

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

People with Traumatic Brain Injuries Who Socialize Online May Be More Involved in Their Communities Than Those Who Do Not

A study funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR).

A traumatic brain injury (TBI) is lasting brain damage from an external force, such as a fall or a car accident. TBI can be mild, moderate, or severe. After a TBI, people may have difficulty participating in social activities or maintaining relationships. Social Internet sites like Facebook, Instagram, or Web-based forums have enabled people with a variety of disabilities to build or maintain connections with others without facing the challenges of in-person participation. However, social Internet use may also present other challenges for people with TBI such as difficulty learning to use a smart phone or other device. In a recent NIDILRR-funded study, researchers looked at the associations between social participation and social Internet use among people with TBI. They wanted to find out whether people with TBI who used social Internet sites spent more or less time engaging in community activities outside the home, relationships, and productive activities compared with those who did not use the Internet for socializing.

Researchers at [TBI Model Systems \(TBIMS\) Centers](#) in Colorado, Pennsylvania, Massachusetts, Texas, Minnesota, and Alabama looked at data from 331 individuals with TBI who were treated at a TBIMS center. The individuals were at least 16 years old, had a moderate or severe TBI, and participated in follow-up interviews by phone at regular intervals after their discharge from rehabilitation. In their regular follow-up interviews, the individuals answered a series of questions about their level of participation in their community. The questions asked how often the individual engaged in activities outside their home, such as shopping or eating at restaurants; how often the individual engaged in relationships such as socializing with family and friends in-person or by phone or maintaining a close friendship or intimate partnership; and how much time the individual spent in productive activities such as working for pay, studying, or homemaking. Finally, the participants answered questions about their level of anxiety and depression. In addition to the scheduled interviews, these individuals participated in a survey of their Internet use. They were asked whether and how they accessed the Internet, if they used social media sites, and if they experienced barriers to using the Internet. As part of this study, the researchers also looked at hospital records and demographic data on the severity of each individual's TBI as well as their age, race/ethnicity, education level, location, and income level.

The individuals were classified as "social Internet users" if they reported using the Internet for email, social-media apps such as Facebook or Twitter, sharing photos or making video calls, or posting on Web-based forums. The researchers found that about 70% of the individuals reported using the Internet for social activities. Compared with the individuals who did not use the Internet for socialization, these social Internet users

tended to be younger, more educated, were more likely to be white or to live in the suburbs, had higher incomes, and had less severe long-term disabilities from their TBI.

When looking at community participation, the researchers found that after accounting for demographics and injury variables, the social Internet users reported engaging in community activities outside the home more often and also reported higher levels of engaging in relationships than the nonusers. There were no differences in time spent in productive activities between the users and the nonusers after accounting for demographic and injury variables.

The researchers also found that the association between social Internet use and engaging in activities outside the home was especially strong for the individuals with higher-than-average depression scores. For these individuals, the social Internet users reported engaging in these activities much more than the nonusers. However, for the individuals with lower depression scores, there was only a weak association between social Internet use and engaging in activities outside the home. The individuals who reported feeling very depressed and not using the Internet for socializing tended to report engaging in these activities very infrequently.

The authors noted that individuals with TBI may not be using the Internet to compensate for difficulties socializing in-person. Instead, those individuals with TBI who are already socially well-connected may also be using the Internet to supplement their real-world social interactions. On the other hand, individuals with lower levels of real-world social connection may also face barriers limiting their socialization online such as lack of technical knowledge, not owning a computer or smartphone, or not having reliable Internet service. Individuals with TBI may benefit from instruction on the use of smart phones and social media applications, perhaps during inpatient rehabilitation, and support to troubleshoot technical challenges so that they can become comfortable using these tools for social connection. Individuals with TBI who are experiencing depression may especially benefit from supports to help them get connected online.

[To Learn More](#)

A previous Research In Focus found that [the Internet and Social Media May Offer Valuable Support and Information for People with TBI](#).

[Using Social Media to Enhance Community Participation](#), developed by the Rehabilitation Research and Training Center on Community Living and Participation for Individuals with Serious Mental Illness, guides users through social media features and functions generally and specific networks such as: Facebook, Twitter, Instagram, LinkedIn, MeetUp, and Yelp. Also reviewed are considerations and risks when using social media.

[To Learn More About this Study](#)

Ketchum, J.M., et al. (2020) The association between community participation and social Internet use among adults with traumatic brain injury. *Journal of Head Trauma Rehabilitation*, 2020. This article is available from the NARIC collection upon request.

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