Behavioral Intentions for Using Social Media for Communicating Turfgrass Innovations

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Introduction

Communicating the specific economic and environmental benefits of turfgrass innovations through messages and communication channels is complicated. Sharing information about turfgrass cultivar effectiveness alone is not likely to bring about sustained adoption among end-users. The needs of end-users vary depending on how they plan to use the turf, and the way in which information about these emerging cultivars is disseminated differs depending on the sender. Therefore, determining the message to be delivered through the appropriate communication channel, coupled with an understanding of end-user needs, is essential so that university professionals can most effectively share the benefits and innovations of turfgrass cultivars (Ruth, 2018). Determining the most appropriate source responsible for the creation of information about turfgrass innovations, and subsequently those best suited to disseminate those messages, has yet to be determined.

In previous research, a team from the University of Georgia sought to determine key players, what messages are significant regarding innovations of new turfgrass cultivars, and the communication channels preferred and used, or considered for future use, by Extension/Outreach and Communications professionals in Agriculture and Natural Resources (ANR) for disseminating information (Worley et al., 2021). This study sought to garner an understanding of the roles of the researcher and the Extension professional as creators and disseminators of turfgrass information via social media. This pilot study was established to better understand the intent of researchers and Extension professionals to use social media to disseminate turfgrass information, and the use of social media by individuals seeking to learn about turfgrass innovations. For the purposes of this study, the behavioral intention under investigation was the intention to use social media for disseminating information or learning about turfgrass.

Theoretical Framework

This pilot test was guided by the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). This model was formed through the integration of components of eight previously constructed acceptance theory models to explain behavioral intention to use information systems. The model consists of four constructs for measuring behavior intentions and user behaviors: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. These four constructs are analyzed in relation to "key moderators;" factors that include age, gender, experience, and voluntariness of use (Venkatesh et al., 2003, p. 447).

Methodology

A quantitative instrument was developed to analyze the use of social media for disseminating turfgrass information. The instrument consisted of twenty questions with three constructs measuring time/frequency, conditions, and intentions as well as multivariate and bi-variate demographic questions.

A non-random purposive sample was collected by emailing six prior contacts in the population of interest from team members of four universities that are part of a USDA SCRI turfgrass grant using the Tailored Design Method (Dillman et al., 2014). The contacts were asked to share the instrument among their industry contacts as deemed appropriate, including through the use of social media channels. The instrument link was shared on a university Twitter account with a following of 795 users, thereby adding to the number of potential respondents. Data were collected over a three-day period in July, 2021. Sampling and coverage error were minimized by sharing the instrument through prior contacts in the industry specific to the target audience – those involved in the turfgrass industry on Twitter. A panel of experts was used to ensure translational, face, and content validity. SPSS version 28 was used for all analysis.

Results

Of the 23 respondents, the majority (73.9%) had a doctoral degree. Respondents were asked to self-identify what they considered their relationship to be in their use of social media; either "creators" or "users" and 65.2% of respondents identified as "creators." There was not a significant difference between the means of "creators" and the means of "users" in their behavioral intent towards social media and turfgrass information ($t = 0.539$, $p = 0.596$). The pilot also demonstrated no significant difference between "creators" and "users" between education levels ($F = 0.112$, $p = 0.952$). When asked if Social Media was used for disseminating or learning about turfgrass innovations, 30.4% indicated that they used Twitter, whereas 13.0% indicated both Facebook and Twitter were used.

Conclusions

Determining the most appropriate source for the creation of information about turfgrass innovations, and subsequently those best suited for dissemination, has yet to be determined. Given that the pilot test demonstrated no significant difference between "creators" and "users" for behavioral intent towards social media and turfgrass information and education levels, a separate instrument that targets specific populations (i.e. Extension agents) within the turfgrass industry will be developed. Additional analysis needs to be conducted for examining the use of social media among different strata within the turfgrass industry.

Implications/Recommendations

Practical application of the findings is intended for further analysis of the communications used and sought for disseminating information in the turfgrass industry. Proceeding to subsequent phases of the research, the team seeks to determine what channels are best received by different sectors of turfgrass end-users. Implementing audience segmentation methods will reveal who is best suited to disseminate information regarding new innovations specific to the turfgrass industry. Messaging and communication channels recommended in previous research phases will further assist in determining how audience segmentation calls for a need for diversity in communications.

References

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