

Texas State-wide Survey of Learning Styles for and Awareness of Texas A&M AgriLife Extension Service Programming

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TEXAS A&M
AGRILIFE
EXTENSION

Evolution of Extension Programming



ISU Extension and Outreach

Iowa State University (n.d.)



Fannin (2014)



Dewald (2018)

Introduction

- ⦿ Changes in society cause Extension to revise program delivery methods (G. Davis, 2006)
- ⦿ Extension educators use various methods, all which have advantages and limitations (Seevers & Graham, 2012)
- ⦿ We must understand how our clientele prefer to learn and deliver programs accordingly

Purpose & Research Questions

- ⦿ Purpose: to identify Texas residents' preferred learning style and awareness of Texas A&M AgriLife Extension.

- ⦿ Research questions:
 - RQ 1: What are participants' demographic information (i.e., gender, ethnicity, educational level, year of birth, and zip code)?
 - RQ 2: Are there statistical differences between demographic categories and on participants' preferred learning styles when learning a new skill or practice?
 - RQ 3: Are there statistical differences between demographic categories on participants' educational programming preferences?
 - RQ 4: Are there statistical differences between demographic categories on participants' preference to be informed of educational programming?
 - RQ 5: What is respondents' awareness of and participation in educational programming of Texas A&M AgriLife Extension Service?

Method

- ⦿ A 12-question survey was developed in Qualtrics by Texas A&M AgriLife Extension Service personnel
- ⦿ Administered by the Qualtrics Research
- ⦿ Available for 14 days, beginning March 11, 2019
- ⦿ Reminder emails were sent and sent survey to areas of the state where there was limited representation
- ⦿ Analyzed by Randy Lund, M.S. using SPSS; descriptive and chi-square

Results – RQ 1



Total Participants

N = 2,803



Female

52.4% (*f* = 1,223)



White

61.6% (*f* = 1,473)



Some College or
Associates Degree

39.5% (*f* = 838)

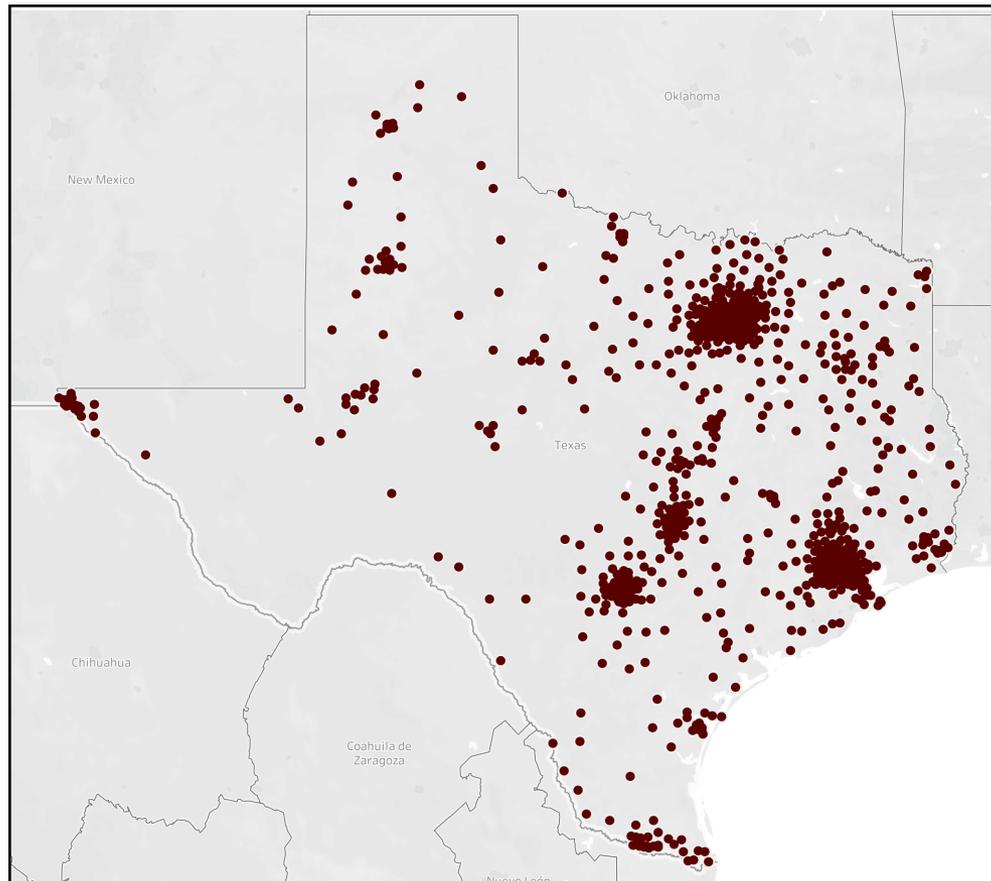


Millennials

44.4% (*f* = 1,166)

Results – RQ 1

Location (zip code) of participants



Results – RQ 2

Overall Preferred Learning Style

Means and Standard Deviations of Respondents' Preferred Method of Learning a New Skill or Practice (n = 2,682)

Preferred Method of Learning	M	SD
Someone teaches one on one	4.21	0.96
Physically trying skill or practice	4.02	1.01
Watching an online video	3.96	0.97
Gathering own information	3.73	1.02
Attending a workshop	3.71	1.07
Watching a television show	3.63	1.06
Attending a field day/tour or demonstration	3.61	1.09
Viewing social media	3.25	1.22
Reading a newsletter, publication, books/manuals	3.24	1.17
Listening to radio or Podcast	2.89	1.20

Note. ≤ 1.50 = definitely not; $1.51 - 2.49$ = probably not; $2.50 - 3.49$ = might or might not; $3.50 - 4.49$ = probably yes; $4.50 \leq$ = definitely yes

Results – RQ 2



Someone teach me one-on-one

Educational categories ($X^2(16, N = 2,332) = 65.71, p = .001$)

Less than a high school education were considerably **less favorable**

Results – RQ 2



Physically trying the skill on my own

Educational categories ($X^2(16, N = 2,332) = 57.92, p = .001$)

Less than a high school education were less favorable

Generational categories ($X^2(12, N = 2,629) = 50.89, p = .001$)

The Greatest and Silent generations were considerably less favorable

Results – RQ 2



Watching an online video

Generational categories ($X^2(12, N = 2,629) = 54.54, p = .001$).

Millennial, Generation X, and Generation Z are more favorable

Ethnicity categories ($X^2(16, N = 2,682) = 69.19, p = .001$).

Black, Asian, and Hispanic ethnicities were more favorable

Educational categories ($X^2(16, N = 2,332) = 47.31, p = .001$).

Less than a high school education were less favorable

Results – RQ 3

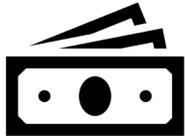
Overall Educational Program Preferences

Means and Standard Deviations of Respondents' Educational Program Preferences (n = 2,645)

Preferred Method of Learning	<i>M</i>	<i>SD</i>
Want the meeting to be free of cost to attend	4.07	0.97
Like an incentive to attend	3.44	1.10
Travel 20 miles from home/work	3.36	1.20
Pay a fee to attend	3.07	1.09
Need continuing education credits (CEUs) or certificate to attend	2.88	1.23

Note. ≤ 1.50 = definitely not; $1.51 - 2.49$ = probably not; $2.50 - 3.49$ = might or might not; $3.50 - 4.49$ = probably yes; $4.50 \leq$ = definitely yes

Results – RQ 3



Want the meeting to be free of cost to attend

Educational categories ($X^2(16, N = 2,332) = 53.43, p = .001$).

At least a high school diploma were more favorable

Ethnicity categories ($X^2(16, N = 2,645) = 32.98, p = .007$).

Asian ethnicity participants were more favorable

Results – RQ 3



Would like an incentive to attend

Ethnicity categories ($X^2(16, N = 2,645) = 53.51, p = .001$).

Asian ethnicity participants were considerably **more favorable**

Generational categories ($X^2(12, N = 2,629) = 52.63, p = .001$).

Millennial and Generation X generations were **more favorable**

Results – RQ 3



Would travel 20 miles from home or work

Educational categories ($X^2(16, N = 2,332) = 53.35, p = .001$).

At least a Bachelor's Degree were generally **more favorable**

Generational categories ($X^2(12, N = 2,629) = 24.72, p = .016$).

Greatest and Silent generations were **slightly less favorable**

Results – RQ 4

Overall Preferences for being Informed of Educational Programs

Means and Standard Deviations of how Respondents Would like to be Informed of Educational Programs (n = 2,645)

Educational Program Preferences	<i>M</i>	<i>SD</i>
Email	3.78	1.13
Friend or Neighbor	3.45	1.11
Mail	3.35	1.24
Mass Media	3.21	1.16
Social Media	3.07	1.30

Note. ≤ 1.50 = definitely not; 1.51 – 2.49 = probably not; 2.50 – 3.49 = might or might not; 3.50 – 4.49 = probably yes; 4.50 ≤ = definitely yes

Results – RQ 4



Email

Educational categories ($X^2(16, N = 3,332) = 72.38, p = .001$).

Less than a high school diploma are considerably **less favorable**

Ethnicity categories ($X^2(16, N = 2,645) = 54.99, p = .001$).

Asian ethnicity participants were **more favorable**

Results – RQ 4



Friend or Neighbor

Generational categories ($X^2(12, N = 2,645) = 37.29, p = .001$).

Millennial and Generation Z groups were **more favorable**

Ethnicity categories ($X^2(16, N = 2,645) = 37.29, p = .002$).

Asian and Black participants were **more favorable**

Results – RQ 4



Mail

Generational categories ($X^2(12, N = 2,629) = 50.88, p = .001$).

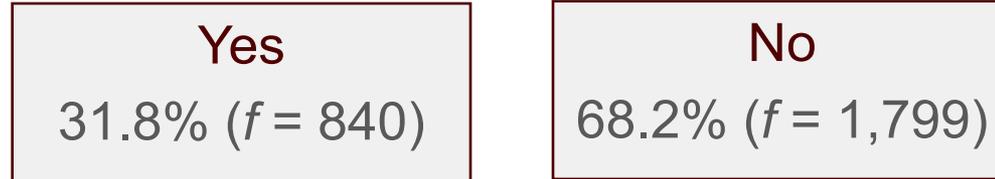
Greatest and Silent Generations were more favorable

Ethnicity categories ($X^2(16, N = 2,645) = 37.81, p = .002$).

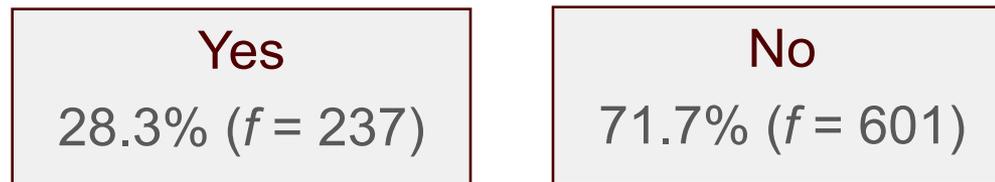
Asian participants were more favorable

Results – RQ 5

Awareness of Texas A&M AgriLife Extension Service
($n = 2,639$)



Participation in Educational Programs of Texas A&M
AgriLife Extension Service ($n = 838$)



Conclusions

- ⦿ A higher mean preference for participants who prefer one-on-one learning, and the only statistical difference between categories was that of education
- ⦿ Younger generations were more favorable of watching online videos
- ⦿ Older generations were less favorable of traveling more than 20 miles to attend an educational program
- ⦿ Millennial and Generation Z categories, and Asian and Black ethnicity participants were more favorable of learning about educational programming through friends or neighbors
- ⦿ Rural, suburban, urban participants showed very few statistical differences among any questions assessed

Recommendations

- ⦿ Majority of people who are not aware of AgriLife nor have participated in programs or received material
- ⦿ Extension educator must think about what content is being taught, the target audience demographic, and use the best method of delivering the content via their preferred learning style
- ⦿ Develop a user-friendly or engaging resource for Extension Educators
- ⦿ Use of Qualtrics Research Service was effective, but had some drawbacks

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Questions?

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