



A 35 Year Systematic Mapping
Review of Refereed Papers on
Equine Assisted Activities and
Therapies, 1980 – 2014

Background to the Study

- Over the past 35 years, equine assisted activities and therapies (EAAT) have grown in popularity, producing many claims of benefits that have not been extensively scientifically investigated.

Aim of the Study

- To develop a comprehensive and coherent map, or *topography*, of the current state of knowledge of EAAT as evidenced in refereed publications
 - This map will serve as a guide for future research and curricula in higher education

Research Questions

WHAT....

- Populations and groups?
- Specific interventions?
- Outcomes?
- Research methodologies?
- Theories?
- Providers including their disciplines, trainings, and certifications?

HOW HAVE....

- Outcomes been assessed or measured?
- Horses been selected, trained and cared for?

Method: Systematic Mapping Review

| Research Elements: | Defining Characteristics: |
|------------------------------|---|
| Overall Aim of the Study | Establish a “map” of scholarship in a topic area; describe a field in early development |
| Research Questions | Very broad |
| Search Process | Broad and inclusive, including research as well as conceptual and descriptive literature |
| Inclusion/exclusion Criteria | Clear, defined, systematically and reliably applied to screen papers |
| Yield of Papers | Large numbers; focus on breadth |
| Data Management | Systematic, rigorous, transparent; often use computer-based tools (e.g. Endnote, MS Access) |
| Data Extraction | Key wording or coding sheet with rules applied reliably across researchers |

Filter 1:
Search
Strategy

Filter 2: Inclusion
& Exclusion Coding

Filter 3:
Data Extraction
Tool

(Hammick, Dornan, & Steinert, 2010)

Filter 1: Search Strategy

Search Result=1,494
Papers

- o Broad concepts
 - o adaptive riding, animal assisted therapy, donkey assisted, donkey related, equine-based, equine assisted activities and therapy, equine programs, equine therapy, equestrian therapy, equine related, horse-assisted, horse related, hippotherapy, horses, mental health, horses, psychosocial, therapy horses, therapy processes, therapeutic riding, treatment outcomes, and onotherapy
- o Multiple databases
 - o CAB Abstracts (EBSCO), CINAHL (EBSCO), PsycINFO (EBSCO), PubMed (NCBI), Social Sciences Abstracts (EBSCO), Social Work Abstracts (EBSCO), SPORTDiscus (EBSCO), and Web of Science (Thomson Reuters)

Filter 1:
Search Strategy

Filter 2:
Inclusion &
exclusion

Inclusion

Exclusion

All included papers must be:

- Peer-reviewed;
 - Primary source
 - Written in English; **AND**
 - Be published between 1980 – 2014
- Paper must be directly relevant to EAAT by meeting one of the following:**
- Primary focus of the paper is one or more kinds of EAAT;
 - Primary focus of the paper is on simulated horse studies (i.e. mechanical horse studies) of relevance to EAAT; **OR**
 - Primary focus of the paper is on the welfare, training, maintenance or any other issue affecting horses involved in EAAT

Papers are excluded that:

- Focus on animal-assisted therapy or human-animal bond, connection or interaction that is either unrelated to EAAT or that includes EAAT only as a minor focus
- Provide only a synopsis of a paper about EAAT that has been published elsewhere
- Provides horse related information not related to EAAT; **OR**
- Have no obvious relevance to EAAT or human-animal bond

N=225 Included
Papers

Filter 1:
Search Strategy

Filter 2:
Inclusion &
exclusion

Filter 3:
Data Extraction
Tool (DET)

- Purpose: To systematically extract information from every included paper that is relevant to the study's research questions
- DET was developed and refined based on ongoing analyses of EAAT literature and consultations with experts and industry leaders (WHO, 2002)
- DET was imported into Microsoft Access to allow computer-based extraction of information from every included paper

Key Research Activities & Timeline

| KEY RESEARCH ACTIVITIES | Year 1 (2013—2014) | | Year 2 (2014—2015) | | Year 3 (2015 – 2016) | |
|---|--------------------|----------|--------------------|----------|----------------------|----------|
| | Aug-Jan | Feb-July | Aug-Jan | Feb-July | Aug-Jan | Feb-July |
| RESEARCH TEAM & PROJECT MANAGEMENT: COMPLETE | | | | | | |
| • Recruit Library Science Expert | → | | | | | |
| • Recruit EndNote/Access Consultant | | → | | | | |
| • Appoint Project Manager & develop project manager system | | | → | | | |
| INITIAL CONCEPTUALIZATION OF STUDY: COMPLETE | | | | | | |
| • Review background literature (EAAT content & methods) | → | | | | | |
| • Develop study rationale, aims and questions | | → | | | | |
| • Determine appropriate methodology | | → | | | | |
| DATA COLLECTION: IN PROCESS | | | | | | |
| • Develop search strategy | | → | | | | |
| • Develop inclusion/exclusion criteria | | → | | | | |
| • Implement Phase 1 of search strategy (9 databases, 1980-2014) | | → | → | | | |
| • Import located papers into EndNote software | | → | → | | | |
| • Obtain 95% reliability in inclusion/exclusion coding | | | → | | | |
| • Implement Phase 2 of search strategy (manual searches) | | | → | → | | |
| • Complete inclusion/exclusion coding of papers (Phases 1 & 2) | | | → | | | |
| DATA CODING & ANALYSIS: IN PROCESS | | | | | | |
| • Develop data extraction tool (DET) | → | → | → | | | |
| • Import DET into Access Database | | | → | | | |
| • Train team members in DET coding in Access | | | | → | | |
| • Import included papers from EndNote into Access | | | → | | | |
| • Obtain 95% reliability in DET coding | | → | → | → | | |
| • Coding all included articles in Access | | | | → | → | |
| • Analyze quantitative data using Access query tool | | | | → | → | |
| • Analyze qualitative data for primary themes | | | | → | → | |
| DISSEMINATION OF FINDINGS: IN PROCESS | | | | | | |
| • 3 initial manuscripts (methods, autism, equine-facilitated OT) | | | | → | → | → |
| • Further dissemination (refereed papers, presentations, website) | | | | → | → | → |

Arrows indicated start and end dates of specific tasks

Study Limitations

- Papers written in English only
- Variations in EAAT terminology
- Emphasizes breadth over in-depth analyses
 - Difficult to analyze effectiveness of various interventions

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