know them.”

*Producer 1* attributed this connection to the ability of television to connect through multiple senses saying, “While technology has changed and delivery methods have changed, the personal that video, sound, and personality bring when you're on, that it exceeds anything you could do in a written blog, a digital post, anything like that. You demonstrate the personality. And for a content specialist, people will know them, people will follow them, and people will come and hear you. If a content specialist wanted to raise his stature with his clientele, it was ideal to help him do that.”

### **RQ5: How do Extension Specialists Perceive the Participation in Broadcast Programming as Impacting Their Career Advancement?**

Although participation with the show led to increased collegiality with extension clientele, the same could not always be said for extension and university administrators. In the early years of the program, both *Specialist 1* and *Specialist 3* reported discouragement from their supervisors. “Back in my younger days,” said *Specialist 1*, “my colleagues in research discounted the counting of *SUNUP* or Southwest Farm Press as a real outlet or real publication.”

*Specialist 3* reported having one department head specifically tell him the effort was wasted as the major program donors did not watch the program nor see a need to watch the program. “The next department head I got was very proud to tell me on numerous occasions that he had never ever and would never ever watch *SUNUP*,” he said, “He didn't really do anything to discourage me from doing it, he just made a point that he would never watch it.” *Specialist 3* added, “If you think I was discouraged from doing the others, you ought [to have] heard the negativity about wasting my time, putting something on the internet.”

In order to stay motivated, *Specialist 3* said he tried to focus on the feedback he was receiving from extension clientele. “Their feedback was coming from those larger, very influential producers in the state as opposed to the 50-cow, 100-cow operations,” he said, “That’s my dad sitting out there that had 50 cows and had a grain farm to take care of. Where he got his information and how he got it wasn’t by going to the National Cattlemen’s Beef Association Convention in Nashville because he couldn’t afford to. He had to get his information at a much more local situation and through local extension rather than through the state.”

Both *Specialist 1* and *Specialist 3* report having advanced to the pinnacle of their career ladder in spite of their involvement with *SUNUP* rather than because of it. However, administrative attitudes toward such outreach efforts have evolved with time. *Administrator 1* said both media and social media outreach are now considered within the promotion and tenure process. “For state specialists, particularly in wheat and livestock which are our primary commodities, and for our ag policy specialists,” *Administrator 1* said, “It’s certainly an appropriate venue and a way to leverage their messaging, their work, to a wide audience.” *Administrator 1* also stated that in the annual review process now, “They’ll submit not only the list of their journal articles, but their extension fact sheets, as well as social media connections through media like *SUNUP*. We haven’t uniformly parsed out and said how many times on *SUNUP*, but many of them do report that.”

## Conclusions

This study sought to explore the career effects perceived by extension specialists participating in a broadcast television effort on a regularly recurring schedule over a long period of time. Specifically, the study sought to understand the value Oklahoma Cooperative Extension placed on this work over time, the cost to the specialists in terms of time dedicated, the specialist perceived impacts on their own effectiveness, and their perception of impacts on their own career advancement. Extension specialists interviewed for this study described evolving administrative attitudes toward the work which trended more positive over time, minimal costs in terms of time allocated, increased effectiveness in the form of increased credibility and familiarity with clients, and no clear detriment to career advancement.

Subjects of this study all indicated that Oklahoma Cooperative Extension has and continues to use *SUNUP* as a vehicle to share scientifically gathered data with agricultural producers in Oklahoma aligning with the known mission of extension (McGrath, 2006). Content specialists, including *Specialist 1-3*, were said to drive the program’s agenda in alignment with the job duty of providing such information with the public (Cullen, 2010; Woeste & Stephens, 1996). This provided an outlet for direct communication to the public much sought by land-grant faculty (Ruth et al., 2019). Where each of the specialists interviewed for this study shared stories of discouragement from direct supervisors early in their careers, each also reflected a change in attitudes from administrators echoed in the comments from *Administrator 1* who holds broadcast outreach as a viable and valuable activity for content specialists. This suggests a positive change in value assigned by the agency to broadcast communications.

Time is a limited resource which extension personnel often struggle to manage properly (Fetcsh et al., 1984; Radhakrishna et al., 1991). The specialists interviewed for this study indicated broadcast communications were an effective use of their time as less was required in preparing for and taping a segment of this show than would be spent on preparation and travel to a face-to-face event. These specialists also noted increased message reach through broadcast

television and subsequent opportunities in print media, radio, and direct mass mailings. This increase in reach works to improve efficiency when paired with reduced time requirements for preparation and travel.

Rogers (2003) wrote that credibility as a key factor in change agent effectiveness with expertise and trustworthiness being two key elements. Ohanian (1990) adds relatability to this evaluation where a form of celebrity is involved. For the specialists interviewed for this study, expertise was recognized when face-to-face audience members asked follow-up questions for subjects raised during broadcasts adding depth to the conversation. Trustworthiness was recognized through increased name recognition and a lowering of audience formality in addressing the specialists. Relatability was recognized through increased expressions of familiarity and camaraderie. Combining these factors, the participants spoke to a deeper level of engagement with face-to-face audience.

Though broadcasting is generally considered a form of one-way communication, when paired in this manner with in-person events, the subjects indicated their perception of the broadcast extending the two-way communication of the face-to-face event rather than dominating the more traditional practice. Their experience suggests that extension specialists who may only interact with individual clientele on an annual or semi-annual basis may extend and improve this relationship through weekly media interactions.

However, no direct career advancement was associated with broadcast involvement due to administrative attitudes. Perhaps most telling is how these specialists carried on with the activity despite facing a range of early administrative attitudes which ran from indifferent to outright hostile. In doing so, these extension specialists demonstrated their own positive valuation of the program and its benefits. Importantly, both the specialists and the administrator interviewed for this study indicate such administrative attitudes have now changed to positively reflect on this activity within career advancement.

## **Recommendations for Research**

Moving forward from this initial study, three branches of research are recommended. First, a quantitative instrument should be developed and deployed to look at extension professionals participating with television, radio, social media video, or podcasting across all states. The population for that research should include those engaged with programs produced both by extension and by other partnering agencies as well as self-produced products used to support programming. The population should also include those who participate at regular, frequent intervals and those who contribute to programming only sporadically.

Second, the phenomenon should be examined from the perspective of extension clientele. Research exploring the perceptions of those who attend in-person extension meetings featuring speakers who are both regular broadcast contributors and those with no broadcast presence would be instructive. Cultivation theory suggests that what viewers regularly see portrayed on television will shape their expectations of the world (Gerbner & Gross, 1976). More recent research suggests regularly presented views of a profession through broadcast television will increase audience adoption of that viewpoint (Pfau et al., 1995). As such, regular representation on television of individuals within a profession as experts should enhance audience perceptions of those individuals as experts.

Finally, where Ohanian's construct suggests expertise, trustworthiness, and relatability are thought to come together to create credibility (Ohanian, 1990), this study suggests by

presenting a subject as credible through broadcasting, we may indeed influence audience perceptions of the individual characteristics for expertise, trustworthiness, and relatability. That which examines this reversal of flow through Ohanian's model may inform many communication plans in the future.

### **Recommendations for Practice**

Recommendations for practice are necessarily limited by the scope of this study. However, based on the reported experiences of the subjects of this study, practicing extension specialists with the opportunity to appear on broadcast programming should feel encouraged to connect the message of those appearance with those delivered in person. While this study did not explicitly discuss the online distribution of such video segments, there may be suggested value in sending links to recorded interview segments with the specialist when inviting the public to an event. The experience of subjects interviewed in this suggests such preview clips may both enhance their expertise with the audience and prime the audience for a deeper conversation.

The positive benefits reported by the subjects of this study also suggest value in professional development opportunities specific to audio and video. To postulate areas of potential benefit in today's media climate from the decades-long experiences reported herein, these may include training specific to smartphone applications for capturing and sharing video, speaking groups which regularly work on short time-frame communications, communications mentors with extension communication professionals, and training in keywords and tagging for posts.

Agricultural communications service units may also contribute to the success of these efforts by extension specialists. In addition to producing broadcast programs like *SUNUP* and delivering much of the professional development listed above, these units could identify and document best practices for self-produced video use through social media. Service units should also seek to create channels, either broadcast or online, where they can engage specialists in content creation on a regular basis, allowing the specialists both experience and feedback with which to hone skills.

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