

Research In Focus: A Weekly Digest of New Research from the NIDILRR Community

Irritability Can Be a Challenge After Traumatic Brain Injury, but There Are Ways to Cope

An estimated 5.3 million Americans are living with traumatic brain injuries (TBI), according to the Centers for Disease Control and Prevention. A TBI occurs when someone experiences brain damage after a head trauma, such as from a fall or a car accident. TBI can cause a variety of long-lasting challenges, including difficulties managing feelings, thinking clearly, or processing information. As a result, many people with TBI have frequent irritability. Irritability is a tendency to get upset or annoyed easily, and it can make it hard for people with TBI to get along well with others.

There has been little research on the causes of irritability in people with TBI or on effective treatments. One recent NIDILRR-funded study looked at how people with TBI, their families, and healthcare providers describe irritability, what tends to trigger it or make it worse, and how people with TBI manage their irritability.

Researchers from the [Brain Research in Aggression and Irritability Network \(BRAIN\)](#) conducted five focus groups with a total of 44 people. Each group included a mix of people with TBI, family members, and professionals who frequently have clients with TBI, such as psychologists, social workers, and vocational rehabilitation counselors. Each group met once a month for ten months to talk with the researchers about their experiences with post-TBI irritability. The participants discussed what irritability meant to them, how irritability was related to having a TBI, what tended to trigger irritability, and how they managed irritability in their daily lives.

The researchers identified several themes and ideas that came up often in the discussions. The participants with TBI and their family members described irritability as a kind of bad mood that can come on suddenly, be intense, and take a while to go away. They described five main components of post-TBI irritability:

1. Negative feelings: Participants said that feelings of frustration, uncertainty, or being overwhelmed could cause irritability.

2. Behavioral triggers: Participants described having difficulties with impulse control or with managing their time. Trying to do too many things too quickly was a common trigger for irritability.
3. Negative thoughts: Participants described having thoughts that led to irritability, such as comparing their mental abilities now to what they could do before the injury, or comparing themselves to other people. They also described other negative thoughts, such as “People think I am stupid” or worrying that other people are judging or blaming them for things.
4. Relationship issues: Miscommunications between the person with TBI and his or her spouse often caused both parties to become irritable with each other. Some spouses reported being frustrated or sad about the injury and new responsibilities they had in caring for their partner with TBI.
5. Environmental elements: Participants described some environmental triggers for irritability, especially noisy or chaotic environments, time pressures, disruptions to their routines, and societal pressures to do too many things.

The participants also described the strategies they use for reducing irritability below:

- ✓ Emotional strategies: Participants indicated that maintaining a sense of humor and building gratitude were helpful in coping with irritability.
- ✓ Cognitive strategies: Participants reported that accepting their limitations and thinking positive thoughts helped to reduce irritability.
- ✓ Behavioral strategies: Participants found that it was helpful to follow routines, build extra time into their schedules, and avoid situations that tend to trigger their irritability.

This study offered a preliminary look at common irritability triggers for people with TBI. Based on these results, the authors argued that irritability is an important problem for clinicians to address when treating people with TBI. Some treatment approaches they recommended included emotional awareness training to recognize the early signs of irritability and cognitive retraining to recognize negative thoughts. They also recommended self-management techniques such as time management, making structured routines, and reducing unwanted noise or stimulation in the environment.

Some of this training could be assisted using computers and mobile applications. In addition, the results point to the importance of family therapy to improve communication between the person with TBI and their family members. Future research could investigate specific treatments for post-TBI irritability, especially family-based treatments and those using novel computer and mobile technologies.

To Learn More

The [Center for Brain Injury Research and Training \(CBIRT\)](#) offers many resources for people with TBI and their families adjusting to life after injury. This includes [Family Support After Injury](#), a training program that provides information about traumatic brain injury (TBI) and strategies to manage the cognitive, behavioral, and social changes that may arise after a TBI.

The Model Systems Knowledge Translation Center (MSKTC) has a wealth of information and resources from the TBI Model Systems, including factsheets, hot topic modules, and the innovative TBI InfoComics series. <http://www.msktc.org/tbi>

BrainLine.org is a comprehensive information and support website for people with TBI, their families, and the professionals who support them: <http://www.brainline.org/>

To Learn More About This Study

Hammond, F.M.; Davis, C.; Cook, James R.; Philbrick, P; and Hirsch, M.A. (2016) [A Conceptual Model of Irritability Following Traumatic Brain Injury: A Qualitative, Participatory Research Study](#). Journal of Head Trauma Rehabilitation, 31(2), E1-E11. This article is available from the NARIC collection under Accession Number J73359.

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