Understanding Agricultural Communicators' Priority Research Areas Using Q Methodology

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Introduction

Iowa State University introduced the first agricultural communications (ag comm) course more than 100 years ago (Irlbeck & Buck, 2017). Since then, ag comm as an academic discipline has evolved significantly. Yet, the academic discipline still lacks a research agenda despite researchers' recommendations (e.g., Doerfert et al., 2007; Irlbeck & Buck, 2017). In 2007, Doerfert et al. acknowledged that "past efforts reveal a scattershot pattern of research that has understandably been shaped by information needs of the place and time, individual interests, funding opportunities, and a wide array of other factors" (p. 10). Therefore, focusing and coordinating research efforts in the discipline can help broaden its impact. Thus, the purpose of the study described herein was to understand ag comm scholars' research priority areas in an effort to identify the types of research and researchers working to advance the discipline.

Theoretical Framework

Evans (2006) stated that ag comm "scholars today are keenly aware that there is no integrated theoretical base for agricultural communications" (p. 16) because the relevant theories "grow deep, spread widely, and change constantly" (p. 25). However, similar to the way Evans (2006) described the applicability and interconnectivity of many theories to the discipline, we will provide a framework (in the final manuscript) that connects communication theories to the types of researchers we identified in the study in an effort to better characterize scholars in ag comm and understand their research endeavors.

Method

We used Q methodology to characterize viewpoints about research priorities in the ag comm discipline. To develop the concourse and the Q set (Watts & Stenner, 2012), we conducted a quantitative content analysis of peer-reviewed journal articles published in the *Journal of Applied Communications*. We searched the key phrase "agricultural communications" in all issues of the *Journal* using newprariepress.org, which resulted in 616 articles. These 616 articles represented the concourse for the study. We eliminated all articles published before 2000, leaving 351 eligible articles. We interpreted the topic of ag comm research by analyzing article titles and abstracts and excluded 91 articles either because they were not central to the field of ag comm or they were duplicates. Thus, we used a total of 259 articles to develop the Q set. We created an excel spreadsheet and combined similar topics, which resulted in 27 different research topic categories. The 27 research topics represented our Q set. We purposively selected the P set ($N = 45$), which consisted of ag comm scholars (e.g., faculty, graduate students) who attended the National Agricultural Communications Symposium.

Results

Using the PQMethod software, we performed a principle component analysis to identify factors, or viewpoints. We extracted four factors that together explained 60% of the variance. Then, we

implemented a varimax rotation and performed a final Q analysis of the rotated factors to allow for factor interpretation. Factor one explained 33% of the variance, with nine defining variables, a composite reliability of 0.97, and an eigenvalue of 14.85. Statements for factor one that participants deemed most important included "effects of message framing on consumer perceptions and behaviors" and "agricultural advertising." In addition, factor two explained 10% of the variance, with four defining variables, a composite reliability of 0.94, and an eigenvalue of 4.4. Statements for factor two that participants deemed most important included "communication in the Cooperative Extension System," and "farm safety communication." Statements for factor two that participants deemed least important were "ag comm academic programs and curricula," and "ag comm students." Furthermore, factor three explained 9% of the variance, with eight defining variables, a composite reliability of 0.97, and an eigenvalue of 4.08. Statements for factor three that participants in this category deemed most important included "use of rigorous research methods in ag comm," and "ag comm academic programs and curricula." The statement for factor three that participants deemed least important included "role of social media in ag comm." In addition, factor four explained 8% of the variance, with five defining variables, a composite reliability of 0.95, and an eigenvalue of 3.41. Statements for factor four that individuals deemed most important included "technology in ag comm" and "best farm management practices." The statement for factor four that participants deemed least important included "effects of message framing on consumer perceptions and behavior." Finally, participants generally agreed that "ag comm efforts during historical events" and "agritourism" were not important research topics.

Conclusions and Recommendations

Results suggest there are four dominant types of researchers in ag comm. We labeled individuals who comprised factor one as Message Framing Influencers. These researchers believe it is most important to prioritize investigating how framing messages effects consumer perceptions, which directly relates to the research topic they consider second most important—agricultural advertising. We labeled individuals who comprised factor two Extension Scholars and Practitioners. These researchers believe it is most important to prioritize investigating communication in the Cooperative Extension System and farm safety communication—an important responsibility of those working within Extension. Extension Scholars and Practitioners believe it is least important to prioritize research investigating ag comm as an academic discipline, including programs, curricula, and students. We labeled individuals who comprised factor three Method-Conscious Researchers. These individuals believe it is most important to investigate using and applying rigorous research methods to advance ag comm, and least important to investigate the role of social media in ag comm. Finally, we labeled the individuals who comprised factor four Production-Oriented Academics. These individuals believe it is most important to research technology in ag comm and farm safety communication, both of which directly relate to production agriculture. Opposite from Message Framing Influencers, Production-Oriented Academics believe investigating how framing messages effects consumer perceptions should be the least prioritized research topic within ag comm. We recommend future research be conducted to characterize these personas more fully and to align the researchers described herein with priority areas identified by Doerfert et al. (2007) and other scholars to advance ag comm as a discipline.

References

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