Emotion recognition deficits impede community integration after traumatic brain injury

August 30 2019

Dr. Helen Genova is assistant director of the Center for Neuropsychology and Neuroscience Research at Kessler Foundation. Credit: Kessler Foundation/Jody Banks

Kessler Foundation researchers have found a correlation between deficits in facial emotion recognition and poor community integration in individuals with moderate to severe traumatic brain injury. Their findings have implications for the development of rehabilitative interventions to reduce social isolation in this population, improve outcomes, and increase quality of life.

The article, "Community integration in traumatic brain injury: The contributing factor of affect recognition deficits," was epublished ahead of print on June 10 in the *Journal of the International Neuropsychological Society* by Cambridge University Press. The authors are Allison S. Binder of Goodwill Industries of Central Texas, Austin, TX, and Kate Lancaster, Ph.D., Jeannie Lengenfelder, Ph.D., Nancy Chiaravalloti, Ph.D., and Helen Genova, Ph.D., of Kessler Foundation.

Among people with moderate to severe traumatic brain injury, social isolation is prevalent, and contributes to poor rehabilitation outcomes. Social isolation manifests as lack of community integration, which comprises the home, social settings, and educational and employment settings. Despite the importance of community integration to individuals and their families, the barriers and facilitators to community integration are poorly understood, and targeted interventions are needed. One potential barrier to community integration is impairment in the ability to accurately identity facial emotions, a deficit that leads to difficulties in social interactions.

This study compared two groups of participants—27 with moderate to severe traumatic brain injury and 30 healthy controls. All participants completed a questionnaire to examine Community Integration and two tests of facial emotion recognition.The TBI group reported lower levels of community integration compared to the healthy control group. Importantly, those individuals who had lower performance on the facial emotion recognition task displayed reduced integration into the

community.

"Our findings suggest that deficits in facial emotion recognition may contribution to the social isolation experienced by so many people with traumatic brain injury," said Dr. Genova, assistant director of the Center for Neuropsychology and Neuroscience Research. "By incorporating appropriate interventions to improve facial emotion recognition into rehabilitative care, we may see improvement in community integration, and increases in quality of life for both individuals and their caregivers," she concluded.

More information: Allison S. Binder et al, Community Integration in Traumatic Brain Injury: The Contributing Factor of Affect Recognition Deficits, *Journal of the International Neuropsychological Society* (2019). DOI: 10.1017/S1355617719000559

Provided by Kessler Foundation