BEHAVIOR ANALYSIS IN BRAIN INJURY REHABILITATION

OVERVIEW

Brain injuries can result in lifelong physical, cognitive, and behavioral changes, which can slow progress toward rehabilitation goals and independent living. Behavior analysts add value to interdisciplinary teams for patients with a brain injury by developing both skill-acquisition and behavior-reduction programs throughout the continuum of care (i.e., acute, post-acute, long term). Common goals for skill-acquisition programs include improved social interactions and the ability to return to work. Common goals for behavior-reduction programs include decreased aggression and inappropriate vocalizations.

Symptoms following brain injury are highly idiosyncratic, which makes behavior analysts' use of single-subject designs particularly useful for evaluating rehabilitative outcomes (e.g., monitoring behavior following medication changes). Given rising healthcare costs and the reduced availability of rehabilitation services, behavior analysts' focus on measurement, accountability, and evidence-based treatment makes them integral to a patient's success.

LEARN MORE

Initial Publication

Boyle, M. E., & Greer, R. D. (1983). Operant procedures and the comatose patient. *Journal of Applied Behavior Analysis, 16*, 3-12.

Recommended Reading

Heinicke, M. R., & Carr, J. E. (2014). Applied behavior analysis in acquired brain injury rehabilitation: A metaanalysis of single-case design intervention research. *Behavioral Interventions, 29,* 77-105.

Jacobs, H. E. (2000). Behavioral contributions to brain-injury rehabilitation. In J. Austin & J. E. Carr (Eds.), <u>Handbook of applied behavior analysis</u> (pp. 211-230). Oakland, CA: New Harbinger Publications. Kolakowsky-Hayner, S. A., Reyst, H., & Abashian, M. C. (Eds.). (2016). *The essential brain injury guide* (5th ed.). Vienna, VA: Brain Injury Association of America.

Additional Resources

- ABA Rehab Special Interest Group
- Brain Injury Association of America
- Cambridge Center for Behavioral Studies
- North American Brain Injury Society
- Brainline: All About Brain Injury and PTSD