## The Journal of Extension

Volume 58 | Number 6

Article 17

12-1-2020

## Social Media Use for Farmers Market Communications in Illinois

Dandan Tao University of Illinois at Urbana-Champaign

Taylor Kathryne Ruth *University of Nebraska* 

Janie Maxwell
Illinois Farmers Market Association

Hao Feng University of Illinois at Urbana-Champaign



This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 4.0 License.

#### **Recommended Citation**

Tao, D., Ruth, T. K., Maxwell, J., & Feng, H. (2020). Social Media Use for Farmers Market Communications in Illinois. *The Journal of Extension*, *58*(6), Article 17. https://doi.org/10.34068/joe.58.06.17

This Research in Brief is brought to you for free and open access by the Conferences at TigerPrints. It has been accepted for inclusion in The Journal of Extension by an authorized editor of TigerPrints. For more information, please contact kokeefe@clemson.edu.



December 2020 Volume 58 Number 6 Article #v58-6rb7 Research In Brief

## Social Media Use for Farmers Market Communications in Illinois

#### **Abstract**

Social media has been recognized as a powerful tool supporting communication of many topics in the agriculture industry. We explored the use of social media platforms among farmers market managers and specialty crop growers in Illinois through an online survey. Facebook, Instagram, and Twitter were platforms used by the majority of respondents. We found that social media was used primarily for communicating with consumers for marketing purposes. We identified major training needs of farmers market stakeholders related to using social media to promote business and convey food safety information.

Keywords: farmers markets, agricultural communication, social media, specialty crops, food safety

#### **Dandan Tao**

PhD Candidate
Department of Food
Science and Human
Nutrition
University of Illinois at
Urbana-Champaign

# Taylor Kathryne Ruth

Assistant Professor Department of Agricultural Leadership, Education and Communication Institute of Agriculture and Natural Resources University of Nebraska-Lincoln

#### **Janie Maxwell**

Executive Director Illinois Farmers Market Association

#### **Hao Feng**

Professor Department of Food Science and Human Nutrition University of Illinois at Urbana-Champaign

### Introduction

Farmers markets, as a form of direct-to-consumer businesses in local food systems, have played a key role in the encouragement of healthful eating by providing access to nutritional specialty crops such as various fruits and vegetables (Pitts et al., 2015; Singleton et al., 2017). Besides being retail food outlets, farmers markets also serve as social gathering spots for communities and venues where people can meet the farmers who grow their food (Figueroa-Rodríguez et al., 2019). During the last few decades, there was rapid growth of farmers markets and increases in related topics of study around the world, especially in the United States (Brown, 2002; Figueroa-Rodríguez et al., 2019). However, the growth rate of farmers markets in the United States has declined in recent years (U.S. Department of Agriculture, 2019). Lack of efficient communication between growers and consumers has been reported as a barrier to the growth of farmers markets (Ragland & Tropp, 2009), likely explaining interest among farmers market managers in learning how to use word-of-mouth communication to promote their markets (Witzling et al., 2019). Additionally, high-profile foodborne illness outbreaks in recent years caused by the consumption of contaminated fresh produce have highlighted the importance of communicating food safety information at farmers markets (Harrison, 2017). Effective communication is critical to ensuring the continued success of farmers markets and consumers' safe handling of fresh food products.

Significant developments in information and communication technologies have assisted farmers' decision making (Ali & Kumar, 2011). By allowing users to spontaneously share information online and interact with others, social media has created a two-way communication channel. Popular social media platforms such as Facebook, Instagram, and Twitter have been used in agricultural businesses for sharing and managing information and building relationships with customers (Ćirić et al., 2018; Hawley et al., 2018). A few recent studies have addressed the use of social media by local growers for business purposes (Abrams & Sackmann, 2014; Hawley et al., 2018). However, little is known about how farmers market stakeholders use social media or what their perceptions are regarding use of social media to communicate about food quality and food safety topics.

We investigated use of social media among farmers market managers and specialty crop growers in Illinois. Specifically, we sought answers to questions in three areas: (a) what social media tools are most popular, how often they are used, and what perceptions exist regarding their use; (b) how farmers market stakeholders use social media for food quality and food safety communications; and (c) how one's role as a farmers market manager or a grower relates to social media use.

Extension materials have proven an effective educational tool for equipping farmers market managers and vendors with food safety knowledge (Norwood et al., 2019). Therefore, Extension should take an active role in furthering the growth and development of farmers markets (Abel et al., 1999). We believe that a better understanding of how managers and vendors communicate with consumers using social media can help clarify effective Extension approaches to contributing to farmers market viability.

# **Survey Design and Procedures**

## **Survey Document**

We used Qualtrics survey software (Qualtrics, Provo, Utah) to develop a 22-question online survey. The University of Illinois Office for Protection of Research Subjects approved the questions.

## **Survey Procedure**

We worked with the Illinois Farmers Market Association and Illinois Specialty Growers Association to distribute the survey. On August 26, 2019, we invited via email 325 farmers market managers and 532 specialty crop growers in Illinois to participate in the online survey. In the subsequent weeks, we sent reminder emails to encourage participation by those who had not yet responded. One hundred members responded, with 98 agreeing to participate in the survey, generating a response rate of 11.7%.

## **Statistical Analysis**

We used the tabular and summation features in the Qualtrics software and a Microsoft Excel spreadsheet to perform a descriptive analysis of the data. We also used SPSS (Version 28.0 for Windows) to conduct an association analysis, with a p value of <.05 used to reject the null hypothesis of no association.

#### **Results**

# **Demographic Information**

We collected demographic data regarding respondent age, gender, relationship to farmers markets, and years of experience in farmers markets as well as data on farm characteristics (see Table 1). A little over a third of respondents (36.5%, n = 27) were farmers market managers, and slightly less than two thirds (63.5%, n = 47) were specialty crop growers.

**Table 1.**Respondent Demographic information

Characteristic	f	% <sup>a</sup>
Gender		
Female	47	61.8
Male	25	32.9
Other	2	2.63
Prefer not to answer	2	2.63
Age		
18-30	6	7.9
31–40	15	19.7
41-50	8	10.6
50 or older	47	61.8
Role in farmers market		
Farmers market manager	27	36.5
Specialty crop grower	47	63.5
Years in farmers market		
<1 year	8	11.9
1–2 years	4	6.0
3–5 years	20	29.8
6-10 years	14	20.9
>10 years	21	31.3
Products sold in farmers market		
Animal products (egg, milk, cheese, poultry, meat, etc.)	17	15.2
Fresh fruit	33	29.5
Fresh vegetable	34	30.4
Processed fruit product	15	13.4

Processed vegetable product

13 11.6

a Percentage is based on total number for the listed options.

# Social Media Use and Perceptions of Social Media Use for Business Purposes

We asked respondents about communication methods and tools they used for professional and personal purposes. Regarding methods used for communicating with customers, respondents rated the extent to which they agreed with relevant statements using a 5-point Likert scale ( $1 = strongly\ disagree$ ,  $5 = strongly\ agree$ ). The most highly rated communication form was face-to-face engagement at farmers markets (M = 3.61, SD =1.67), followed by social media use (M = 3.37, SD = 1.28). Of platforms used by the 75 respondents who reported having a professional social media account, Facebook, Instagram, and Twitter were the most popular. When asked about frequency of social media use for posting business information, almost half of the respondents (47.6%, n = 40) chose "a few times a week." Building relationships with customers, generating market awareness, and stimulating market traffic were the top three purposes for using social media in business. When questioned further about use of social media, again rating the extent to which they agreed with relevant statements using the aforementioned 5-point Likert scale, respondents judged that social media is easy to use (M = 3.76, SD = 1.27) and that they had the time (M = 3.16, SD = 1.28) and skill (M = 3.39, SD = 1.28)SD = 1.30) to do so for promoting business. Also, they expressed agreement that social media could provide benefits for their business (M = 4.21, SD = 1.27) and allowed them to feel connected to customers (M = 3.84, SD = 1.27). Respondents also agreed that posting more on social media led to increased numbers of farmers market customers (M = 4.31, SD = 1.04), that reading social media posts helped them know customer demands (M = 3.95, SD = 1.02), and that reading social media posts helped them understand how to make products more attractive (M = 3.68, SD = 1.10). However, they were in less agreement regarding whether they learned about good food safety practices via social media (M = 3.14, SD = 1.17).

# Use of Social Media for Communication About Food Quality and Food Safety

We also asked respondents about their use of social media for communication about food quality and food safety (see Table 2). We observed higher agreement regarding posting about produce quality (M = 3.26, SD = 1.41) than produce safety (M = 2.51; SD = 1.29). Likewise, respondents indicated that they read more posts about produce quality (M = 3.25, SD = 1.33) than produce safety (M = 3.01, SD = 1.44). There was a fairly even distribution of motivations for learning about social media use, with the highest scores being for learning how to promote business (29.9%) and how to identify consumer needs (27.4%), indicating that marketing—versus communication of food quality or food safety information—was the primary purpose for respondents' professional use of social media.

**Table 2.**Use of Social Media for Food Quality and Safety Communications

Strongly	Somewhat	Neither agree	Somewhat	Strongly
agree	agree	nor disagree	disagree	disagree

Item	%	No.								
I write posts about produce quality on social media.	23.08	18	24.36	19	28.21	22	3.85	3	20.51	16
I write posts about produce safety on social media.	5.26	4	21.05	16	26.32	20	14.47	11	32.89	25
I read posts about produce quality on social media.	15.79	12	31.58	24	27.63	21	7.89	6	17.11	13
I read posts about produce safety on social media.	15.79	12	25.00	19	23.68	18	11.84	9	23.68	18

# Relationship Between Respondent Role in Farmers Markets and Social Media Use

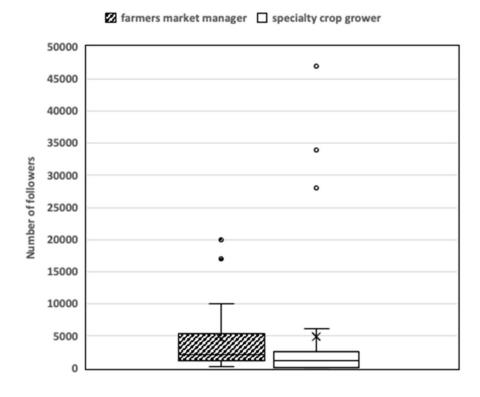
We conducted a cross-tabular chi-square analysis to identify associations between variables (see Table 3). The behavior of posting business information on social media was associated with respondent role in farmers markets. Farmers market managers tended to post business information more frequently than growers, a circumstance that might be associated with average number of followers (see Figure 1). Respondent role had a significant influence on the behavior of posting about food safety on social media, with managers being more likely to do so than growers. When we asked respondents about their attitudes toward the benefits of using social media, their responses also were associated with their roles. For example, farmers market managers expressed higher agreement with the statement "social media can provide benefits for my business."

**Table 3.**Associations Between Variables Determined Via Chi-Square Test

	Respondent role in farmers markets		
Social media use variable	X2	р	
Frequency of using social media for posting business information	25.059	.015	
Agreement with the statement "I write posts about produce safety on social media."	26.642	.046	
Agreement with the statement "Social media can provide benefits for my business."	26.385	.049	

Figure 1.

Numbers of Followers on Professional Social Media Accounts Respondents Used Most Often



### **Discussion**

Abrams and Sackmann (2014) conducted a survey study in Illinois to understand social media use and found that Facebook and Twitter were popular social media platforms in farmers market businesses, findings with which our results are consistent. Hawley et al. (2018) reported similar findings. Also, use of Instagram as a newer communication tool is growing among farmers market managers and local growers, according to our study. Overall, evidence shows that social media has become a critical channel for agricultural businesses such as farmers markets. Our findings indicate that marketing and interacting with customers are the primary reasons farmers market businesses use social media. Additionally, we observed an interest in posting or reading posts on food quality and food safety topics.

Most previous studies investigating the attitudes of stakeholders toward food safety at farmers markets have been focused on consumers (Young et al., 2017). In our study, we focused on farmers market managers and specialty crop growers. An interesting finding was that one's behavior and perception of social media use are highly dependent on one's role in farmers markets.

Extension should work closely with farmers market stakeholders to provide training on social media use. Because farmers market managers may possess more favorable attitudes toward social media compared to specialty crop growers, Extension may have better results tailoring training to managers. Additionally, Extension could develop food quality and food safety social media kits that both managers and growers could customize for use in promoting their businesses. Future research also should identify consumers' preferences regarding learning about food quality and food safety online to guide future Extension efforts. Qualitative interviews with farmers' market managers also could reveal insight into their social media use that cannot be captured through survey procedures.

It is recognized that getting prompt information from market managers is challenging. While some farmers

market managers work full time and are paid, many others are unpaid volunteers who do not have strong obligations as paid managers do (Meeks & Culp, 2011), perhaps making it hard to keep in touch with them. Having community development Extension educators serving as market managers and organizing regular coordination has been proposed as a way to increase the long-term viability of farmers markets (Civittolo, 2012). Our results also indicate that market managers rarely communicate about produce safety. Previous studies have shown that food safety training is a type of education that many market managers need most (Berry et al., 2013; Norwood et al., 2019). Given this circumstance, lack of means for gaining food safety knowledge and expertise might be one reason the market managers in our study tended not to communicate about produce safety.

# Conclusion

We investigated use of social media among farmers market managers and local growers in Illinois. The popular social media tools used for communicating about farmers market businesses were identified. We observed positive attitudes toward using social media for posting or reading food safety-related information. Respondent role has a significant impact on social media use. From our findings, we can conclude that social media is highly accepted as a good tool for farmers market communication. However, the low response rate for the survey (11.7%) might be a limiting factor to be considered when drawing conclusions from the work. We believe that additional effort to collect data from a larger population would help validate our results. More importantly, an understanding of the stakeholders' behaviors and needs regarding use of social media would help Extension professionals design projects for improving farmers market performance. For example, Extension educators could contribute to the improvement of farmers markets by offering workshops for managers and vendors on digital marketing and business management as well as on providing information via social media regarding food safety practices.

#### **Author Note**

Our study was partially supported by the Illinois Specialty Crop Grant Program (DUNS Number: 041544081) and the Illinois Agricultural Experiment Station.

Correspondence concerning this article should be addressed to Hao Feng. Email: haofeng@illinois.edu

#### References

Abel, J., Thomson, J., & Maretzki, A. (1999). Extension's role with farmers' markets: Working with farmers, consumers, and communities. *Journal of Extension*, *37*(5), Article 5FEA4. https://www.joe.org/joe/1999october/a4.php/joe/rb1.php

Abrams, K. M., & Sackmann, A. (2014). Are alternative farmers yielding success with online marketing and communication tools for their social capital and business viability? *Journal of Applied Communications*, 98(3), 5. <a href="https://newprairiepress.org/jac/vol98/iss3/5">https://newprairiepress.org/jac/vol98/iss3/5</a>

Ali, J., & Kumar, S. (2011). Information and communication technologies (ICTs) and farmers' decision-making across the agricultural supply chain. *International Journal of Information Management*, *31*(2), 149–159. https://doi.org/10.1016/j.ijinfomgt.2010.07.008

Berry, J., Moyer, B., & Oberholtzer, L. (2013). Assessing training and information needs for Pennsylvania

farmers markets: Results from a 2011 survey of market managers. *Journal of the NACAA*, 6(1). https://www.nacaa.com/journal/index.php?jid=194

Brown, A. (2002). Farmers' market research 1940–2000: An inventory and review. *American Journal of Alternative Agriculture*, 17(4), 167–176. <a href="https://doi.org/10.1079/AJAA200218">https://doi.org/10.1079/AJAA200218</a>

Ćirić, M., Carić, M., & Kuzman, B. (2018). Farmer innovativeness and its impact on internet and social media adoption. *Economics of Agriculture*, 65(1), 243–256. <a href="https://doi.org/10.5937/ekoPolj1801243C">https://doi.org/10.5937/ekoPolj1801243C</a>

Civittolo, D. (2012). Extension's role in developing a farmers' market. *Journal of Extension*, *50*(1), Article v50-1iw1. <a href="https://www.joe.org/joe/2012february/pdf/JOE\_v50\_1iw3.pdf">https://www.joe.org/joe/2012february/pdf/JOE\_v50\_1iw3.pdf</a>

Figueroa-Rodríguez, K. A., Álvarez-Ávila, M. D. C., Hernández Castillo, F., Schwentesius Rindermann, R., & Figueroa-Sandoval, B. (2019). Farmers' market actors, dynamics, and attributes: A bibliometric study. Sustainability, 11(3), 745. https://doi.org/10.3390/su11030745

Harrison, J. A. (2017). *Food safety for farmers markets: A guide to enhancing safety of local foods.* Springer. <a href="https://link.springer.com/content/pdf/10.1007/978-3-319-66689-1.pdf">https://link.springer.com/content/pdf/10.1007/978-3-319-66689-1.pdf</a>

Hawley, J. L., Hall, K., & Chowdhury, A. (2018). Agricultural communicators' use of mobile devices and social media in USA. *Rural Extension and Innovation Systems Journal*, *14*(1), 101. https://search.informit.com.au/documentSummary;dn=563584239682238;res=IELHSS

Meeks, P., & Culp, K., III (2011). Developing a farmers' market volunteer team in lieu of a paid manager. *Journal of Extension*, 49(3), Article v49-3iw3. <a href="https://www.joe.org/joe/2011june/iw3.php">https://www.joe.org/joe/2011june/iw3.php</a>

Norwood, H. E., Neal, J. A., & Sirsat, S. A. (2019). Food safety resources for managers and vendors of farmers markets in Texas. *Journal of Environmental Health*, 82(2), 8–12.

Pitts, S. B. J., Wu, Q., Demarest, C. L., Dixon, C. E., Dortche, C. J., Bullock, S. L., & Ammerman, A. S. (2015). Farmers' market shopping and dietary behaviours among Supplemental Nutrition Assistance Program participants. *Public Health Nutrition*, *18*(13), 2407–2414. <a href="https://doi.org/10.1017/S1368980015001111">https://doi.org/10.1017/S1368980015001111</a>

Ragland, E., & Tropp, D. (2009). *USDA national farmers market manager survey, 2006* (No. 1470-2016-120666). <a href="https://doi.org/10.22004/ag.econ.147043">https://doi.org/10.22004/ag.econ.147043</a>

Singleton, C. R., Baskin, M., Levitan, E. B., Sen, B., Affuso, E., & Affuso, O. (2017). Perceived barriers and facilitators of farm-to-consumer retail outlet use among participants of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in Alabama. *Journal of Hunger & Environmental Nutrition*, 12(2), 237–250. <a href="https://doi.org/10.1080/19320248.2016.1157550">https://doi.org/10.1080/19320248.2016.1157550</a>

U.S. Department of Agriculture. (2019). *National count of farmers market directory listings* 1996–2019. <a href="https://www.ams.usda.gov/sites/default/files/media/NationalCountofFarmersMarketDirectoryListings082019.pg">https://www.ams.usda.gov/sites/default/files/media/NationalCountofFarmersMarketDirectoryListings082019.pg</a>

Witzling, L. C., Shaw, B., Wilson, M., & Morales, A. (2019). Promoting farmers' markets: Preferences of farmers' market leaders. *Journal of Extension*, *57*(3), v57-3a4. <a href="https://www.joe.org/joe/2019june/a4.php">https://www.joe.org/joe/2019june/a4.php</a>

Young, I., Thaivalappil, A., Reimer, D., & Greig, J. (2017). Food safety at farmers' markets: A knowledge

synthesis of published research. *Journal of Food Protection*, 80(12), 2033–2047. https://doi.org/10.4315/0362-028X.JFP-17-193

<u>Copyright</u> © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the <u>Journal Editorial Office</u>, <u>joeed@joe.org</u>.

If you have difficulties viewing or printing this page, please contact <u>JOE Technical Support</u>