



RESEARCH PAPER**Perceptions of Agriculture: A Sociological Analysis**

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ABSTRACT

This research investigated agricultural knowledge and growing agricultural producers. The results revealed significant gaps in agricultural knowledge among growing agricultural producers. These gaps in agricultural knowledge can hinder the success and sustainability of growing agricultural producers. A quantitative study in which students at a large public university were asked about their firsthand interactions with agricultural production and experience, as well as their knowledge, awareness, and familiarity with agricultural issues. The study findings revealed the students' perceptions and understandings of agricultural practices, highlighting areas where further education and awareness are needed. An analysis of variance revealed significant differences between students with experience in agricultural production and those with a little less experience, implying that those with little exposure to agriculture may have done so in a context related to traditional rather than modern production. Agricultural literacy initiatives should be encouraged, and hands-on learning at agritourism sites, agricultural fairs, and expositions can enhance agricultural experiences.

KEYWORDS Agricultural Issues, Agricultural Literacy, Knowledge Theory, Public and Students Perceptions

Introduction

In the last decade, Pakistani audiences have consumed news stories about aspects of modern agricultural production with which they are largely unfamiliar. They have gained a greater understanding and appreciation for the advancements in farming practices. Furthermore, this knowledge has allowed them to make more informed decisions about their own agricultural practices. As a result, they have been able to improve their yields and overall productivity (Magagula & Tsvakirai, 2020). The food industry has been charged with serious violations such as livestock mistreatment, environmental degradation, and non-therapeutic antibiotic abuse. These violations have raised concerns about the ethical and sustainable practices of the food industry, prompting calls for stricter regulations and increased transparency. Action to address these issues has become evident. Various organizations and governments have started implementing measures to mitigate the negative impacts of these practices (Houser, Gunderson, & Stuart, 2019). The Government Accountability Office revealed that the Environmental Protection Agency failed to manage pollution generated by the country's livestock activities, resulting in the deterioration of critical resources such as rivers and lakes. This failure has had major ecological effects and jeopardized the general health of the ecosystem. Furthermore, it harms the health of both animal and human populations (Morgan, Widmar, Wilcox, & Croney, 2018). The public's ignorance of agriculture may make the effects of this confusion worse. Narratives and associated visuals of industrial farming and contemporary

techniques for raising animals challenge long-standing notions of agriculture as a peaceful, pastoral "way of life." However, educating the public about modern agriculture practices can help alleviate this confusion. By increasing transparency and sharing accurate information about the industry (Preethi, NATARAJU, & LAKSHMINARAYAN, 2017). Stories and images of modern farming operations call into question long-held agricultural beliefs, and the consequences of misinformation may be exacerbated by a general lack of agricultural knowledge. These misunderstandings and disinformation regarding the realities of modern agriculture can hinder progress and hinder the adoption of sustainable farming practices. As a result, it is crucial to educate the public about the true nature of agriculture and promote accurate information to ensure informed decision-making (Kivlin & Fliegel, 1967). The goal of this study was to look into the effect of agricultural literacy – defined as knowledge and awareness of agricultural experience – on college students' perceptions of television coverage of issues in modern livestock production. The findings of the study will provide valuable insights into the relationship between agricultural literacy and college students' perceptions of television coverage of issues in modern livestock production, which can inform future educational initiatives and media strategies in the agricultural industry.

Literature Review

According to knowledge gap theory, the introduction of mass-mediated information into a society causes certain groups to acquire knowledge at a faster rate than others, resulting in "knowledge gaps" between informational haves and have-nots, which can exacerbate existing social inequalities and disparities in access to information and opportunities. This can further perpetuate existing power dynamics and contribute to the marginalization of already-disadvantaged groups (Scott & Lavergne, 2004). The primary variable in the development of these, according to seminal work in knowledge gap theory, is socioeconomic status; however, other factors, such as audience motivation and perceived message usefulness, may contribute to the formation of informational divides among social groups (Paudel, Zhang, Yan, Rai, & Li, 2019). The agricultural knowledge gap between farmers and customers is widening. As people move away from the farm, both geographically and generationally, the importance and relevance of agricultural knowledge decrease, potentially leading to the formation of an agricultural knowledge gap, which could increase the incidence of negative or unrealistic perceptions of the industry gaining traction in society (Kusis, Miltovica, & Feldmane, 2014).

Agriculture Knowledge

Prior to the agricultural industrial revolution of the postwar decades, it was a nation built on—and reliant on—a strong shared agrarian tradition. A tight association with a common agrarian culture and history culminated in a shared sense of agricultural literacy, which stemmed from personal knowledge of agricultural product production, distribution, and usage. It facilitated efficient agricultural practices and fostered a strong sense of community among farmers (Fonte, 2002). Increasing urbanization and the shift of the labor force to white-collar jobs gradually led to the decline of agriculture as a focal point of life. The latter decades of the twentieth century brought growing concern about the population's disconnect from the sources of its food and fiber, leading to a renewed interest in sustainable agriculture and local food production (Guillem, Barnes, Rounsevell, & Renwick, 2012). Firsthand experience in the food and fiber industries is one aspect of agricultural literacy that has received little attention in non-agricultural areas. An organizational scholar established the notion of experiential learning by applying the principles of progressives in his education studies to increase agricultural literacy. However, there is still a need for more research and understanding in this area (Shukla,

Agarwal, Sachdeva, Kurths, & Joshi, 2019). Real-world learning enriches the educational process and improves comprehension of the subject matter and real-world mechanisms. In the 2011, Haston and Russell observed that actual context learning improved students' performance and information retention. Perhaps more intriguingly, the students' preconceived notions about teaching were reduced or removed (Far & Rezaei-Moghaddam, 2018). As a result, experience can help mitigate the negative effects of misconceptions and establish new ways of thinking about previously unfamiliar topics. Experience can also lead to a better understanding and improved decision-making in future situations. Furthermore, experience allows individuals to develop a sense of adaptability and resilience, enabling them to navigate challenges and setbacks with greater ease. This ability to learn from past experiences and apply that knowledge to future scenarios can ultimately contribute to personal growth and success.

Material and Methods

To explore how agricultural literacy and industry experience impact young people's attitudes toward agricultural production techniques, students from two agricultural programs for communication at a big public university were chosen as a representative sample of the whole university population. Students in these classes have often come from a variety of agricultural backgrounds, allowing for a diversified viewpoint on agricultural challenges. This diversity of viewpoints improves the learning experience for all students. Additionally, it promotes a more inclusive and well-rounded education. A questionnaire was developed utilizing a survey conducted online and circulated. To guarantee that every student could complete the questionnaire, students registered in a big lecture hall received it, while those enrolled in a web-based course did not. A small seminar or discussion group was given a paper copy received it, while those enrolled in a web-based course were emailed a link to access the online survey. The questionnaire was used to collect demographic information as well as specifics regarding the students' knowledge, awareness, and experience with agriculture in order to gain insights for further research and improvement of agricultural education programs. The study collected data using a comparable method with a similar undergraduate student sample and utilized the same items and scales as this study. A pilot test was not done. However, data were calculated for the scales of reaction, agricultural literacy, and agricultural experience. The results of the data calculation were then analyzed for statistical significance. Of the 122 students enrolled in both sessions, 93 gave relevant responses. The findings were analyzed using SPSS. The overall averages of respondents' agricultural literacy and experience ratings were categorical variables with four levels. The findings revealed that the majority of respondents had a moderate level of agricultural literacy and experience. These results suggest that there is room for improvement in agricultural literacy and experience among the respondents.

Results and Discussion

Descriptive statistics were determined using the continuous variables response score, agricultural knowledge score, and agricultural experience score. The results were analyzed and reported. Similar results were found for agricultural experience and the agricultural literacy scores, which showed students to be neither highly literate nor illiterate. The categorical variables of agricultural literacy level and agricultural experience level were found to have at least a moderate level of awareness and knowledge about agricultural issues.

Table 1
Frequency of Agricultural Literacy/ knowledge

Categories	Frequency	Percent	Cumulative Percent
Illiterate	21	22.60	22.60
Semi-literate	19	20.40	43.00
Semi-literate	27	29.00	72.00
Literate	26	28.00	100.00

Table 2
Frequency of Agricultural Experience

Categories	Frequency	Percent	Cumulative Percent
Inexperienced	15	16.10	16.10
Semi-inexperienced	26	28.00	44.10
Semi-inexperienced	21	22.60	66.70
Experienced	31	33.30	100.00

Frequencies were derived for the categorical variables agricultural literacy and agricultural experience (refer to Tables 1 and 2). Evaluated agricultural literacy was fairly evenly spread throughout each of the four groups, with more than half (57.00%) describing themselves as at least somewhat informed about and aware of agricultural concerns. The remaining sentence is: However, there were some variations within the groups in terms of specific agricultural knowledge and understanding. While the vast majority of survey respondents claimed to be fairly unskilled, their self-assessment of their agricultural experience was slightly more positive, with one-third identifying as experienced in the field of agriculture.

Conclusion

The first research goal, which was to describe young people's responses to pictures of agriculture-related items, yielded very predictable findings. Overall, the 93 respondents had overwhelmingly unfavorable reactions to the photographs obtained in production and agriculture. The participants expressed strong disapproval and disgust towards the images. Whether purposeful or not, even students reported better levels of agriculture literacy and food competence. This conclusion is congruent with research on visual rhetoric and framing, which show how the news media may persuade viewers to believe or act in a particular way. The conclusion suggests that the news media's influence on viewers' beliefs and actions extends to agriculture literacy and food competence as well, highlighting the power of visual rhetoric and framing in shaping public opinion and behavior. The results of the second goal justified the use of a convenience sample of students from two agriculture courses. A closer look at the breakdown of the students' self-assessments showed that they were fairly evenly distributed among the four levels of agricultural literacy and industry experience. Students' self-reported scores for agricultural literacy and experience trended toward the middle. Although a relatively small cell size may be a confounding factor requiring additional analysis with a larger sample of participants, this distribution allowed the researchers to examine differences among these categorical groups.

Recommendations

The study's findings suggest that young people's reactions to graphic materials that are negatively biased and related to contemporary agricultural production may be influenced by their agricultural experience and literacy. In the context of this study, it was demonstrated that agricultural literacy was an effective predictor of responder reaction, implying that audiences who are more literate are less likely to react negatively and automatically to news articles and visuals about the food and fiber industries. Although the study's findings are limited to the population it sampled, they do offer more proof that

audiences' familiarity and understanding of the food and fiber industries affect how they interpret information about the industries in mass media news contexts. This research may serve as a call to action for agricultural communicators, educators, and producers to better inform Pakistani citizens about its food and fiber systems through formal education programs, industry-based communications efforts, and agritourism.

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