

Horse selection and suitability in the equine assisted activities and therapies industry

Ellen M. Rankins, Chris Cook, Dr. Carissa Wickens

Animal Sciences MS Exit Seminar
July 2, 2018
emr219@scarletmail.rutgers.edu



\$122 billion industry

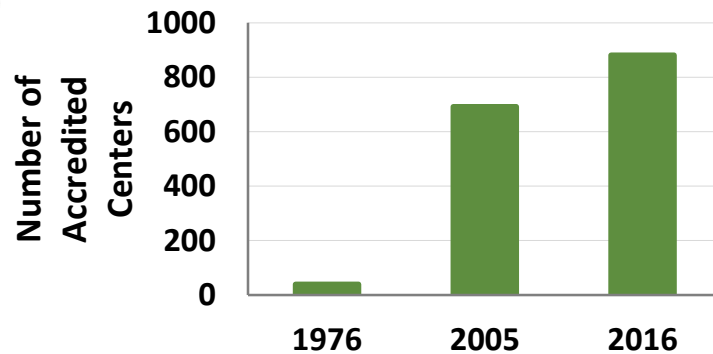


American Horse Council (2018)

7.2 million horses

EAAT Industry

- Colleges and universities are offering degrees or classes in equine assisted activities and therapies (EAAT)



(Renker, 1993; PATH Intl., 2006; PATH Intl., 2017)

EAAT Operations

- Involve 4,800 instructors in 877 PATH International certified facilities
- Generate \$311.7 million in revenues
- Support a workforce of 6,768 employees

American Horse Council (2018)



Current Practices

- Accreditation or certification not required to offer EAAT
 - Professional Association of Therapeutic Horsemanship, International (PATH Intl.)
 - Provides broad guidelines
 - Example: Center should have a protocol for initial screening of horses
 - Level & extent of implementation unknown
-

Phase 1

**EAAT CENTER NEEDS
ASSESSMENT**

Objectives

- 1) Assess equine selection, management, and training practices utilized by EAAT centers**
 - 2) Investigate knowledge and resource needs of EAAT centers in relation to equine selection, management, and training**
-

Hypotheses

- 1) EAAT centers will utilize a variety of protocols in selecting, managing, and training equines
 - 2) There will be gaps in knowledge and resources in relation to equine selection, management, and training
-

Survey Development

- Directed discussions with PATH, Intl professionals guided question development
- Qualtrics survey
 - 59 total questions



Questionnaire

Section	Number of Questions
Center Demographics	12
Horse Selection & Management	30
Horse & Personnel Training	17

- **Question type:**
 - **Fill in the blank**
 - **Open-ended**
 - **Multiple choice**
 - Select one or all that apply
 - **Likert scale (1-very prepared to 5-very unprepared)**

Response Collection

- **Survey link emailed to 45 Florida PATH, Intl centers in January 2017**
- **Executive director, barn/equine manger, and volunteer coordinator invited to participate**
- **Repeat contact strategy (Dillman et al., 2009)**
 1. Initial invitation
 2. Thank you & reminder
 3. Thank you & reminder
 4. Final thank you & reminder

Statistical Analysis

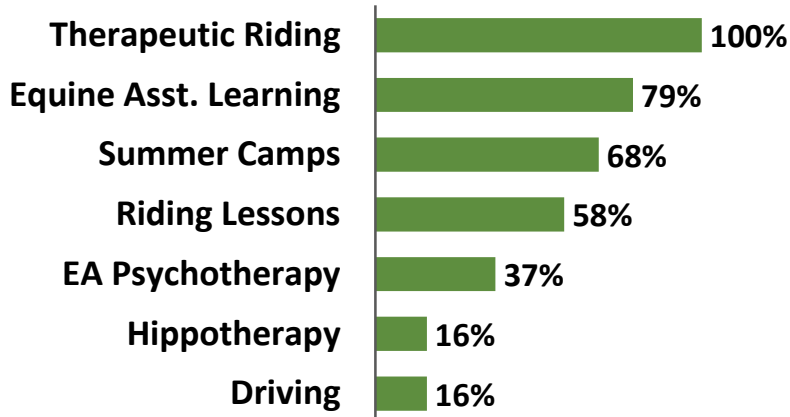
- Qualtrics report
 - Data include frequency counts, descriptive statistics, and qualitative responses
 - Means ± Standard Deviations
-

Center Demographics

- 16/45 centers – 36%
 - 19 completed responses
 - Centers responding
 - 68% Member Centers
 - 32% Premier Accredited Centers
 - All PATH Intl Centers
 - 69% Member Centers
 - 31% Premier Accredited Centers
-

Center Demographics

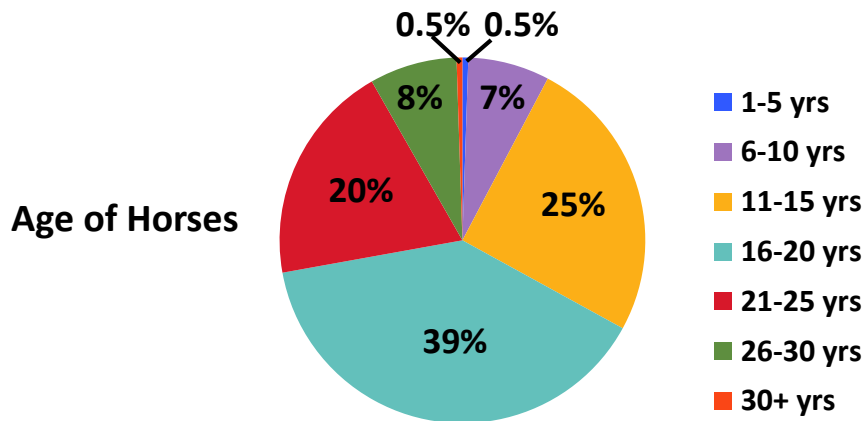
(select all that apply)



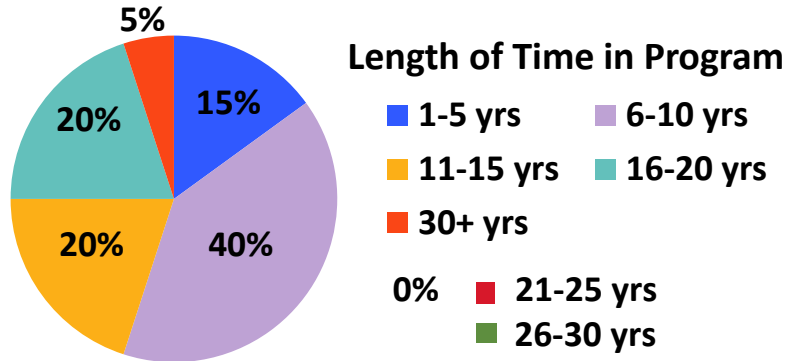
Equine Demographics

Number of horses active in center's program

10 ± 3.7



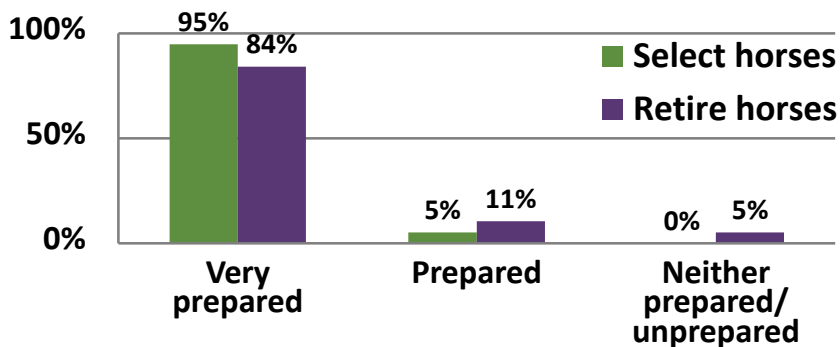
Equine Demographics



Workload	Hours/Day	Range	Days/Week	Range
EAAT Activities	2.7	1-4	4	1-5
Other Activities	1.8	0-3	3	0-5

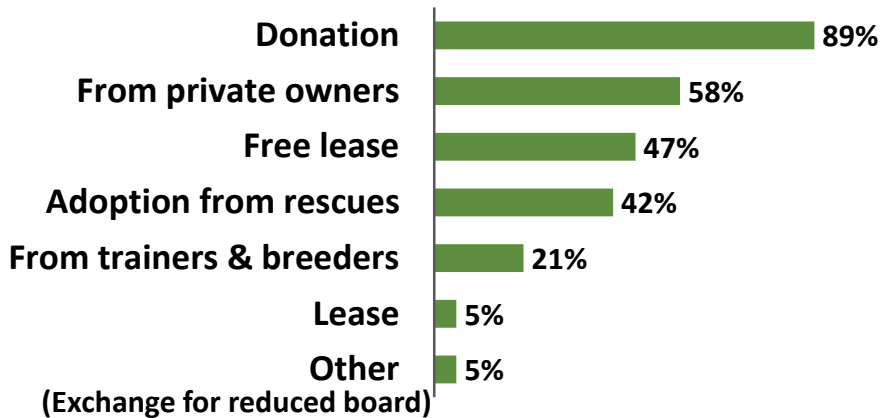
Horse Selection & Retirement

- 90% had a horse selection protocol
- 58% had a set of criteria used to determine when to retire a horse



Acquiring Horses

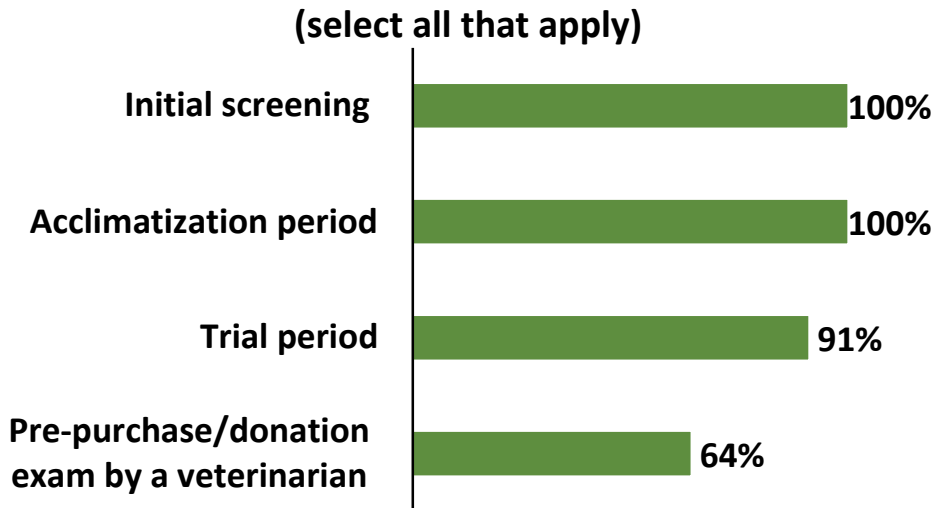
How does your center acquire horses?
(select all that apply)



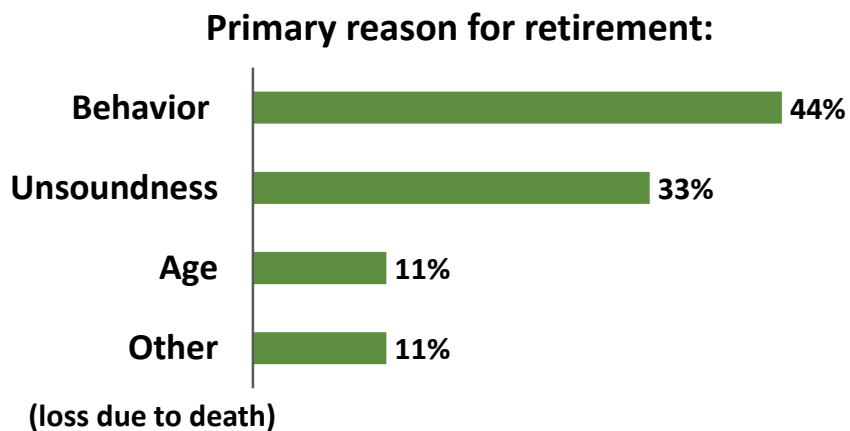
Selecting Horses

- ✓ Age
- ✓ Health
- ✓ Previous training
- ✓ Soundness
- ✓ Conformation
- ✓ Movement
- ✓ Size
- ✓ Disposition
- ✓ Temperament
- ✓ Friendly
- ✓ Calm
- ✓ Willing
- ✓ Patient
- ✓ Accepting of sidewalkers & riders

Selection Protocol



Retiring Horses



Behavior Issues

- Behavioral issues included:
 - Biting/nipping
 - Kicking
 - Pinning ears
 - Aggression

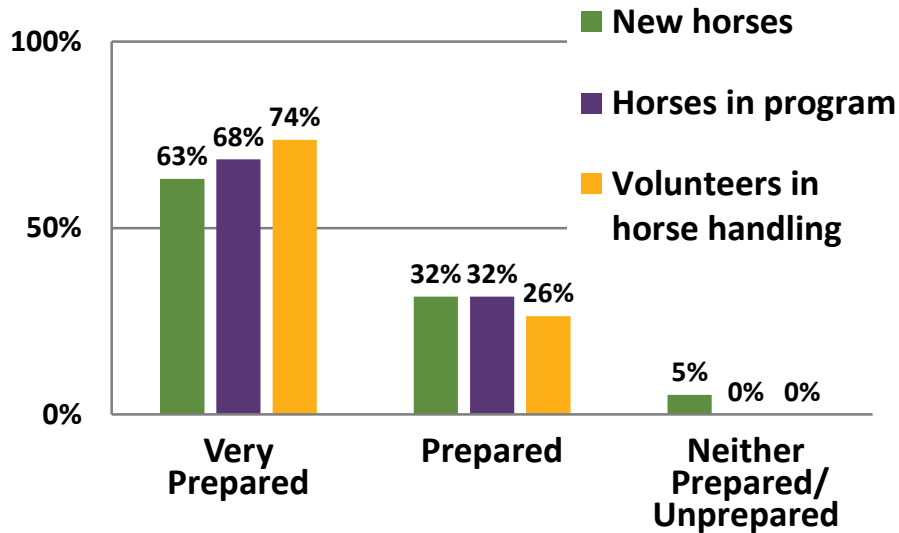


Behavior Issues

- Common behavioral issues include (Foster & Wallach, 2013):
 - pinned ears
 - biting
 - avoidant-resistant behaviors
- Leads to attrition rates as high as 50%



Training Preparedness



Training Methods

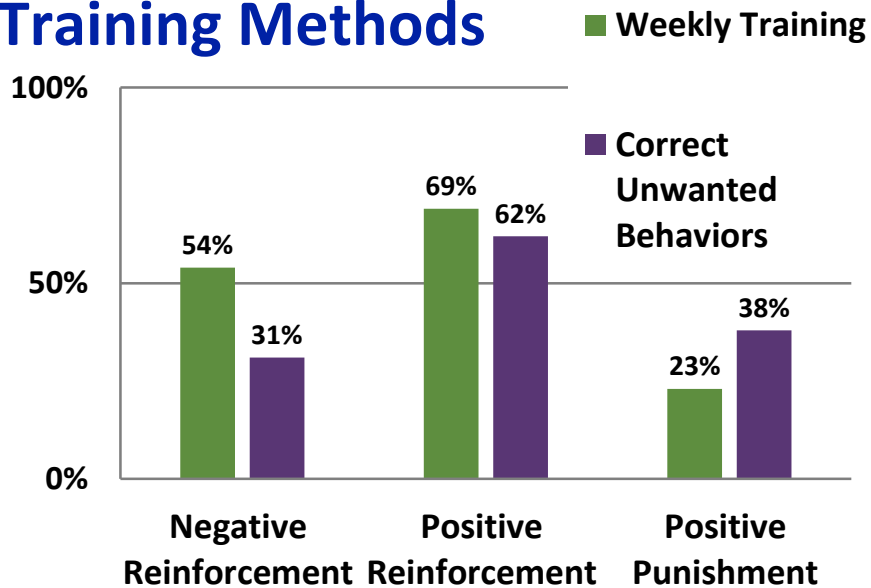
Training Method	Description
Negative Reinforcement	Removal of a stimulus in response to a desired behavior
Positive Reinforcement	Addition of a stimulus in response to a desired behavior
Negative Punishment	Removal of a rewarding stimulus in response to a undesired behavior
Positive Punishment	Addition of an aversive stimulus in response to a undesired behavior

Training Methods

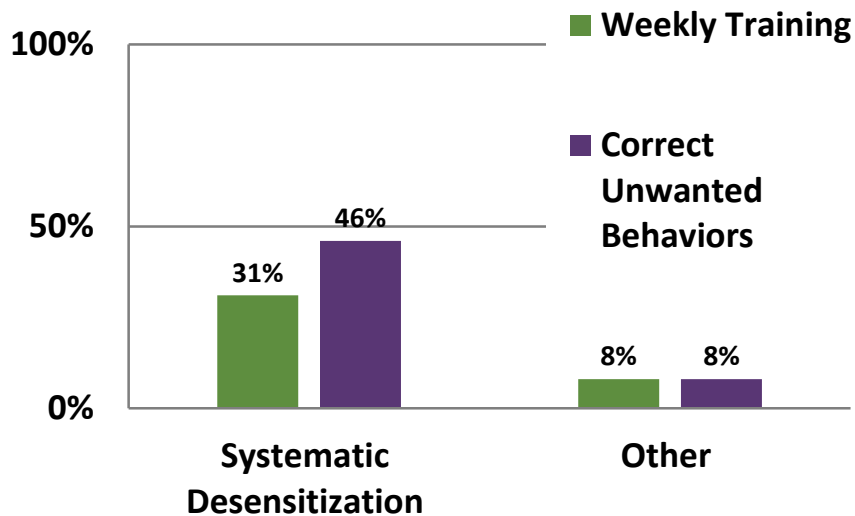
Training Method	Description
Systematic Desensitization	Exposure to increasing levels of an arousing stimulus until habituation or a decrease in responsiveness to the stimulus occurs



Training Methods



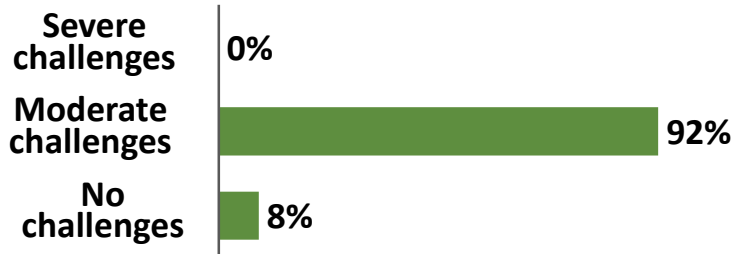
Training Methods



Reinforcement in Training

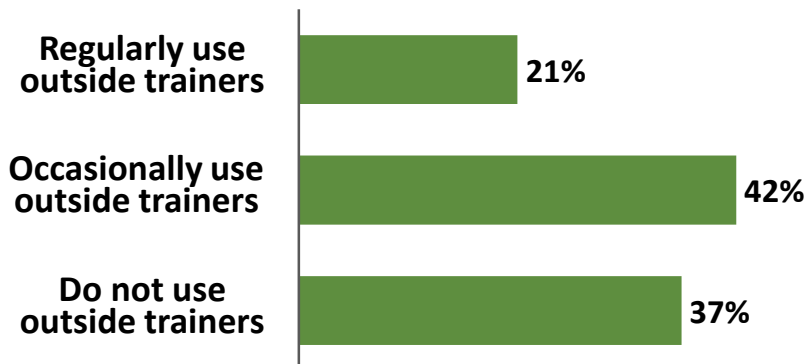
- **Implementation of positive reinforcement in horse training is thought to be relatively low** (McLean and Christensen, 2017)
- **Limited ability to identify techniques in common situations** (Telatin et al., 2016)

Horse Training Challenges

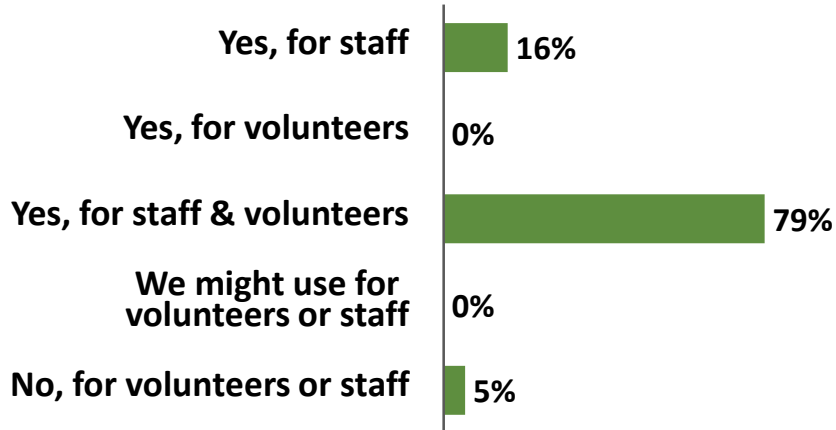


- ✓ Time
 - ✓ Consistency
 - ✓ Communication
 - ✓ Experience
 - ✓ Recognizing behavior
-

Use of Outside Trainers



Continuing Education



Extension Opportunities

- Facilitate sharing among centers
- Programming & resources to address:
 - Equine behavior issues
 - Horse training
 - Volunteer training



Overall Conclusions from Collaborative Research

- **Low level of agreement among raters across horses and questionnaire type (using subjective assessments)**
 - **Associations between temperament assessed via questionnaires and behavioral testing evident, especially in traits such as reactivity, nervousness, and touch**
 - **No clear relationship between temperament or behavior in mock therapeutic riding lesson and behavior during lessons**
-

Future Directions

- **Development of educational resources for EAAT industry**
- **Better understanding of equine temperament and its assessment**
- **Links between behavior during lessons and temperament and management factors**



Acknowledgements

Committee

Dr. Carissa Wickens

Dr. Emily Miller-Cushon

Dr. Kimberly Sibille

Dr. Nicole Dorey

Collaborator

Chris Cook and WHC

Students

Fellow Graduate Students

Undergraduate Students

TR Centers

HOrses Helping **P**Eople

Special Equestrians

Heart of FL Youth Ranch

Funding

Bruno Diekmann

Foundation

Questions?

