



## **RESEARCH BRIEF #85**

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# **How Did COVID-19 School Closures Affect Adolescents with ADHD?**

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### **KEY FINDINGS**

- Adolescents with ADHD experienced losses and gains during COVID-19-related school closures.
- Adolescents with ADHD experienced:
  - Difficulty adjusting to online learning
  - Reduced socialization
  - Increased mental distress
  - Increased family reconnection
  - Reduced school-related anxiety
- Female adolescents with ADHD fared worse than male adolescents with ADHD, especially with respect to reduced socialization.

During the COVID-19 pandemic, school closures in the United States differentially affected school-aged youth,<sup>1</sup> with greater challenges in the transition to remote learning among youth with Attention Deficit/Hyperactivity Disorder (ADHD). School closures increased risk for negative developmental outcomes by reducing access to specialized learning opportunities, essential social interaction, physical activity, food assistance, and other supports.<sup>2</sup> At the same time, protective responses within the family, such as increased time together and communication, may have offset risks for some youth with ADHD and contributed to new opportunities for support and stress-related growth.<sup>3</sup>

This research brief presents results from a small, exploratory, mixed-methods study, involving qualitative interviews and self-reported quantitative scales. The study examined the risks, protective factors, and family processes that shaped well-being among adolescents during COVID-19-related school closures. While there were some positive changes, overall findings indicate a range of negative experiences. Additionally, we found that adolescent females with ADHD were more likely than adolescent males

with ADHD to experience negative consequences from COVID-19, including greater social and family impairments.

### Negative and Positive Impacts of COVID-19 on Families

Parents reported a range of negative and positive impacts of COVID-19 on their families (Table 1). Based on the Epidemic-Pandemic Impacts Inventory (EPII)<sup>4</sup> parents reported the most negative impacts in the Social Activities (e.g., reduced contact with friends) and Emotional Health and Well Being (e.g., increased anxiety) domains. However, parents also reported a high level of positive changes (e.g., more quality time with family, more time spent in nature).

<b>Epidemic-Pandemic Impacts Inventory (EPII) Subscales</b>	<b>Average Number of Changes</b>	<b>Items</b>	<b>Standard Score</b>
Work and Employment	2.29	11	0.21
Education and Training	0.86	2	0.43
Home Life	2.29	13	0.18
Social Activities	5.86	10	0.59
Economic	0.14	5	0.03
Emotional Health and Well-Being	3.29	8	0.41
Physical Health Problems	1.86	8	0.24
Physical Distancing and Quarantine	1.29	8	0.16
Infection History	0.43	8	0.05
Positive Changes	9.29	19	0.49

**Table 1: Average Number of COVID-related Changes**

Data source: EPII data collected during the pandemic from adolescents (N=7) and their parents (N=12) in August 2020. The standard score enables comparison across the subscales.

### In Their Own Words: Experiences with COVID-19

The results from qualitative interviews with these same adolescents with ADHD and their parents further support and provide nuance to the EPII data.

#### "He's Always Needed Reminders"

The loss of structured schedules and instruction were primary difficulties in the transition to online learning. As one parent noted:

*“There isn’t a time to get up in the morning, there isn’t a time for math. And at her age, she just didn’t have the discipline yet to structure her day accordingly.”*

Some parents responded with increased vigilance:

*“He’s always needed reminders, but now, I feel he needs more reminders. He’s definitely more distracted, not as focused as he was when he was going to school and doing his work.”*

Generally, parents tried to compensate for the loss of structure brought about by school closures. They tried to monitor their adolescent’s remote learning more consistently to help them complete their assignments and remain on track.

### **"I Like Hanging Out with My Friends"**

Unsurprisingly, families detailed a drastic reduction in social activities during the period of COVID-19-related school closures. Adolescents with ADHD missed seeing their friends in-person and found reaching out to peers more difficult and less satisfying. One 12-year-old male adolescent noted:

*"You don't realize how much better it is to talk to people in-person versus over a Zoom meeting."*

Similarly, a 14-year-old female adolescent commented:

*"...and I sit there and I'm on the phone with my friends, but I like hanging out with my friends. It's different from being on the phone with them."*

One parent aptly stated:

*"I think that just the home isolation and the limited social interactions for them have been probably the hardest hitting."*

Notably, adolescent females fared worse than adolescent males with respect to reduced socialization. Adolescent males frequently interacted with friends via online video games or playing outside. Adolescent females more often used social media, text messaging, and phone calls to socialize, but found that their peers did not reply to messages, and they had difficulty staying in touch with multiple peers.

### **"COVID Pretty Much Ruined My Entire Year"**

The lifestyle changes associated with COVID-19 increased mental distress among adolescents with ADHD and their parents. One parent noted:

*"And when there's uncertainty and there's what-ifs, it makes things very challenging."*

Adolescents with ADHD cited the loss of in-person interactions with friends and extracurricular activities as contributing to their increased mental distress. As one 12-year-old female adolescent noted:

*"I'm just sick of just sitting here and even though I have stuff to do... I don't really want to. I want to do something that I used to be able to do."*

Similarly, a 12-year-old adolescent male expressed considerable despair when he succinctly stated:

*"COVID pretty much ruined my entire year."*

### **"COVID is a Blessing in Disguise"**

Parents and adolescents also identified some positive impacts of COVID-19. Participants reflected that life prior to the pandemic was hectic. Adolescents' lives were consumed by school, extracurricular activities, homework, and friends, while parents felt pressured to balance work with family time, homemaking, school events, and providing transportation for their children. In contrast, participants described their pandemic lifestyle as less hectic. As one parent noted:

*“COVID is a blessing in disguise because it gives us the freedom to relax and be simplified again.”*

These simplified routines provided opportunities for consistent family meals, engagement in physical activity together (e.g., family walks or bike rides), and increased connection between adolescents and parents. A 14-year-old female adolescent said:

*“It is a lot easier to tell [my parents] how I am feeling now.”*

### **"I Don't Like School at All"**

For adolescents, remote schooling reduced school-related anxiety associated with academic pressure and negative social interactions with peers, teachers, and school administrators. As one 14-year-old male adolescent commented:

*“There were a few kids and a few teachers at school that would just make me really angry--now I'm starting to know that I have to go to school [in person for the upcoming school term], it's making me very upset because I don't like school at all.”*

The remote learning environment mitigated these negative interactions with peers and teachers for some adolescents with ADHD.

### **Experiences Varied by Gender**

Interviewer-assigned Clinical Global Impressions--Improvement (CGI)<sup>5</sup> scores indicate that females with ADHD were more negatively affected by COVID-19 than males in multiple domains. Family functioning includes increases in family stress (e.g., parent-adolescent conflict). Social functioning includes decreases in social interaction and perceived social support. Academic functioning includes lower grades and increased difficulty completing schoolwork. Across all three domains, girls were more likely to exhibit no change or worsened functioning. Worse functioning was particularly notable for girls in the social domain. Within each domain, boys' responses to COVID-19 were more varied than girls' responses.

### **Recommendation for Practice: Increasing Structure for Adolescents with ADHD**

The abrupt changes brought about by COVID-related school closures stressed adolescents with ADHD, their parents, and the family system. Our findings suggest that the experience and consequences of ADHD may vary by gender (as they do among adults with ADHD).<sup>7</sup> Our findings also underscore the need for structured academic experiences for adolescents with ADHD, the importance of in-person social activities with peers, and the value of opportunities to connect with parents. Because families of adolescents with ADHD struggle to manage homework and achieve academic success, it seems important for schools to provide additional supports to these families. Specific guidelines regarding instructions for downloading and submitting homework, as well as suggestions on how to establish structure and reinforcement systems surrounding schoolwork, may be helpful for parents and adolescents with ADHD.

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## Data and Methods

Seven parent-child dyads, consisting of 12 parents and 7 adolescents, participated. We conducted semi-structured interviews, lasting approximately 30 minutes each, over Zoom in August 2020 with adolescents with ADHD and their parents. Parents and adolescents were interviewed separately. We asked parents and adolescents to reflect on their overall experiences with COVID-19 since March 2020. Interviews were audio-recorded and transcribed verbatim. We analyzed data using the Interpretative Phenomenological Analysis (IPA) methodology.<sup>6</sup> Quantitative analyses compared longitudinal differences on self-report scales from T1 (pre-pandemic) to T2 (during pandemic) via a Qualtrics survey.

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