AUTHENTIC CONNECTIONS

Student Resilience Survey: Preliminary Findings and Recommendations

July 2020

Student Resilience Survey

Executive Summary

Between April and June of 2020, the **Student Resilience Survey (SRS)** was administered to a total of 15,331 students in grades 6-12 from 54 independent and public schools throughout the United States. All assessments were done after schools had moved to distance learning.

Results showed that across all schools, the percentage of students in each grade reporting clinically significant symptoms of **depression** ranged from **3.9%-6.6%**. Parallel rates of clinically significant symptoms of **anxiety** ranged from **4.0%-7.5%**.

Analyses of risk and protective factors identified three variables most strongly associated with students' symptoms: **low parent relationship quality**, **low structure of days**, and **high levels of distraction**. In responses to open-ended questions, students often highlighted appreciation of **support and understanding from school adults**.

The report concludes with a discussion of what we at **Authentic Connections** believe educators need in order to improve student **well-being** and **resilience**, along with specific, actionable recommendations based on what we have learned thus far in the pandemic. We will continue to carefully track students' well-being in the fall, with updated measures that can be implemented across distance-learning and in-person formats.

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INTRODUCTION

Authentic Connections (AC) is a team of leading scientists, clinicians, and consultants committed to helping schools measure, track, and improve student well-being and resilience.

AC works with schools to improve student outcomes by providing valuable tools rooted in cutting-edge science. This includes measurement based on validated surveys, interactive presentation of results, and provision of actionable school-specific recommendations for practices and policies.

This document highlights the findings and results from the Spring 2020 administration of the **Student Resilience Survey (SRS)**.

It begins by reviewing the current context surrounding adolescent well-being and resilience. Next, it provides an overview of the scientific research underlying the **SRS**, and of the design and validation of the survey. It then presents findings from the most recent administration of the **SRS** in Spring 2020.

The report concludes with a discussion of what we at AC believe educators need in order to improve student well-being and resilience.

MISSION STATEMENT

At Authentic Connections, we aspire to maximize well-being and resilience in school communities through data-driven insights.

CHALLENGES TO STUDENT WELL-BEING AND RESILIENCE

Persistent trends of increasing depression and anxiety rates among adolescents (ADAA, 2020; CDC, 2020; NIMH, 2017; NIMH, 2019) highlight the need for effective evidence-based tools to measure and intervene in student well-being and resilience.

Analyses of survey data compiled by the National Institute of Mental Health show that among adolescents in the United States, 31.9% had anxiety and 13.3% had depression (NIMH, 2017; 2019).

For both anxiety and depression, prevalence was higher among female adolescents than males (NIMH, 2017; 2019).

Over the past few decades, our research group has accumulated evidence showing that adolescents attending high-achieving schools– where pressures to achieve and excel are intense and constant– have higher rates of anxiety, depression, and substance use than their peers in the general population (see Luthar, Kumar, & Zillmer, 2019; Luthar & Latendresse, 2005). This phenomenon of increased student vulnerability has been shown to extend across public and private schools, cities and suburbs, and different regions of the country (NASEM, 2019).

At AC, we believe that there is clearly a need to focus on improving student well-being and resilience generally and specifically in high-achieving schools.

UNIQUE CHALLENGES RESULTING FROM COVID-19

The COVID-19 pandemic has resulted in unprecedented disruptions to the daily lives and routines of students and their families.

The addition of a public health crisis and an economic recession to the stressors adolescents already faced at home and school has considerable implications for their academic development and mental health (Golberstein, Wen, & Miller, 2020).

AC is committed to developing and validating research-based tools to measure the impact of prolonged school closure and future uncertainty on students' mental health and well-being, and to collaborating with educators to deliver effective school-specific interventions.

THEORETICAL FRAMEWORK FOR STUDENT RESILIENCE

The **Student Resilience Survey (SRS)** stems from decades of research conducted by developmental and clinical psychologists.

In 1988, Dr. Suniya S. Luthar (Professor Emerita at Columbia University Teachers College; Co-Founder & Chief Research Officer at AC) first published a paper on resilience with Dr. Edward F. Zigler (Sterling Professor Emeritus of Psychology at Yale University).

Since then, Dr. Luthar has maintained an active, productive program of research, with pioneering contributions in the field of resilience among children and families (see Luthar, Cicchetti, & Becker, 2000; Luthar, Crossman, & Small, 2015; NASEM, 2019).

AC applies modern techniques for data science and analytics to a strong legacy of scholarly excellence featuring decades of peer-reviewed scientific research.

RESILIENCE AND RELATIONSHIPS

Resilience is the process of adapting well in the face of adversity or stress. Resilience is affected by many factors stemming from relationships at home, relationships at school, and individual attributes of students themselves (Luthar et al., 2015).

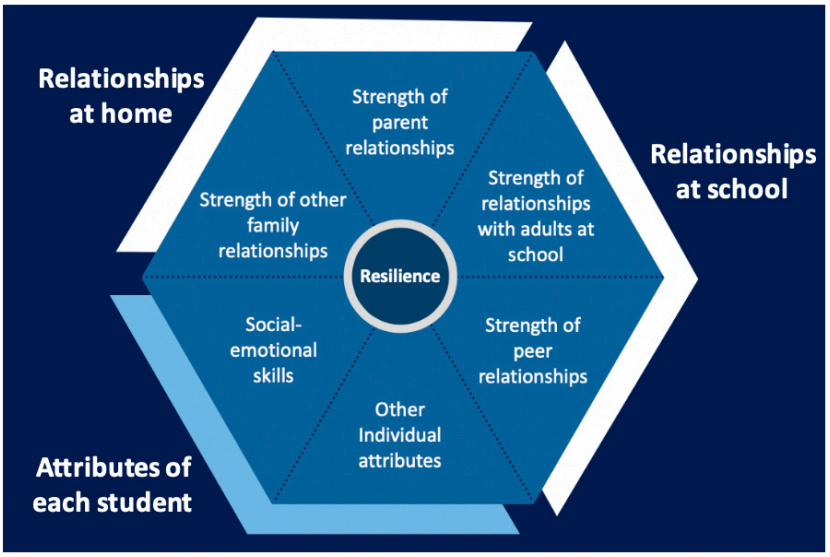

Figure 1. Components of Resilience

Our research has led to the identification of many **risk factors** and **protective factors** that impact resilience in students across all socioeconomic backgrounds.

Risk factors are characteristics of individual students and also of their relationships with others that are *negatively* related to resilience and well-being; examples include conflicts at home or difficulties with peers.

Protective factors are aspects of individual students and of their relationships with others that are *positively* associated with resilience and well-being; examples include feeling supported by at least one important adult and having positive views of the school climate.

Evidence accumulated by our research group has shown that students who appear at surface level to be resilient– for instance, those who manage to succeed academically and socially despite having stressful home lives– may be hiding serious symptoms of depression, anxiety, and substance use (see Luthar, Doernberger, & Zigler, 1993; Luthar, Kumar, & Zillmer, 2019, 2020).

At AC, we know that resilience rests, fundamentally, on relationships; we strive to measure, track, and improve the quality of the relationships that matter most to students.

Table 1 presents an illustrative list of common risk and protective factors influencing student well-being.

RISK AND PROTECTIVE FACTORS INFLUENCING STUDENT WELL-BEING		
Relationships at home	**Student attributes**	**Relationships at school**
Parent alienation	Perfectionism	Caring adults
Parent criticism	Intrinsic aspirations	Teacher alienation
Parent expectations	Authenticity	Friendship quality
Parent over-involvement	Pressure on self	Bullying

Table 1. Risk and Protective Factors Influencing Student Well-Being

MENTAL HEALTH AND WELL-BEING

Well-being, or mental health, refers to the absence of serious symptoms of depression, anxiety, and substance use.

Evidence from our research program shows that, like resilience, well-being is influenced by many factors stemming from relationships at home, relationships at school, and individual attributes of students themselves.

At AC, we partner with educators to improve student mental health and well-being by assessing rates of clinically significant depression, anxiety, and substance use in students, and through identifying risk and protective factors that are most associated with students' well-being *within their own communities*.

THE STUDENT RESILIENCE SURVEY

The **Student Resilience Survey (SRS)** was designed to help schools assess the impact of disruptions resulting from the COVID-19 pandemic on student well-being and mental health.

The **SRS** was designed to be a short survey that could be completed online by students in approximately 10 minutes.

From early April through the end of June 2020, the **SRS** was administered to over 15,000 students at 54 independent (private) and public schools across the U.S.

SURVEY DESIGN AND VALIDATION

The **SRS** is a mixed-methods survey that includes both quantitative and open-ended questions (Luthar, Ebbert, & Kumar, in press).

Quantitative items used 5-point Likert scales to measure symptoms, risk factors, and protective factors.

Qualitative free-response prompts were designed to capture student concerns and suggestions regarding the (unprecedented) changes to their daily lives at school and at home.

SYMPTOMS

The **SRS** measured two components of mental health: **Depression** and **Anxiety**. For each component, five Likert-scale measures asked students to report how frequently they experienced the symptom in question on a 5-point scale (0 = never, 4 = very often).

The items were taken from the **Well-Being Index (WBI)**, a psychometrically-validated measure consisting of 25 items with five subscales (Luthar, Ebbert, & Kumar, 2020). Each school is able to see rates of students who report clinically significant levels of depression or anxiety, relative to rates in national norms.

RISK AND PROTECTIVE FACTORS

The **SRS** assessed two essential components of student life during COVID-19: **Academics** and **Relationships**. Prior research has shown that both components are critical for resilience (Luthar, Crossman, & Small, 2015; NASEM, 2019), and both have been threatened by school closures.

Three Likert-scale measures were created to assess academics-related factors specific to the COVID-19 context. **Learning Ability** assessed how well students felt they were able to learn at home. **Learning Focus** asked students how well they were able to focus during their online classes. **Time for Fun** asked students to indicate the degree to which their typical days at home had specific times set aside for activities that were fun or relaxing.

Three Likert-scale measures were designed to assess students' relationships with peers and adults from school during the COVID-19 school closures.

Sharing with Friends assessed students' satisfaction with the frequency with which they shared personal concerns with friends.

Sharing with Adults asked students how satisfied they were with the frequency with which they shared personal concerns with adults from school.

Concerns Heard asked students about the degree to which they felt teachers and administrators were listening to their concerns about school and doing something about those concerns.

Two Likert-scale measures assessed both positive and negative aspects of students' relationships with parents or adults at home.

Parent Support assessed the degree to which students felt their parents understood and helped manage their feelings.

Parent Stress asked students to report the degree to which they felt their parents were a source of stress for them (Luthar, Ebbert, & Kumar, in press).

Table 2 lists measures and sample survey items for each component of student life.

COMPONENT	MEASURE	SAMPLE ITEM
Symptoms	Depression	I don't enjoy life.
	Anxiety	I worry or obsess.
Academics	Learning Ability	How well are you able to learn new school materials at home?
	Learning Focus	During your online classes in general, how distracted or focused are you?
Relationships	Time for Fun	Does your day follow a set schedule with specific time set aside for fun / hobbies?
	Sharing with Friends	In the last week, how many times have you talked with a friend / friends from school about things that are bothering you?
	Sharing with Adults	In the last week, how many times have you talked with an adult from school about things that are bothering you?
	Concerns Heard	I feel like teachers and administrators are listening to my concerns about school.
	Parent Stress	These days, my parents / guardians make me feel more stressed.
	Parent Support	These days, my parents / guardians understand my feelings and help me deal with them.

Table 2. Measures and Sample Items by Student Life Component

QUALITATIVE ITEMS

The **SRS** included three open-ended free response questions designed to capture students' feelings and insights about issues concerning them.

FREE RESPONSE PROMPTS
These days, what are you most worried about?
In thinking about your school experience, what could your teachers/faculty be doing to improve things for you?
What are things that your school is doing well to support your overall school experience and well-being?

Table 3. Free Response Prompts

Using data collected during a pilot study of the free response questions, a coding taxonomy was developed in order to capture distinct themes and non-overlapping categories. The coding taxonomy was refined and validated by our team in consultation with two external reviewers.

CODING TAXONOMY	
Academic Workload	Academic content and schedule; school policies on assignments, exams, and schedules
Connections and Support	Student relationships with peers and faculty; faculty flexibility and support
Personal Concerns	Personal student considerations, including academic performance, matters of health and safety, home life, and financial considerations

Table 4. Coding Taxonomy for Free Response Questions

Table 4 on the preceding page presents the three overarching themes on the coding taxonomy. Table 5 lists sub-categories within each theme.

CODING TAXONOMY SUB-CATEGORIES BY THEME		
ACADEMIC	Academic Performance	Exams
	Assignments *(General)*	Grading Criteria
	Assignments *(Timing)*	Learning Efficacy
	Assignments *(Volume)*	Structure & Schedule
	Ethics & Cheating	School *(Unspecified)*
RELATIONSHIPS	Faculty Academic Support	Faculty Flexibility
	Faculty Communication	Peer Interactions
	Faculty Emotional Support	
PERSONAL	Athletics, Activities, & Events	Financial Security
	College	Future Uncertainty
	COVID-19 Health	Home Life & Family
	Economy	

Table 5. Coding Taxonomy Sub-Categories by Theme

RELIABILITY AND VALIDITY

Inter-rater Reliability

Two team members coded all open-ended responses, and Cohen's (1960) kappa coefficients were calculated to determine levels of agreement. Kappa coefficients for the free response questions were in the substantial agreement range of 0.61–0.80 (Viera & Garett, 2005).

Content Validity

To ensure the content validity of the survey items and coding taxonomy, two external reviewers were consulted. One had significant expertise in developing systems for coding qualitative data, and the other had classroom teaching certification and experience.

ASSESSMENT AND REPORTING

Interactive dashboards were created to present quantitative and qualitative findings to each participating school. The interactive dashboards allowed school leaders to view salient findings for the school overall and also separately for gender, ethnicity, and grade level subgroups.

The interactive dashboards also allowed school administrators to compare findings for their school to national norms based on AC's data from the 15,331 students across the U.S. who have completed the SRS to date[1].

Figure 2. Sample interactive dashboard.

[1] As of July 15, 2020.

THE 2019–2020 STUDENT RESILIENCE SURVEY

PARTICIPANTS AND METHODOLOGY

The analyses presented in this document are based on a sample of 15,331 students at 54 schools across the U.S. who completed the **SRS** between April and June of the 2019–2020 academic year.

The **SRS** was administered virtually during regular school hours by school officials following the move to distance learning. School leaders obtained consent from students and their parents/guardians, giving them the option to decline to participate and assuring them of data confidentiality and anonymity.

The findings and recommendations reported in this document are organized by student grade level. Additional detailed analyses by gender and ethnicity subgroups will be reported in a forthcoming academic paper (Luthar et al., in preparation).

Across all schools in the sample, 44.6% of students were male (n=6,830), 51.0% were female (n=7,817), and 2.7% identified as non-binary (n=414).

Of the sample of students, 62.0% identified as Caucasian/White (n=9,503), 14.3% as Asian/Asian American/Pacific Islander (n=2,192), 7.8% as Biracial/Multiracial (n=1,197), 7.9% as African American/Black (n=1,211), 5.3% as Latinx/Hispanic (n=811), 1.6% as Middle Eastern (n=238), and 0.4% as American Indian/Native American (n=68).

Grade	N
6	1,467
7	1,647
8	1,648
9	2,956
10	2,898
11	2,886
12	1,829
Total	15,331

Table 6. Participants by Grade Level

RESULTS AND FINDINGS

SYMPTOMS

Analyses of the 2019–2020 **SRS** data showed that across all schools in the sample, non-zero percentages of students reported experiencing clinically significant symptoms of **Depression** and **Anxiety**– i.e., at levels that warrant clinical attention.

In general, rates of clinically significant symptoms of **Depression** increased to a peak of 6.6% among 10th graders in the samples before decreasing; rates of clinically significant symptoms of **Anxiety** peaked at 7.5% in 11th grade before decreasing.

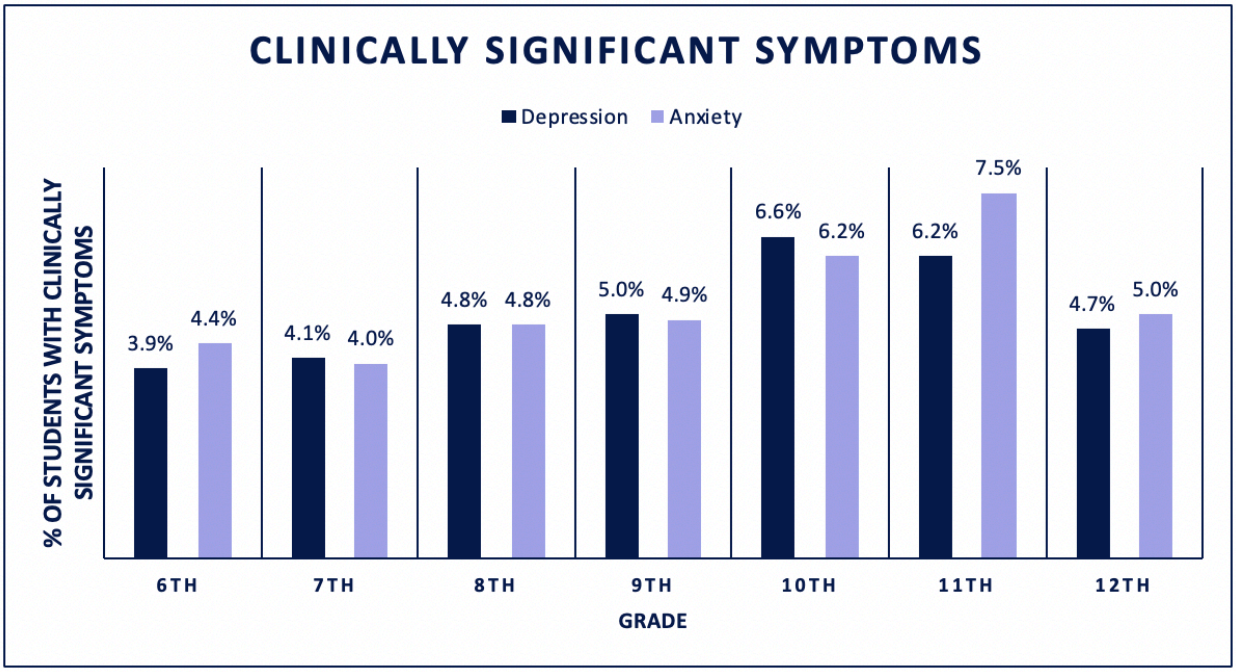

Figure 3. Percentage of Students Reporting Clinically Significant Symptoms by Grade Level

RISK AND PROTECTIVE FACTORS

Analyses of the risk and protective factors most strongly correlated with symptoms identified three key variables that significantly predicted **Depression** and **Anxiety**: **Low Parent Relationship Quality**, **Low Structure of Days**, and **High Distraction**.

Low Parent Relationship Quality was significantly predictive of both **Depression** and **Anxiety**.

Figure 4 below shows the percentage of students reporting low parent relationship quality.

The measure combines students' reported feelings of high stress and of low support in their relationships with parents/guardians at home.

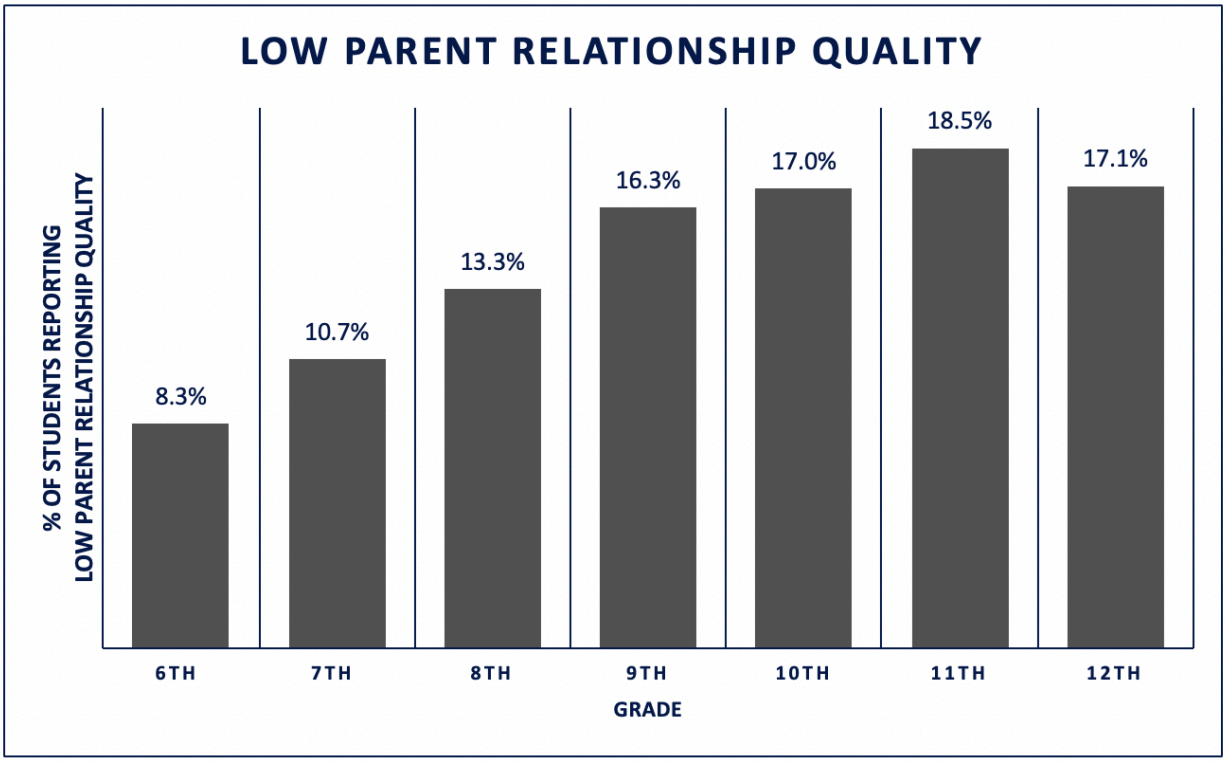

Figure 4. Percentage of Students Reporting Low Parent Relationship Quality by Grade Level

Low Structure of Days was significantly predictive of both **Depression** and **Anxiety**. Figure 5 below shows the percentage of students reporting lack of structure in their daily routines.

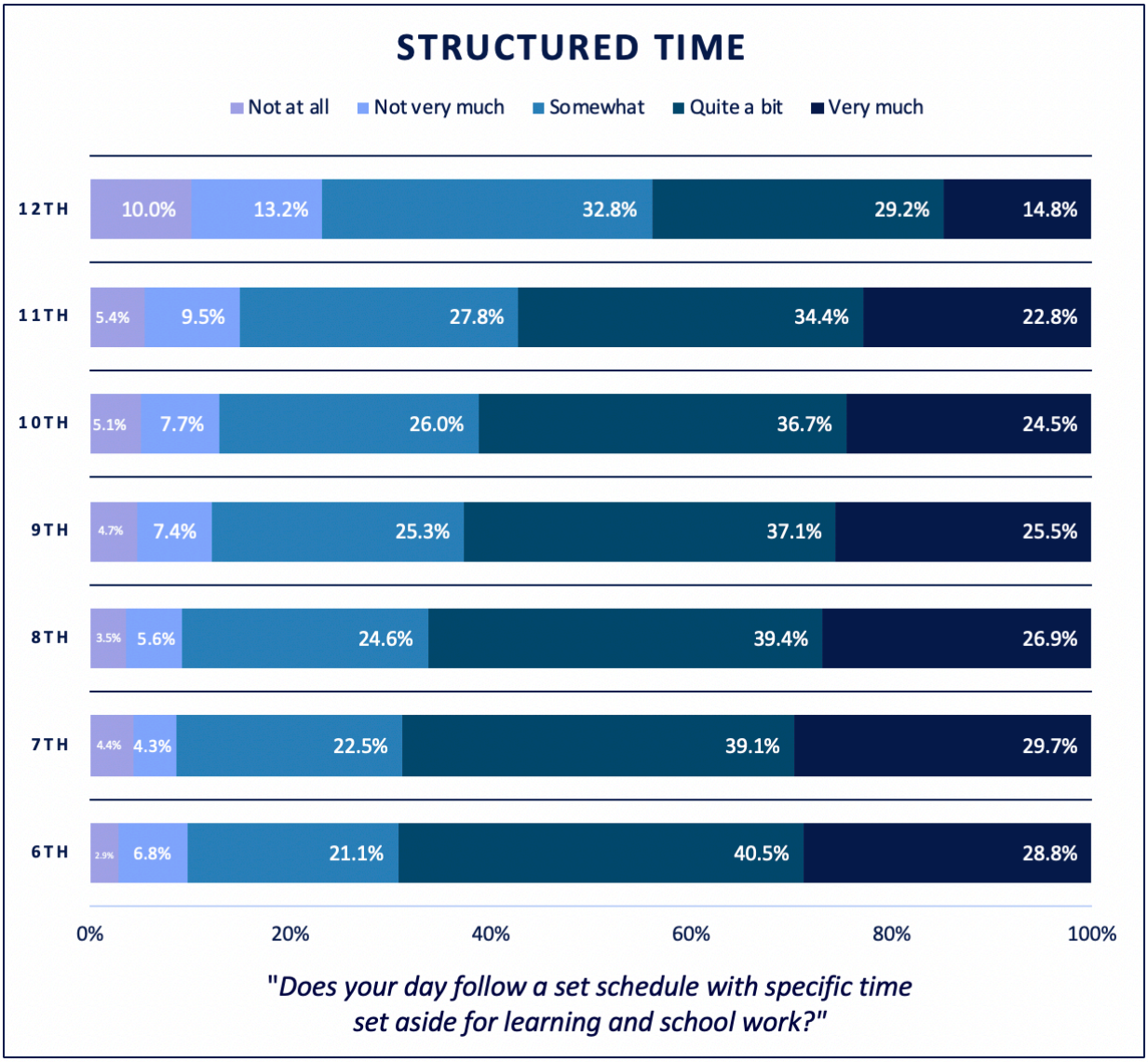

Figure 5. Percentage of Students Reporting Lack of Daily Structure by Grade Level

High Distraction was significantly predictive of both **Depression** and **Anxiety**. Figure 6 below shows the percentage of students reporting high levels of distraction in their daily routines.

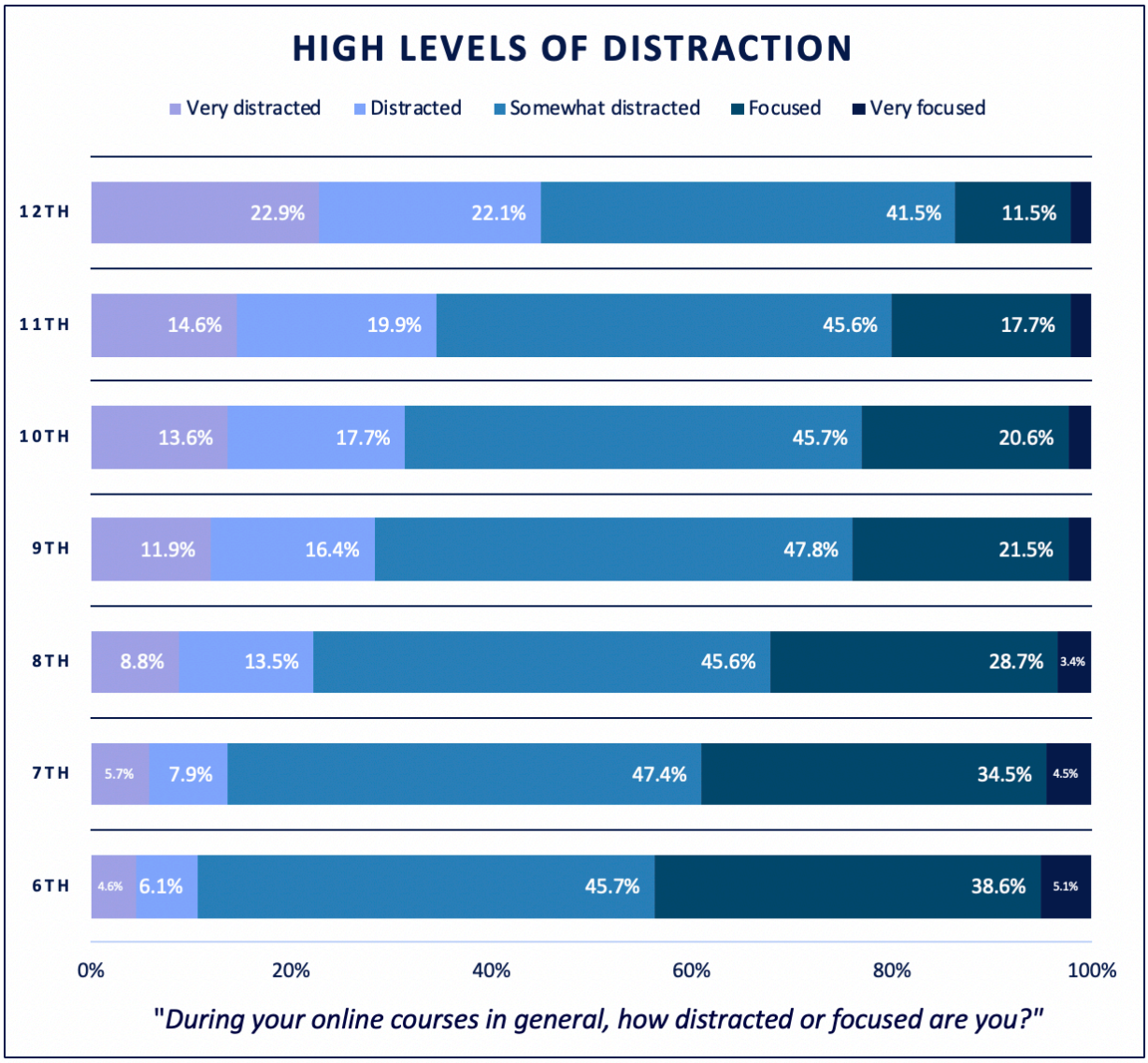

Figure 6. Percentage of Students Reporting High Levels of Distraction by Grade Level

Low Learning Efficacy combines students' reported feelings of lacking necessary resources to complete school work at home, being unable to learn new school materials at home, and being distracted during online courses. Figure 7 below shows the percentage of students reporting low learning efficacy.

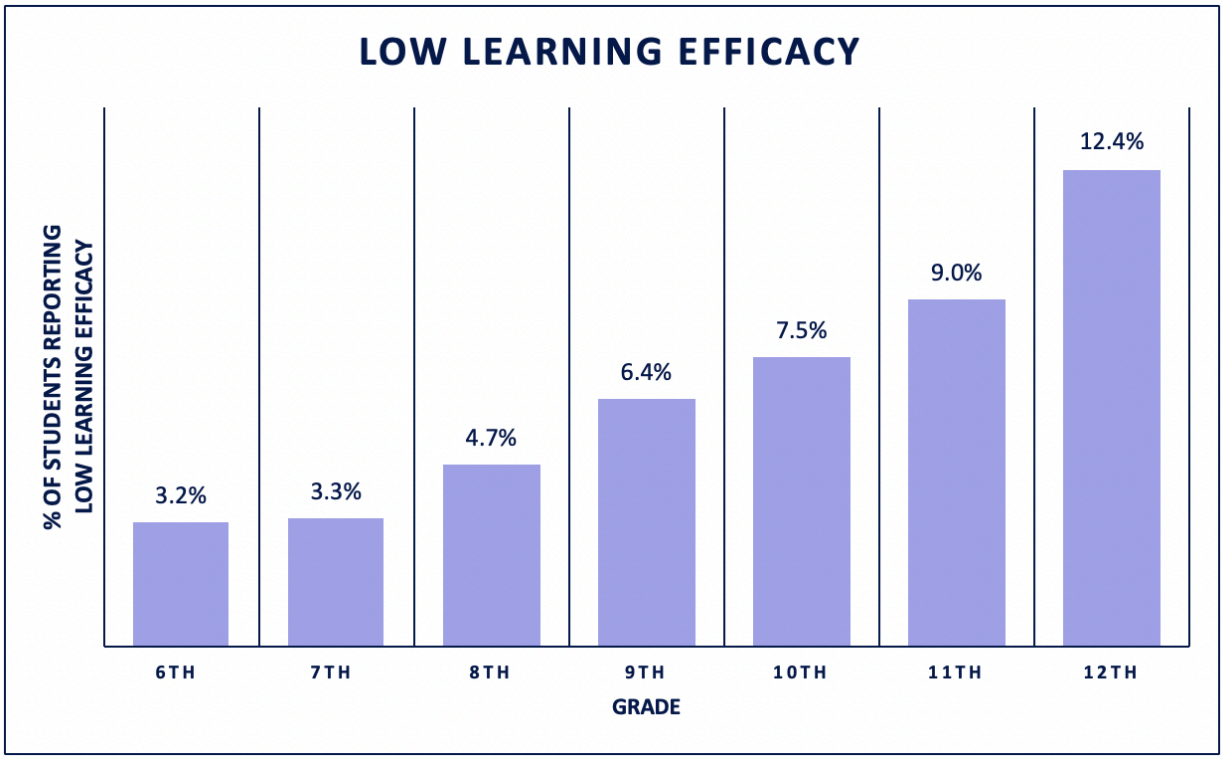

Figure 7. Percentage of Students Reporting Low Learning Efficacy by Grade Level

QUALITATIVE RESPONSES

Figure 8 below shows response themes and topics from students' responses to the open-ended questions about what could be improved and what is going well. Larger text indicates that the topic was mentioned more frequently by students.

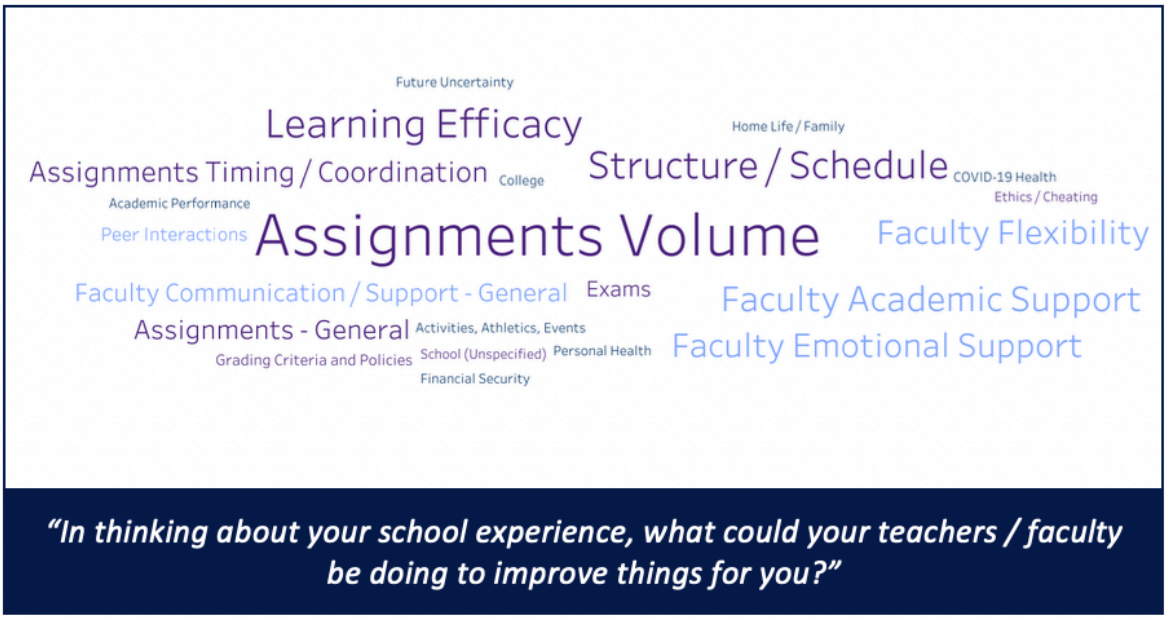

Figure 8. Themes and Topics in Students' Responses to Open-Ended Questions

Table 7 presents selected student responses to the free response questions.

VERBATIM STUDENT RESPONSES TO FREE RESPONSE QUESTIONS	
Concerns	"Honestly, I am most worried about the college process. I am worried about how everything is changing and we don't know much about it. Everything is so unknown, and I am someone who does not do well with uncertainty; I like having a set plan."
	"AP Exams are stressing me out. Also, the coronavirus has brought to light many issues with the world that stress me out (climate change, uncaring world leaders, inequality, people not paying attention to experts, etc.)."
Going Well	"All of my teachers are very understanding of the circumstances that we are in and they are being very lenient. They are making me feel like they are here for me."
	"All of the teachers understand how crushing it is to be a senior now, without special end-of-the-year activities. They are giving us sneak peeks of the yearbook, and shouting us out on social media trying to highlight us in some way."
Areas for Improvement	"They often say things like, "I know this is a tough time, BUT…" and then give us a bunch of work that they themselves don't feel like grading. And I know they don't feel like grading because they tell us as much and take far longer to grade than usual, all while we have less time to do the same projects."
	"I feel like we could have more time devoted to office hours because of how they're only once a week and an hour long. Sometimes, I feel that I have a question that I forget to ask during a class, but would like to talk to my teacher, rather than emailing them."

Table 7. Excerpted Student Responses to Free Response Questions

WHAT EDUCATORS NEED

At AC, we believe that in addition to rigorous data and analyses, what schools need most from scientists are actionable school-specific recommendations that clearly highlight next steps.

Through our interactive dashboards , we present each school with their **unique profile of strengths and weaknesses** derived from **quantitative and qualitative student data** on **symptoms**, **risk factors**, and **protective factors**.

We also identify the top areas of focus– the variables shown to be most strongly associated with student symptoms– to be prioritized by each school.

Finally, based on our review of each school's quantitative and qualitative data and also our decades of research on resilience and well-being, we present **actionable school-specific recommendations regarding practices and policies** that can address student concerns, needs, and suggestions.

RECOMMENDATIONS

While all schools are unique, some general findings and recommendations have emerged from our research with students and schools.

Four broad features were common among those schools that did best in terms of mental health (demonstrating resilience in the face of the pandemic):

1. They fostered a strong sense of community
2. They practiced clear and consistent communication
3. They prioritized mental health
4. They frequently sought and addressed feedback

The table below lists examples of actionable next steps schools might take in response to student concerns.

	EXAMPLES OF ACTIONABLE NEXT STEPS
Community	Provide unstructured opportunities for students, staff, and parents to connect
	Establish a "caring committee" to distribute handwritten notes, yard signs, and tokens of appreciation to students and staff
Communication	Proactively delineate changes made around workload, curriculum content, and homework assignments
	Convey thoughts even when tentative (*"I'm not sure, but this is what I'm thinking…"*) rather than nothing at all
Mental Health	Create opportunities for students and staff to participate in support groups
	Shorten school week to 4 days to give students and staff time to catch up, connect, and recharge
Feedback	Give members of the learning community opportunities to provide feedback on processes and procedures
	Respond to feedback by communicating specific changes and next steps resulting from the feedback

ONGOING INNOVATION

At AC, we are committed to creating high-quality tools to help schools measure, track, and improve the well-being and resilience of all members of the learning community.

In addition to the **SRS**, we have developed the **Faculty Resilience Survey (FRS)** to assess well-being and resilience among teachers and school staff, as we believe that supporting students also requires supporting the adults they rely on.

We are continuing to refine the **Well-Being Index (WBI)** and the **High Achieving Schools Survey (HASS)** and regularly disseminate new findings in **peer-reviewed journals** (see Luthar, Ebbert, & Kumar, in press; Luthar, Kumar, & Zillmer, 2019; Luthar, Suh, Ebbert, & Kumar, 2020) and also **directly to educators** (see Luthar & Kumar, 2020a; Luthar & Kumar, 2020b).

CONCLUSION

Overall, across schools, there were some distinct features of “resilient schools”– those doing well in the face of all the disruptions from the pandemic and distance learning. These schools had each fostered a supportive, warm, and understanding community. They were committed to clarity and transparency in decision making, and to proactively fostering and monitoring well-being and mental health. Looking ahead to the summer and fall, they are prioritizing next steps derived from the data, focusing on issues and subgroups most needing attention within their own schools. As circumstances continue to evolve, we at AC are committed to helping educators measure and track changes to student well-being and resilience over time.

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