Mental Health Supports and Academic Preparedness for High School Students During the Pandemic

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Introduction

ACT has been investigating issues and supports related to high school students' mental health even before the COVID-19 pandemic. For example, we found in pre-pandemic research that students had a limited awareness of the mental health services available to them at their school.[1] Early on in the pandemic, certain students reported that their families needed help accessing health care. In open-ended survey responses, many students also reported an increase in anxiety brought on by the pandemic, due to concerns such as worrying that their parents might get sick or having difficulty concentrating on schoolwork.[2]

We expanded on prior research by asking students to indicate, near the beginning of the new 2020–2021 school year, their perceptions of how well their school was supporting their mental health and the extent to which daily life experiences during the pandemic had helped or hurt their mental health. We asked a random sample of high school students who sat for the 2020 October National ACT® test to participate in an online survey; a total of 2,291 students participated.[3] These students provided us with insights regarding their learning context, the mental health support they received, and whether they had experienced additional stressors during the pandemic, particularly whether they had academic concerns this school year or concerns regarding their college preparedness.

Because students varied in whether their schools were offering in-person, virtual, or hybrid learning (or had changed between these three learning models during the current school year), we further examined whether differences in learning contexts shaped the mental health support that students received from their schools or their concerns about academic preparedness. In our study, 41% of students reported engaging in a hybrid learning model, either by participating in a continuously hybrid learning model or by changing from in-person to virtual learning or vice versa in the first few months of the 2020–2021 school year. The remaining students indicated that for the first few months they had either learned virtually (32%) or in person (27%) but not both.[4] We were particularly interested in discovering if those students who participated in hybrid and online learning models had similar mental health support compared to students who were in the classroom.

In February 2021, the Centers for Disease Control and Prevention (CDC) issued updated guidance regarding how schools can safely offer in-person learning, highlighting scientific data on reopening and an operational strategy for K–12 schools to do so.[5] Among a wide range of factors to consider, the CDC recommended that schools identify how operational approaches to learning (i.e., in-person, virtual, hybrid) might impact their students' mental health, particularly with equity in mind.

ACT hopes that this latest study, which includes the voices of students themselves, will be useful to policymakers and school system administrators as they analyze and apply CDC guidelines in determining when and how to safely return students to the classroom.[6]

Student Mental Health Support

According to both the National Institutes of Health (NIH) and the CDC, students age 12–17 have experienced increased stress, anxiety, and depression because of the isolation brought on by the social distancing measures implemented to reduce the spread of COVID-19.[7] Moreover, we know that in earlier times when instruction was largely administered in person, high-quality relationships with teachers were shown to increase students' academic and social-emotional well-being, as well as improving their mental health.[8]

To this point, several students shared the effects of their learning mode on their academic and mental well-being. One student said, "Human interaction does a lot for my learning." Others explained pandemic-era learning's effect on their mental health:

I've noticed my anxiety has gotten worse. I think my brain has a hard time separating when it's time for me to rest and when it's time for me to work, as I'm doing both things in the same environment. I constantly feel overwhelmed with work yet unmotivated to get it done."

I have too many assignments at once, and they all seem to have due dates stacked on top of each other. I'm trying my best, but I also have mental health issues. It's hard for me to balance everything and extremely stressful."

To investigate the level of mental health support that students were receiving during the first few months of the 2020–2021 academic year, we asked whether someone at school had reached out to them to ask how they were doing and whether they had someone to contact at school should they need mental health support.

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Only 50% of students said that, between the start of the school year and the survey in late October, someone at their school had reached out to ask how they were doing. Students learning in a hybrid model (46%) were less likely than students learning in person (55%) to say that someone had reached out to them. A little more than half (53%) of students who were learning remotely reported that someone at their school had reached out to them.[9]

While a higher percentage of students (66%) said there was an adult at their school they felt comfortable contacting if they needed mental health support (compared to students who had someone reach out to them), differences across students' learning models emerged here as well. Specifically, more students who were learning at school (74%) indicated they had someone they felt comfortable contacting compared to students learning in either a hybrid format (66%) or virtually (59%; see Figure 1).

There were also differences between students of different racial/ethnic groups. Only one in two Black students (52%) said they had an adult at school they were comfortable contacting if they needed mental health support, while 70% of White students had an adult they could contact. This is consistent with prior research conducted by ACT, which found that students of color were less likely than White students to say that they felt comfortable reaching out to an adult at their school if they needed mental health support.[10]

Figure 1. Percentage of Students Who Responded That They Had an Adult at Their School They Felt Comfortable Reaching out to if They Needed Mental Health Support, by Race/Ethnicity and Learning Format
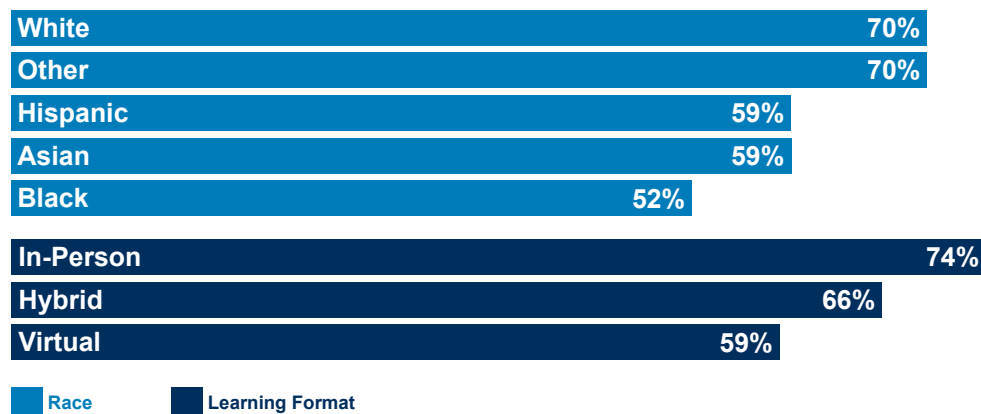
Following the finding that students learning in person were more likely to have someone at school they felt comfortable reaching out to for mental health support, it is not surprising that there was a relationship between the format in which students were learning and whether they agreed that their school could effectively support their mental health needs.

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Specifically, more students who were learning in person (71%) agreed that their school personnel could effectively help students who were experiencing mental health issues than students who were learning virtually (62%) or in a hybrid format (63%; see Figure 2).[11]

Figure 2. Percentage of Students, by Learning Format, Who Agreed or Disagreed That Their School Could Effectively Help Students Experiencing Mental Health Issues

Learning Format	Agree	Disagree	Unsure
Hybrid	63%	27%	10%
In-Person	71%	22%	8%
Virtual	62%	27%	11%

■ Agree　　■ Disagree　　■ Unsure

Concerns Regarding Preparedness

A major new stressor in many students' lives is whether the pandemic and its effects on the format and quality of their learning have negatively impacted their academic preparedness. This was particularly true for the students in our study, both for the 2020–2021 school year and for college preparedness.

A large majority of students were at least "somewhat" concerned that school closures in spring 2020 had negatively impacted their academic preparedness for the current school year (82%) and/or their college preparedness (84%). Almost one in three students (30%) experienced "a great deal" of concern about each of these two issues. Students who were experiencing hybrid learning or had switched between a virtual model and an in-person learning model were more likely to be concerned, at 85%, compared to those who only experienced either virtual or in-person learning (80% for both groups).

The higher percentage of students in a hybrid learning model who were concerned about the pandemic having a negative impact on their academic preparedness might be attributable to them being in the unique position of experiencing both learning models this school year. In fact, 68% of the students who were experiencing both in-person and virtual learning indicated that their learning was better at school than it was at home.[12] While online and hybrid learning can be exceptionally useful in certain circumstances (such as a global pandemic), research tells us that online classes are typically less effective than traditional in-person learning.[13] Perhaps also contributing to these results was the fact that a higher percentage of students in a hybrid model were learning asynchronously (i.e., students watching recorded lessons rather than participating live alongside their teachers and peers) (23%) compared to those learning exclusively in a virtual environment (17%).

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The challenges of learning in a hybrid model was explained in a student's own words:

> It's very weird; it's harder to learn because if I miss a day you have to wait [until] the day after [next] to see your teacher if you don't have a way of contacting them. I also feel like the teachers aren't giving me much help, and I don't have much time for help [from] the teacher."

We also asked students which of the core subject areas (i.e., mathematics, science, English/ language arts, social studies) they were most concerned about. The greatest number of students were most concerned about their mathematics preparedness (57%), followed by science (37%). Under "other," the most common student write-in responses were foreign languages (see Figure 3). There were no differences in the subject areas by learning format.

Figure 3. Percentage of Students Who Thought That Closures in Spring 2020 Negatively Impacted Their Academic Preparedness for School Year 2020–21 in Each Core Subject Area

Subject Area	Percentage
Mathematics	57%
Science	37%
English/Language Arts	26%
Social Studies	17%
Other	8%
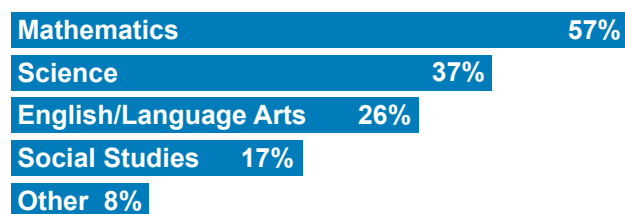
Note: Students could choose more than one subject area; therefore, percentages will not sum to 100.

Students reiterated these concerns, particularly regarding the effectiveness of virtual learning, in their open-ended responses:

> While some aspects of learning in terms of content have stayed the same, in certain classes, it is still not the same as in person. For instance, in my AP Bio course, I am only able to watch videos of certain labs or my teacher's demonstrations. I am unable to participate in the labs myself, and it is sometimes   a little more difficult to follow a lab when I am not actively involved."

> When we went online I struggled with subjects like math and foreign language which were difficult to learn without a teacher in front of you, but subjects like English and history were easy."

Considering our findings, ACT recommends the following:

1 Ensure that schools have the resources to offer mental health supports and that students are proactively informed of these resources.[14] This may include hiring more school counselors and/or social workers, partnering with community mental health providers, and offering professional development for teachers and other non-counseling staff so that they are comfortable touching base with each student to check in and ensure the students understand the available resources. Effective mental health supports may look different under different learning models, and schools should ensure that students in all modes of instruction have easy access to mental health resources.

2 Provide parents with resources to support the mental health of their children. To further increase student access to mental health resources, particularly given limited school resources, schools should enlist parents as partners. Ensuring that parents know the resources available for their students, including resources that will assist them in understanding their children's potential mental health challenges and give them the tools to identify if their child might require assistance, will provide additional opportunities for students to receive help if needed.

3 Actively recruit counselors, teachers, and other staff members of color. Though this type of transformation requires longer-term efforts, school systems must work to increase the diversity of their teaching and staff workforces, since in the current study there were fewer Black students who reported having someone at school to reach out to relative to White students.[15] In addition, all staff should receive professional development around connecting with and supporting students from different backgrounds than their own. This includes cultural competency training as well as working with all teachers (particularly White teachers) to implement restorative justice practices and promote anti-racism, including identifying and working to end microaggressions and other behaviors that can alienate students of color.

4 As soon as it is possible to do so safely, allow students to return to school. Students who were learning in school reported a higher belief that adults at their school could help with mental health issues, and students who had experienced both in-person and distance learning reported a better quality of learning at school. States, districts, and schools should carefully consult CDC guidelines to ensure that any in-person learning is safe for students and teachers as these complicated decisions are made.[16]

Notes

1. Michelle Croft, Shannon Hayes, and Raeal Moore, *Supporting the Mental Health Well-Being of High School Students* (Iowa City, IA: ACT, 2020),
https://www.act.org/content/act/en/research/reports/act-publications/mental-health-report.html.

2. Michelle Croft, Raeal Moore, Gretchen Guffy, Shannon Hayes, Katie Gragnaniello, and Dan Vitale,*High School Students' Experiences in March During the Coronavirus Pandemic* (Iowa City, IA: ACT, 2020),
https://www.act.org/content/dam/act/unsecured/documents/R1841-covid-insights.pdf.

3. A random sample of 30,000 students were sent an email to participate in the survey approximately three hours after they completed the national ACT test. A total of 2,291 students answered at least half of the items on the survey, the criterion we used to define a survey participant. This resulted in a 7.6% response rate.

4. Students were first asked which of the following learning formats best describes how they started this school year, and then they were asked which of the following formats they were currently participating in. For each item, students were asked to choose one of the following response options: hybrid, in-person, or virtual. Students who provided a different learning format when comparing the two items were categorized as changing their learning format between August, when school approximately started, and October, when we administered the survey. Those students who did change their leaning format did so by starting with distance learning and later moving to either a hybrid or an in-person model, or they started the school year with a hybrid model and moved to in-person learning. Those who indicated a hybrid learning format for both items and those who changed learning formats were collapsed into one category since both represent a "hybrid" experience. A total of 20% reported a hybrid model only, and 21% reported changing their learning format. Results on items highlighted in this report were similar across these two groups, further justifying the aggregation of these two learning formats.

5. For more information, see CDC, "Operational Strategy for K-12 Schools through Phased Mitigation," accessed February 19, 2021,
https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/index.html;
CDC, "K-12 School Operational Strategy," accessed February 12, 2021,
https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/operation-strategy.html;
and CDC, "Transmission of SARS-CoV-2 in K-12 schools," accessed February 12, 2021,
https://www.cdc.gov/coronavirus/2019-ncov/more/science-and-research/transmission_k_12_schools.html.

6. Student responses have been lightly edited for readability.

7. CDC, "Adolescent's Wellbeing During COVID-19: Parental Resources," accessed February 19, 2021,
https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/parental-resource-kit/adolescence.html;
Rebecca T. Leeb, Rebecca H. Bitsko, Lakshmi Radhakrishnan, Pedro Martinez, Rashid Njai, and Kristin M. Holland, "Mental Health-Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic—United States, January 1-October 17, 2020," *Morbidity and Mortality*

Weekly Report 69, no. 45 (November 13, 2020), http://dx.doi.org/10.15585/mmwr.mm6945a3; and Nicole Racine, Jessica E. Cooke, Rachel Eirich, Daphne J. Korczak, BraeAnne McArthur, and Sheri Madigan, "Child and Adolescent Mental Illness During COVID-19: A Rapid Review," *Psychiatry Research* 292 (October 2020), https://doi.org/10.1016/j.psychres.2020.113307.

8. Jenny Edwards, Isabella Goldie, Iris Elliott, Josefien Breedvelt, Lauren Chakkalackal, and Una Foye, Relationships in the 21st Century: *The Forgotten Foundation of Mental Health and Wellbeing* (London: Mental Health Foundation, 2016), https://www.mentalhealth.org.uk/sites/default/files/Relationships-in-21st-century-forgotten-foundation-mental-health-wellbeing-full-may-2016.pdf.

9. The percentage of students who said that someone reached out was similar across demographic groups including race/ethnicity, first-generation status, and geographic location (i.e., rural, suburban, or urban location of the student's school).

10. Croft, Hayes, and Moore, *Supporting the Mental Health Well-Being of High School Students*.

11. In the survey, students were asked to indicate to what degree they agreed or disagreed with the statement: School personnel can effectively help students who are experiencing mental health issues. A six-point scale was provided that ranged from strongly agree to strongly disagree. Those who indicated any level of agreement (i.e., strong, moderate, or slight) were categorized as "agreeing," while those who chose any of the disagree options were categorized as "disagreeing."

12. 26% responded that their learning was about the same at both locations, and 7% responded that their learning was worse at school than it was at home.

13. Susanna Loeb, "How Effective Is Online Learning? What the Research Does and Doesn't Tell Us," *Education Week*, March 20, 2020, https://www.edweek.org/technology/opinion-how-effective-is-online-learning-what-the-research-does-and-doesnt-tell-us/2020/03.

14. For additional research on and recommendations regarding student mental health, see Croft, Hayes, and Moore, *Supporting the Mental Health Well-Being of High School Students* at https://www.act.org/content/act/en/research/reports/act-publications/mental-health-report.html.

15. Denise-Marie Ordway, "Minority Teachers: How Students Benefit from Having Teachers of Same Race," Journalist's Resource, May 22, 2017, https://journalistsresource.org/education/minority-teachers-students-same-race-research/.

16. For more information, see CDC, "Operational Strategy for Reopening Schools," updated March 12, 2021, https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/index.html.

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