

2-1-2017

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Recommended Citation

Walker, N., Cater, M., Davis, D., & Fox, J. (2017). Evaluation of Components of Volunteerism in Master Horseman Program Graduates. *Journal of Extension*, 55(1), Article 12. <https://tigerprints.clemson.edu/joe/vol55/iss1/12>

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Evaluation of Components of Volunteerism in Master Horseman Program Graduates

Abstract

Providing volunteers with training opportunities affects the overall success of programs with which they are involved. This article describes a study of 98 Louisiana Master Horseman Program graduates. The study addressed their perceived self-efficacy related to equine technical and management skills, their changes in confidence regarding teaching relevant skills to others, and their willingness to teach those skills to others. Results indicated that the training positively affected graduates' horsemanship skills and their confidence and willingness related to teaching such skills. Findings suggest that the Louisiana Master Horseman Program is useful for creating a highly trained volunteer workforce and is a master volunteer program option that could be replicated successfully in other states.

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Introduction

The value of volunteerism in Extension programming is well documented (Radhakrishna & Ewing, 2011; Schrock, Meyer, Ascher, & Snyder, 2000; Thoits & Hewitt, 2001; Wessel & Wessel, 1982). Since the origination of master volunteer programs in the 1960s, multiple Extension programs across the United States have been developed for the purpose of using highly trained volunteers to enhance the efforts of agents and specialists in youth programming (Bauske et al., 2011; Grieshop & Rupley, 1984; Nichnadowicz, 2001). However, studies have suggested that training in competency areas is an essential component of creating a strong volunteer workforce (Fox, Hebert, Martin, & Bairnsfather, 2009; Long & Hackett, 1985) and that those who receive training are more likely to remain active in a program (Clary et al., 1998). In other words, ensuring that volunteers have the skills, confidence, and willingness to teach others is vital to any program that relies substantially on volunteerism.

The Louisiana State University Agricultural Center's former horse specialist, Clint Depew, developed the first master horseman program in 2004 to improve the horsemanship skills of adults and to prepare them to

serve as leaders in the 4-H horse program and the Louisiana horse industry. Louisiana's Extension system employs three Cooperative Extension agents and specialists to lead the master horseman program, and local agents assist in recruiting participants and scheduling events. The program includes 8 weeks of instruction on many topics related to equine science and horsemanship. Each class consists of 1 hr of lecture and 2 to 3 hr of riding and training instruction. Program graduates are asked to volunteer a minimum of 20 hr in some kind of horse-related activity. Since its inception, over 850 men and women have graduated from the program and served in leadership roles in horse organizations and youth programs throughout the state.

Problem Statement

The purpose of the evaluation described here was to identify Louisiana Master Horseman Program graduates' self-efficacy related to riding and groundwork skills and horse care and health management, their confidence related to teaching others the skills and techniques they learned from participation the program, and their willingness to teach those skills and techniques to others. The objectives of this study were as follows:

- Describe graduates' riding and groundwork skill and horse care and health management self-efficacy, confidence regarding teaching riding and groundwork skills, confidence regarding teaching horse care and health management, willingness to teach riding and groundwork skills, and willingness to teach horse care and health management.
- Determine whether differences existed between preprogram scores and postprogram scores for confidence regarding teaching riding and groundwork skills and confidence regarding teaching horse care and health management.

Method

Participants

Instructors of the Louisiana Master Horseman Program were asked to provide a list of program graduates from the preceding 4 years (2011–2015). This request yielded 271 names and email addresses of program graduates. Surveys were distributed to these program graduates, and 98 responses were received, resulting in a response rate of 36.2%. The respondent group was relatively equally split between females ($n = 52$, 55.3%) and males; four people did not report gender. In terms of age, most respondents were 35 or older (see Table 1).

Table 1.
Ages of Louisiana Master Horseman
Graduates Participating in the Postprogram
Evaluation

Age	No.	%
Less than 16	1	1.1
16–19	0	0.0
20–24	1	1.1

25–34	6	6.4
35–44	15	16.0
45–54	29	30.9
55–64	32	34.0
65 and over	10	10.6

Note. Four respondents did not report age.

Instrument

A survey instrument was developed specifically for the evaluation and was reviewed for content validity by a panel of experts in both the Louisiana Master Horseman Program and program evaluation. Exploratory factor analysis was used for establishing the psychometric properties of the survey. The survey consisted of three scales, two of which each comprised two subscales. Internal consistency reliability was assessed through use of Cronbach's alpha.

The *riding skill and horse health care self-efficacy* scale was a unidimensional scale consisting of 10 items that probed participants' perceptions of their riding and groundwork skills and horse care and health management skills. The items in this scale explained 65.5% of the variance in participants' self-efficacy. Cronbach's alpha was .95.

The *confidence to teach in the master horseman program* scale consisted of two subscales that explained 66.5% of the variance in participants' confidence regarding teaching in the program. The *confidence to teach riding and groundwork skills* subscale consisted of five items that probed participants' confidence in their ability to teach riding and groundwork skills to others. Cronbach's alpha for the five items was .90. The *confidence to teach horse care and health management* subscale was comprised of four items that explored participants' confidence in their ability to teach horse care and health management skills to others. Cronbach's alpha for the four items was .89.

The *willingness to teach in the master horseman program* scale consisted of two subscales that explained 74.1% of the variance in participants' willingness to teach in the program. The *willingness to teach riding and groundwork skills* subscale encompassed five items that explored participants' willingness to teach riding and groundwork skills to others. Cronbach's alpha for the five items was .92. The *willingness to teach horse care and health management* subscale consisted of three items that probed participants' willingness to teach horse care and health management skills to others. Cronbach's alpha for the three items was also .92.

Data Collection

Data were collected through distribution of the survey via Qualtrics, an online survey software tool. A link to the survey that would ensure respondent anonymity was generated and emailed to the program graduates. Two email reminders were sent, along with one reminder through social media.

Data Analysis

Objective one was descriptive in nature and was analyzed through means and standard deviations. Objective

two was analyzed through the use of a paired-samples *t*-test. Effect size was calculated by using Cohen's *d* and Morris and DeShon's (2002) equation 8 to correct for dependence between means. For limiting the Type I error risk, the Bonferroni correction was used. The experiment-wise alpha was set at .05, yielding a per-comparison alpha of 0.025 (Warner, 2013). The data were analyzed through the use of SPSS 22.0 statistical software.

Results

The purpose of objective one was to describe program graduates' riding and groundwork skill and horse care and health management self-efficacy, confidence regarding teaching riding and groundwork skills, confidence regarding teaching horse care and health management, willingness to teach riding and groundwork skills, and willingness to teach horse care and health management. For riding and groundwork skill and horse care and health management self-efficacy, a 5-point Likert-type scale—1 = *not at all*, 2 = *very little*, 3 = *somewhat*, 4 = *quite a bit*, and 5 = *a great deal*—was used for collecting responses. Mean scores were computed from responses to the 10 items of the scale. The overall group mean for the self-efficacy construct was 3.51 (*SD* = .990). Higher self-efficacy scores were reported by males and by participants 45 and older (see Table 2).

Table 2.

Mean Scores for Riding and Groundwork Skill and Horse Care and Health Management Self-Efficacy by Selected Subgroups

Subgroup	<i>M</i> ^a	<i>SD</i> ^a
Gender		
Female	3.36	1.13
Male	3.70	.76
Age		
Less than 16	3.60	—
20–24	2.90	—
25–34	3.18	1.45
35–44	3.38	1.17
45–54	3.60	.93
55–64 ^b	3.55	1.03
65 and over	3.60	.61

^aOverall group *M* = 3.51 (*SD* = .990). Because there was only one participant each in the "less than 16" and "20–24" age groups, standard deviations were not reported for those groups. ^bTwo respondents did not answer the self-efficacy

questions.

For confidence to teach riding and groundwork skills, a 3-point Likert-type scale—1 = *not at all confident*, 2 = *somewhat confident*, 3 = *very confident*—was used for collecting responses. Two mean scores were computed from responses to the five items of the subscale, a retrospective preprogram mean score and a postprogram mean score. The overall group means were 1.80 (*SD* = .569) for the retrospective preprogram scores and 2.67 (*SD* = .381) for the postprogram scores. Females had higher preprogram scores, whereas males' postprogram scores were higher. Younger participants had higher scores at both preprogram and postprogram (see Table 3).

Table 3.
Retrospective Preprogram and Postprogram Mean Scores for Confidence to Teach Riding and Groundwork Skills by Selected Subgroups

Subgroup	Preprogram scores		Postprogram scores	
	<i>M</i> ^a	<i>SD</i> ^a	<i>M</i> ^b	<i>SD</i> ^b
Gender				
Female	1.88	.638	2.63	.385
Male	1.70	.457	2.73	.373
Age				
Less than 16	2.00	—	3.00	—
20–24	2.20	—	2.80	—
25–34	2.07	.745	2.80	.219
35–44	1.87	.527	2.68	.376
45–54	1.94	.526	2.79	.318
55–64	1.57	.577	2.46	.410
65 and over	1.76	.456	2.78	.420

^aOverall retrospective preprogram group *M* = 1.80 (*SD* = .569). Because there was only one participant each in the "less than 16" and "20–24" age groups, standard deviations were not reported for those groups. Eight respondents did not answer the preprogram confidence to teach riding and groundwork skills questions. ^bOverall postprogram group *M* = 2.67 (*SD* = .381). Because there was only one participant each in the "less than 16" and "20–24" age groups, standard deviations were not reported for those groups. Fifteen respondents did not answer the postprogram confidence to teach riding and groundwork skills questions.

For confidence to teach horse care and health management, a 3-point Likert-type scale—1 = *not at all confident*, 2 = *somewhat confident*, 3 = *very confident*—was used for collecting responses. Two mean scores

were computed from responses to the four items of the subscale, a retrospective preprogram mean score and a postprogram mean score. The overall group means were 1.85 ($SD = .561$) for the retrospective preprogram scores and 2.43 ($SD = .467$) for the postprogram scores. Males and females had very similar pre- and postprogram scores. Participants in the 25–34 age group had the highest preprogram scores, whereas those in the 45–54 age group had the highest postprogram scores (see Table 4).

Table 4.

Retrospective Preprogram and Postprogram Mean Scores for Confidence to Teach Horse Care and Health Management by Selected Subgroups

Subgroup	Preprogram scores		Postprogram scores	
	M^a	SD^a	M^b	SD^b
Gender				
Female	1.86	.623	2.44	.462
Male	1.84	.479	2.43	.479
Age				
Less than 16	1.75	—	2.50	—
20–24	1.00	—	2.00	—
25–34	2.04	.928	2.42	.516
35–44	1.95	.666	2.28	.471
45–54	1.90	.409	2.57	.409
55–64	1.73	.548	2.36	.490
65 and over	1.92	.599	2.52	.543

^aOverall retrospective preprogram group $M = 1.85$ ($SD = .561$). Because there was only one participant each in the "less than 16" and "20–24" age groups, standard deviations were not reported for those groups. Eight respondents did not answer the preprogram confidence to teach horse care and health management questions.

^bOverall postprogram group $M = 2.43$ ($SD = .467$). Because there was only one participant each in the "less than 16" and "20–24" age groups, standard deviations were not reported for those groups. Fifteen respondents did not answer the postprogram confidence to teach horse care and health management questions.

For willingness to teach riding and groundwork skills, a 3-point Likert-type scale—1 = *not at all willing*, 2 = *somewhat willing*, 3 = *very willing*—was used for collecting responses. Mean scores were computed for responses to the five items of the subscale. The overall group mean for the willingness to teach skills construct was 2.54 ($SD = .524$). Willingness to teach riding and groundwork skills was fairly evenly distributed across all age groups, though those in the 55–64 group had the lowest mean (see Table 5).

Table 5.

Mean Scores for Willingness to Teach Riding and Groundwork Skills by Selected Subgroups

Subgroup	<i>M</i>^a	<i>SD</i>^a
Gender		
Female	2.52	.536
Male	2.57	.515
Age		
Less than 16	3.00	—
20–24	3.00	—
25–34	2.67	.547
35–44	2.66	.355
45–54	2.59	.536
55–64	2.33	.579
65 and over	2.76	.343

^aOverall group $M = 2.54$ ($SD = .524$). Because there was only one participant each in the "less than 16" and "20–24" age groups, standard deviations were not reported for those groups. Seven respondents did not answer the willingness to teach riding and groundwork skills questions.

For willingness to teach horse care and health management, a 3-point Likert-type scale—1 = *not at all willing*, 2 = *somewhat willing*, 3 = *very willing*—was used for collecting responses. Mean scores were computed from responses to the three items of the subscale. The overall group mean for willingness to teach horse care and health management was 2.27 ($SD = .596$). Both males and females were equally willing to teach horse care and health management. The two youngest participants seemed the most willing to teach this type of information (see Table 6).

Table 6.
Mean Scores for Willingness to Teach Horse Care and Health Management by Selected Subgroups

Subgroup	<i>M</i>^a	<i>SD</i>^a
Gender		
Female	2.26	.621
Male	2.28	.572
Age		
Less than 16	3.00	—

20–24	3.00	—
25–34	2.22	.911
35–44	2.40	.475
45–54	2.25	.493
55–64	2.10	.673
65 and over	2.52	.475

^aOverall group $M = 2.27$ ($SD = .596$). Because there was only one participant each in the "less than 16" and "20–24" age groups, standard deviations were not reported for those groups. Eight respondents did not answer the willingness to teach horse care and health management questions.

The second objective of the study was to determine whether differences existed (a) between preprogram and postprogram scores for confidence regarding teaching riding and groundwork skills and (b) between preprogram and postprogram scores for confidence regarding teaching horse care and health management (see Table 7). Results of the paired-samples t -test showed a statistically significant difference between postprogram scores and retrospective preprogram scores for confidence regarding teaching riding and groundwork skills ($t = 15.67, p < .001$). Cohen's d was 1.815, indicating that the standardized difference between the two means was almost two standard deviations' improvement from preprogram to postprogram, an extremely large practical effect. The difference between postprogram scores and retrospective preprogram for confidence regarding teaching horse care and health management also was statistically significant ($t = 10.38, p < .001$). Cohen's d was 1.177, again indicating a very large practical effect.

Table 7.

Paired-Samples t -Test Results for Confidence Regarding Teaching Riding and Groundwork Skills and Teaching Horse Care and Health Management

Factor	t	df	p
Confidence regarding teaching riding and groundwork skills ^a	15.67	81	.000
Confidence regarding teaching horse care and health management ^b	10.38	81	.000

^aConfidence regarding teaching riding and groundwork skills: retrospective preprogram $M = 1.77$ ($SD = .57$); postprogram $M = 2.67$ ($SD = .38$). ^bConfidence regarding teaching horse care and health management: retrospective preprogram $M = 1.83$ ($SD = .57$); postprogram $M = 2.44$ ($SD = .47$).

Discussion and Conclusions

Volunteer training programs are used throughout the nation for increasing self-efficacy in targeted educational areas to create a strong volunteer workforce. Results from the evaluation of graduates of the Louisiana Master Horseman Program suggest the same. The results indicate that the Louisiana Master

Horseman Program has successfully instilled willingness to teach equine technical and management skills. The program also has attained its goal of creating confident volunteer leaders to teach topics and techniques learned throughout the program, as indicated by changes between retrospective preprogram and postprogram scores for confidence regarding teaching riding and groundwork skills and confidence regarding teaching horse care and health management.

The results of the evaluation suggest that males and those 45 and older are more confident about teaching equine topics than their female and younger counterparts. In future iterations of the program, instructors will use varied teaching methods to address the needs of and increase confidence within female and younger master horseman program participants.

The survey instrument used was an effective tool for measuring volunteer perceptions and can be adapted and used with other statewide equine volunteer training programs. The instrument takes under 10 min to complete and, if an online survey hosting site similar to Qualtrics is used, data collection and data analysis are fast and intuitive. Similar evaluations will be built into future program curricula, and completion of such evaluations will be required for graduates to obtain certification. Although the low response rate is a limitation of the study reported here, the incentive to obtain certification should improve participation in program evaluation and increase the overall response rate. Results of the study suggest that this unique program has been successful in reaching its goals of creating an educated volunteer workforce and is another master volunteer program that can be replicated in other states to increase volunteer leadership.

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