



# The Effects of Therapeutic Riding on Functioning and Quality of Life of Veterans: An ICF Perspective

Beth Lanning, PhD, MCHES

Baylor University

Nancy Krenek, DPT, HPCS

Ride on Center for Kids (ROCK)

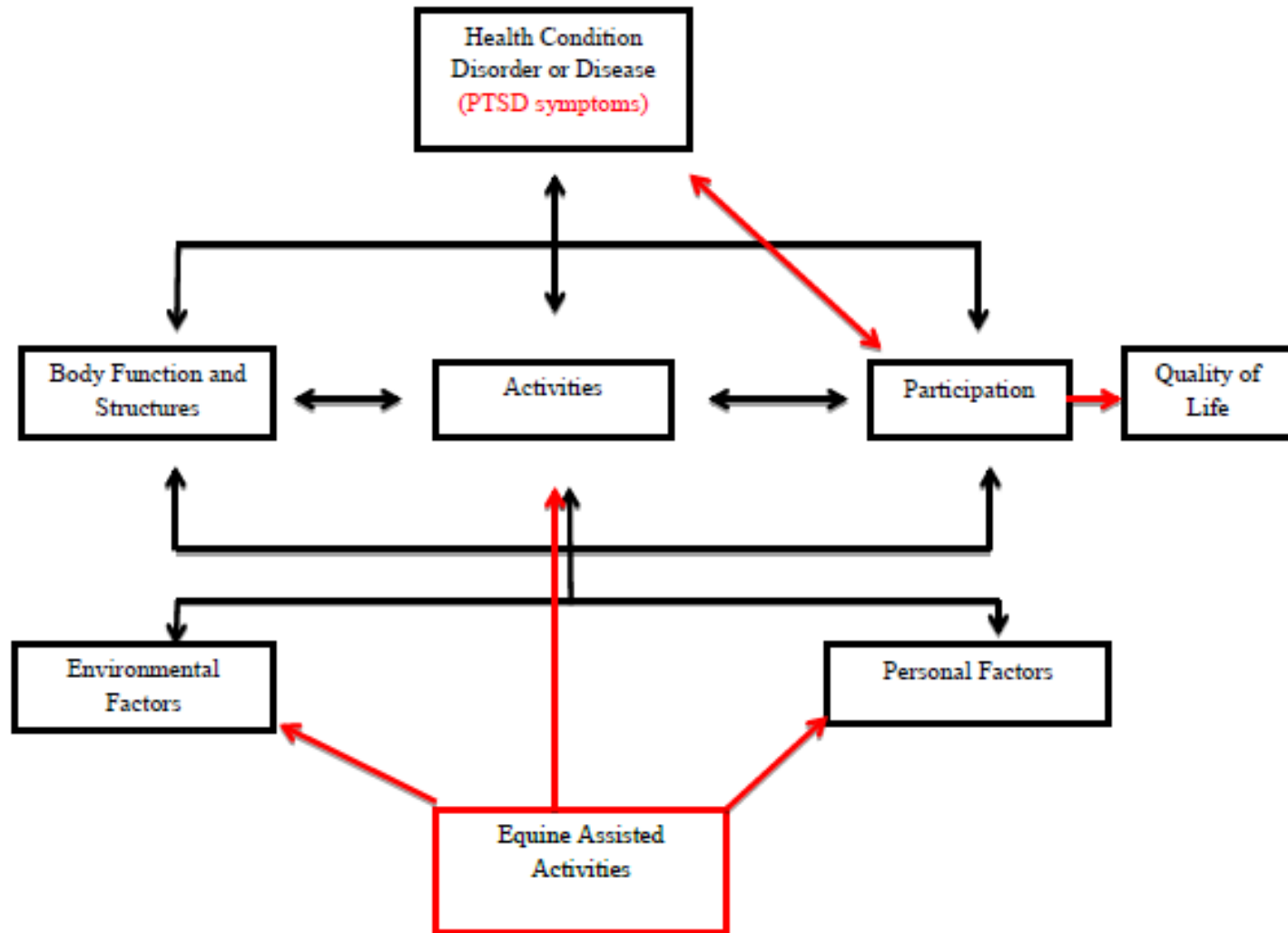
# The International Classification of Functioning, Disability, and Health (ICF)

- Adopted by the World Health Organization in 2001
- Patient-centered evaluation tool for disability and functioning
- The model helps clinicians, practitioners, and researchers visualize the relationship between areas of impairment

# ICF Components

- Body Function and Structures- the physiological functioning of the body systems
- Activities- execution of everyday activities
- Participation- involvement in everyday life situations
- Environment- physical and social environment
- Personal Factors- lifestyle, habits, education, social factors, gender, ethnicity.

# THR and the ICF model



# The Project

- Stage one- funded by Baylor University
- Stage two- funded by Horses and Humans Research Foundation
- In kind support from 5 therapeutic riding facilities
  - ROCK (Georgetown, TX), REACH (McGregor, TX, Triple H (Pipe Creek, TX), Rainier TR (Yelm, WA), Courtney Cares (College Station, TX).



# Study Design

- Mixed-methods, waitlist-control, experiment, with repeated measures.
- Eight week structured therapeutic riding intervention using the Riding Through Recovery curriculum
- Assessments at week 0, 4, 8 , 2 month post intervention

# Participants

- Post 9/11: OEF-Operation Enduring Freedom, OIF- Operation Iraqi Freedom, OND-Operation New Dawn
- Veterans and active duty service members
- No EAAT experience 6 months prior
- PTSD diagnosis, confirmed with PCL-M, PCL-5 provisional diagnosis
- Signed consent, Baylor IRB, IACUC, BAMC IRB.

# Assessments

- PTSD checklist-military (PCL-M), PTSD checklist-5 (PCL-5)
- SF-36v2 Health Assessment (SF-36v2)
- World Health Organization Disability Assessment Schedule 2 (WHODAS-2)
  - 36 items self-assessment, 12 item proxy form
- Major Depression Inventory- MDI



# Findings

- Data subset of the full project
- 51 veterans/active duty participated in the therapeutic horseback riding program
- 75% (n = 39) completed all 8 weeks
- 55% (n = 28) completed 2 month follow-up surveys
- 37 completed post intervention interviews



# Findings (2)

- Variables of interest
  - Overall PTSD symptoms
  - Quality of life Indicators
  - Functioning
  - Themes

# Findings (3)

- Quality of Life Indicators mapped to Body Function and Activities & Participation
  - Largest improvements:
    - PTSD symptoms,
    - social functioning,
    - vitality,
    - interference of emotions in everyday functioning
    - overall mental health

# Findings (4)

- WHODAS-2: Mapped to Activities & Participation
  - Small improvements noted in
    - Understanding and Communication
    - Getting Along with People
    - Participating in Society



# Findings (5)

- Supportive themes
  - Less anxiety
  - More confidence
  - Increase hope
  - Helping others
  - Gratitude

# ICF Linking (selected)

ICF Category	Theme
Body Function	
Emotional Function (b152)	Depression, Anxiety, Less anxiety
Confidence (b1266)	Increase confidence
Optimism (b1265)	Increase hope
Activities and Participation	
Focusing Attention (d160)	In the present time
Communication non-verbal (d315)	Horse mirrors emotions
Informal Social Relationships (d750)	Increase trust

# ICF Linking (selected)

ICF Category	Theme
Environmental Factors	
Domesticated animals (e350)	Personality of horse
Friends (e320)	Feel comfortable with surroundings
Supportive relationships (e420)	Not feeling judged
Not in ICF	Set boundaries
	Improved patience

# Correlations

- Highest (0.59- 0.73) baseline correlations noted between
  - PCL-5 scores and
    - Social functioning
    - Role emotional
    - Mental health
    - Vitality
    - Participating in Society



# Correlations (2)

- Highest (0.53- 0.72) Post treatment correlations noted between
  - PCL-5 scores and
    - Social functioning
    - Role emotional
    - Mental health
    - Understanding and Communicating
    - Getting Along with People
    - Participating in Society



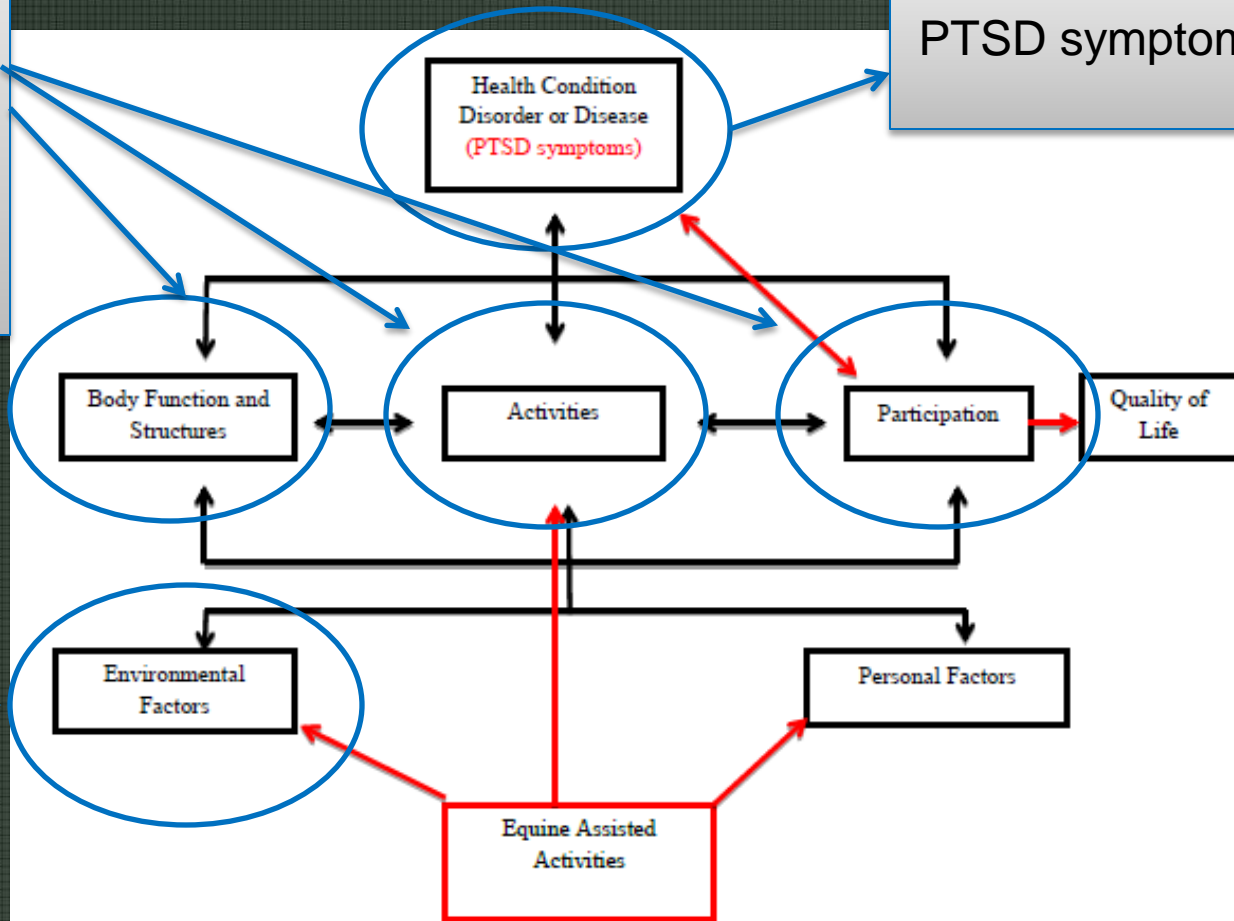
# The missing piece

- Personal Factors in the ICF- no systematic coding yet.
  - Key to understanding and treating reactive disorders
  - Need to consider a person's coping style, past and present experiences, behavior patterns.

# THR and ICF revisited

Quantitative data supports improvement in these areas

PTSD symptoms



Qualitative themes support



# Questions?

Beth\_Lanning@baylor.edu