

# Research Matters

## School Services for Students with TBI During COVID-19

### OVERVIEW

This study explored how COVID-19 school closures affected students who had previously experienced a traumatic brain injury (TBI) and were receiving school-based support services. Each year, millions of children experience TBIs, and even mild injuries such as concussions can lead to ongoing challenges with thinking, attention, emotional regulation, physical symptoms, and behavior. Many students with TBI require classroom accommodations, special education services, or therapy supports such as speech therapy, physical therapy, or counseling.

When schools abruptly shifted to remote or hybrid learning in spring 2020 due to the COVID-19 pandemic, families of children with TBI faced an unexpected situation. Researchers interviewed 41 caregivers—and in some cases, their children—in Pennsylvania between spring 2020 and spring 2021. All of the students had experienced a TBI before the pandemic and were already receiving support services through a formal school reintegration program. The goal was to understand how the transition to remote or hybrid schooling changed their educational services, social experiences, and overall well-being.

### WHAT THE STUDY FOUND

Two major themes emerged:

1. Changes in education, services, and accommodations
2. Changes in social relationships and mental health

#### Changes in Education and School Services

##### Disruptions to Services

In terms of education, many families reported disruptions in services and accommodations. Some students stopped receiving certain supports altogether. Others continued receiving services, but in modified forms that were less effective. Parents described delays in updating educational plans such as 504 plans or IEPs because schools and medical offices were closed or operating under restrictions. Teachers, who were managing new teaching platforms and increased workloads, sometimes overlooked accommodations or struggled to adapt them to online formats.

## Issues with Technology

For students with TBI, remote learning often introduced new barriers. Many had difficulty concentrating on screens for long periods of time. Some experienced increased headaches, migraines, or visual strain due to extended screen use. Others struggled to navigate multiple online platforms, keep track of assignments, or follow lessons that required switching between links and applications. Students with more severe TBIs sometimes had difficulty interacting through a screen at all. In certain cases, specialized classroom equipment that supported learning could not be used at home.

## Parent/Caregiver Role Shift

The shift to remote learning also placed more responsibility on parents. Many caregivers found themselves monitoring assignments, helping organize schoolwork, clarifying instructions, and sometimes sitting alongside their child throughout the school day. For families with multiple children learning from home, managing space, schedules, and technology added additional stress. Parents described feeling increased pressure to ensure their child completed work and kept up academically.

## Academic Performance

Academic performance varied widely. Some students' grades declined, often due to decreased motivation, organizational challenges, or difficulty learning independently. Others maintained or even improved their grades. In some cases, students appreciated the flexibility of remote learning. Being able to work at their own pace, complete assignments on their own schedule, or reattempt certain tasks helped them feel more independent. For students who experienced anxiety in traditional classroom settings, learning from home sometimes reduced social stress and pressure. However, even families who recognized these benefits did not feel that remote special education services were more effective overall than in-person services before the pandemic.

## **Changes in social relationships and mental health**

The second major theme involved social relationships and mental health. Many students experienced significant social isolation during remote learning. Opportunities for casual interaction with peers disappeared, and even hybrid classrooms limited contact due to social distancing. Students described feelings of loneliness, sadness, and anxiety.

At the same time, not every family experienced negative social changes. Some students maintained friendships through video games, messaging, or video chats. A few families reported that peer interactions did not change significantly. Some parents felt that the slower pace of life and increased time together helped reduce their child's anxiety.

## FINAL TAKEAWAY

Overall, the study showed that the COVID-19 pandemic and the rapid shift to remote and hybrid schooling significantly affected students with TBI. Services were often interrupted or harder to deliver effectively. Students faced technological and cognitive challenges unique to online learning. Families took on greater responsibility, and many students experienced increased social isolation and mental health strain. At the same time, the experience revealed potential advantages of flexible scheduling and self-paced learning for some students.

The findings from this study highlight the importance of ensuring that students with TBI continue to receive appropriate accommodations and mental health support, whether learning occurs in person or online.

## REFERENCE

Palusak, C., Dart, L., Ciccio, A., Nagele, D., & Lundine, J. P. (2026). Caregiver and student perspectives on school services for students with traumatic brain injury during the COVID-19 pandemic. *Journal of pediatric rehabilitation medicine*, 19(1), 55–66. <https://doi.org/10.3233/PRM-230021>