

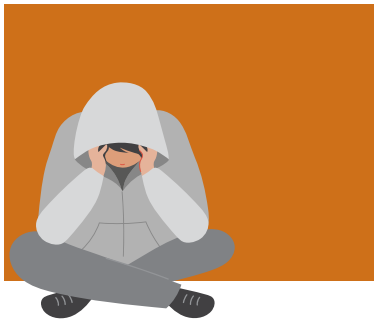
THE SHAPE OF

# youth mental health

*Finding a way back  
from sadness and stress  
for Northern Virginia's teens*

*Elizabeth Hughes / January 2023*





# executive summary

The 2022 Virginia School Survey of Climate and Working Conditions reveals a troubled state of mental health in our region:

- **One in ten** high school students in Northern Virginia had seriously contemplated suicide in the past year.
- **One in four** had symptoms of recent, clinical depression, and one in three had felt persistent sadness/hopelessness over the past year.
- **One in three** had symptoms of recent, clinical anxiety.
- **One in two** reported experiencing at least one of these negative feelings.

While youth mental health needs became more common during the pandemic, rates have been increasing for years. To better understand the mental health needs of our region's youth, this report uses data from Fairfax County to examine three factors associated with heightened levels of need:

**1. By demographics.** Girls, those who identify as LGBTQ, older students, Hispanic and other/mixed race students, and students whose families may be experiencing material hardship had higher levels of persistent sadness in Fall 2021, and also saw some of the largest increases from pre-pandemic levels. Most of these groups also experienced heightened stress.

**2. By time use.** Many students do not get enough sleep, a symptom of poor mental health as well as a contributing factor. Instead of sleeping, students often spend a substantial amount of time on screens or on productive activities (homework, extracurriculars, and part-time jobs). These three factors—productive time, screentime, and sleep—are highly related, as teenagers trade-off and prioritize their time over the course of the day (and night).

**3. By relationships with adults.** A teenager's experience with safety and trust, particularly among parents but also teachers and other adults in the community, was related to their underlying mental wellbeing. There is a well-known, County-tracked cumulative effect of these protective factors, where more family, school, and community assets tend to buffer against persistent sadness. Friendships and the role of social media are also reviewed.

A community response to these three areas of concern might include: (1) focusing mental health outreach to youth at heightened risk of persistent sadness and stress; (2) acknowledging that adequate sleep is not just a “nice to have”—it is a key ingredient in youth wellbeing, stress management, and happiness; and (3) expanding the number of trusting, supportive adults in a teenager's life by focusing on mentoring skills, parenting skills, and adult mental health services.

## ABOUT THE DATA

**Sources.** This brief uses data from a number of sources, primarily:

- The [Fairfax County Youth Survey](#) (FCYS) is an anonymous, voluntary survey of students in grades 8, 10, and 12, typically administered in November. Students in 6th grade take a modified survey and are generally not included in this report. The FCYS is part of the statewide Virginia Youth Survey and the national Youth Risk Behavior Surveillance System. Data from the FCYS are used as a proxy for Northern Virginia where applicable, as rates of persistent sadness in the FCYS have historically tracked within a single percentage point of regional estimates.
- The [Virginia School Survey of Climate and Working Conditions \(VSS\)](#) is an anonymous, legislatively-mandated survey of public school students, teachers, and staff throughout the Commonwealth, administered in January-March and alternating between high school (even years) and middle school (odd years). While schools must participate, individual students may opt out. The state reports on selected metrics, including the mental health of students, staff, and teachers, at the regional, district, and school level.
- The [Household Pulse Survey](#) is a joint data collection initiative by the CDC's National Center for Health Statistics and the Census Bureau. Data collection began on April 23, 2020, with children's mental health data collected beginning in summer of 2022. Full datasets can be downloaded from the CDC for analysis, but users may also benefit from the state-level mental health reporting tool hyperlinked above.

**Limitations.** Youth survey data are not confirmed through external checks or feedback from parents, and the accuracy relies on teenagers' willingness and ability to recall, label, and quantify their experiences. This task that may be particularly challenging with more subjective feelings of sadness and stress and when prompted for socially desirable answers (e.g., research has found that students may exaggerate their height on the national YRBS<sup>4</sup>). Also, the survey excludes the experiences of students who are educated outside of the public school system (including those in private school, home school, and institutional settings) and who no longer attend school.

**Acknowledgements.** We are grateful for the additional data and helpful insights provided by the Virginia Department of Criminal Justice Services, the Fairfax County Countywide Data Analytics unit, the City of Alexandria Department of Community and Human Services/Center for Children and Families, and Fairfax County Public Schools.

**Measures.** This brief examines several aspects of mental health:

- **Persistent sadness** (FCYS, VSS) reflects the percent of respondents who answered affirmatively to the question, "during the past 12 months, did you ever feel so sad or hopeless almost every day for two or more weeks in a row that you stopped some usual activities?". The question is used routinely in youth surveys, but has not been validated as a screen for clinical depression. Research has found that about two-thirds of individuals who report persistent sadness would screen positive for clinical depression.<sup>1</sup> In Northern Virginia, 61 percent of students who reported persistent sadness showed symptoms of recent, clinical levels of depression.
- **Psychological stress** (FCYS) reflects the percent of respondents who answered "most of the time" or "all of the time" to the question, "Within the last 30 days, how often have you felt ... tense, restless, nervous, or anxious, or is unable to sleep at night because their mind is troubled all the time?". The measure has demonstrated sufficient content, construct, and criterion validity of psychological stress (that is, the emotional experience of stress, versus objective "stressors"),<sup>2</sup> but has not been validated as a screener for anxiety. Research has found that about two-thirds of individuals who report psychological stress would screen positive for clinical anxiety.<sup>3</sup>
- **Anxiety / depression** (VSS) reflect the percent of respondents whose sadness, loss of interest, tension, and worry occur frequently enough that they would *screen* positive for clinical depression and anxiety if given a diagnostically-validated assessment. These metrics are identical to those reported in our 2022 report, *Finding our Way Back to Mental Health*.

# a population in distress

A third of students with clinical levels of anxiety; a quarter at clinical levels of depression. One in three felt persistent sadness over the past year, and one in ten have considered taking their own life.

This past winter (Jan-Mar 2022), 33 percent of high school students in the Northern Virginia who completed the Virginia School Survey showed recent, clinical levels of anxiety; they reported feeling nervous, anxious, or uncontrollably worried more than half of the time over the past two weeks. A quarter showed clinical levels of depression, where sadness and reduced interest/pleasure in daily activities occurred more than half of the time. See **Figure 1**. Over the course of the past year, 34 percent of students also felt persistent sadness/hopelessness, and 10 percent had seriously considered suicide.

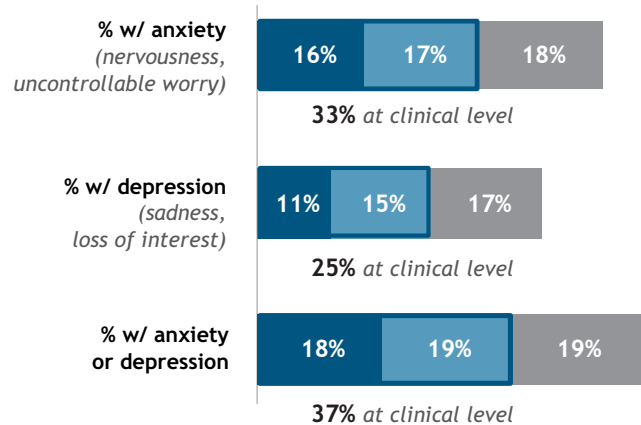
All told, 47 percent of high school students in Northern Virginia experienced recent, clinical levels of anxiety/depression or past-year mental health need (persistent sadness and/or suicidal thinking).



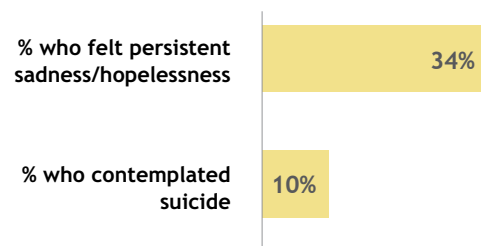
**FIGURE 1.** Mental health experiences of Northern Virginia high school students

## RECENT MENTAL HEALTH NEEDS

- clinical: severe (~every day in past 2 wks)
- clinical: moderate (> half the days in past 2 wks)
- mild (several days in past 2 wks)



## PAST-YEAR MENTAL HEALTH NEEDS



## RECENT OR PAST-YEAR MENTAL HEALTH NEED

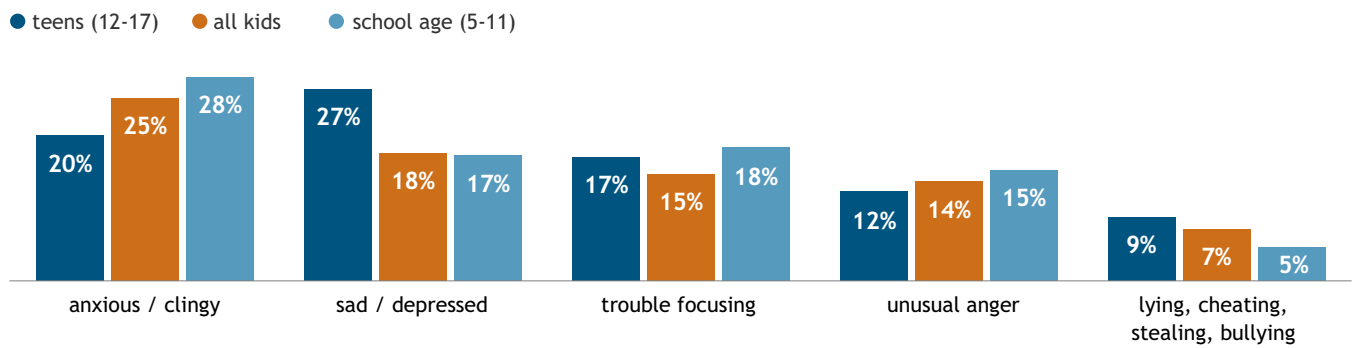


Source: Insight Region® analysis of data from the VSS, 2022, obtained through FOIA request from the Virginia Department of Criminal Justice Services. mental health scores based on the PHQ4 diagnostic screener available at <https://www.capc.org/documents/download/467>. Total sample size of 66,413 student surveys.

Parents across Northern Virginia have also noticed these changes in their children. In a sample of the region’s households spanning June-October 2022, 25 percent of families with children reported increased anxiousness and clinginess, 18 percent reported sadness or depression,

fifteen percent noticed their kid struggled with focusing, and fourteen percent had unusual anger or outbursts. Anxiety and clinginess were more common among school-age children, and elevated rates of sadness and depression more common among teenagers. See **Figure 2**.

**FIGURE 2.**  
Percent of Northern Virginia households with children reporting mental health concerns



Source: Insight Region® analysis of CDC Household Pulse Survey for respondents in Virginia and DC metro area, June - October 2022; data on all children includes those under age 5 (not shown as separate category)

Rates of youth mental health need vary substantially within the region.<sup>6</sup>

At the district level, Alexandria, Manassas Park, and Prince William County middle school students reported higher

rates of persistent sadness and suicidal thinking than other districts. However, this story changes slightly when rates are examined at the school level; Fairfax County had some of the highest and lowest rates of these mental health concerns in the region. See **Figure 3**.

**FIGURE 3.**  
Mental health concerns among region’s middle schools, Jan-Mar 2021

	PERSISTENT SADNESS			SUICIDAL THINKING		
	district average	lowest rate of any school	highest rate of any school	district average	lowest rate of any school	highest rate of any school
ALEXANDRIA	41%	26%	41%	12%	4%	13%
ARLINGTON	29%	23%	37%	8%	5%	14%
FAIRFAX	29%	16%	45%	8%	0%	19%
FALLS CHURCH	33%	33%	33%	9%	9%	9%
LOUDOUN	29%	23%	38%	6%	5%	9%
MANASSAS	31%	31%	31%	8%	8%	8%
MANASSAS PARK	42%	42%	42%	13%	13%	13%
PRINCE WILLIAM	38%	28%	46%	12%	7%	18%
NORTHERN VIRGINIA	--	16%	46%	--	0%	19%

Source: Insight Region® analysis of VSS, 2021, middle school data; note that overall, rates for middle school students fall slightly below high school students. 2021 school data was used since 2022 district summary reports were not available at the time of publication.

Trend data for these mental health needs are not available at the regional level. However, changes in youth mental health in Fairfax County can shed a light on the needs of the broader region.

Fairfax County administers an annual youth survey to Fairfax County Public School (FCPS) students in grades 8, 10, and 12 (a shorter version of the survey is given to sixth grade students, and is not included in the rates below). Over the past ten years, rates of persistent sadness and suicidal thinking among FCPS students have fluctuated within 3 percentage points. The exceptions are in 2015, when persistent sadness declined by six percentage points from 2014, and in 2021, when rates were 8 percentage points higher than two years prior. See Figure 4.

The percent of teens reporting that they had seriously contemplated suicide also increased from 2019 to 2021, though the fluctuation is within the range observed in previous years. Suicide attempts (not shown) have been trending upward over time, with no noticeable acceleration between 2019 and 2021, and deaths by suicide in Northern Virginia remain very low and statistically unchanged from previous years.<sup>8</sup>

Nationally, rates of teenage persistent sadness and incidence of major depressive disorder had been climbing steadily well before the pandemic.<sup>9</sup> Since 2020, these needs have become acute; one study found that 22 percent of U.S. parents reported overall worsened mental

## LOOKING TO DIVE DEEPER?

Data for individual middle schools and high schools are publicly available and can be accessed through the [Virginia Department of Criminal Justice Services](#) website, along with other historical data and trends.

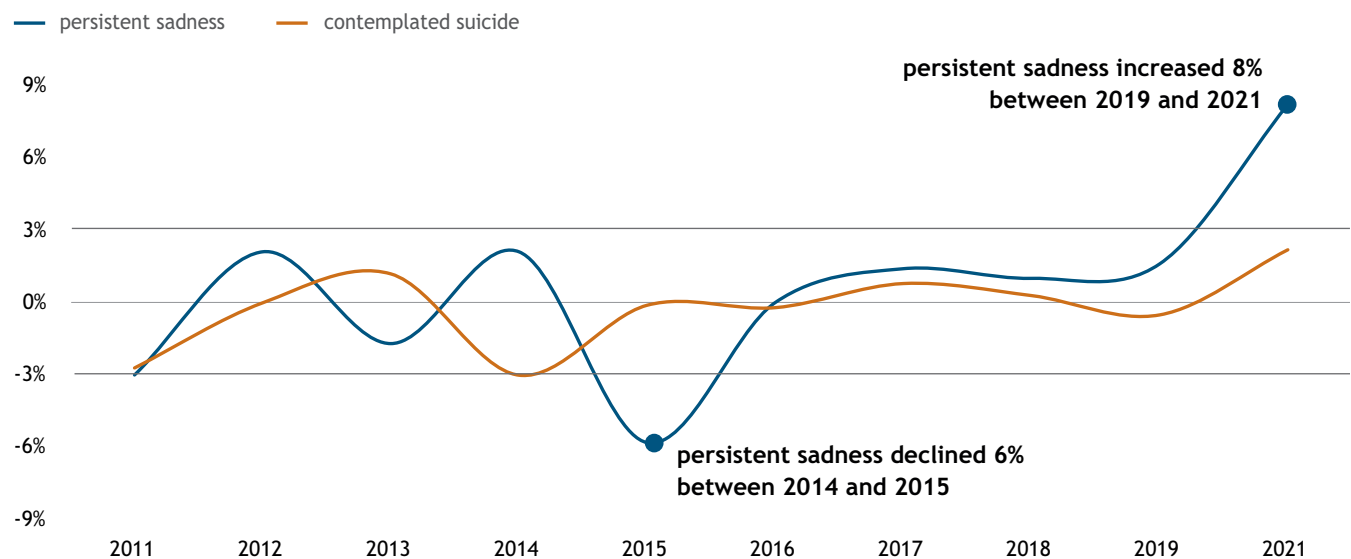
The [Fairfax County Youth Survey Interactive Data Explorer](#) is an online tool that allows users to create custom charts to explore the mental health needs of different student populations.



or emotional health for their school-age children, and global rates of depression and anxiety for children and youth have doubled from their pre-pandemic levels.<sup>10</sup> While data from the 2021 Youth Risk Behavior Surveillance System—the national equivalent of the FCYS—have not been released, preliminary analyses of state-released data suggest that teenagers across the country saw increases in persistent sadness.<sup>11</sup>

**FIGURE 4.**

Annual variation in FCPS students reporting persistent sadness and suicidal thinking



Source: Insight Region® analysis of Fairfax County Youth Survey for grades 8-12 (FCYS-Teen), Fall 2009-2021

# who is struggling?

In addition to asking students about their experience with persistent sadness and suicidal thinking, the FCYS 2021 examines psychological stress, where teens report experiencing tension, restlessness, anxiety, nervousness, and inability to sleep due to worry most or all of the last thirty days.

These markers of emotional wellbeing (persistent sadness and psychological stress) can be compared against other aspects of teens' lives to illuminate who in our region is struggling—and why.

For this section, it is important to note that the rates of persistent sadness presented for Fairfax County are higher than those reported in the Virginia School Survey: while 40 percent of high school students (grades 10 and 12) who completed the FCYS in November 2021 reported persistent sadness, 31 percent of high school students across Northern Virginia's eight school districts who completed the VSS in February 2022 reported persistent sadness. These discrepancies are due to differences in sampling methods employed by the two surveys.



## DEMOGRAPHICS *and mental health*

Some student populations are more likely to experience elevated distress than others.<sup>12</sup>

**Age.** Persistent sadness and psychological stress tended to increase modestly with age, peaking for students in the twelfth grade; approximately two out of every five students in the graduating class of 2022 was experiencing persistent sadness and over a third (37 percent) was stressed all or most of the time. Equally concerning, a third of sixth graders (excluded elsewhere in this brief) were persistently sad, and one in five were stressed.

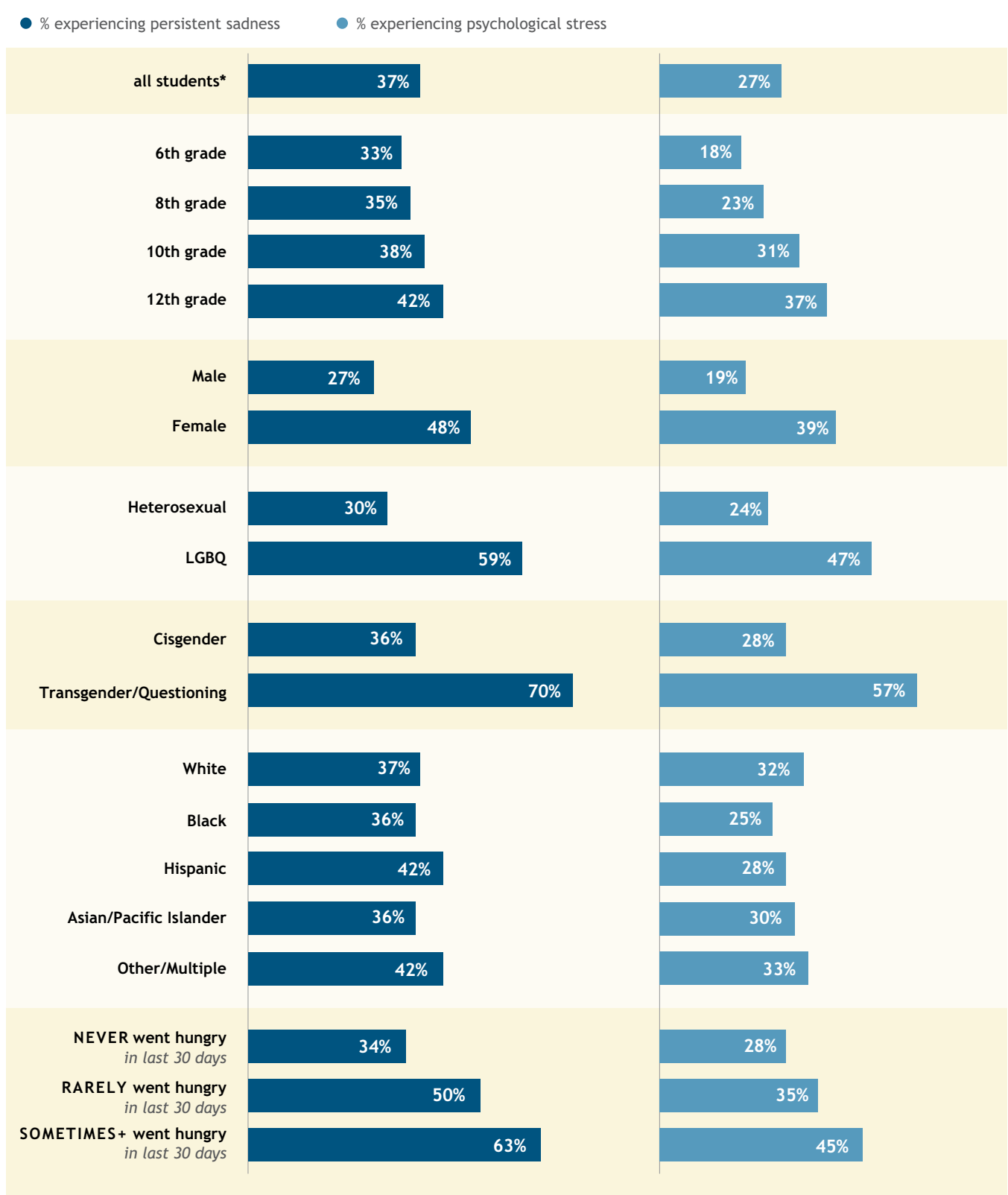
**Gender & Sexuality.** Girls, those who identified as lesbian, gay, bisexual, or questioning (LGBQ), and individuals who are transgender or gender questioning were approximately twice as likely to experience persistent sadness and psychological stress as male, heterosexual, and cisgender peers. Rates of these negative feelings were particularly high among transgender/questioning students, where 70 percent reported persistent sadness and 57 percent reported psychological stress.

**Race-Ethnicity.** Students who identify as Hispanic or other/mixed race experienced slightly higher rates of persistent sadness (42 percent, compared to around 36 percent among other races), while those who identify as White or Other had slightly higher rates of psychological stress.

**Food Security.** Students who reported that they had experienced food insecurity—a useful but incomplete marker of broader material security—also reported heightened levels of persistent sadness and psychological stress. Half of students who “rarely” had gone hungry because their family did not have enough food reported persistent sadness, compared to 34 percent who “never” had gone hungry. Nearly two-thirds (63 percent) of those who reported that this situation had occurred “sometimes, most of the time, or always” were persistently sad. Stress levels followed a similar trend, with smaller differences between groups.

**FIGURE 5.**

Rates of persistent sadness and psychological stress, by select student characteristics



Source: FCYS-Teen, Fall 2021



## TIME USE and mental health

When a focus group<sup>13</sup> of City of Alexandria teenagers was asked to name the top sources of stress and sadness in their lives, responses were remarkably similar to youth across the country: they felt overwhelmed and overscheduled, with too little time to play or spend with friends.<sup>14</sup>

The role of downtime—time to attend to basic needs (sleep, meals, hygiene), relax, socialize, pursue hobbies/entertainment—in mental health is far more complex than simply “not having enough”.

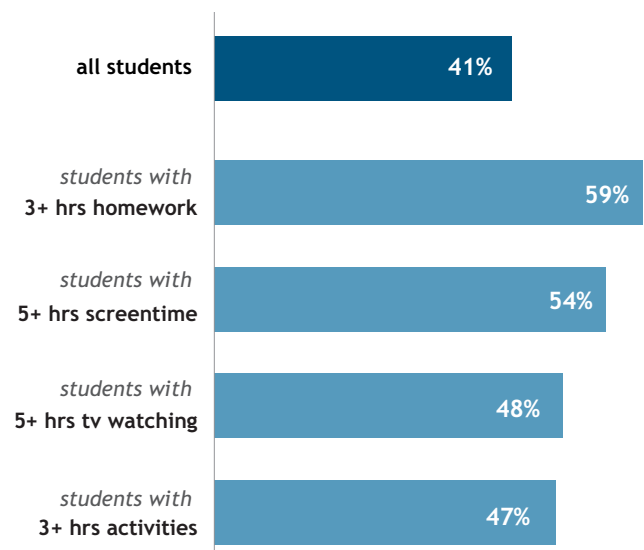
As shown in **Figure 6**, psychological stress showed an inverse relationship with downtime; as total downtime goes up, stress goes down, from 42 percent of youth with fewer than 9 hours of downtime to 25 percent with 16 or more hours.<sup>15</sup> Persistent sadness, on the other hand, follows a curve, with the lowest rates observed among those who spend about half of their day “on” and the other half “off”.

These findings suggest that, when it comes to persistent sadness, how students spend their time may matter more than the absolute number of hours they have “free”. As shown in **Exhibit A**, students who spend a lot of time or virtually no time on activities and homework, have a heavy amount of leisure time using a screen, and/or who sleep less tend to have a higher incidence of persistent sadness.

The three clusters of activities—productive time for academics and afterschool activities<sup>16</sup>, leisure time, and time left over for sleep—must all fit into a 24-hour day, and students with high commitment to one area may compensate by depleting another. For example, students

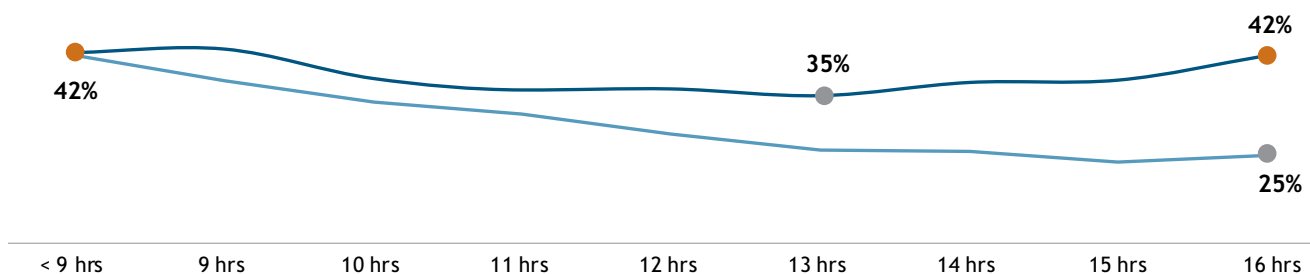
with 3 or more hours of homework and those who spend 5 or more hours using a screen have higher rates of sleep deprivation (6 hours or less), which may contribute to their overall mental wellbeing.<sup>17</sup> See **Figure 7**.

**FIGURE 7.**  
Percent of students who sleep 6 hours or less



Source: FCYS-Teen, Fall 2021

**FIGURE 6.**  
Rates of persistent sadness and psychological stress by total downtime on typical school day



Source: Insight Region® analysis of data from FCYS-Teen, Fall 2021

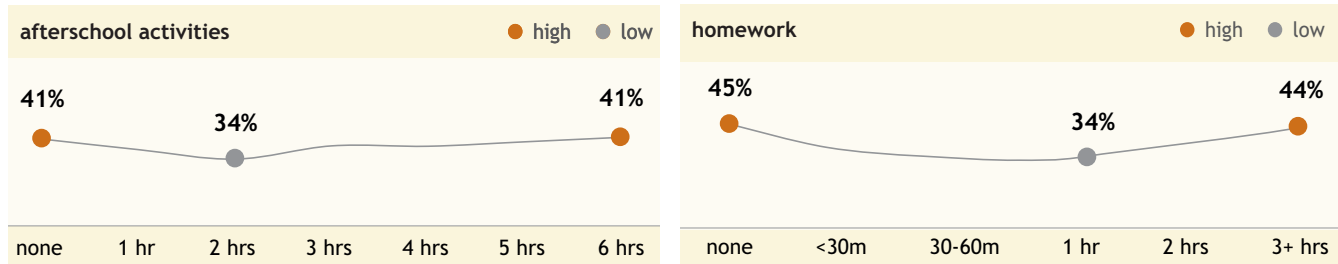
## EXHIBIT A.

Percent of students reporting persistent sadness, by time use

### PRODUCTIVE TIME:

*happier students have moderate levels of homework and activities*

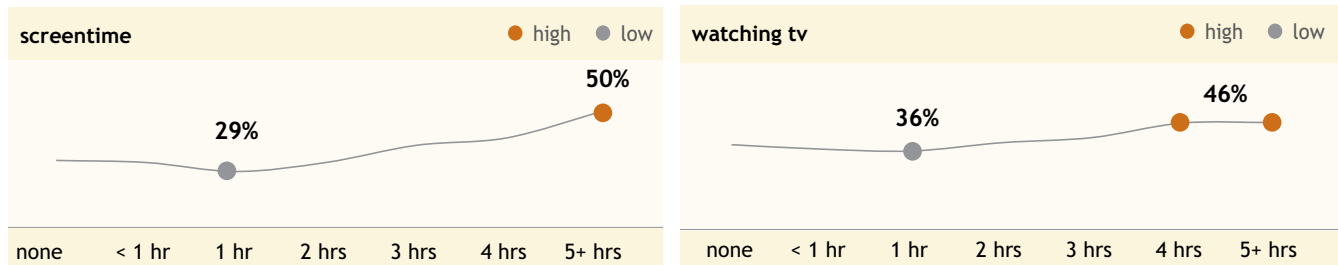
Students who spend either a lot of time on homework and activities OR virtually no time reported the highest rates of persistent sadness. The lowest rate occurred among students with 2 hours of activities and 1 hour of homework. Research suggests that excessive homework (3+ hours) can reduce overall wellbeing and that academic benefits “plateau at about two hours per night.”<sup>18</sup> The finding that students who spend no time on homework and extracurriculars also have high rates of persistent sadness may be both cause and symptom (students who are persistently sad may have lower engagement in school and activities, and low engagement can increase sadness).



### LEISURE TIME:

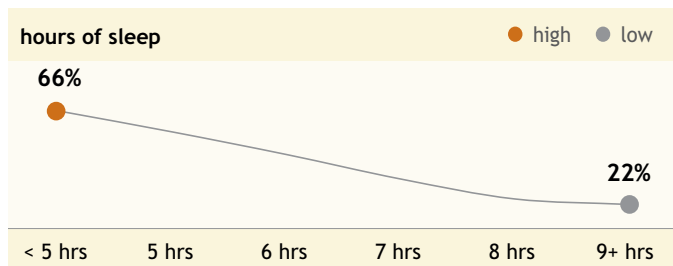
*happier students spend less time using screens and watching tv*

Teenagers who spend about 1 hour using a computer, playing video games, or watching tv have lower rates of persistent sadness than their more “plugged in” peers.<sup>19</sup> Research on the link between screentime and youth wellbeing is complex—studies have found that screen use can *exacerbate* sadness, loneliness, and depression,<sup>20</sup> with the strongest effects observed among youth already at risk<sup>21</sup> and a probable bidirectional relationship (e.g., those experiencing depression/anxiety may seek respite through screens). The specific type of screentime that a youth engages in matters, too—hours of television watching made less of an impact than social media, for example, as the former may be done as a quasi-social, relaxing activity with family and friends.<sup>22</sup>



### SLEEP:

*happier students sleep more*



Every additional hour of sleep that a Fairfax teen gets is associated with a ten+ percentage point drop in persistent sadness. These findings align closely with decades of sleep research, which suggests that teenagers need eight hours or more for optimal health; those who sleep fewer than seven hours may experience impaired mental health.<sup>23</sup> Note that sleep deprivation is considered both a *symptom* of anxiety and depression—those with these feelings may find sleep difficult due to worry and rumination—as well as a *contributing factor*, where those whose schedules or habits interfere with sleep see effects on mood and perception.

Source: Insight Region® analysis of data from FCYS-Teen, Fall 2021

## RELATIONSHIPS *and mental health*

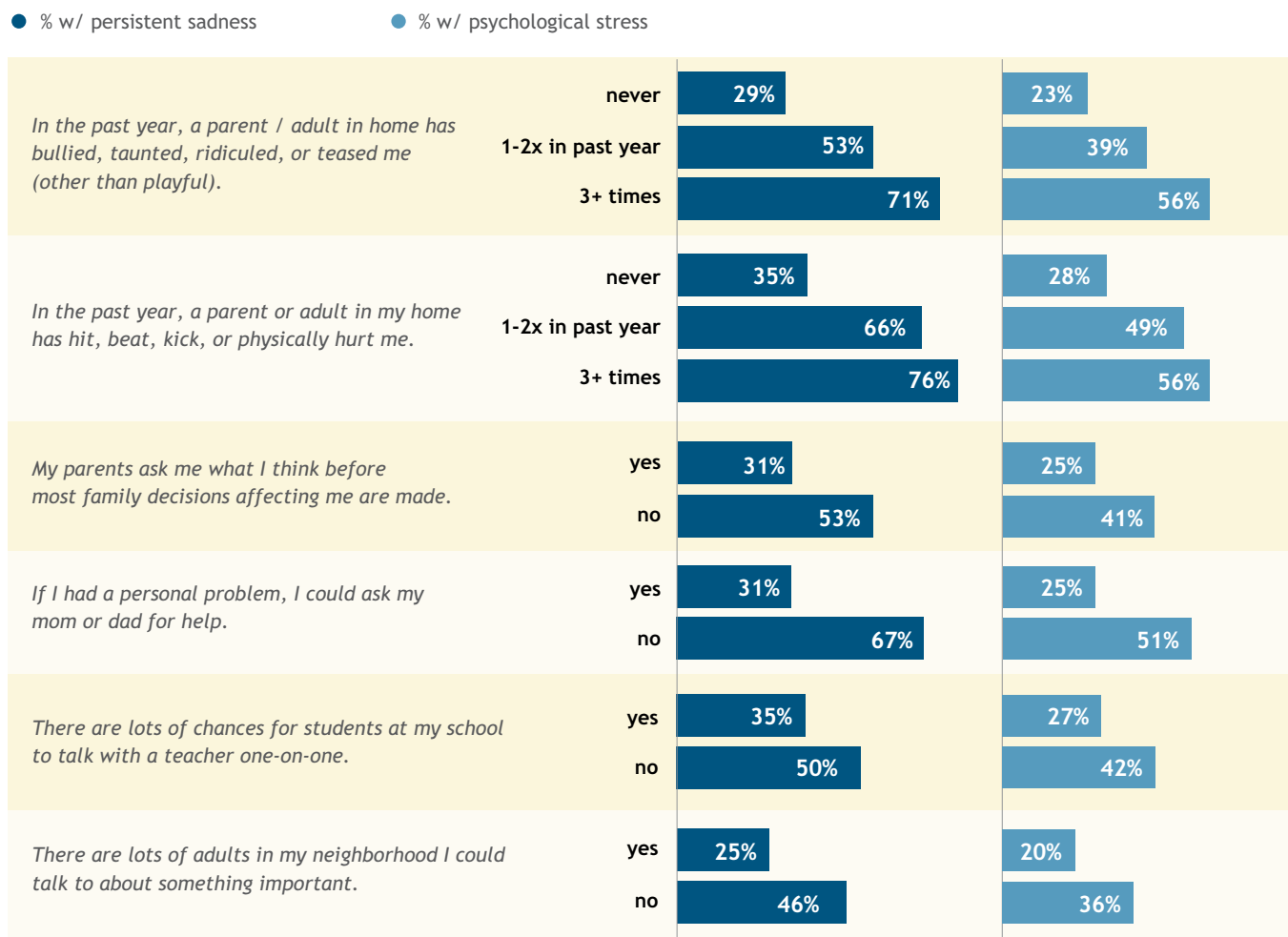
The Fairfax County Youth Survey asks students a number of questions about their relationship with parents and other adults.

As shown in **Figure 8**, youth who reported that their parents had bullied, taunted, ridiculed, or teased them (not playful or horseplay)<sup>24</sup> and/ hit, beat, kicked, or physically hurt them had much higher rates of persistent sadness and stress than students who did not have these experiences. While physical and verbal abuse are extreme manifestations of negative parent-child relations, they are not the only ones that matter when it comes to youth emotional wellbeing; students with parents that excluded them from important family decisions and/or that could not be consulted about personal problems also had substantially higher rates of both persistent sadness and stress.

The perceived availability of teachers and other adults in the community related to youth wellbeing, too; 29 percent of students who felt there were “lots of chances for students to talk with a teacher one-on-one” reported persistent sadness, compared to 53 percent who did not have this resource. The presence of trusted adults in the student’s neighborhood showed a particular buffering effect, with 25 percent of students reporting persistent sadness compared to 46 percent without this resource.<sup>25</sup>

**FIGURE 8.**

Rates of persistent sadness and psychological stress, by relationship with parents, teacher, and other adults in the community



Source: FCYS-Teen, Fall 2021

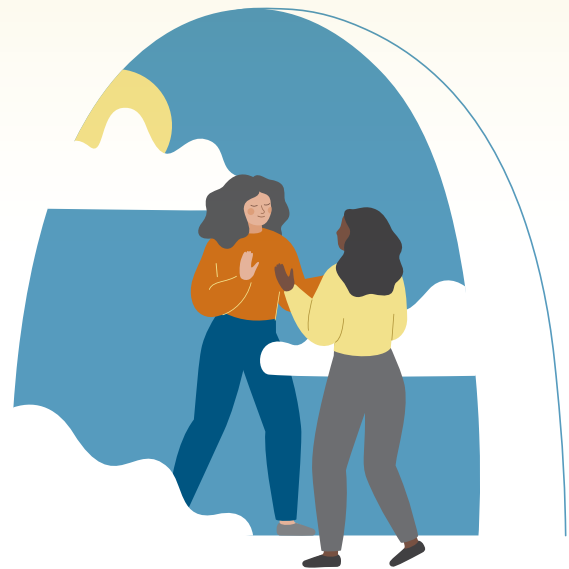
These factors—relationships with parents, teachers, and adults in the community—are three of six assets monitored by Fairfax County through its *Three to Succeed* campaign, which highlights the importance of protective factors in helping youth “manage stress, make better choices, and develop healthy habits”.

The other three factors that are tracked are involvement in community service, involvement in extracurriculars, and students’ ability to take responsibility for their actions.

Mental health increases dramatically as protective factors accumulate; in 2021, each additional protective factor was associated with an approximately ten percentage point drop in the rate of teenage persistent sadness, a slope similar to hours of sleep. Sixty-three percent of youth with no protective factors reported persistent sadness, compared to 42 percent with 3 and just 18 percent that reported 6. Fairfax County considers three or more protective factors to be a target baseline for all teenagers to achieve.<sup>26</sup> See Figure 9.

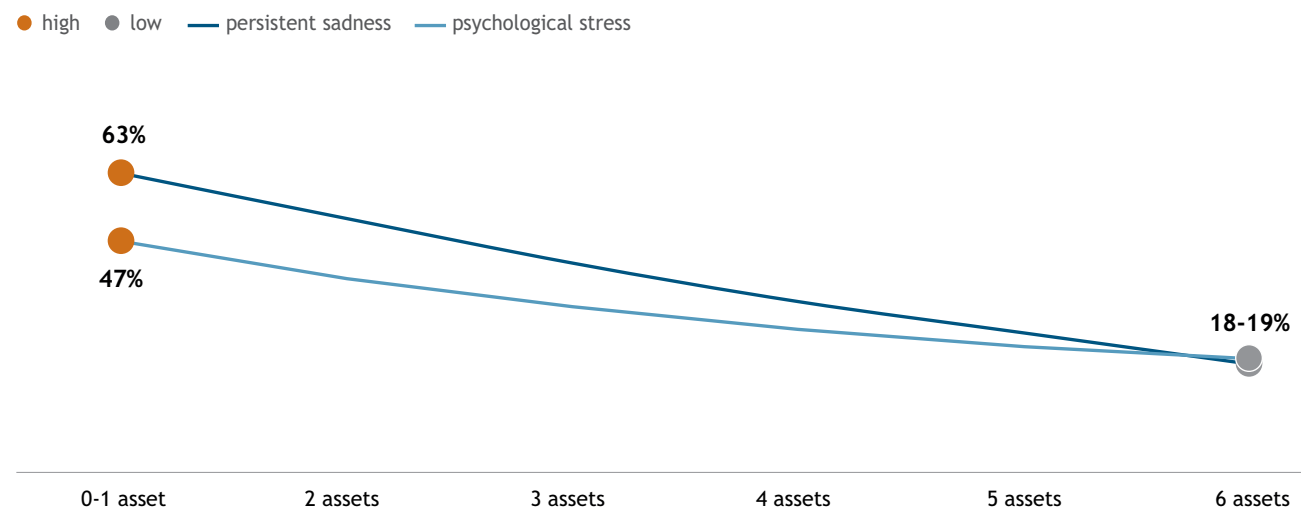
## A REGIONAL PERSPECTIVE

These county-level findings align closely with results from the VSS, 2022. While the majority of the region’s high school students (57 percent) have an adult to whom they can turn for help when sad, 19 percent do not, and 24 percent were unsure. Perceived support from adults was lowest among those with a recent or past-year mental health need (48 percent, versus 68 percent of those who did not have this need).



**FIGURE 9.**

Rates of persistent sadness and psychological stress, by total protective factors



Source: FCYS-Teen, Fall 2021



Research has found that teenagers with a few close, meaningful friendships that provide companionship and emotional intimacy tend to have higher levels of self-esteem and lower rates of anxiety and depression whose effects last into adulthood.

#### WHAT ABOUT FRIENDSHIP?

The FCYS-Teen does not ask questions about the quality of students' friendships, an important, well-recognized protective factor. Research has found that teenagers with a few close, meaningful friendships that provide companionship and emotional intimacy tend to have higher levels of self-esteem and lower rates of anxiety and depression whose effects last into adulthood. Popularity, marked by many superficial relationships, was associated with increased longer-term mental health issues.<sup>27</sup>

While local data are not available, national research suggests that nearly all (98 percent) teenagers have at least one close friend, and 78 percent have multiple close friends.<sup>28</sup> Many of these friendships are maintained primarily online. Even before the pandemic (2018), 60 percent of teens indicated that they spent time with their friends online every day or almost every day, compared with 24 percent who spent time with their friends in person. The most common reason for spending time in a digital environment was being "too busy with other obligations" (41%) or having friends that were too busy (34 percent) to find time in person.

In general, teens recognize that their online interactions can be a mixed bag, on one hand "an important part of their social lives, [a] space [to] meet new people and receive support to cope with tough times," while on the other a source of "feeling worse about their own life because of what they see from other friends on social media."<sup>29</sup>

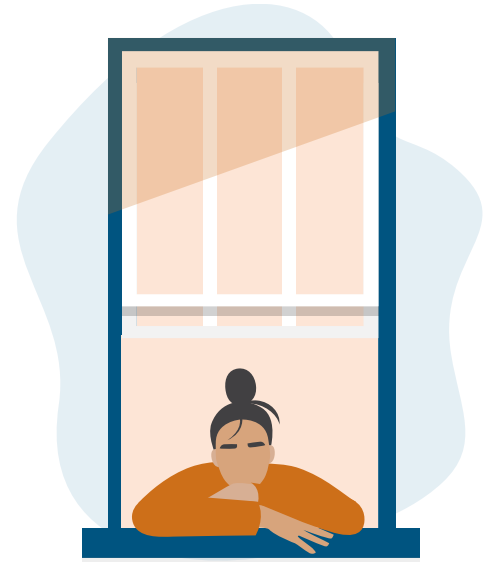
# tracing the impact

## OF THE PANDEMIC ON YOUTH MENTAL HEALTH

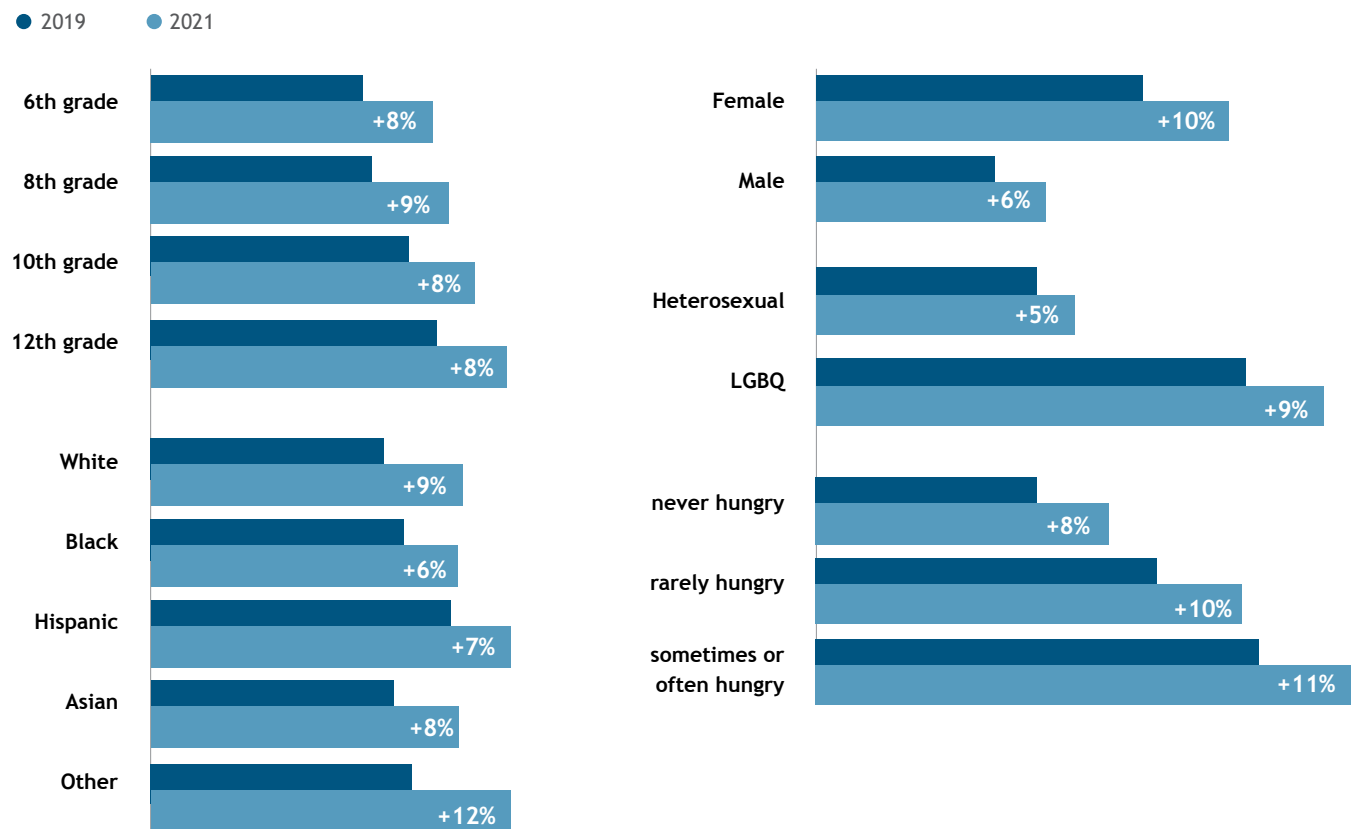
The students most likely to experience persistent sadness during the pandemic are the same ones who encountered elevated risk prior to the pandemic.

### 1. Increased acuity among students already at heightened risk.

The students most likely to experience persistent sadness during the pandemic are the same ones who encountered elevated risk prior to the pandemic. From 2019 to 2021, the *largest* increase in persistent sadness occurred among students already at risk of experiencing these feelings. See **Figure 10**. This finding aligns with observations made by Fairfax County officials that the pandemic not only increased rates of poor mental health, but also increased the *acuity*—those who were on the borderline or needed a light touch before are really struggling.<sup>30</sup>



**FIGURE 10.**  
Percentage increase in persistent sadness, 2019 to 2021



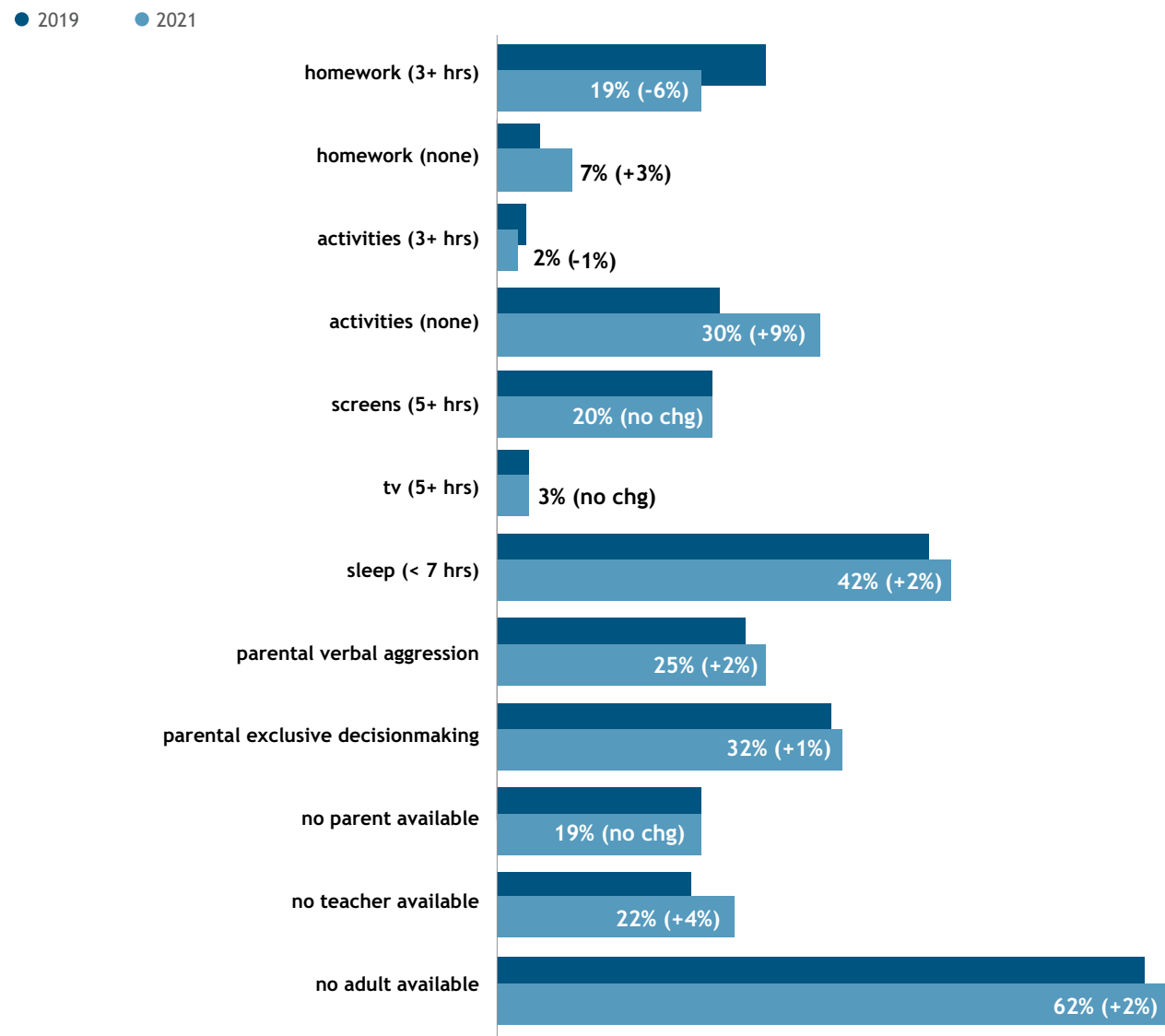
Source: FCYS-Teen, 2019; FCYS-Teen, 2021

## 2. Modest increases across risk factors.

This brief identified a number of factors related to time-use and relationships (with adults) that were associated with increased mental health needs. **Figure 11** below suggests that many of these risk factors increased slightly during the pandemic, with somewhat larger increases in the percent of students with no extracurriculars (up nine percent) and those lacking a teacher to go to for help (up four percent).



**FIGURE 11.**  
Percent of students experiencing various risk factors for persistent sadness



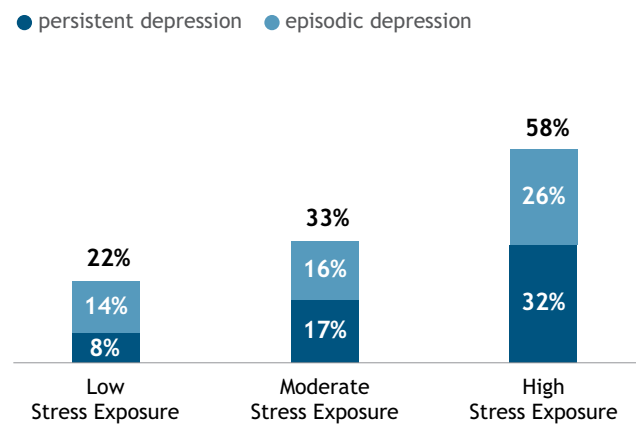
Source: FCYS-Teen, Fall 2021

### 3. Depletion of protective factors at a time of increased stress factors.

Research has shown a strong connection between the number of objective “life stressors” that an individual experienced during the pandemic and overall mental health.<sup>31</sup> As shown in **Figure 12**, individuals exposed to a large *number* of stressors during the pandemic were more likely to become depressed and to remain depressed than their peers.<sup>32</sup> These pandemic-specific stressors may include intense fears about death and dying (for teenagers, particularly their risk of transmitting the virus to parents and family members), loss of a loved one, material insecurity (parents’ loss of income, housing insecurity, food insecurity), loss of routine, and concerns about society and the future. The ill effects of “stacked stressors” on mental health also applies to the depletion of protective factors; those who possess a greater number of total assets—strong, supportive relationships, ties to community, personal responsibility, etc.—are generally better able to cope with stress, and to buffer themselves from symptoms of depression and anxiety.<sup>33</sup> Many of these protective factors were interrupted during the pandemic: teenagers were required to spend an increasing portion of their lives online, making it difficult to see friends and non-residential family, volunteer, participate in extracurricular activities, and feel connected to school/community.<sup>34</sup>

**FIGURE 12.**

Percent of students experiencing various risk factors for persistent sadness



Source: Insight Region® analysis of data from Ettman et al, 2021

During the pandemic, there was a noticeable downward shift in the total number of protective factors teenagers possess. In 2019, 21 percent of FCPS students were at-risk (fewer than 3 protective factors), compared to 28 percent of students by 2021. The largest increase was in the percent of students who had fewer than two protective factors (7 percent of students in 2019, versus 12 percent in 2021). See **Figure 13**.

**FIGURE 13.**

Percent of students with protective factors, 2015-2021



Source: Insight Region® analysis of FCYS-Teen



# coming together **AROUND SOLUTIONS**

We have known for years that, “positive relationship variables (such as talking about plans for the coming day with parents [or] participating in family activities) and those related to healthy behaviors like physical activity and better sleep [are] among the top predictors of high positive affect and [protect teens] against stress, anxiety, and depression.”<sup>35</sup>

These protective factors—strong, trusting relationships and fulfilled physiological needs—act as armor to help buffer adolescents from the ill effects of stress and trauma, which may be particularly important for youth already at risk of experiencing anxiety and depression. Unfortunately, many teenagers in the region do not have some of these basic tools, and with about half of the region’s teenagers experiencing recent or past-year mental health needs, these protective factors are more important than ever.

*A community response to this concerning trend might include:*

## **1. Focusing mental health outreach to youth at heightened risk of persistent sadness and stress.**

This brief identified a number of populations at heightened risk of stress and persistent sadness, including certain demographics groups (girls, students in the LGBTQ community, and upperclassmen). It also identified that very low and very intense engagement in certain activities

(homework, extracurriculars, screentime) may place youth at risk, including youth that are increasingly disconnected from/struggling with school as well as “high performing” students such as those taking advanced coursework and/or dedicated athletes. Lastly, students who experience strained parental relationships—and those who do not have another adult in whom they can confide about personal problems—are also more likely to experience stress and persistent sadness.

Outreach can take a variety of forms and settings. At its most basic level, it means individuals in a teenager’s life—including their friends and peers—feel empowered to have open, trusting discussions about mental health, serving as “wayfinders” that are the first point of contact for those who are struggling. When reaching out to teenagers, it may be particularly important for wayfinders to be proactive, responding when needs/symptoms are present but also initiating conversations about emotional and mental wellbeing with teens who seem “fine”; recent research suggests that teenagers are more willing than ever to



discuss issues around depression, anxiety, sadness, and stress, but they are typically unwilling to initiate that conversation, particularly with their friends.<sup>36</sup>

Programs that support basic mental health literacy—including self-help books, classes in Youth Mental Health First Aid for adults and for teenagers/friends, and online resources—can be an important way to develop basic skills to recognize and respond to issues.

## **2. Acknowledge that adequate sleep is not just a “nice to have”—it is a key ingredient in youth wellbeing, stress management, and happiness.**

Lack of sleep is not just a symptom of poor mental health; it is also a contributing factor. Research has found that person-level interventions that effectively target sleep issues have an important side benefit—they also tend to reduce depression and anxiety, even with no services/supports offered around mental health. Developing and promoting resources and programs that help teenagers who have sufficient time for sleep but still do not get enough may become critically important in improving mental health and wellbeing.

Screentime—particularly spent on social media—has been linked to both reduced mental health as well as sleep struggles in teenagers. Unfortunately, the medium continues to serve as a lifeline for many teenagers during and post-pandemic; a way to develop and maintain friendships, make sense of the world, and feel connected. For students educated in a virtual environment, where a good portion of their productive hours were also spent looking at a screen, the distinction between “good” screentime and “harmful” screentime may not be particularly salient. Instead of discouraging screen time or social media use, programs that offer more enjoyable alternatives—structured time to spend with friends/peers in the form of afterschool and weekend activities—may help, particularly if youth see their friends, parents, and other adults opting to spend more of their free time “offline”.

Sleep deprivation in teenagers is not just about trading sleep for screentime. It is also related to workload. This brief found that students with heavy amounts of time spent on homework and/or extracurriculars not only sleep less, they also have higher rates of persistent sadness.



## **3. Expand the number of trusting, supportive adults in a teenager’s life by focusing on mentoring skills, parenting skills, and adult mental health services.**

Teenagers need adults in their lives to whom they can go with personal problems, and it needs to be more than just their parents. Formal mentoring programs that pair youth with a caring adult in the community—ideally in late childhood or early adolescence—can help foster these connections, but any arranged activity that brings together adults and youth over a sustained period of time, such as tutoring, community volunteering, coaching sports, etc., can create these meaningful ties. Some of the forms of outreach and mental health literacy presented in recommendation 1 could be applied here, focused on providing mental health literacy and support to adults based on their role in a youth’s life (such as resources for mentors, coaches, youth ministry).

Lastly, it is important to recognize that feelings of depression and anxiety are not just a teenager problem. In Fall 2021, over a quarter of the adult population was struggling with clinical levels of anxiety and/or depression, including those who worked primarily in the schools (33 percent). Adults with their own mental health needs may have limited ability to provide emotional support to others, and could benefit from receipt of mental health support, too.

## ENDNOTES

1. Toscos, T., M. Carpenter, M. Drouin, A. Roebuck, A. Howard, M. Flanagan, & C. Kerrigan. (2018). [Using Immediate Response Technology to Gather Electronic Health Data and Promote Telemental Health Among Youth](#). *Journal of Electronic Health Data and Methods*, 6(1). Also see Bitsko, R.H., A.H. Claussen, J. Lichstein J, et al. 2022. [Mental Health Surveillance Among Children – United States, 2013-2019](#). *MMWR* 2022;71.
2. Elo, A.L., A. Leppänen, & A. Jahkola. (2003). [Validity of a single-item measure of stress symptoms](#). *Scandinavian Journal of Work, Environment, & Health*, 29(6).
3. Wiegner, L., D. Hange, C. Björkelund, & G. Ahlberg, Jr. (2015). [Prevalence of perceived stress and associations to symptoms of exhaustion, depression and anxiety in a working age population seeking primary care--an observational study](#). *BMC family practice*, 16(38). Also see Bitsko, R.H., A.H. Claussen, J. Lichstein J, et al. 2022. [Mental Health Surveillance Among Children – United States, 2013-2019](#). *MMWR* 2022;71.
4. A 2000 study by the CDC determined that on average, students in national version of this survey—the Youth Risk Behavior Surveillance System, or YRBSS—overreported their height by 2.7 inches and underreported their weight by 3.5 pounds. See Centers for Disease Control and Prevention. (2013). [Methodology of the Youth Risk Behavior Surveillance System – 2013](#). *MMWR* 2013;62.
5. Rates for middle school students, collected a year earlier in February 2021, hover just a few percentage points the rates of their older peers.
6. 2021 data were used instead of 2022 as some jurisdictions did not have publicly available data for 2022 at the time of publication
7. For more data on individual schools and divisions, see <https://www.dcjs.virginia.gov/virginia-center-school-and-campus-safety/school-safety-survey/secondary-school-climate-survey/results>. For statewide perspective, see JLARC. (2022). Report to the Governor and the General Assembly of Virginia Commonwealth of Virginia November 7, 2022 Pandemic Impact on Public K-12 Education 2022. <http://jlarc.virginia.gov/pdfs/reports/Rpt568.pdf>
8. In 2021, Northern Virginia reported 3.7 deaths by suicide per 100,000 youth, the lowest rate of any region in the state and statistically unchanged from levels seen in previous years. See Virginia Department of Health. 2022. [Self-Harm and Suicide Among Virginia Youth Aged 9-18 Years, 2015-2021](#). This finding—that suicidal ideation, attempts, and completions have not risen as steeply as persistent sadness—may surprise those who have observed a surge in emergency room visits for youth self-harm. Some experts believe that this spike reflects heightened parental monitoring and limited pediatric/therapist availability during the pandemic, rather than a pure increase in those with suicidal thoughts or actions. See Ellis, J. (2021). [Youth Mental Health in Fairfax County During the Covid-19 Pandemic](#). Report to the Board of Supervisors.
9. For an analysis of these findings, see The Learning Network. (2022). [What’s Going On in This Graph? | Teen Behaviors](#). *New York Times*, 05/05/2022.
10. Panchal, N. Kamal, R., Cox, C., Garfield, R.L., & Chidambaram, P. (2021). [Mental Health and Substance Use Considerations Among Children During the COVID-19 Pandemic](#). Kaiser Family Foundation. Racine, N. & McArthur, B.A. (2021). [Global prevalence of depressive and anxiety symptoms in children and adolescents during COVID-19: A meta-analysis](#). *JAMA Pediatrics*, 175(11).
11. Gilligan, C. (2022). [Data Depicts Rise in Students Who Feel Persistent Despair](#). *U.S. News*, 08/15/2022.
12. For a deeper analysis of FCPS students who face increased mental health challenges, see Lee, C. & Krafchek, A. 2022. [Mental Health During the Pandemic Among Fairfax Students: What the 2021 Fairfax County Youth Survey Data Tells Us](#). Fairfax County Countywide Data Analytics, Department of Management & Budget. Questions may also be directed to the report’s authors through [Countywide Data Analytics](#).
13. Focus groups held by the City of Alexandria’s Office of Youth in 2019; see [Children & Youth Community Plan 2025, Appendix C: Community Engagement in Developing Alexandria’s CYCP 2025](#).
14. Challenge Success. (2019). [Give Teens More Downtime and Support with Time Management](#). Association for Supervision and Curriculum Development.
15. Downtime is calculated in hours as: 24 - sum(time spent on homework, extracurriculars at school, extracurriculars away from school, paid employment) - 0.75 (for commuting; 1.5 use if student works or has outside extracurricular) -7 (direct classroom instruction).
16. These activities include: participation in extracurriculars held at school, participation in extracurriculars held away from school, and paid employment.
17. Also see Richter, R. (2015). [Among teens, sleep deprivation an epidemic](#). Stanford Medicine News Center. and Garey, J. (2021). [Why Are Teenagers So Sleep-Deprived?](#) Child Mind Institute.

18. See Galloway, G., J. Conner, & D. Pope. (2013). [Nonacademic Effects of Homework in Privileged, High-Performing High Schools](#). *Journal of Experimental Education*, 81(4); a useful summary of this research is also available at [Stanford.edu](#). Research on excessive extracurriculars is less available, though see Wheeler, S. & K. Green. (2018). [‘The helping, the fixtures, the kits, the gear, the gum shields, the food, the snacks, the waiting, the rain, the car rides...’: social class, parenting and children’s organised activities](#). *Sport, Education, & Society*, 24(8).
19. In reality, the typical U.S. teenager spends about a third of their day (7.8 hours) using a computer, smart phone, or tablet. Nagata, J.M., C.A. Cortez, C.J. Cattle, K.T. Ganson, P. Iyer, K. Bibbins-Domingo, & F.C. Baker. (2022). [Screen Time Use Among US Adolescents During the COVID-19 Pandemic: Findings From the Adolescent Brain Cognitive Development \(ABCD\) Study](#). *JAMA Pediatrics*, 176(1). The Fairfax County Youth Survey, and the larger national survey from which most of its questions are derived, tends to have much lower estimates of screen time usage, with just 20 percent of students reporting five or more hours of recreational computer/video game playing each day. Although screentime may be underreported, we can use it to track changes in overall screen usage over time.
20. For example, see Thompson, D. (2022). [Why American Teens Are So Sad. Four forces are propelling the rising rates of depression among young people](#). *The Atlantic*, 4/11/2022; and Twenge, J.M., A.B. Cooper, T.E. Joiner, M.E. Duffy, & S.G. Binau. (2019). [Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005-2017](#). *Journal of Abnormal Psychology*, 128(3). For an earlier summary of existing research on this topic for the lay audience, see a guest column by the second study’s lead author: Twenge, J.M. (2017). [Why So Many Teens Today Have Become Depressed. The answer might be right there in their hands: the smartphone](#). In this column, Dr. Twenger notes, “I focused on the analyses... of the nationally-representative MtF and CDC data on thousands of teens, which show correlations between more time on social media and lower well-being. The most recent meta-analysis (of 67 studies) also found a correlation between more time on social media and lower well-being... Overall, between the large samples I analyzed and the meta-analysis, it seems clear that the preponderance of the evidence points toward lower well-being with more social media use... Social media may have other benefits, but more psychological well-being... does not appear to be one of them. Of course... correlation doesn’t prove causation. For example, perhaps unhappy people use screen devices more. However, three other studies have effectively ruled out that explanation, at least for social media. Two longitudinal studies found that more social media use led to unhappiness, but unhappiness did not lead to more social media use. A third study was a true experiment (which can determine causation); it randomly assigned adults to give up Facebook for a week, or not. Those who gave up Facebook ended the week happier, less lonely, and less depressed.”
21. Thompson (2022) articulates this point well as, “Social media isn’t like rat poison, which is toxic to almost everyone. It’s more like alcohol: a mildly addictive substance that can enhance social situations but can also lead to dependency and depression among a minority of users.”
22. For a visualization of the impact of different types of screen use on mental health, see Clearvue Health, 2019. [Video Games vs Social Media in Teens](#). Also note that a 2022 study found that “for girls in particular, the correlation between mental health and social media use is larger than that between mental health and binge drinking, early sexual activity, hard drug use, being suspended from school, marijuana use, lack of exercise, being stopped by police, and carrying a weapon.” See Twenge, J.M., J. Haidt, J. Lozano, & K.M. Cummins (2022). [Specification curve analysis shows that social media use is linked to poor mental health, especially among girls](#). *Acta Psychologica*, 224.
23. While eight hours is the “standard” for sufficient sleep, research suggests that teenagers may actually need a little over nine hours of sleep each night for full energy, mood, and cognition. Conversely, individuals who sleep for six hours or less each night—“insufficient” levels—begin to show impaired mental health. See Blackwelder A., M. Hoskins, & L. Huber. (2021). [Effect of Inadequate Sleep on Frequent Mental Distress](#). *Preventing Chronic Disease Public Health Research, Practice, And Policy*, 18(61).
24. Before being asked about parent verbal aggression, students are told that bullying means to “tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. Bullying is any aggressive and unwanted behavior that is intended to harm, intimidate, or humiliate the victim; involves a real or perceived power imbalance between the aggressor or aggressors and victim; and is repeated over time or causes severe emotional trauma. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way. ‘Bullying’ does not include ordinary teasing, horseplay, argument, or peer conflict.”

25. It is important to recognize that, as with sleep and screen usage, association is not causation, and some students may have a strained relationships with parents, teachers, and other adults (or even perceive it to be negative) because of underlying mental health issues and their associated impact on behavior.
26. For a more detailed discussion of how these protective factors—and assets related to family, school, and community influence youth mental health—see Lee & Krafchek, 2022.
27. See Narr, R.K., J.P. Allen, J.S. Tan, & E.L. Loeb. (2017). [Close Friendship Strength and Broader Peer Group Desirability as Differential Predictors of Adult Mental Health](#). *Child Development*, 90(1).
28. Anderson, M. & J. Jiang. (2018). [Teens, friendships and online groups](#). Pew Research Center.
29. Leinhardt, A. (2015). [Teens, Technology and Friendships](#). Pew Research Center; Anderson & Jiang, 2018.
30. Insight Region\* interview, summer 2022
31. These 13 stressors fall into three categories: strained or lost relationships (feeling alone, seeing family in person less, family/relationship problems, death of a loved one), strained or lost routines (personal job loss, job loss in the household, difficulty paying rent, financial problems), and strained or lost financial security (travel restrictions, being forced to leave campus, challenges finding childcare, food shortages, supply shortages).
32. Persistent depression was detected both in spring 2020 and in spring 2021. Episodic depression was detected in either spring 2020 or in spring 2021. Ettman, C.K., G.H. Cohen, S.M. Abdalla, L. Sampson, L. Trinquart, B.C. Castrucci, R.H. Bork, M.A. Clark, I. Wilson, P.M. Vivier, & S. Galea. (2022). [Persistent depressive symptoms during COVID-19: a national, population-representative, longitudinal study of U.S. adults](#). *The Lancet Regional Health*, 5.
33. Although depression and anxiety are related in part to how an individual responds to stress, numerous and severe stressors do tend to increase the likelihood of developing depression. Pliegera, T., M. Melchersa, C. Montagb, R.Meermannnc, & M.Reuter. (2015). [Life stress as potential risk factor for depression and burnout](#). *Burnout Research*, 2(1).
34. The pandemic did not necessarily affect the quality of one's relationships—for the past fifty years, young people have increasingly felt more alone, disconnected, and disappointed with their social connections. Buecker, S., M. Mund, S. Chwastek, M., Sostmann, & M. Luhmann. (2021). [Is loneliness in emerging adults increasing over time? A preregistered cross-temporal meta-analysis and systematic review](#). *Psychological Bulletin*, 147(8).
35. Research summary. (2022). [Social connectedness, sleep, and physical activity associated with better mental health among youth during the COVID-19 pandemic](#).
36. National Alliance on Mental Health. (2022). [Poll of Teen Mental Health from Teens Themselves \(2022\)](#). Of note, 65% of teens surveyed said they feel comfortable talking about their mental health with those who are closest to them, but only 48% talk regularly with parents about their mental health and only 22% talk regularly with friends. Further, 34% seek mental health information from parents, 18% from friends, 8% from the internet, 7% from teachers or trusted adults outside their family, and 6% from social media. Among those who have sought information about mental health, 95% trust their parents and 78% trust their friends.

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