

Metaphor Training Program

References:

Lundgren, K., Bownell, H., Cayer-Meade, C., Milone, J., & Keams, K. (2011). Treating Metaphor Interpretation Deficits Subsequent to Right Hemisphere Brain Damage: Preliminary Results. *Aphasiology*, *1*(1), 1-19. doi:10.1080/02670382.2010.500839.

Bownell, H., Lundgren, K., Cayer-Meade, C., Milone, J., Katz, D., & Keams, K. (2013). Treatment of Metaphor Interpretation Deficits Subsequent to Traumatic Brain Injury Damage: Results from a Preliminary Study. *Journal of Head Trauma Rehabilitation*, *28*(6), 445-52. doi:10.1097/HTR.0b013e31829b5e85.

Training

Stimulus items

- Words
- Word association
- Metaphors

Task I: Judgments of Single Word Connotative Meaning

- **Rationale:** To illustrate and practice thinking about connotative meaning.
- **Task:** Patient is familiarized with computer display and answers yes/no questions about 10 words.

TASK I Familiarization

- Is this word typically considered "beautiful"?
- Is this word typically considered "strong"?
- Is this word typically considered "active"?
- Is this word typically considered "passive"?

Tiger

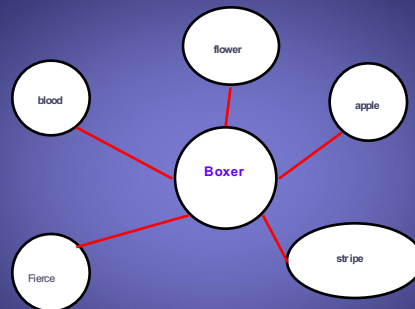
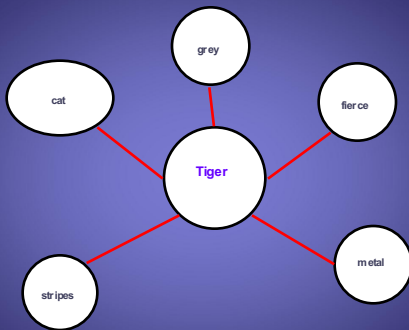
TASK I
Familiarization

- A. Is this word typically considered “beautiful”?
- B. Is this word typically considered “strong”?
- C. Is this word typically considered “active”?
- D. Is this word typically considered “passive”?



Task II: Judgments of Word Associations

- **Rationale:** Illustrate and practice assessing typical associations.
- **Task:** Patient sees a target word and 5 possible associations, and must say whether the association is appropriate or not.

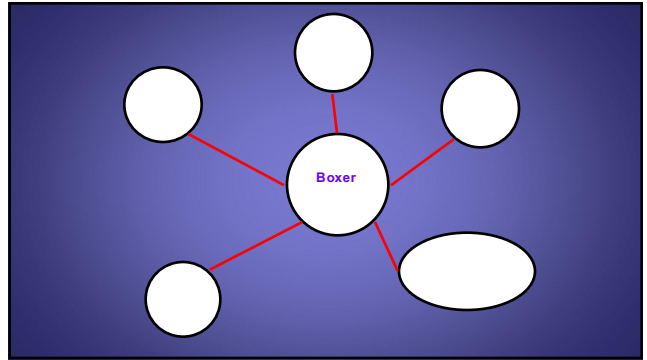
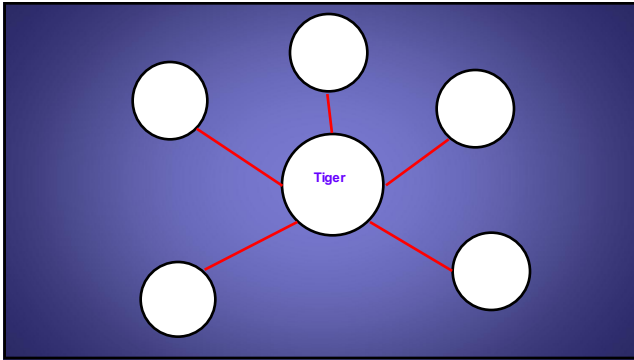


Task III: Generation of Word Associations

- **Rationale:** Practice generating 5 words associated with a target.
- **Task:** Patient must generate 5 associations to fill empty bubbles linked to a target word contained within the center bubble.

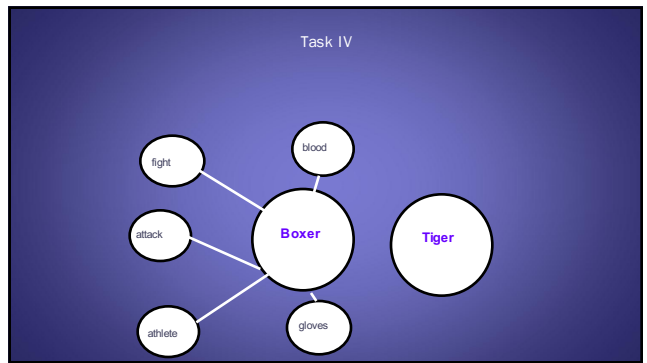
TASK III

- I want you to give me a word that *most* people would associate with this word in the center

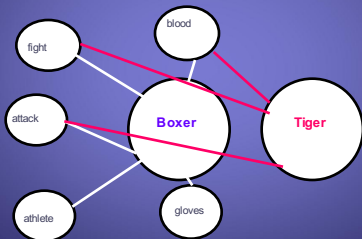


Task IV: Judgment of Patient-Generated Associations to Link 2 Words

- **Rationale:** Provide practice generating associations and evaluating appropriateness of associations between 2 words.
- **Task:** C) Patient is asked whether the associations for Word 1 can also be associated to Word 2. Ideally, some will and others will not.



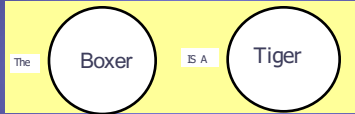
Task IV
Participant generates 5 accurate associations to Target



Task V: Selection of Appropriate Metaphor Ground from Candidate Dual Associations

- **Rationale:** Provide practice selecting the basis for a metaphor from a set of candidates.
- **Task:** Patient views a metaphor within a double bubblemap and selects the appropriate interpretation from 3 choices (correct, literal, close substitution using another metaphor).

Task V
Selecting Metaphor Ground from Dual Associations



2. Selects appropriate meaning from 3 choices:
- A) The boxer is a wild animal. (literal)
 - B) The boxer is a fierce competitor. (correct)
 - C) The boxer gets paid for fighting (other)

Multidimensional scoring

(Lundgren et al. 2005; Brownell et al. 2007)

- 6. Complete and appropriate, characterized by rich, descriptive language (only rarely used).
- 5. Complete and appropriate (non-concrete) but basic/simple.
- 4. Complete and appropriate but (a) delayed (longer than 5 seconds required for response initiation), (b) may contain self-corrections, or false starts but eventually gets to the correct response, or (c) may include some tangential comments and/or personalization.
- 3. Close substitution using appropriate alternative metaphor to close substitution/with some clear elements of abstraction but not the complete, correct /appropriate interpretation.
- 2. Literal associate, may be partially correct with some partial or inappropriate non-concrete extension.
- 1. Literal associate without any non-concrete extension.
- 0. No response, "I don't know" response, off topic comments unrelated to the metaphor.