

October 30, 2021

Horses & Humans Research Foundation

Spindale, NC

THE HORSES AND THE PEOPLE ARE THE MAGIC

Building the Scientific Bases of Diverse Equine-Assisted Services

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What is an Intervention?

- ◆ Most basically, an intervention is what we do as therapists and providers in the hopes of having a positive impact on the people we serve

Therapy

- ◆ Counseling
- ◆ Occupational therapy
- ◆ Physical therapy
- ◆ Psychotherapy
- ◆ Speech-language pathology

Learning

- ◆ Equine-assisted learning in education
- ◆ Equine-assisted learning in development
- ◆ Equine-assisted learning in organizations

Horsemanship

- ◆ Adaptive Equestrian Sports
- ◆ Adaptive riding or Therapeutic riding
- ◆ Driving
- ◆ Interactive vaulting

Equine-assisted Services

Why Intervention Research?

- ◆ Because it helps us to draw conclusions about:
 - ◆ Cause-effect relationships between a specific intervention and its outcomes; and
 - ◆ Which intervention, among meaningful alternatives or comparison conditions, most effectively produce desired outcomes.

Must We Really Talk about Theory?

- ◆ Because neglecting the early conceptual development and refinement of any intervention results in a “weaker intervention that is harder to evaluate, less likely to be implemented, and less likely to be worth implementing.”

- ◆ Act 1. The Horses are the Magic
- ◆ Act 2. The People are the Magic, Too
- ◆ Act 3. Mopsi and Steffen



Act 1. The Horse is the Magic

Kinney, Eakman, Lassell & Wood, 2019; McDaniel Peters & Wood, 2017; Peters, Wood & Hepburn, 2019;
Wood & Fields, 2019; Wood, Fields, Rose & McLure, 2017

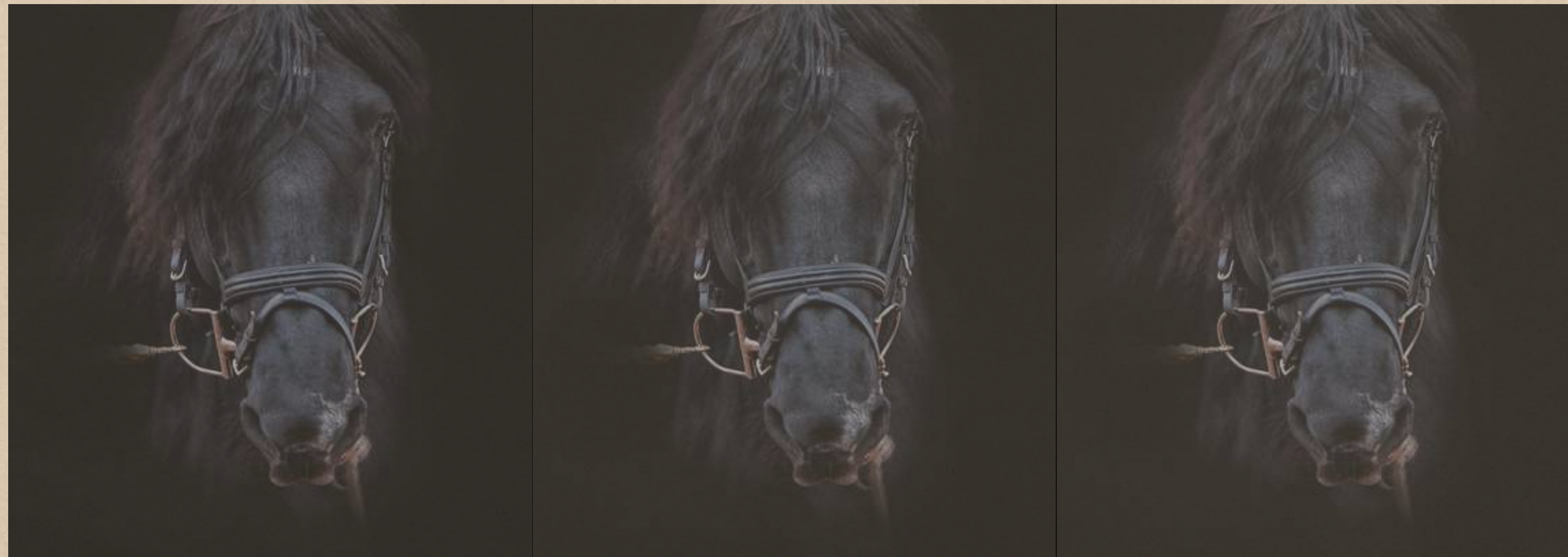
Why the Horse?



- Positive benefits of interacting with and building relationships with horses as prey animals
- Positive benefits of the quality of horses' movement, warm bodies, nonjudgmental nature, and calming effects
- Positive sensory experiences, and of experiences of mastery and self-efficacy, which riding and other horsemanship activities create

A "Black Box" Approach

Study
participants +



= outcomes

“Equine-assisted Activities and Therapies Therapy”

“Equine-assisted Therapy”

“Equine-assisted Activities”

“Hippotherapy”

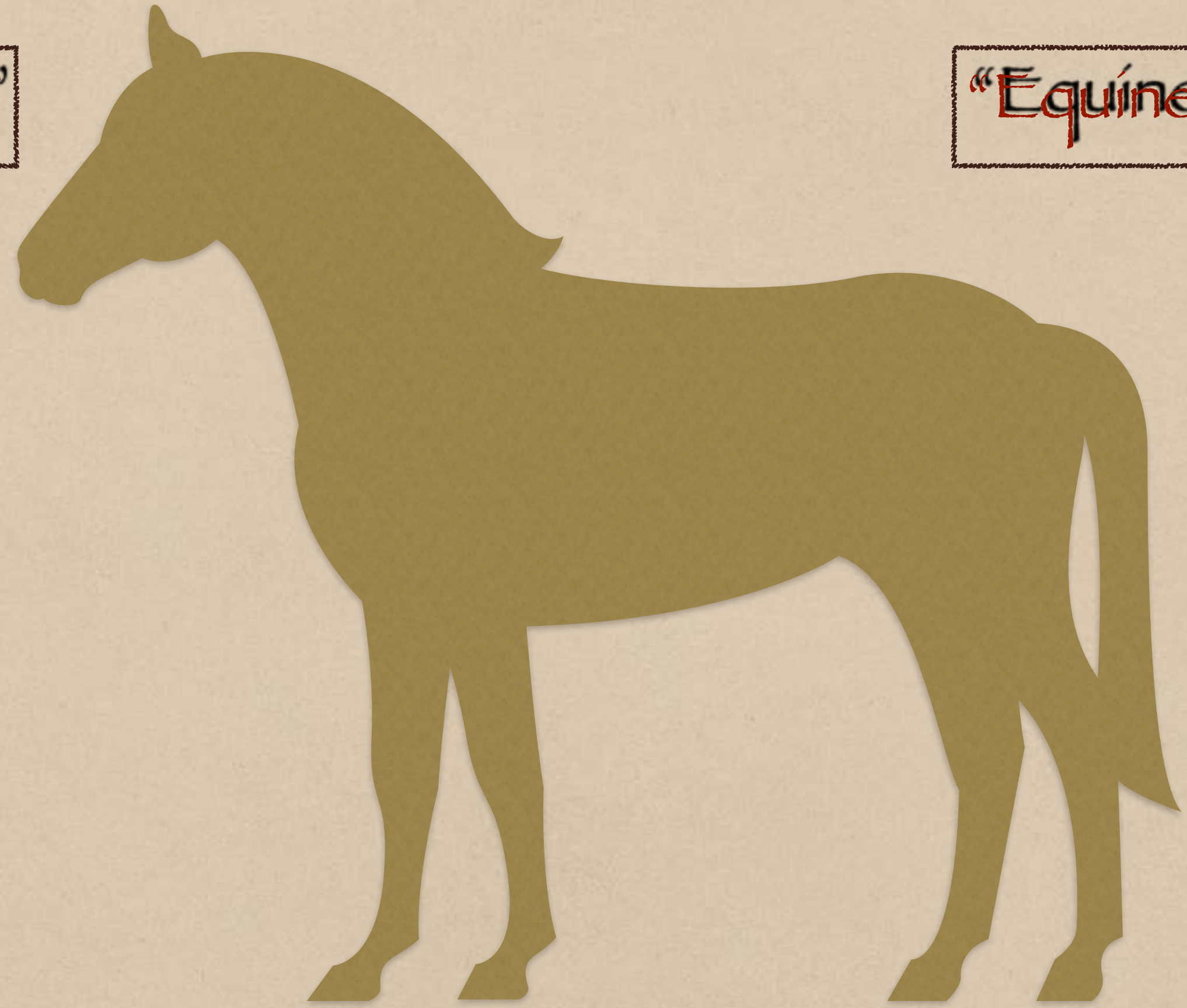
“Equine Therapy”

“EAAT Therapy”

“Horse Therapy”

“Therapy Riding”

“Equestrian Therapy”



“Horseback Riding Therapy”

Therapy

- ◆ Counseling
- ◆ Occupational therapy
- ◆ Physical therapy
- ◆ Speech-language pathology

Learning

- ◆ Equine-assisted learning in development

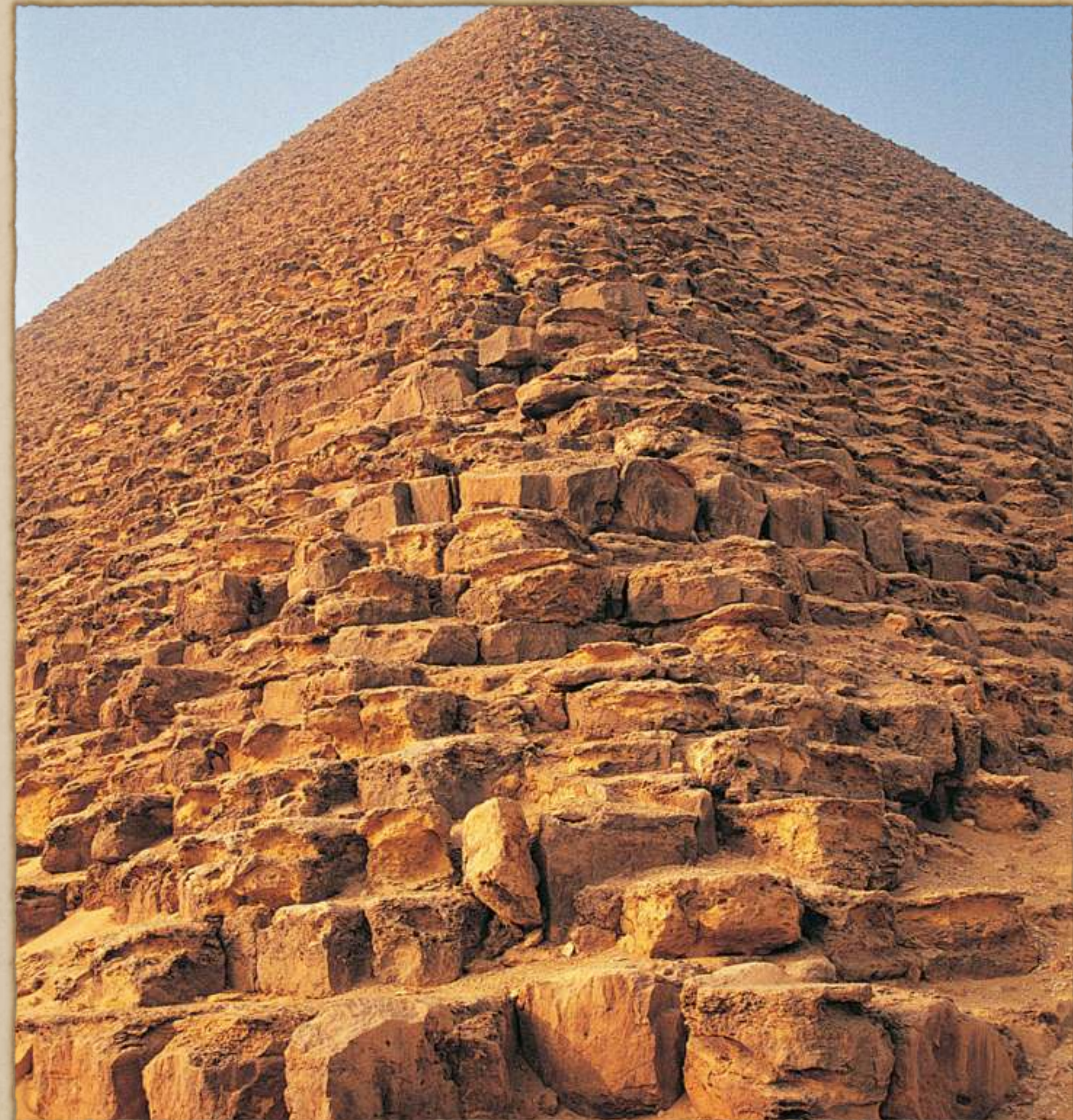
Horsemanship

- ◆ Therapeutic riding

Unpacking 78 Studies of So-called “Hippotherapy”

Building and refining the theory of an intervention

- ◆ Fully elucidating the exact nature of the intervention



A woman with long dark hair, wearing a wide-brimmed tan hat, a denim jacket over a white top, and light-colored pants, stands in a field of tall, dry grass. She is looking off to the side. The background is a soft-focus landscape with more vegetation and a bright sky.

Act 2. The People are the Magic, Too

OTee-HORS: Occupational Therapy in an Equine Environment for Youth with
Autism: Harnessing Occupation for Self-Regulation Skills

In youth with autism (P), what is the effect of OTee-HORS (I) versus OT in a clinic (C) on self-regulation, social functioning, and performance of targeted skills (O)?



Hearts and Horses Therapeutic Riding Center

Peters & Wood, 2017; Peters, Wood & Hepburn, 2019; Kalmbach, Wood, & Peters, 2020; Peters, Wood, Hepburn & Bundy, 2020; Peters, Bentele, & Wood, 2021; Peters, Wood, Hepburn, & Moody, 2021)

The Theory of an Intervention

The Problem

How people in a specific group or population characteristically experience a problem, under what conditions or over time.



OTee-HORS: Occupational Therapy in an Equine Environment for Youth with Autism: Harnessing Occupation for Self-Regulation Skills

The Problem

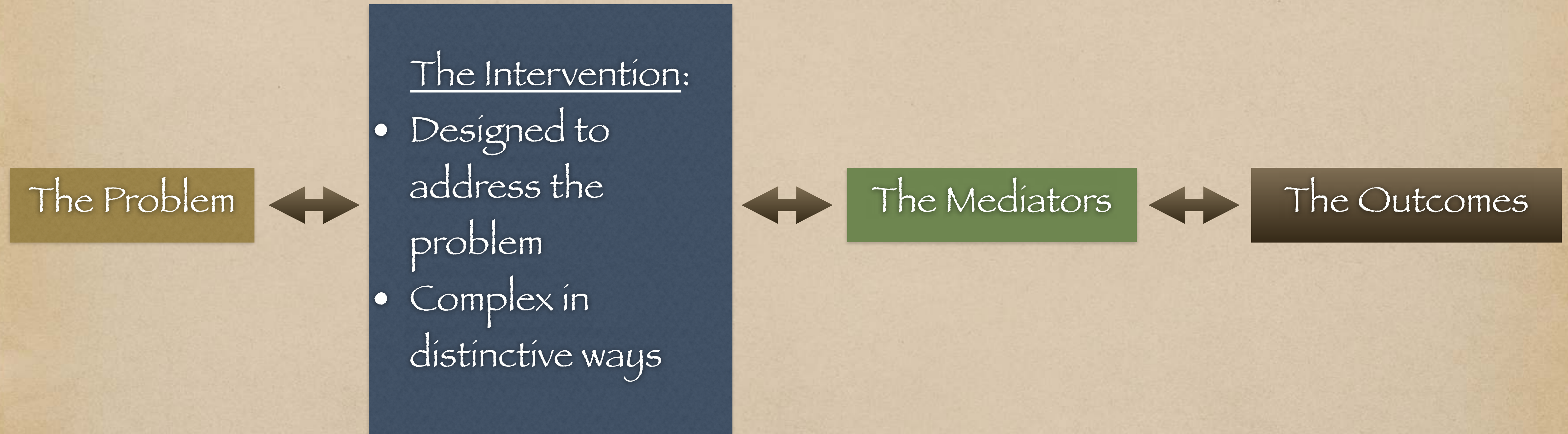
Adverse impact on occupational performance related to decreased self-regulation skills, decreased social engagement, and impairments in physiological regulation.

The Intervention

The Mediators

The Outcomes

The Theory of an Intervention



OTee-HORS: Occupational Therapy in an Equine Environment for Youth with Autism: Harnessing Occupation for Self-Regulation Skills

The Intervention:

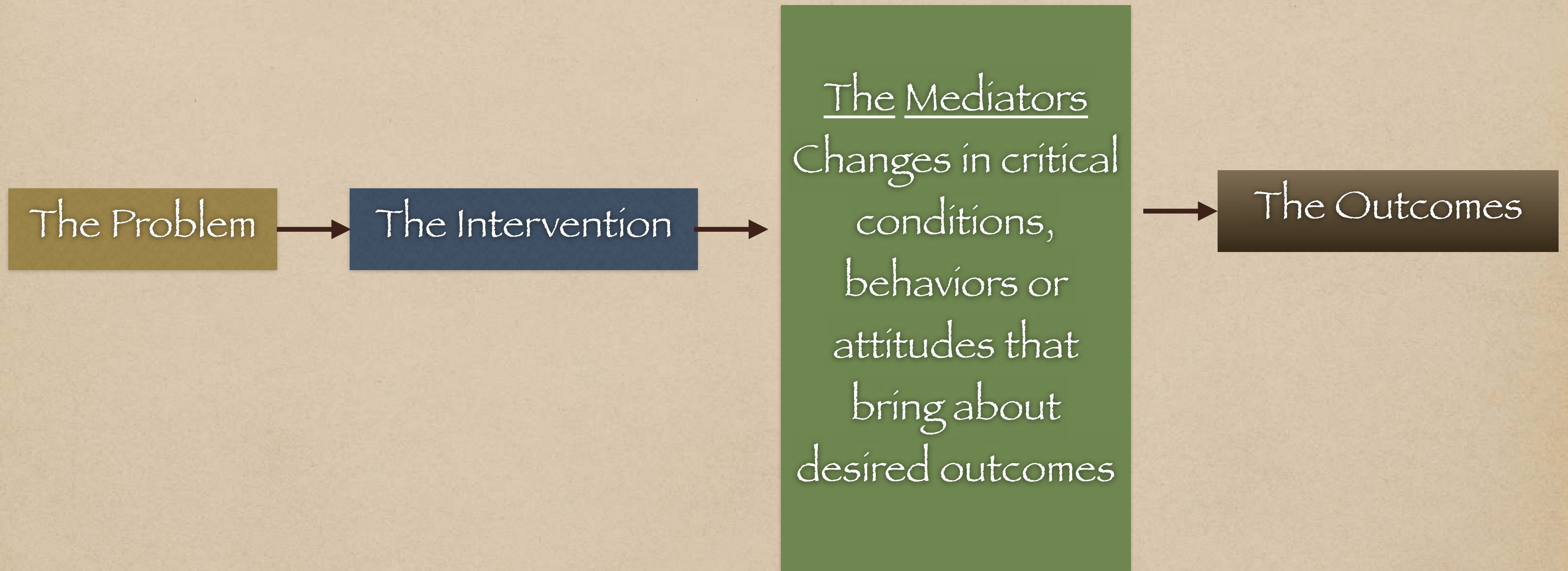
- Direct instruction of emotional regulation skills
- Practice emotional regulation skills in therapeutic activity
- Positive reinforcement
- Scaffold skill performance with behavioral techniques
- Arrange environment to maximize learning

The Intervention:

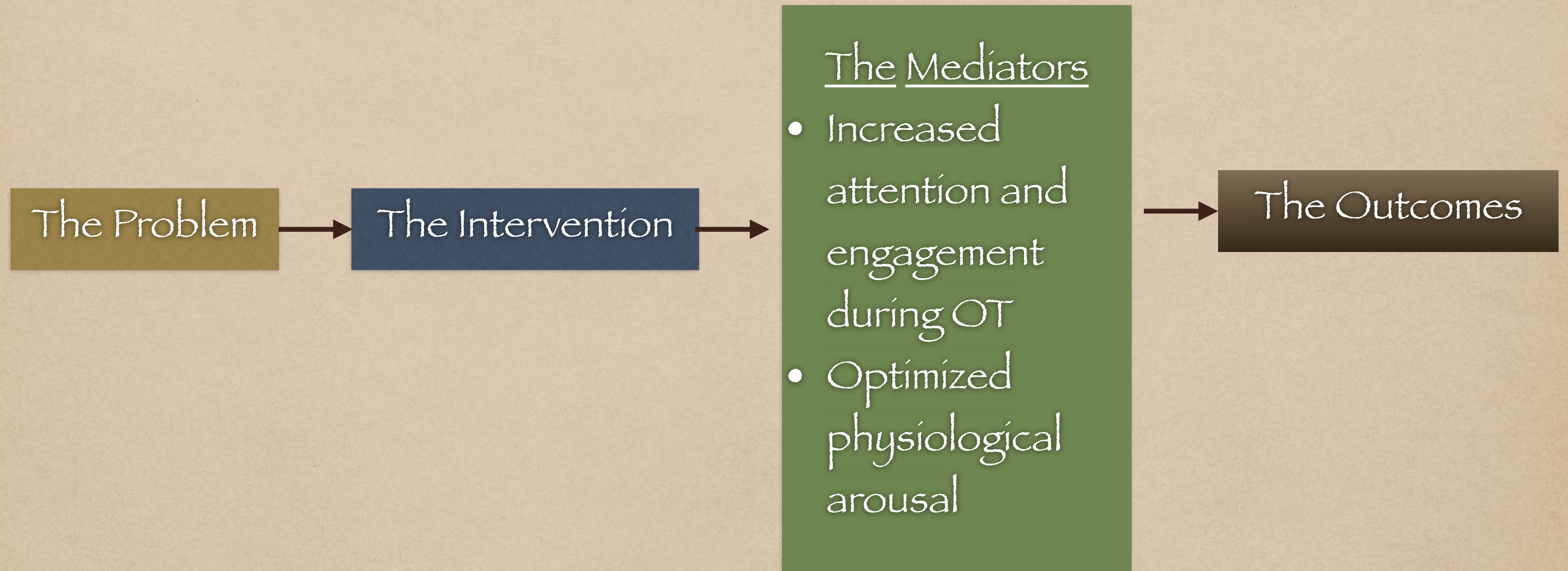
Incorporate the horse to

- Optimize physiological arousal
- Motivate youth to participate
- Provide positive reinforcement

The Theory of the Intervention



OTee-HORS: Occupational Therapy in an Equine Environment for
Youth with Autism: Harnessing Occupation for Self-Regulation Skills



The Theory of the Intervention



The Outcomes

- Ultimate goals
- Aspects of problem the intervention was designed to address
- Changes in functional status, attitudes, motivation; points in time of anticipated changes and patterns of change over time

OTee-HORS: Occupational Therapy in an Equine Environment for
Youth with Autism: Harnessing Occupation for Self-Regulation Skills

The Problem



The Intervention



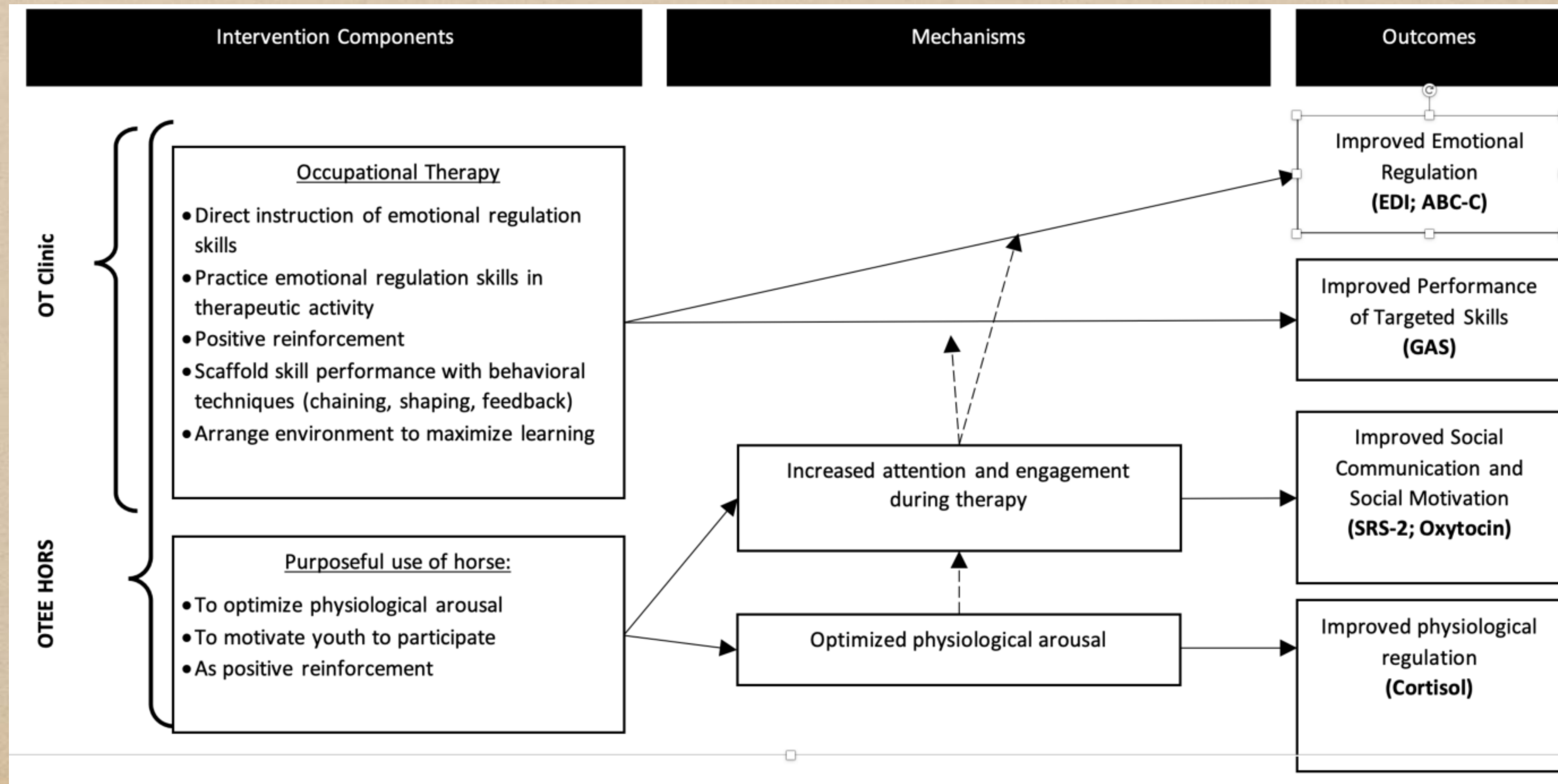
The Mediators



The Outcomes

- Improved self-regulation
- Improved performance of targeted skills
- Improved social communication and social motivation
- Improved physiological regulation

O_Tee-HORS: Occupational Therapy in an Equine Environment for Youth with Autism: Harnessing Occupation for Self-Regulation Skills





Act 3. Mopsi and Steffen



Mopsi, the Rave horse with the magic moves

2021 Tokyo Olympics

Pillars of the Village



Sugar, 2014 PATH Intl Horse of the Year
Hearts and Horses Therapeutic Riding Center



Scooter
Temple Grandin Equine Center

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