Introduction

Social media, a digital communications tool facilitating the communication of user-generated content (Dobbins et al., 2021; Kaplan & Haenlein, 2010), has become an important medium enabling users to interact, create, share, retrieve, and exchange data and ideas using text, images, and video (Saravana & Suchiradipta, 2016; Wagler & Cannon, 2015). The proliferation of smartphones and mobile internet users worldwide has made it an indispensable means of communication (Casey et al., 2016). Unlike traditional media, such as television, radio, and print, which provide information to the audience, social media offers a two-way communication channel, enabling the public to engage and contribute (Rutsaert et al., 2013). Individuals also use social media to create online communities to exchange information, concepts, private messages, and other types of content (Ghosh et al., 2021). Social media platforms have transformed traditional communication paradigms, shifting from one-way broadcasting to interactive, multi-directional exchanges.

This shift is characterized by the democratization of information sharing, where individuals can engage in conversations and share content with a global audience, reshaping interpersonal and societal communication dynamics. Information encompasses disseminating factual data and fosters innovation (Amaral et al., 2012). Social media has allowed most individuals to communicate more easily and effectively. Social media aids social contact and facilitates the exchange of ideas and information in a manner previously unattainable through traditional media channels (Khaeriyah et al., 2023). Social media is more frequently used to disseminate information than in previous years (Ghosh et al., 2021; Harjule et al., 2023).

"The United States' food and agricultural systems are critical components of the nation's economy and public health" (Woodside, 2024, p. 40). Social media presents opportunities and challenges when communicating scientific information about food and agricultural systems to producers and consumers. Reaching consumers where they receive information is a benefit of social media since most individuals lack food and fiber literacy. However, a challenge is the proliferation of non-credible information that can influence public perception, purchasing habits, and production practices (Woodside, 2024). Food and agricultural system topics including GMOs, organic farming, climate change, food safety standards, and environmental practices have received attention, and controlling inaccurate information requires diligent monitoring and a rapid response (Woodside, 2024).

The popularity of these social media platforms is evidenced by their extensive user bases and the frequency with which individuals engage with them. The Pew Research Center (2024a) reported United States adults under 30 used at least five of the 11 (Instagram, Snapchat, TikTok, Reddit, X (Twitter), YouTube, Pinterest, LinkedIn, WhatsApp, BeReal, and Facebook) social media platforms included in the 2023 survey. Popularity of the platforms varied but adults under 30 were more inclined to use Instagram (78%), Snapchat (65%), and TikTok (62%) compared to older adults. Facebook demonstrated the lowest gap in usage by age ranging from 60% (lowest) for ages 65+ and 93% (highest) for adults under 30 (Pew Research Center, 2024a). All ages reported usage of YouTube, with 93% of adults under 30 using the platform (Pew Research Center, 2024a). X usage was reported at 42% among young adults. LinkedIn (32%), WhatsApp (32%), and BeReal (12%) were the only social media platforms with lower reported usage among those under 30 (Pew Research Center, 2024a). This widespread adoption underscores the significant role these platforms play in the daily lives of users, particularly among younger demographics who are increasingly moving away from traditional media.

College students, who fit the young adult demographic, are known as “digital natives” because digital technology was present in their daily lives since birth, and it is presumed their familiarity with using technology also means they are familiar with navigating shared information (Ziv & Bene, 2022). Research findings indicate college students are among the most active users of social networking platforms across different age groups (Azizi et al., 2019). College students have discovered social media to be a portal for news and information on current events across diverse topics as they perceive the platforms as having meaningful and timely information (Kim et al., 2014). Olaimat et al. (2020) found most college students used the Internet and social media to obtain information related to COVID-19 during its outbreak. This is attributed to the expansion of social media over the past ten years especially in the educational sector, where it has become an essential instrument for raising social awareness and encouraging community involvement (Rijal et al., 2024). Rather than using traditional news channels such as CNN, the *New York Times*, and other news networks, students prefer social media platforms such as X, Facebook, LinkedIn, and YouTube (Zaker, 2024). United States adults under the age of 30 reported consuming news from television (46%), radio (27%), and print publications (19%) compared to digital devices at 91% (Pew Research Center, 2024b). Social media (78%) was the most used digital news platform followed by searches (74%), news websites or apps (62%), and podcasts (34%) (Pew Research Center, 2024b). Among regular social media news consumers, they used TikTok (45%) the most, followed by Reddit (43%), Instagram (39%), X (38%), YouTube (24%), and Facebook (22%) (Pew Research Center, 2024c).

College students pursuing degrees or careers in agriculture, or those with personal interests like gardening or sustainable living, have a strong motivation to seek out agriculture-related information (Howard et al., 2017). As students rely more heavily on social media for agriculture-related information, they are likely to experience a corresponding increase in their agricultural knowledge (Rabbi, 2024). This increased exposure can lead to more informed attitudes toward agricultural practices and ultimately influence their behaviors positively if the media consumed is accurate (Rabbi, 2024). Engagement with reliable and informative agricultural content can improve students' decision-making and critical thinking regarding contemporary farming practices (White, 2018). Consequently, the quality and trustworthiness of information disseminated on social media are essential for fostering a beneficial influence on students' agricultural knowledge and behavior.

Conversely, college students' use of social media can subject them to biased information, thereby influencing their opinions and leading to misinformed decision-making (Goyanes & Demeter, 2020). These behaviors may yield implications for agriculture as a consumer-driven industry where people have less experience with agricultural production than previous generations (Allen, 2022). While these platforms offer opportunities for engagement, education, and outreach, concerns regarding misinformation remain. Misinformation within this context is the sharing of inaccurate agricultural-related information without the intention to cause harm (Wu et al., 2019). Examples of agricultural-related misinformation include the notion that bell pepper (Capsicum annuum) fruit can be classified as male or female, which has garnered public attention in the media (Lomeli, 2021). Additionally, claims that the "Dirty Dozen" list of fruits and vegetables is harmful due to elevated pesticide residues are incorrect (Cato et al., 2022).

Despite the prevalence of social media in their daily lives, scant research has investigated how college students employ these platforms to seek, disseminate, and interact with agriculture-related content. Considering the extensive usage of social media by college students and their position as young adults with enduring attitudes and behaviors, analyzing their interaction

patterns with agricultural information can provide significant insights into wider public information trends. Scholars have argued that college students might act as a "bellwether population," whose attitudes and activities frequently foreshadow and shape wider societal changes (Hargittai, 2010; Westerman et al., 2014). Moreover, as digital natives, they frequently lead in the adoption and transformation of novel methods of information consumption and public discourse (Pew Research Center, 2022). Examining their engagement with agricultural information on social media not only addresses a gap in literature but also aids in broader initiatives to enlighten the public about essential agricultural issues, hence fostering more sustainable and knowledgeable food systems.

Theoretical Framework

This study was guided by Ball-Rokeach and DeFleur's (1976) media dependency theory. Media dependency theory suggests that the more an individual depends on media to satisfy their needs, the more important and influential the media becomes for them (Ball-Rokeach & DeFluer, 1976; Uddin & Karim, 2023). "The primary reason for this focus is that the degree of audience dependence on media information is a key variable in understanding when and why media messages alter audience beliefs, feelings, or behavior" (Ball-Rokeach & DeFluer, 1976, p. 5). Ball-Rokeach and DeFleur (1976) described an audience member's dependency as stemming from the need to find information for decision-making, the need to connect with people beyond one's neighborhood community, the need to act, or the need to escape personal problems (entertainment/relaxation). The primary hypothesis of the theory is based on how a person who depends on media will ultimately relate to how important the media will be in influencing their life.

Media and society are inseparable, and how people utilize media is influenced by this relationship (Charanza et al., 2012). The influence of media on an audience determines the interrelationship between a societal system's level of stability or instability, the media system (number of platforms and information functions of mass media), and the audience's dependency on information from media. This interrelationship may result in cognitive, affective, and behavioral changes of the audience (Ball-Rokeach & DeFluer, 1976). Audience dependency increases when more needs (information, social connections, entertainment, etc.) are met. Audience dependency also increases when society is less stable (conflict or social change). The greater an audience's dependency on media the greater the potential of media impacting the beliefs, attitudes, values, feelings, and behaviors of the audience (Ball-Rokeach & DeFluer, 1976).

In the context of this study, these dependency relations are explored through the interactions of college students, who are in the stage of young adulthood. The disconnect from agriculture in contemporary society creates ambiguity, as many individuals have been removed from farming practices for several generations (Telg et al., 2022). This knowledge gap may lead to a heightened reliance on media to understand agricultural issues. The rise of digital media has significantly expanded the availability of information, offering platforms that facilitate social connections and provide access to current events, entertainment, and specialized knowledge, including agricultural content (Paudel & Baral, 2018). Research indicates a growing dependency on these digital platforms for information consumption (Paudel & Baral, 2018). However, it remains unclear whether this dependency extends specifically to agriculture-related information and which mass media channels individuals are most reliant on for insights into agricultural topics.

Literature supports the applicability of the media dependency theory in understanding college students' use of social media for agriculture-related information-seeking. By examining the construct of the theory, the study can explore the extent of college students' dependency on social media for agriculture information. Howard et al. (2017) found students perceived social media platforms like Facebook and Twitter as relatively trustworthy and Instagram and YouTube somewhat trustworthy sources for information about the beef industry. This highlights the potential impact on students' perceptions as applied in the media dependency theory. However, students also expressed concerns about information availability regarding food safety practices and other beef supply information suggesting social media could shape their attitudes and behaviors towards agriculture and food consumption (Howard et al., 2017).

Opat et al. (2018) used media dependency theory to examine how doctoral students in plant and soil sciences at Texas Tech University used social media, particularly Facebook, to promote agriculture and share their research. The results indicated limited use of personal social media accounts for this purpose, despite the theory suggesting greater dependency on media could influence audience cognitions and behaviors related to controversial agricultural topics like genetically modified crops. Media dependency is heightened during periods of information ambiguity or instability in society (Lin, 2015).

Purpose and Objectives

The purpose and results described are part of a larger study about college students and misinformation in agriculture. This study is part of a larger investigation that examined college students' preparedness and ability to identify agriculture-related misinformation on social media, particularly as they transition into roles as the next generation of agricultural communicators and educators. All data for the larger study, including the subset analyzed in this paper, were collected on the same day. The purpose of the study components reported here was to understand how college students, enrolled in a junior-level communicating agriculture to the public class, accessed agriculture-related information. The following objectives guided this study:

1. Describe the selected demographic characteristics of respondents.
2. Identify the frequency with which respondents seek and access agriculture-related information from identified sources.
3. Describe the extent to which students seek and consume agriculture-related information through social media.
4. Identify the social media platforms used to access agriculture-related information and the frequency of platform use.

Methods

This study utilized a descriptive cross-sectional survey approach to capture participants' views and behaviors at a specific moment. A cross-sectional survey is a research approach employed to gather data from a community or a representative subset at a singular point in time (Wiersma & Jurs, 2009). This method is especially beneficial for investigating correlations among variables without intervention, enabling researchers to assess existing situations, beliefs, or practices in their natural state (Saunders et al., 2009). This study's methodology effectively captured the present condition of students' interactions with misinformation on agricultural-related social media. Cohen et al. (2007) assert that cross-sectional designs are advantageous for

describing and interpreting the characteristics of a group or phenomenon at a certain moment in time. Similarly, descriptive surveys serve as useful instruments for detecting the existence of specific traits, behaviors, or circumstances within a community (Ary et al., 1990). This strategy aligned with the study's aim of comprehending the preparation and capabilities of college students without seeking to affect or modify those characteristics.

This study is not without limitations. The sample was limited to junior-level college students participating in the Communicating Agriculture to the Public course. This group established a suitable baseline for understanding students' utilization of social media for agricultural information acquisition; nonetheless, the findings are not generalizable to students across different academic levels, disciplines, or institutions. Students enrolled in this course may experience enhanced exposure to agricultural communication principles, perhaps shaping their viewpoints relative to classmates not enrolled in the course. The research was performed in a single institution, constraining the applicability of the results to diverse geographic, cultural, or institutional settings. Subsequent research could mitigate these constraints by incorporating a wider and more diverse sample from various institutions, utilizing longitudinal or mixed methods approaches, and integrating behavioral or observational data to enhance self-reports.

Population and Research Design

The study population was comprised of undergraduate college students in the Dale Bumpers College of Agricultural, Food, and Life Sciences at the University of Arkansas who took a communicating agriculture to the public course during the spring 2024 semester. The course had an enrollment of 144 students, with all but nine pursuing majors in agriculture, food, or life sciences. Enrolled students represented 11 of the 14 offered majors in Dale Bumpers College of Agricultural, Food, and Life Sciences. The course provided an overview of public communications theories and practices and satisfied a communications-intensive course requirement of Dale Bumpers College. Thus, the course is considered a large enrollment for the College and was designed to cover appropriate course content for the scope of the study. A census method was used to gather data from all the students who registered for the course. Census allows researchers to obtain data from the entire population (Lavrakas, 2008). A census approach involves collecting data from every member of a population, making it especially suitable when the population is relatively small and accessible, thereby ensuring complete coverage without the need for sampling (Lavrakas, 2008).

Instrumentation

The instrument was adapted and modified from a previous study by Butler-Horton (2021) on college students' perception of ability versus actual ability to identify fake news on agricultural topics. The adapted instrument was modified in the context of this current study based on the research objectives. Closed-ended questions with response options for age, gender, community type, and classification were used to collect demographic characteristics. Respondents were asked about sources they used to obtain agriculture-related information. Responses were collected using a five-point Likert scale (1=Never to 5=Very Frequently) for each source option (social media, textbooks, television, radio, print newspapers/magazines, and news websites/apps). A five-point Likert scale (1=Never to 5=Always) was used to collect responses to nine statements about student behaviors when seeking and consuming agriculture-related information through social media. Finally, respondents identified which social media

platforms they used for agriculture-related information. A follow-up question used a five-point Likert scale (1=Never to 5=Daily) to assess the frequency of social media platform use. To ensure the internal reliability of the instrument, Cronbach's Alpha was run on the Likert-scale questions from the pilot study (Ary et al., 2019). The study was piloted on 10 students in the class, who was subsequently excluded from the main data collected for this study. Data collected from the pilot study were coded and entered into SPSS version 29 to compute the reliability of the instrument. The Cronbach Alpha values for the Likert-scale questions ranged from .85 to .93, suggesting the research instrument was reliable and could be used for the main data collection. Content validity of this instrument was ensured by two faculty members and three graduate students with expertise who are not part of the research team in agricultural communications and communications research for clarity of thoughts and accuracy (Ary et al., 2019). Suggestions from the panel were reviewed and integrated to improve the wording of some questions as well as the flow. The researchers incorporated all the changes into the research instrument before the main data collection. With a census conducted, a total of 103 students completed the research instrument, representing a 72% response rate.

Data Collection and Analysis

A survey instrument administered via Qualtrics was used to collect data after IRB approval was obtained from the University of Arkansas Human Subject Research Institutional Board (Protocol # 242519399). Before students participated in the study, informed consent was obtained. The consent form communicated voluntary involvement, options to withdraw at any point during the survey, and anonymity in result reporting. Data collection occurred during a regular course meeting time during the spring 2024 semester. The instrument was provided using a QR code linked to Qualtrics.

Responses were downloaded from Qualtrics into Microsoft Excel, which was later imported into IBM® SPSS version 29 for data analysis. Any incomplete questionnaires were removed before analysis. Data obtained was analyzed with frequencies and percentages reported for research objectives one, two, and four. Means and standard deviations were computed and reported for research objective three.

Results

Objective one sought to describe the characteristics of students involved in the study. The respondents (n = 103) consisted of more females, 57 (55.3%), than males 46 (44.7%), as presented in Table 1. Whereas most of the respondents, 47 (45.6%) and 46 (44.7%) were from rural and suburban communities respectively, a few, 10 (9.7%) were from urban communities. Respondents reported classification as 16 (15.5%) freshmen, 46 (44.7%) sophomores, 30 (29.1%) juniors, and 11 (10.7%) seniors. All respondents were in the young adult, 30 or less range, with most (90.3%) of the respondents being 20-21 (n = 62) and 18-19 (n = 31).

Table 1
Students' Characteristics

Variable	*f*	%
Gender		
Male	46	44.7
Female	57	55.3

Variable	*f*	%
Community of origin		
Rural	47	45.6
Suburban	46	44.7
Urban	10	9.7
Class classification		
Freshman	16	15.5
Sophomore	46	44.7
Junior	30	29.1
Senior	11	10.7
Age of Respondents (years)		
18-19 years old	31	30.1
20-21 years old	62	60.2
22-23 years old	7	6.8
24-25 years old	3	2.9

Source: Survey, 2024 *n* = 103, Age (*Min= 18, Max= 25, M=20.6, SD= 1.26*)

The second objective of this study sought to examine the frequency with which respondents utilized various sources when seeking agriculture-related information or news. Table 2 presents the detailed findings. The data revealed a notable reliance on digital platforms, with 59(57.3%) respondents very frequently obtaining agricultural news from websites or mobile apps. Social media emerged as the second most used source, with 32(31%) of participants reporting very frequent use. Traditional media, while less frequently accessed, still played a role: 22(21.4%) rely on television, 17(16.5%) on textbooks, and 15(14.6%) utilized print newspapers or magazines for agricultural news very frequently.

Respondents used these sources only occasionally, with 48(46.6%) for television, 39(37.9%) for textbooks, 31(30%) for both social media and print newspapers/magazines, and 29(28.1%) for both radio and news websites/apps. A minority of research respondents, 3(2.9%), reported never using news websites/apps, and 10(9.7%) indicated they never used social media as sources of agricultural news.

Table 2

Frequency of Agriculture-related News Sources Used

	Never	Very rarely	Rarely	Occasionally	Very frequently		
	f	*f*	*f*	*f*	*f*	*M*	*SD*
News websites/apps	3	5	7	29	59	4.42	1.10
Television	7	7	19	48	22	3.73	1.16
Social media	10	16	14	31	32	3.63	1.41
Textbooks	13	15	19	39	17	3.32	1.29
Print Newspapers/magazines	18	17	22	31	15	3.11	1.38
Radio	34	14	19	29	7	2.62	1.37

Source: Survey, 2024 *n* = 103

Objective three aimed at assessing the extent to which students seek and consume agriculture-related information through social media. Table 3 provides findings for the nine statements related to respondents' social media behaviors. Responses were measured on a Likert scale, ranging from 1 (Never) to 5 (Always).

The highest mean score was observed for statement "I use social media for agriculture-related entertainment" (M = 3.01, SD = 1.13), indicating respondents, on average, reported using social media sometimes for agricultural entertainment purposes. The second-highest mean (M = 2.90, SD = 1.06) was associated with the statement "I use social media to obtain national news on agriculture-related topics," which meant respondents occasionally engaged with social media for national agricultural news. Conversely, the statement "I use social media to obtain international agriculture-related information" yielded a mean score of 2.62 (SD = 1.14), indicating international agriculture-related content was sought less frequently. The lowest mean (M = 1.42, SD = 0.95) for the statement "I use social media to create online blogs to share agriculture-related information," suggested respondents rarely or never engaged in content creation related to agriculture on social media platforms.

Undergraduate students involved in this study generally sought and consumed agriculture-related information on social media less frequently, as demonstrated in the overall mean score of 2.38 (SD = 0.82). The standard deviation indicated that, while some variability in response exists, most were clustered near the mean, demonstrating limited divergence in behavior across respondents.

Table 3

Extent to Which Students Seek and Consume Agriculture-related Information Using Social Media

Statements	*M*	*SD*
I use social media to look for information about agriculture-related academic activities.	2.56	1.07
I use social media for agriculture-related entertainment.	3.01	1.13
I share my thoughts and opinions about agriculture-related topics on social media.	1.99	1.06
I use social media to share agriculture-related information from experts.	2.11	1.15
I consult social media for credible agriculture-related information.	2.34	1.11
I use the information on social media for my agriculture-related student projects.	2.49	1.15
I use social media to obtain national news on agriculture-related topics.	2.90	1.06
I use social media to obtain international agriculture-related information	2.62	1.14
I use social media to create online blogs to share agriculture-related information.	1.42	0.95

n = 103: 1= Never, 2 = Rarely, 3 = Sometimes, 4 = Very often, and 5 = Always

Objective four sought to identify social media platforms utilized by respondents and describe the frequency with which students engaged on these platforms. The most used social media platforms were Instagram 78(76.7%), YouTube 66(64.41%), Facebook 59(57.3%), and TikTok 52(50.5%) (see Table 4). WhatsApp 1(1.0%), Pinterest 16(15.5%), and Reddit 14(13.6%) were the least used social media platforms (see Table 4). Other platforms used by students include X, LinkedIn, and Snapchat.

Table 4

Types of Social Media Platforms Used by Students

Type of social media	*f*	%
Facebook	59	57.3
TikTok	52	50.5
WhatsApp	1	1.0
X (Twitter)	28	27.2
Instagram	78	76.7
LinkedIn	22	21.4
Snapchat	24	23.3
Pinterest	16	15.5
Reddit	14	13.6
YouTube	66	64.41

Source: Survey, 2024 $n = 103$

Concerning the frequency of use of social media platforms among students, the findings indicate that half of the students who use Instagram 50, 48.5%) utilize it daily, 15(14.6%) use it frequently, and 14(13.6%) use it occasionally. YouTube, the second social media platform for frequency, was utilized by 17(16.5%) daily, 26(25.2%) frequently, 19(18.4%) occasionally, and 4(3.9%) rarely. Regarding Facebook, 19(18.4%) used it daily, 14(13.6%) utilized it frequently, 18(17.5%) used it occasionally, and 8(7.8%) rarely used Facebook (see Table 5). TikTok was used daily by 31(30.1%), frequently by 14(13.6%), occasionally by 6(5.8%), and never by 1(1%) of respondents. X, LinkedIn, Pinterest, and Reddit have the lowest daily usage among respondents.

Table 5

Frequency of Use of Social Media Platforms Among Students

Social media platforms	Never		Rarely		Occasionally		Frequently		Daily	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
Facebook	-	-	8	7.8	18	17.5	14	13.6	19	18.4
TikTok	1	1	-	-	6	5.8	14	13.6	31	30.1
X (Twitter)	-	-	7	6.8	13	12.6	3	2.9	5	4.9
Instagram	-	-	-	-	14	13.6	15	14.6	50	48.5
LinkedIn	-	-	2	1.9	10	9.7	7	6.8	3	2.9
Snapchat	-	-	1	1.0	2	1.9	3	2.9	18	17.5
Pinterest	-	-	2	1.9	6	5.8	5	4.9	3	2.9
Reddit	-	-	3	2.9	5	4.9	3	2.9	3	2.9
YouTube	-	-	4	3.9	19	18.4	26	25.2	17	16.5

Source: Survey, 2024 $n = 103$

Conclusions, Implications, and Recommendations

University students commonly utilize social networking sites due to the widespread use of cellphones and accessibility convenience of these platforms (Azizi et al., 2019; Casey et al., 2016; Pew Research Center, 2024a). Social media has provided college students with additional channels to obtain news and information (Kim et al., 2014). In this study, we assessed how

college students in Dale Bumpers College of Agricultural, Food, and Life Sciences at the University of Arkansas interacted with social media in the context of seeking agriculture-related information and the social media platforms frequently utilized by these students.

More female students enrolled in the communicating agriculture to the public course than males. This aligned with 2023 institutional data that showed Dale Bumpers College of Agricultural, Food, and Life Sciences undergraduate program enrollment was higher for females (n = 1513) than males (n = 645) (Office of Strategic Analytics and Insights, 2023). Data obtained on the location of respondents demonstrated the majority were from rural and suburban communities. The results obtained on the student's classification level indicated that most respondents were in their sophomore or junior years. The course was listed at the junior level, so having more students classified as sophomores or juniors aligned with expected enrollment for the course. All respondents were categorized as young adults (Pew Research Center, 2024a) with reported ages of 18-25 and an average age of 20.6 years. Most college students in the United States are within the age range of 21 -24 years (National Center for Education Statistics, 2022). The demographic characteristics of the respondents in this study revealed a diverse group of students encompassing a range of ages and backgrounds. This diversity was helpful for understanding these students' information-seeking behaviors and preferences.

This study found most students obtained their agriculture-related news and information very frequently from news websites/apps and social media, which aligned with Kim et al. (2014), the Pew Research Center (2024b), and Zaker (2024). Despite literature (Pew Research Center, 2024b) identifying social media as the most used digital news platform for young adults, respondents used news websites/apps most frequently. As supported by Pew Research Center (2024b), television received the third-highest frequency of use. Television also received fewer never or rarely ratings for frequency of obtaining agriculture-related information compared to social media among respondents. This indicates differences from Zaker's (2024) findings of student preference of social media for news information and Howard et al.'s findings of social media platforms as trustworthy sources for agriculture-related information among college students. These findings underscore the need to understand young adults' use of social media to obtain agriculture-related information and to understand their perceptions of social media trustworthiness.

While undergraduate students frequently engaged with digital content, their use of social media for agriculture-specific information appeared less pronounced. Respondents utilized social media for agriculture-related entertainment, national news on agriculture-related topics occasionally, and international agriculture-related information less frequently. Respondents rarely created and shared agriculture-related information on social media. While Kim et al. (2014) found that college students perceive social media as a meaningful channel for news and information, the limited use of social media for national and international agriculture-related content in this study suggests that students may be relying on other sources for such information. Given that web/app usage was higher, it is plausible that students accessed national or international news directly from news websites or apps, bypassing social media altogether. This aligns with Olaimat et al. (2020), who found that students turned to both the Internet and social media during the COVID-19 pandemic, indicating flexibility in their choice of platforms based on the nature and urgency of the topic. From a media dependency theory lens (Ball-Rokeach & De Fleur, 1976), this suggests that students may differentiate between platforms depending on their perceived credibility or appropriateness for specific types of information.

Howard et al. (2017) noted that motivation to seek agriculture-related information tends to be higher among individuals pursuing degrees or careers in the field. However, despite being enrolled in a course on communicating agriculture to the public, and most pursuing degrees in agricultural, food, or life sciences, respondents in this study showed low motivation to seek agriculture-related information, particularly through social media. This points to a potential disconnect between their academic interests and their media habits.

To bridge this gap, land-grant universities and Extension professionals might consider prioritizing the posting of agriculture-related content on institutional websites and mainstream news sites, which students may trust more or access more frequently than social media. Social media can then serve as a secondary channel for amplifying that content. Understanding and strategically adapting to the media behaviors of this demographic is critical for effectively reaching and engaging the next generation of agricultural communicators and educators.

The most popular social media platforms for young adults were Facebook, YouTube, Instagram, Snapchat, and TikTok (Pew Research Center, 2024a). In this study, Instagram was the top social media platform used by respondents, with a majority using it daily. YouTube, Facebook, TikTok, and X followed Instagram for usage. Consequently, it may be inferred that most participants showed dependency on Instagram. While previous literature suggested Facebook was the most used social media platform by young adults (Pew Research Center, 2024a), our findings were consistent with Butler-Horton (2021), who found Instagram and Snapchat were used more than Facebook in their study of college students. Given college students' tendency to trust peer networks over formal channels, encouraging influential figures within the agriculture community to share relevant content online can help establish these platforms as reliable sources of information (Macdonald & Howard, 2020).

The findings from the study highlight the need for further research into how social media can be better connected to websites and apps for more engagement beyond passively reading content on websites and apps. Future studies could explore who the key social media influencers in agriculture are, the role of social media influencers in shaping perceptions of agricultural content, the effectiveness of different types of content, and the integration of social media within professional agricultural networks (Roy, 2023; Inegbedion et al., 2021). The evolving role of social media in agricultural communications presents both challenges and opportunities. However, integrating social media into educational frameworks and understanding the preferences of students can foster a more engaged and informed generation. Additionally, the need to build the capacity of college students to be gatekeepers in spotting and addressing agriculture-related social media misinformation is critical in this digital age and must be given priority. This can be ascertained through media literacy training, where students are exposed to approaches to identify and combat misinformation.

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