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# How Children Coped in the First Months of the Pandemic Lockdown

## Free Time, Play, Family Togetherness, and Helping Out at Home

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During the first and second months after school lockdown in spring 2020, the author and others conducted surveys in the United States of children aged eight through thirteen and of parents with children the same ages. Contrary to many expectations, they found the children less anxious than they had been prior to the pandemic. The children were getting more sleep, were much more likely to report themselves as happy than sad, were using their free time to discover and engage in new, self-chosen activities, were helping out at home, were enjoying the extra time with their family, and were gaining new respect and appreciation from their parents. The author concludes that these findings, along with findings from other studies early in the pandemic, suggest an increased time for play, an increased opportunity to contribute constructively to family life, and an increased family togetherness improved the mental well-being of many children during at least the first months of the pandemic. He discusses these results in relation to Self-Determination Theory, which posits that psychological well-being depends upon satisfaction of basic needs for autonomy, competence, and relatedness, all of which may have been satisfied to a greater extent after lockdown than before. **Key words:** children's initiative; children's resilience; coping with stress; COVID-19; family togetherness; pandemic school lockdown; play and mental health; Self-Determination Theory

**I**N EARLY TO MID-MARCH 2020, schools and venues for children's after-school activities suddenly closed throughout the United States (as well as in other parts of the world) to reduce the spread of COVID-19. How did children cope with this change from a world in which they had been kept perhaps too busy with scheduled activities at school and after school to one in which these activities were suddenly canceled? Many businesses also closed, and everyone was cautioned to avoid close contact with anyone outside the immediate family, even outdoors.

The most prevalent early predictions by mental health specialists, conveyed both in professional journals and the popular press, were that children, though generally not suffering from the virus itself, were or would soon be suffering psychologically from the consequences of the pandemic (Courtney et al. 2020; Kluger 2020; Villarreal 2020). The general claim was that the disruption in children's schedules and routines caused by school closures, along with confinement to home, loss of physical contact with friends, and family stress from economic and health concerns would result in heightened levels of depression and anxiety. Many research studies were initiated worldwide in spring 2020, aimed primarily at identifying and documenting the pandemic's harm on children's psychological well-being (Kempen 2021; Singh et al. 2020).

As pointed out by Hilgo Bruining and colleagues (2020), however, too much focus on harmful effects of the pandemic might prevent researchers from seeing potential beneficial effects. They pointed to clinical observations suggesting that the lockdown-induced changes in daily routines "seemed to actually reduce child and adolescent mental illness symptoms and even improve well-being" (n.p.). They urged that studies be designed in such a way as to identify positive as well as negative effects of the pandemic-induced changes in families' lives and to look for healthy ways that families coped—not just at their suffering.

In theory, there are several reasons for thinking that children's mental health might improve, at least temporarily, as a result of the pandemic lockdown. These include a reduction in the stress of school; increased time to play and in other ways pursue their own interests; and increased time with parents, who themselves may have more time and motivation to interact with and support their children emotionally than they had before.

For decades prior to the pandemic, the social trajectory for children was one of ever-increased time spent at school, at schoolwork at home, and at adult-managed school-like activities outside of school; ever-increased performance pressure related to such endeavors; and ever-reduced opportunity to play and explore in their own chosen ways. Over this same period, rates of anxiety, depression, and suicide among school-aged children rose continuously. Elsewhere I have reviewed the evidence for these changes and the reasons for believing that the increased performance pressure and decline in play were major causes of the continuous decline in children's mental well-being (Gray 2011, 2013). In the years just before the pandemic, the rate of mental health problems for school-aged children in the United States was at what appears to be an all-time high (Danielson et al. 2020). Multiple studies have also revealed that children's mental

health problems—as measured by their own reports, by suicide rates, and by rates of emergency mental health admissions to hospitals—increase sharply when school is in session and decline, every year, when school is off in the summer (APA 2014; Hansen and Lang 2011; Lueck et al. 2015; Miller et al. 2018). The pandemic lockdown could increase children’s mental well-being by reducing the pressure of schooling and increasing children’s opportunities to play and in other ways pursue their own interests.

There is general agreement among developmental psychologists that play is essential for children’s psychological well-being (Clark 2015; Gordon 2015; Gray 2013). From the perspective of Self-Determination Theory, play promotes well-being because it helps satisfy the three basic human psychological needs—those for autonomy, competence, and relatedness (Ryan et al. 2006). Play, by definition, is self-chosen and self-directed (promoting autonomy); play is often challenging and skill building (promoting competence); and social play is a major means by which children connect with others (relatedness). The pandemic may have limited play with other children, but it may have increased overall the opportunity to play and thereby increased children’s experiences of autonomy and competence. Possibly, too, despite the isolation induced by the pandemic, children’s experiences of relatedness could have increased because of the increased closeness with family members. Moreover, children would still be able to interact with friends through online computer games and other virtual means of connecting.

The study was designed and financed by the nonprofit organization Let Grow. Led by its president Lenore Skenazy (author of the book *Free-Range Kids*), Let Grow is dedicated to the principle that children need opportunities to play and explore independently of adults to develop well physically, emotionally, socially, and intellectually. The organization works with schools and communities and online with parents to promote such opportunities. I was one of the founding members of Let Grow and an early board member, though I have since stepped off of the board.

When schools locked down, the Let Grow team saw an opportunity to collect information that could be useful to the organization in helping families adapt to pandemic living and, further, to help communities, schools, and parents create a better postpandemic world for children. How did children and parents cope with the lockdown? In particular, how did they deal with loss of children’s daily routine of school and after-school activities and the increased time spent at home? To what degree did children begin to take more control of their own

lives and embark on activities, including play, of their own choosing? What positive as well as negative effects might this have had on children and parents? What might children and parents have learned about themselves and each other from this experience?

To address such questions, Let Grow conducted large-scale, demographically representative surveys in the middle of April 2020, and again in the middle of May 2020, roughly one and two months after most schools had closed. The organization chose to focus on families with children aged eight through thirteen, old enough to respond to survey questions but within the range of middle childhood to very early adolescence. The survey questions were developed by the Let Grow staff, headed by Skenazy and Tracy Tomasso (who has a background in market research and was then executive director of Let Grow), with some input from Camilo Ortiz (a professor of clinical psychology at Long Island University) and me. Early reports of some of the results were disseminated by Let Grow in various ways and by me in two blog posts (Gray 2020a, 2020b). However, in order to describe and disseminate the findings more fully and systematically, to an academic as well as nonacademic audience, I asked and gained permission from Let Grow to analyze the data for academic publication. This is that publication.

## Research Methods

The surveys were conducted, online via the Internet, in mid-April and mid-May 2020. Each month, one survey was directed to parents who had at least one child in the age range of eight through thirteen years and another to children in this age range. If a family had more than one child in the range, we made clear that the survey concerned just one of them, the target child. To keep the parents' and children's responses as independent of one another as reasonably possible, the surveyed parents and children came from different families. Also, the families surveyed in May were a different set from those surveyed in April. Parents of the children surveyed had to indicate permission for their child to complete the survey, and then the survey form continued with this instruction to the child: "Please ask your parent for help if you need it. Just remember, we want to know what *you* think, not what your parent thinks, so please answer the questions based on how *you* feel."

The survey samples came from a large database of people in the United States, maintained by the market research company OvationMR, who had previ-

ously registered as interested in responding to surveys in return for points they could redeem for small monetary rewards. That database includes information about such variables as age, income, gender, race, marital status, children, and location, which enables the company to reach out to specific, targeted potential respondents. In this case, the target group were those with at least one child from age eight through thirteen, chosen to create a demographically representative sample of such families. To minimize self-selection deriving from the survey topic, the company did not inform potential respondents of the topic before they started to fill out the questionnaire. So, the measure of the degree to which there may have been such selection is the drop-out rate after starting to fill out the questionnaire.

The children's questionnaire included a list of twelve adjectives, to check or not, to indicate how the children felt in the most recent week of lockdown; a list of twelve categories of activities, to check or not, in response to the question, "Which of the following have you done MORE of in the past week?"; and eight descriptive statements about their possible experiences during lockdown, to which they rated their level of agreement or disagreement. The parents' questionnaire included a list of ten statements, to check or not, to describe their child's mood or behavior during the most recent week; seven additional statements about their child's or their own coping during the lockdown, to which they rated their level of agreement or disagreement; nine adjectives, to check or not, to indicate how they felt about their child's coping during this period; and additional questions concerning their child's sleep, remote or online schooling, and outdoor play. The specific items are made clear in the figures and text in the results section. Each questionnaire also included a number of open-ended questions, but the only ones I have analyzed and reported on here are three that we asked of the children, as will become clear in the results section.

## Results

### *Demography of Respondents*

The April surveys were completed by 798 parents and 762 children; and the May surveys, by 752 parents and 817 children. These numbers represent, respectively, 87 percent, 85 percent, 85 percent, and 82 percent of those who received the survey and opened it and thereby became aware of what it was about. By self-reports, the racial and ethnic distribution of the respondents, averaged

over all four surveys, was 67 percent Caucasian or White, 12 percent African American or Black, 11 percent Hispanic, and 4 percent Asian. The remainder marked themselves as “Other” or chose not to say. Self-reported annual family income was available only for the May parents’ survey, for which 33 percent were under \$50,000; 34 percent, between \$50,000 and \$100,000; and 33 percent, over \$100,000. In all four surveys, by design, the distribution by age and gender was such that there were essentially equal numbers of target children in each age group (age 8, 9, 10, 11, 12, and 13) and of each gender. The geographical distribution included all portions of the United States (Northeast, Midwest, South, and West), roughly in proportion to the population in each.

### *Children’s Reports*

Figure 1 shows the percentages of children in April and May who checked each adjective in a list following the instruction, “Choose the ones that describe how you’ve mostly been feeling this past week.” As shown there, “happy” and “bored” were the most frequently checked, and “sad” and “angry” were the least. In between, in order of frequency (most to least), were “helpful,” “confident,” “excited,” “more grown-up,” “capable,” “smarter,” “worried,” and “lonely.” It is noteworthy that, overall, more than three times as many children checked happy

Figure 1. Percentage of Children Who Checked Each Adjective in Response to “Choose the ones that describe how you’ve mostly been feeling this past week.”\*

	SURVEY MONTH:	<i>April</i>	<i>May</i>
Happy		55%	60%
Bored		59%	55%
Helpful		41%	42%
Confident		32%	34%
Excited		29%	35%
More grown-up		32%	29%
Capable		30%	31%
Smarter		26%	34%
Worried		33%	24%
Lonely		27%	27%
Sad		20%	17%
Angry		12%	12%

\*The items were presented in varying orders in the survey. Here they are listed in order of average frequency that they were checked.

as checked sad, and the largest changes from April to May were increases in “happy,” “excited,” and “smarter,” and decreases in “bored,” “worried,” and “sad.” The biggest decline was in “worried.”

Figure 2 shows the percentages of children who agreed or disagreed in April and May with various statements concerning their coping with the lockdown. The first row shows that, overall, 50 percent agreed, and only 25 percent disagreed, with the statement “I have been more calm than I was in regular school.” The second, third, and fourth rows reveal that most agreed that they were finding new things to do, were being allowed to do more on their own, and were figuring things out on their own. The fifth row indicates that about half of them were worried about their online schoolwork, and the bottom row indicates that about 70 percent were looking forward to going back to regular, in-person school. A breakdown of these data by age, gender, and racial or ethnic group (conducted just for the May survey) revealed only relatively small difference across these variables. The largest differences turned out to be that older children were more likely than younger ones to agree with the statement, “I have been figuring things out on my own” (52 percent agreement for ages 8

Figure 2. Percentage of Children Who Responded “Yes,” “No,” or “Neither” to Statements Concerning Their Coping with the Lockdown\*

	Yes	Neither	No
I have been more calm than I was in regular school	49% 51%	27% 25%	25% 25%
I have been finding new things to do to pass the time	72% 74%	15% 14%	13% 12%
My parents have been letting me do more things on my own.	71% 72%	18% 20%	10% 8%
I have been figuring things out on my own	58% 59%	25% 24%	15% 17%
I have been worried about making mistakes or not understanding my schoolwork.	48% 50%	20% 20%	33% 30%
I have been looking forward to going back to school	70% 73%	13% 12%	18% 15%

\*The top number in each cell is from the April survey and the bottom is from the May survey. For each item, the response choices ranged from 1 through 5, where 1 = “No, this does not describe me at all,” and 5 = “Yes, this describes me very much.” For this table, responses of 4 and 5 were scored as “Yes,” 3 as “Neither,” and 1 and 2 as “No.”

Figure 3. Percentage of Children Who Checked Each Activity in Response to “Which of the following have you been doing MORE of in the past week?”\*

	SURVEY MONTH:	
	<i>April</i>	<i>May</i>
Watching movies or TV shows	74%	75%
Watching YouTube	70%	71%
Helping around the house	59%	56%
Playing video games alone	55%	57%
Playing/talking with friends online (chat, games, or soc. media)	51%	55%
Playing video games with friends (online or in person)	48%	52%
Reading for fun	42%	45%
Art or crafts	43%	44%
Playing or exploring outdoors with an adult	33%	31%
Engaged in a hobby (activity I’m interested in) not listed above	24%	28%
Playing or exploring outdoors without an adult	23%	23%
Playing/talking with friends in person	13%	19%

\*The items were presented in varying orders in the survey. Here they are listed in order of average frequency that they were checked.

and 9, 60 percent for ages 10 and 11, and 66 percent for ages 12 and 13) and that Caucasian or White students were more likely than others to say they were looking forward to going back to school (76 percent for White, 66 percent for African American or Black, and 68 percent for Hispanic).

Figure 3 shows the percentages of children in April and May who checked each category of activity in a list following the question, “Which of the following have you been doing MORE of in the past week?” Perhaps not surprisingly, watching movies, TV, and YouTube; playing video games (alone and with friends); and connecting online with friends were near the top. But helping around the house, reading for fun, and arts or crafts were also checked by more than 40 percent.

As noted in the methods section of this article the surveys also included several open-ended questions. Here, I have analyzed qualitatively responses to three of these for the May survey of children only. One was “Tell us something new that you’ve started doing, if anything, since school closed.” This generated a wide range of responses, which I sorted into several categories to gain an overall picture. The most frequent category, encompassing 19 percent of the respondents, was one I labeled as “arts and crafts,” which included such activities as painting, drawing, knitting, modeling with clay, woodworking, and various other types of constructive play. The second most frequent was “cooking and



meal preparation,” which represented 12 percent of the sample. Third was “new indoor games” (including but not limited to video games), noted by 11 percent. Following these categories were “housework” (other than cooking), 10 percent; “new reading for fun” (not for school), 7 percent; and “learning new computer skills,” 7 percent. Outdoor activities that were each noted by more than fifteen respondents (more than 2 percent) included “exploring outdoors,” “outdoor games,” “gardening,” and “bicycling.” Only 10 percent stated that they had not taken up any new activities.

As was noted in figure 2, approximately 70 percent of the children indicated that they were looking forward to going back to school. To learn more about that, an open-ended item asked the children to complete the sentence, “What I miss most about regular school is \_\_\_\_\_.” Here it was relatively easy to sort the responses into categories. Eighty-seven percent said, in one way or another, friends. In contrast, only 14 percent mentioned a teacher or teachers in general; 5 percent mentioned recess, gym, PE, sports, or extracurriculars; 1 percent mentioned music or art; 1.5 percent mentioned classes in general or a specific class other than the types just listed; 3.5 percent said they missed nothing about school; and 6 percent fell into a miscellaneous category that included getting out of the house, getting away from remote learning, having a schedule, the school library, and the school environment in general. The percentages total more than one hundred because some named more than one thing they missed.

Another open-ended item asked the children to complete the sentence, “Something I like about this time is \_\_\_\_\_.” By far the most common category of response, noted by 47 percent of the respondents, was that which I labeled “more time with family” (often stated as more time with mother, or father, or both). Second most common, noted by 30 percent, was that which I labeled “time to pursue my own interests.” Third, noted by 16 percent, was “more sleep” (often stated as “I can sleep as late as I want”). The remaining categories with response rates greater than 5 percent were “not going to school” (8 percent); “less stress” or “being more relaxed” (7 percent); and “online learning” (often stated as more efficient or less stressful than learning in school) (6 percent). Only 1.3 percent said “nothing” or “not much.”

### *Parents’ Reports*

Figure 4 shows the degree to which parents believed that various statements about mood and behavior accurately described their child during the most recent week. Responses were on a 10-point scale ranging from 1 (“no, not at all”) to

10 (“yes, very much”). Figure 4 shows, for each month, for each descriptor, the percentage who chose a number above 5 (which would be in the yes direction) and the mean response (where any mean above 5.5 would be in the yes direction). The first three rows concern the child’s mood, the next six concern the child’s behavior, and the bottom row pertains to the relationship between parent and child. The highest rankings (in descending order) were for “happy,” “fully immersed in some activity they enjoy,” “helping with chores around the house,” and “solving problems on their own,” with percentage agreements ranging from 87 percent down to 76 percent. All other positive descriptors in the list were agreed to by 65 percent or more of the respondents. A high percentage (65 percent) of the parents also agreed that their child had been bored. In contrast, less than half (49 percent in April and 42 percent in May) agreed that their child had been anxious, and, in what is perhaps the most surprising result, less than a third (27 percent in April and 31 percent in May) indicated that they and their child were having more conflicts.

Figure 5 shows the percentage of parents who agreed, disagreed, or neither agreed nor disagreed with another set of statements about their children’s and their own coping during the lockdown. The first three rows provide further evidence that the parents generally perceived their children as coping well. More

Figure 4. Level of Agreement, by Parents, to Statements Concerning Their Child’s Mood and Behavior during Most Recent Week of Lockdown.\*

<i>During the past week my child . . .</i>	<i>April</i>		<i>May</i>	
has been bored.	65%	6.61	65%	6.50
has been happy.	85%	7.66	87%	7.72
has been anxious.	49%	5.28	42%	4.88
has been fully immersed in some activity they enjoy	86%	7.59	82%	7.66
has helped with chores around the house.	78%	7.45	78%	7.38
has been willingly undertaking activities that are new and/or a stretch for them.	67%	6.54	70%	6.71
has been developing a new interest or skill.	63%	6.37	67%	6.59
is solving problems on their own.	79%	7.09	76%	7.00
has been making their own decisions about what to do and how	65%	6.41	68%	6.55
and I are having more conflicts.	27%	3.98	31%	4.02

\*The response choices ranged from 1 = “No, not at all,” to 10 = “Yes, very much.” Each cell shows the percentage of responses that were at 6 or above followed by the mean response. A mean of more than 5.5 is on the side of yes.

Figure 5. Percentage of Parents Who Agreed or Disagreed with Statements Concerning Coping with the COVID-19 Lockdown\*

	Yes	Neither	No
My child is less stressed now than before school closed.	43%	29%	29%
Since school closed my child has become more needy.	35%	26%	38%
I am gaining a new appreciation of my child's capabilities while observing them at home.	73%	21%	5%
I am more stressed now than before school closed.	54%	21%	25%
Pandemic parenting is easier than parenting during normal times.	24%	28%	47%
It's a relief not to have the normal school and extracurricular activities.	34%	24%	42%
I'm afraid my child will fall behind in school.	46%	18%	36%

\*The top number in each cell is from the April survey and the bottom is from the May survey. For each item, the response choices were “strongly agree,” “agree,” “neither,” “disagree,” or “strongly disagree.” For this table, “strongly agree” and “agree” were combined for “Yes,” and “disagree” and “strongly disagree” were combined for “No.”

parents agreed than disagreed that their child was less stressed now than before school closed; only 35 percent agreed that their child was more needy now, and the great majority agreed that they were gaining a new appreciation of their child’s capabilities during this period. In fact, only 5 percent disagreed with that statement. As shown in the bottom four rows of figure 5, however, their assessments about their own coping during the lockdown were not so positive. More than half of the parents agreed that they were more stressed during this period than before school closed, while about a quarter disagreed. Likewise, roughly half disagreed that pandemic parenting is easier than parenting during normal times, and only about a third agreed that the absence of normal school and extracurricular activities was a relief. Nearly half indicated fear that their child will fall behind in school.

Figure 6 shows the percentages of parents in April and May who checked each adjective in a list following the instruction, “How does seeing how your child is coping with this period make you feel?” As can be seen in the figure, the positive adjectives “proud,” “grateful,” “impressed,” and “optimistic” were

Figure 6. Percentage of Parents Who Checked Each Adjective in Response to “How does seeing how your child is coping with this period make you feel?”\*

	<i>April</i>	<i>May</i>
Proud	49%	50%
Grateful	45%	44%
Impressed	45%	44%
Optimistic	38%	39%
Reassured	27%	24%
Worried	23%	22%
Annoyed	8%	9%
Disappointed	6%	7%
Disheartened	6%	6%

\*The items were presented in varying orders in the survey. Here they are listed in order of average frequency that they were checked.

checked far more often (50 percent, 45 percent, 45 percent, and 39 percent, respectively) than were the negative adjectives “annoyed,” “disappointed,” and “disheartened” (9 percent, 7 percent, and 6 percent, respectively). In the middle were “reassured” (26 percent) and “worried” (23 percent).

In addition to the items shown in the figures, the parents were asked several other objective questions. One item asked if their child was getting more or less sleep since school closure, to which, in April, 50 percent checked “more”; 38 percent checked “about the same”; and 12 percent checked “less.” In May these percentages were, respectively, 48 percent, 38 percent, and 14 percent. Another question asked parents if their child was participating in remote or online learning from their school, to which 91 percent in April and 96 percent in May checked yes. This was followed by a question about how many hours per weekday, on average, were devoted to such participation. To this, in April, 26 percent reported less than two hours, 40 percent two to four hours, and 33 percent more than four hours. In May these percentages were, respectively, 27 percent, 41 percent, and 32 percent. The parents were also asked to respond yes or no to separate questions about whether their child played outside without supervision before and during the lockdown. The percentages checking yes for before, for April and May respectively, were 67 percent and 62 percent; for during, they were 38 percent and 37 percent.

## Discussion

### *Summary of Findings*

By their own and their parents' reports, children in the population surveyed were on average experiencing less stress and anxiety during the pandemic than they had before, were far more often happy than sad, were getting more sleep, were appreciating the extra time with their parents, were involved in fewer conflicts with their parents, were learning how to cook and in other ways were helping out at home, were discovering and pursuing new activities that they enjoyed, and were gaining new respect from their parents because of the ways they managed themselves and helped the family at this time. The sudden canceling of school and other activities that had previously occupied most of their waking time led many of them to experience boredom, but boredom is not necessarily a bad thing. It can stir people to take initiative, to try new activities, and seek new interests. That apparently occurred for the majority of these children. Most of them reported that they looked forward to going back to school, but they also made it clear that almost the only reason for that was that they missed seeing their friends at school.

### *Relation to Other Surveys Conducted Early in the Pandemic*

At least three other large-scale surveys of young people's pandemic coping revealed improved mental well-being consistent with that described here. One, sponsored by the Wheatley Institute for Family Studies, surveyed over fifteen hundred school-aged teens in the United States after school lockdown, in spring 2020, using many of the same questions they had used in a prepandemic survey with a similar population (Twenge et al. 2020). Included in both surveys was a set of questions designed to assess depression. The researchers found, to their reported surprise, that the percentage of teens who were depressed, by the researchers' measure, declined from 27 percent before the pandemic to 20 percent during the pandemic. They also found that the majority of teens reported they had become stronger and more resilient, their families had become closer and more likely to eat dinner together, they were less lonely (perhaps because of the family togetherness), and they were getting more sleep than they had before. All this occurred despite the fact that a quarter of the teens reported that a parent had lost a job, a quarter of them expressed worry about their family having enough food, two-thirds expressed worry about catching the virus, and two-thirds expressed worry about not being able to see friends. The teens

surveyed were aware of and concerned about the dangers and losses from the pandemic, but they were in many ways better off psychologically despite that.

A second study involved a survey of more than a thousand teens, ages thirteen and fourteen, in Southwest England (Widnall et al. 2020). These researchers compared the teens' scores on a clinical questionnaire assessing depression, anxiety, and overall mental health, in April and May 2020 after school lockdown, with the same teens' scores on the same questionnaire in October 2019, before the pandemic. They found no meaningful change in depression but a significant decline in anxiety and a slight increase in overall mental health. By their measure, 32 percent of teens scored as "at risk for anxiety" during the pandemic, down from 40 percent prior to the pandemic.

A third study was of 442 Norwegian families with a child aged seven through seventeen, involving an online survey for older children and interviews for younger ones (Larsen, Helland, and Holt 2021). The majority of children reported missing their friends and worrying about coronavirus infection, but, despite that, the majority also reported feeling less sad, less anxious, less angry, and safer than they had before the pandemic. As possible explanations, the researchers suggested that the children were receiving more attention and support than usual from their parents or that the break from school offered respite from school-related pressures, or perhaps, a combination of the two.

In contrast to the studies just described, several apparently well-designed surveys revealed overall mental health declines for school-aged children during the first months of lockdown. Among these were a nationwide survey in the United States assessing changes in behavioral health (which included mental well-being) after lockdown (Patrick et al. 2020); a survey in Ontario, Canada, assessing changes in depression, anxiety, and four other dimensions of mental disturbance (Cost et al. 2021); and a survey in Germany assessing anxiety, depression, and overall mental health (Ravens-Sieberer et al. 2021). Each of these studies revealed, on average, small but statistically reliable declines in mental well-being after the pandemic lockdown compared to before it occurred. It is beyond my scope here to attempt to account for the differences between studies revealing overall mental improvement and overall mental decline, but they could well be the result of differences in the populations surveyed or the manner in which mental health was assessed.

At least two studies conducted early in the pandemic focused on family dynamic variables that seemed to influence children's coping during the pandemic. One of them, which studied families in Southern California with

preschool-aged children, revealed that children whose parents maintained predictable family routines—such as eating meals together and having a regular bedtime ritual—fared better than those without such regular routines (Glynn et al. 2021). The other, a three-week diary study of families in Germany, revealed that school-aged children fared better—as did their parents—if the parents adopted an autonomy-supportive style of interacting with their children (Neubauer et al. 2021). Autonomy support was assessed by level of agreement to these two items: “As far as possible, I let my child decide what he or she wants to do”; and “As far as possible, my child was able to do what he or she liked today.” Greater autonomy support apparently allowed and encouraged children to discover and pursue what they wanted to do, which improved their mood and also freed the parents to fulfill their own needs to work or relax. This finding is quite compatible with our finding that many parents expressed pleasure in observing that their children were capable of initiating and following through on their own activities.

### Concluding Thoughts

A general conclusion from the Let Grow study and the others reviewed here is that children, overall, at least early in the pandemic, did not suffer psychologically as much as many clinicians and others predicted they would and that many exhibited improved psychological well-being. Adults appeared to suffer more than did children. In the present study, parents generally rated their children as doing better but themselves as doing worse during the lockdown compared to before. Another study tracked the suicidal thoughts of a sample of adults and adolescents who had previously been hospitalized for suicidal thinking or attempts and found that such thoughts increased during the pandemic for adults but not for adolescents (Fortgang et al. 2021). Possible reasons for such a difference are that children and adolescents did not share fully the worries that their parents had about economic and other negative consequences of the pandemic and may have experienced more relief than did adults from stressors that existed before the pandemic.

One way of understanding the findings of improved mental well-being for children is to consider them in the light of Self-Determination Theory. According to Ryan and Deci (2006), hundreds of studies have shown that increases in the experiences of autonomy, competence, and relatedness result in improved psychological well-being. All three of these experiences may have increased for

many children when schools locked down.

With the lockdown, children suddenly went from a condition of little autonomy, because their time was filled with school and other adult-directed activities, to a condition of lots of free time. Many of the children reported experiencing boredom, but boredom motivated them to action. Much of that action can be described as play, including especially (by the children's reports) constructive play, in the form of arts, crafts, and other playful creation of things, and games, including online games with friends and more traditional games with family members. Many of their other activities, which might not be thought of as play, were also self-chosen. For example, many children, at their own initiative, learned to cook and reported that they enjoyed preparing meals for the family. Some also reported learning other new practical skills, such as how to use computer platforms to communicate with friends. All such self-initiated activities would promote not only a sense of autonomy but also a sense of competence. The finding in the German diary study (Neubauer et al. 2021), that autonomy-supportive parenting promoted children's psychological well-being, is consistent with this analysis.

Somewhat surprising to us, because we were not initially looking for it, was that nearly half the children reported that the single thing they liked best about the lockdown was the increased time and closeness with their parents and other family members. The lockdown may have reduced their connection with friends, but it increased their connection with family. A similar finding emerged in the Wheatley study (Twenge et al. 2020), and the role of family time was also evident in the California study showing that regular family meals and other predictable family routines corresponded with children's improved mental well-being (Glynn et al. 2021). Because parents as well as children were home most of the time and the pace of life had slowed, and because the pandemic may have augmented parents' nurturing tendencies, children and parents may have bonded more deeply than they had before. And so, the third essential drive of Self-Determination Theory, that for relatedness, may also have been satisfied to an increased degree. Of course, children also need to connect with their friends outside of the family, so the need for relatedness was by no means entirely satisfied, as indicated by the majority of the children's saying they looked forward to returning to school because they missed seeing their friends.

### *Limitations*

One limitation of the Let Grow study, as well as all the other studies reviewed



here, is that it was conducted early in the pandemic. The study cannot tell us how children and families fared in the months of pandemic to follow. Perhaps by the time this article appears, results of studies conducted later in the pandemic will be available. At least one report, available at the time of this writing, suggests that children's mental health improved early in the pandemic but that the improvement was gradually lost over months to follow. This report is an analysis of children's mental health-related emergency visits at a representative set of U.S. hospitals, from January 1 to October 17, 2020 (Leeb et al. 2020). Such emergency visits dropped sharply at the beginning of the pandemic to a level in March and April that was less than half that in the same months of 2019. Subsequently, however, the rate gradually rose, such that by September and October the rate was only slightly below that for those months in 2019. Increased time in isolation, coupled with increased family financial problems and renewed online schooling, may have created stress that counteracted early boosts to mental health.

Another limitation of the Let Grow study is that it was designed initially as market research, and the data provided by the research company came in a form that did not permit statistical analyses of interactions among the items assessed. For instance, it would have been useful to compare families in which children were coping especially well with those in which children were not coping so well to see the differences among them that might contribute to this discrepancy, but doing so was not possible from the data compilations provided.

As with any survey, our conclusions are limited by the population surveyed. The study aimed to include, to the degree possible, a cross section of American families. It was demographically quite representative of American families in terms of race and ethnicity, geographical location, and income (13 percent of the respondents reported family incomes below twenty-five thousand dollars). Still, these were all families that owned computers or smartphones and had the qualities it takes to register with the research company and to complete surveys in exchange for small rewards. A major strength of the study, however, is that it invited families to describe the gains as well as losses that seemed to accompany their pandemic confinement.

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