



## Back to School II\*

The effects of school re-opening on families' health, emotional well-being, government support, and economic situation

Jens Olav Dahlgaard

Zoltán Fazekas

15-05-2020

Disclaimer: After Wave 1 of the survey we released a report. The present version focuses on both Wave 1 and Wave 2 and thus for Wave 1 specifics, please check the previous document:

Link: [https://www.cbs.dk/files/cbs.dk/back\\_2\\_school-wave\\_1.pdf](https://www.cbs.dk/files/cbs.dk/back_2_school-wave_1.pdf)

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\*Department of International Economics, Government & Business, Copenhagen Business School. We are grateful for financial support from the Department of International Economics, Government & Business and the Inequality Platform. Contact: [jod.egb@cbs.dk](mailto:jod.egb@cbs.dk); [zf.egb@cbs.dk](mailto:zf.egb@cbs.dk).

## Summary

We present results from two waves of a panel-survey collected for parents with children in the 4th to the 7th grade in the week that schools partially re-opened (Wave 1, initial N = 1,303) and again two weeks after (Wave 2, initial N = 1,000 re-interviewed). On April 15, over a few days, schools partially re-opened after having been closed for an entire month. Only children up until the 5th grade were allowed to return to school. In this report, we explore how the well-being of parents, their suspicion of infection, their assessment of their children's well-being, their support for the authorities, and their economic situation has developed since the gradual reopening. Our findings are as follows:

1. Comparing two weeks after the re-opening (wave 2) to the re-opening, we find that this group of parents has experienced a decline in infection suspicion, stress, support for the Prime Minister and the Health Authorities, and they were better able to take care of their work obligations. We find a small decrease in children's well-being (assessed by parents).
2. There has been much debate about the choice that only some children were allowed to go back to school, while others were not. When we compare parents with children in 4th or 5th grade to parents of children in 6th or 7th grade, we do not find major differences in how our outcomes of interest develop.
3. Around the re-opening, parents of the older children group (6th or 7th grade) showed the most support for the Prime Minister and the Health Authorities. Since then, there has been a significant decline for those parents whose children had to stay home.
4. We do not find that parents rate child well-being better or worse among children who have returned to school compared to children who did not, but as highlighted above, there is a small, overall decrease in well-being.

## Sammenfatning

Vi præsenterer resultater fra to runder af et panel-survey indsamlet blandt forældre med børn i 4. til 7. klasse i den uge, hvor skolerne delvist genåbnede (runde 1, oprindeligt N = 1,303) og igen 14 dage senere (runde 2, oprindeligt N = 1,000). Den 15. april genåbnede skolerne delvist over nogle få dage efter at have været lukket i godt en måned. Det var kun elever indtil 5. klasse, der fik lov til at starte igen. I denne rapport undersøger vi, hvordan forældrenes stress, smittemistanke, vurdering af deres børn velbefindende, støtte til myndighederne og økonomiske situation har udviklet sig siden den delvise genåbning. Vi finder følgende:

1. Når vi sammenligner to uger efter genåbningen med tiden omkring genåbningen, kan vi se, at vores gruppe af forældre har oplevet et fald i smittemistanke, stress, støtte til statsministeren og sundhedsmyndighederne, samt at de var bedre i stand til at opfylde deres arbejdsforpligtelser. Vi finder et lille generelt fald i børnenes velbefindende (vurderet af forældrene).
2. Der har været megen debat om valget af, at kun nogle børn fik lov at vende tilbage til skole, mens andre ikke gjorde. Når vi sammenligner forældre med børn i 4. eller 5. klasse med forældre med børn i 6. eller 7. klasse, finder vi ikke væsentlige forskelle i udviklingen af de ting, vi undersøger.
3. Omkring genåbningen viste forældrene til den ældre elevgruppe (6. eller 7. klasse) større opbakning til statsministeren og sundhedsmyndighederne. Siden da har der været et signifikant fald for de forældre, hvis børn måtte blive hjemme.
4. Vi finder ikke evidens for, at forældre, hvis børn er startet i skole igen, vurderer deres børns velbefindende bedre eller værre end forældre, hvis børn stadig er hjemme. Men som beskrevet ovenfor ser vi generelt et lille fald i børnenes velbefindende på tværs af klassetrin.

## Main aim and review

We present results from two waves of a panel-survey collected for parents with children in the 4th to the 7th grade in the week that schools re-opened (Wave 1, initial N = 1,303) and again two weeks after (Wave 2, initial N = 1,000 re-interviewed). On April 15, over a few days, schools partially re-opened after having been closed for an entire month. However, this was only a partial re-opening and only children up until the 5th grade were allowed to return to school. Children in the 6th grade and above were to remain at home and receive distance schooling, largely using online platforms. We report here results pertaining COVID-19 related health outcomes, parental and child stress and well-being, parental political attitudes, and the economic impact on the families.

The survey's first round was fielded by Voxmeter from Wednesday 15 April to Wednesday 22 April, the first week that schools re-opened. In the survey, respondents were initially scanned for whether they had any children in the 4th to 7th grade. The survey was run using a mix of Voxmeter's web-based panel and other respondents contacted and surveyed by phone, and one parent per household completed the survey. In the second round, 1,000 parents were re-interviewed by Voxmeter, and data collection was carried out from 28 April to 6 May. All questions of interest were repeated with the same exact wording.

In the screening question, respondents were asked how many children in the household were in each grade from the 4th to the 7th grade. After the screening question, we asked respondents to provide the year and month of birth for each of the children living in their household. We removed 12 respondents who reported having 4 or more children in the same grade in the household. We removed another 12 respondents who reported being 27 years of age or younger, as we deemed it unlikely that they would be parents, step-parents, or legal guardians of the school children in their household. This leaves us with a total of 1,279 respondents in the first round and 986 in the second round. For the purposes of this report, we mostly focus on between-family comparisons around the return-to-school cut-offs. We report here differences between families that have one or more children in 4th or 5th grade, but no children in the 6th or 7th grade, and vice-versa. They can have younger or older children. Overall, we have re-interviews for 413 parents with at least one child in the 4th or 5th grade (but no children in 6th or 7th), and 427 parents with at least one child in 6th or 7th grade (but no children in the 4th or 5th grade).

Broadly speaking, we are interested in three aspects:

1. Changes in the outcomes between the two waves, which can contribute to better understanding the short-term effects of the re-opening, conditional on whether the children were allowed to go back to school or not.
2. Differences in the outcomes in the second wave, which represents a prolonged lockdown for some parents or a first post-opening measurement for other parents.
3. The development of gender differences in the outcomes throughout the period covered here, conditional also on whether the children were allowed to go back to school or not.

Finally, we extend our child well-being analysis by zooming in on within-family changes using those cases where there are children on both sides of the cut-off, i.e. in 4th or 5th grades and in the 6th or 7th grade. This allows us to hold household characteristics and parental reporting style fixed.

At the end of the document (Additional information) we list the exact question wording and answer choices for all of our outcomes of interest. Furthermore, we report between-family comparisons on covariates and show that there are no systematic differences in terms of gender, education, household income, or region between parents on the two different sides of the cut-off. Parents of older children (6th or 7th grade) are, on average, older than parents of younger children (4th and 5th grades).

## Results: between-waves comparisons

Before our more fine-grained discussion of changes and differences, we report overall changes for all outcomes in Table 1. For this table, all outcomes have been rescaled to be on a 0 to 100 scale, for ease of interpretation of differences in a heuristic manner (as percentage). With the exception of the positive tests or symptoms (first row), all variables are coded so that higher values reflect more positive outcomes (i.e. less stress, more well-being, and so on).

Table 1: Means and mean differences between wave 1 and wave 2

	Wave 1	Wave 2	Mean difference	Std. error	95% CI
Tested positive or showed symptoms	14.2	11.2	-3	1	[-4.9; -1.2]
Hard to wind down	22	19.7	-2.3	0.9	[-4.2; -0.5]
Rather touchy	16.9	16.8	-0.1	0.8	[-1.7; 1.6]
Intolerant of anything that kept me from. . .	18.9	16.6	-2.4	0.9	[-4.1; -0.6]
Parent stress	19.3	17.7	-1.6	0.6	[-2.8; -0.4]
PM support	81.1	77.7	-3.3	0.5	[-4.3; -2.3]
Health Authority support	79.5	77.3	-2.2	0.6	[-3.3; -1]
Economic well-being	48	47.8	-0.1	0.3	[-0.8; 0.5]
Work capacity	82.6	85	2.1	0.8	[0.5; 3.7]
Job outlook	84.7	85.2	0.4	0.7	[-1; 1.8]
Feeling relaxed (child)	74.9	72.3	-2.5	0.8	[-4.2; -0.9]
Dealing well (child)	77.8	77.3	-0.6	0.8	[-2.1; 0.9]
Make up mind (child)	79.4	79.4	0	0.8	[-1.5; 1.5]
Child well-being	77.4	76.3	-1	0.6	[-2.1; 0.1]

On the one hand, two weeks is a rather short time span between two waves. On the other hand, after a long period of full lockdown and partial reopening, this period could serve some important changes on many outcomes. Overall, while there are some important changes, the magnitude of these are quite small and some of these differences are not statistically significant. We find an overall decrease of positive COVID-19 test or symptoms, decrease in parental stress levels, decrease in support for the Prime Minister and the Health Authorities, and an increase in work capacity. Regarding child well-being, we find small decreases and the only significant change is related to how relaxed children are feeling.

## Outcomes by children's grade

Some children were sent back to school in the middle of April, while other children stayed at home. This could have an impact on both the children and their parents. In this section, we explore if parents' outcomes and children's well-being was affected by some children going back to school and not others. For each outcome, we use the first survey wave as a baseline and see if there are differences in the differences between wave 1 and wave 2 for parents whose children went back to school and parents whose children did not. For each wave, we show means in wave 1 and wave 2 for parents with a child in the 4th or 5th grade and parents with a child in the 6th or 7th grade. Some parents have children both in the 4th or 5th grade and in the 6th or 7th grade. We omit them, but include them for a separate analysis of children's

well-being later in the report. Some parents have more than one child in either in the 4th or 5th grade or in the 6th or 7th grade. We keep these parents in the analysis.

### Health outcomes by children’s grade

First, we compare health outcomes between parents whose children were sent back to school and parents whose children were not at both time points. We report here the prevalence of positive tests or showing symptoms (1) in comparison with no symptoms or negative test results (0).

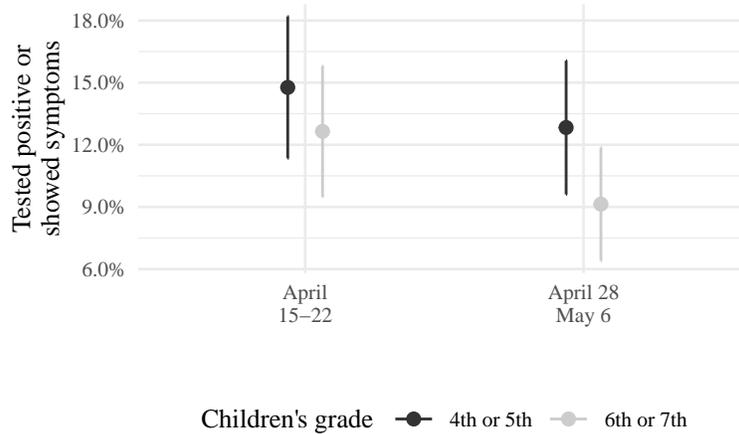


Figure 1: COVID-19 related health outcomes for household. Please note that y-axis is truncated, i.e. does not cover the full range of the outcome.

As displayed in Figure 1, we see fewer COVID-19 positive tests or symptoms in the second wave and both in the first and second waves these numbers are lower for those parents whose children stayed at home. We also see a larger drop in these numbers for parents with children kept at home (3.5% compared to 1.9%). However, all these estimates come with a lot of uncertainty and none of the differences are statistically significant. There is no evidence here to suggest that families where children went back to school are substantially more exposed.

In Table 2, we present the distribution across categories in each survey wave. Since testing was rolling out in this period, a more detailed check of the separate answer categories is warranted. This reveals that we have two new positive tests compared to Wave 1 and one respondent who previously reported a positive test, but not in the second wave. We have 59 people reporting new negative test results, with 10 respondents now reporting no negative test results, but had reported those in the first wave. Finally, we have 27 parents indicating symptoms (with no symptoms before) and 59 who previously reported symptoms, but not now.

Table 2: Health outcomes (%)

Response	Wave1	Wave2
Tested positive	0.6	0.7
Tested negative	5.3	10.2
Showed symptoms, but not tested	13.7	10.4
Showed no symptoms	81.1	79.1

It is important to note that our question wording was *Which of the following statements best describes your families' situation?*, thus it might be that some parents interpreted this as an overall situation question (so far), whereas some answered focusing on the most recent period (or even previous survey round).

### Parents' stress by children's grade

In Figure 2, we compare parents' outcomes on our three individual items from a stress scale and a stress index (Cronbach's  $\alpha = 0.63$  in wave 1). All these outcomes have been rescaled to range [0, 1], where higher numbers indicate more stress.

Overall, we saw a small decrease in stress from wave 1 to wave 2 in Table 1. However, differences become larger in the second wave between parents who had children going back to school and those who did not. This is mostly attributable to the fact that stress levels dropped slightly for those with kids at home in comparison to the larger reduction of stress for those with kids in the 4th or 5th grades. However, as also confirmed later on in a multiple regression analysis, none of the rate of change related differences are statistically significant.

We might have expected that parents whose children went back to school, would have been less stressed in comparison to those whose children did not. However, while we see parents become less stressed from wave 1 to wave 2 in general, we cannot conclude that this is driven by the parents with children in the 4th and 5th grade.

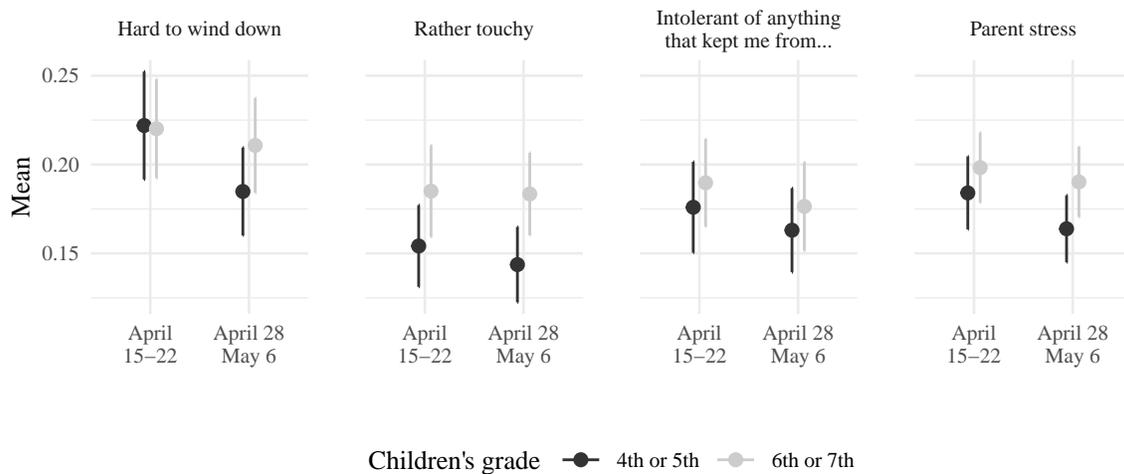


Figure 2: Parental stress (ranges from 0 [minimum] to 1 [maximum]). Please note that y-axis is truncated, i.e. does not cover the full range of the outcomes.

### Children's well-being by grade

Turning to child well-being, in Figure 3 we display results at the child level for each of three outcomes concerning children's well-being and an average over all items (unadjusted Cronbach's  $\alpha = 0.73$  in wave 1). We also rescaled these measures to be on a 0-1 scale where 0 is *at no time* and 1 is *all the time* (with higher values reflecting more well-being). As above, we restrict the sample to parents who only had children in the 4th or 5th grade, but no children in the 6th or 7th grade and vice versa. Some of these parents have more than one child in their household in the relevant grade levels. For them we include evaluations of all relevant children.

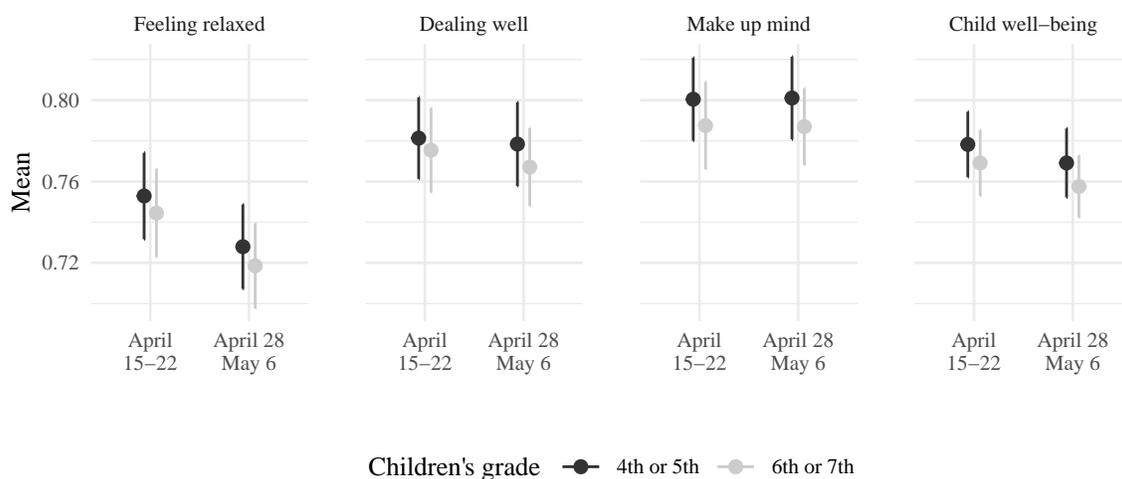


Figure 3: Child well-being (ranges from 0 [minimum] to 1 [maximum]). Please note that y-axis is truncated, i.e. does not cover the full range of the outcomes.

As before, we see only very small changes between the two waves. Overall, reported child well-being is quite constant and stays at relatively high levels, with the exception of how relaxed children are. Here, we find a more pronounced decrease, but within-wave differences across the two parental groups stay constant.<sup>1</sup> The multiple regression models reported later in the paper further confirm that, again, the differences between children in the 4th or 5th grade and those in the 6th or 7th are small and imprecisely estimated.

There has been public concern that it would negatively affect children’s emotional well-being when they are isolated from their peers for a prolonged time.<sup>2</sup> However, we find no evidence that their well-being increased (or decreased less) in the short-term when they are allowed to return to school; at least not from the perspective of their parents.

### Government support by children’s grade

In Figure 4, we present support for the Prime Minister (PM) and the Health Authorities (HA). While the overwhelmingly strong support and approval of both the PM and HA are still present, this is the first aspect where we find more pronounced developments.

For the PM, we see a slight decrease of 3-5% in the support numbers, and this is larger among those with children at home. This is mostly driven by stronger support among the parents with kids at home in the first survey wave, which then drops to similar numbers as those reported by parents whose children went back to school. The numbers for wave 2, while lower in both cases, align very closely between different groups of parents. When we control for the background covariates age, gender, education, household income, and region, the difference is statistically significant, but it is not when we only compare unadjusted mean changes.

We mostly see similar patterns for the HA, with the exception that here, the approval stayed unchanged among parents who could send their children back to school. In parallel, we see a roughly 4% decrease among parents who still had to keep their children at home, overall resulting in statistically significant differences in the development both when we compare raw means and when we include control variables.

<sup>1</sup>The first survey round was fielded immediately after the Easter break and parents were asked to evaluate their children retrospectively over the last week. The drop in how relaxed children have felt could be attributed to this timing if children are more relaxed during school breaks.

<sup>2</sup><https://www.sst.dk/da/nyheder/2020/gode-raad-til-trivsel-og-mental-sundhed>

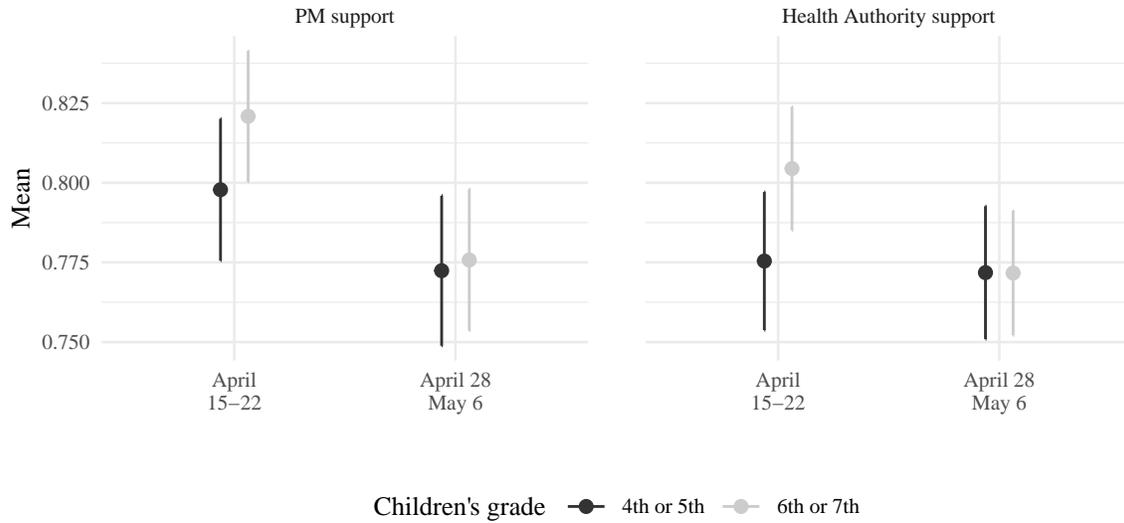


Figure 4: Support for PM and Health Authorities (ranges from 0 [minimum] to 1 [maximum]). Please note that y-axis is truncated, i.e. does not cover the full range of the outcomes.

While there is still very high support of both the Prime Minister and the Health Authorities, we do see a small drop in both. The drop is more pronounced for parents of children who have not been allowed to return to school. One interpretation of the difference is that parents tend to be more supportive when policies and recommendations are beneficial to their situation.

### Economic well-being by children's grade

In Figure 5, we look at differences in economic variables. As summarized in the figure, between-wave differences are small and there is no systematic direction in changes. Generally, the two parental groups on the different side of the cut-off exhibit similar development for capacity to work from home and future job outlook (marginal changes to the better), whereas appreciation of economic consequences for the household remain stable, placed in the middle of the range, neither negative, nor positive (on average).

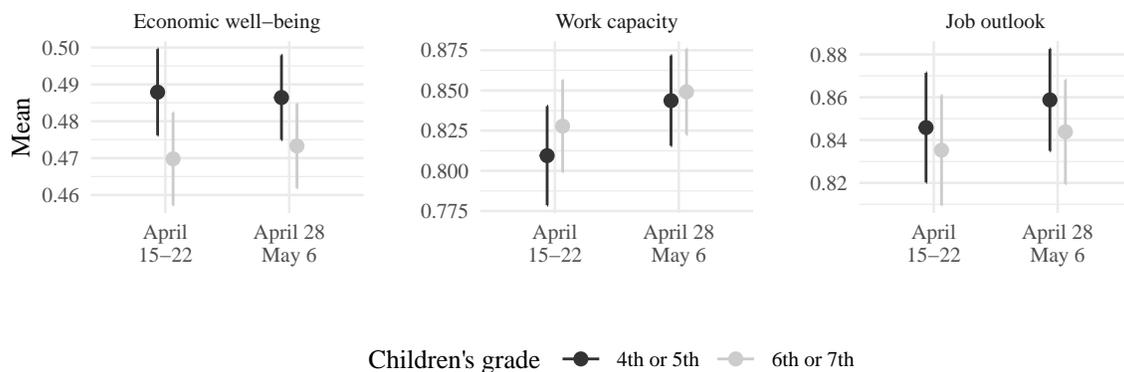


Figure 5: Economic well-being (ranges from 0 [minimum] to 1 [maximum]). Please note varying y-axis used for easier comprehension and the y-axis is truncated, i.e. does not cover the full range of the outcomes. We reversed the coding for Job outlook so that higher values represent less concern, to be in line with the general direction of positive economic outlook coding.

## Model estimates for developments over time

As already referenced, we have fitted multiple regression models of the change, defined as  $Y_{wave_2} - Y_{wave_1}$  for all parental health, well-being and political support outcomes (reported in Figure 6) and for all child level well-being measures (Figure 7).

In Figure 6, the two sets of models differ only in the sense that the ones with controls included (right panel) include parental level covariates: gender, age, household income, indicators for region, and an indicator for having at least a Bachelor's degree. To avoid losing data due to item non-response, we also include an indicator for missing values on income and impute the mean value of income to these observations. There are no missing values on other variables.

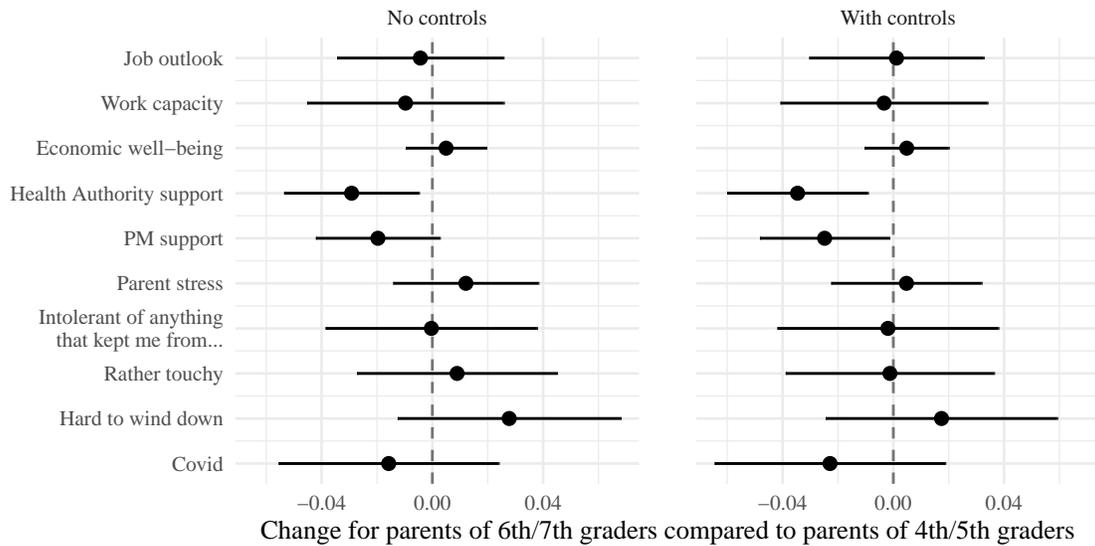


Figure 6: Model estimates (OLS coefficients) for differences in development over time between parent with children in the 4th or 5th grade and parents with children in the 6th or 7th grade.

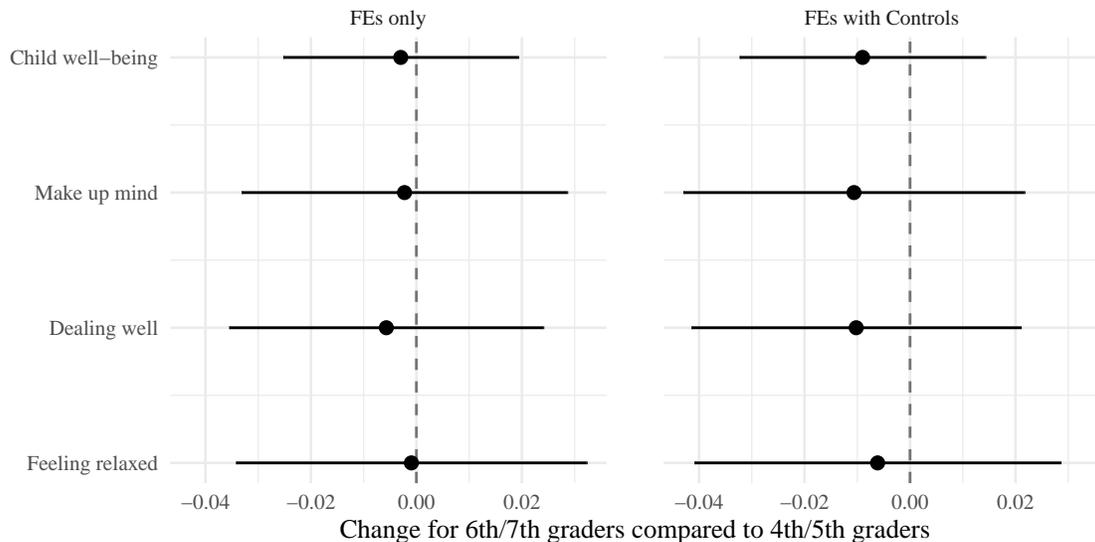


Figure 7: Model estimates (OLS coefficients) for differences in development over time between parent with children in the 4th or 5th grade and parents with children in the 6th or 7th grade.

In both sets of the children models (Figure 7), we control for child order, but the second set of models also includes the same parental level controls as before. Here, if parents had multiple children on the same side of the cut-off, all child ratings are taken into account.

Overall, these model summaries accompany our figure based presentation regarding mean differences. As discussed throughout the paper, with the exception of parental approval of the Health Authorities and the Prime Minister, we find no statistically significant differences in development between parents on the two sides of the cut-off.

## Results: Gender differences

In Figure 8, we present gender differences in wave 1 and wave 2 for all parents. We see that in both waves, mothers are more stress and more supportive of the Prime Minister and Health Authorities and they report higher economic well-being. On the other hand, fathers report that they are able to fulfill their work obligations to a higher degree. In the first wave, mothers were more optimistic about their employment, but this difference has decreased in the second round.

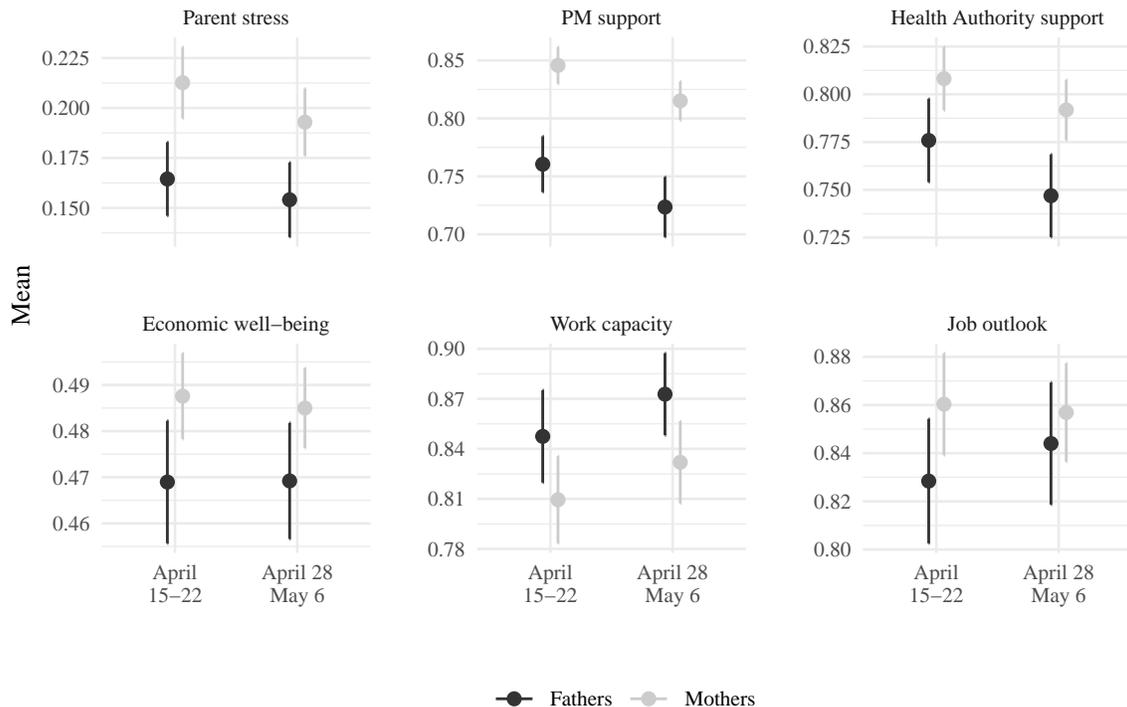


Figure 8: Overall gender differences. Please note varying y-axis used for easier comprehension and the y-axis is truncated, i.e. does not cover the full range of the outcomes. We reversed the coding for Job outlook so that higher values represent less concern, to be in line with the general direction of positive economic outlook coding.

In Figure 9, we present model estimates for whether the outcomes have developed differently for mothers and fathers between survey waves. Overall, we find no evidence of different trends for any outcomes between mothers and fathers. The measures for which we see a general increase or decrease seem to change at a similar rate for men and women.

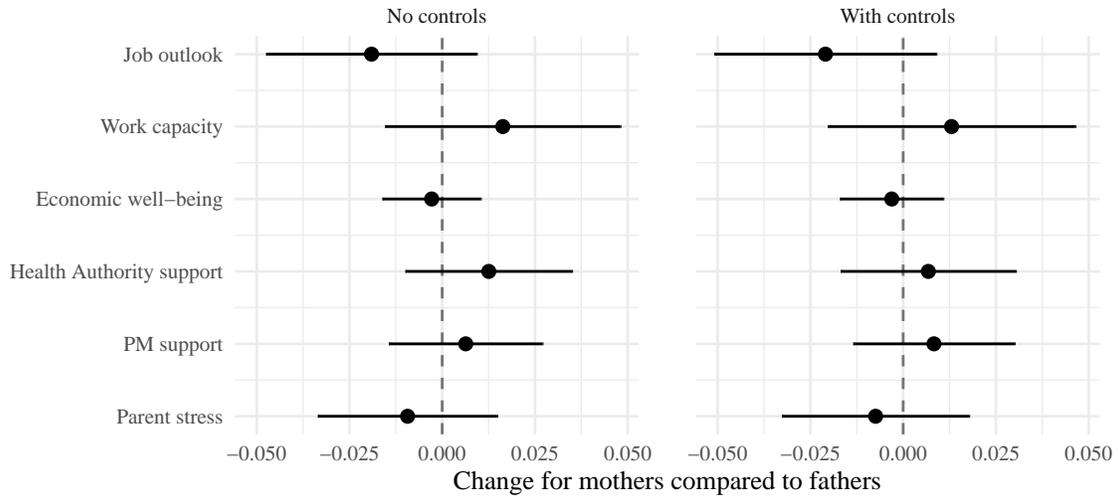


Figure 9: Model estimates (OLS coefficients) for differences in development over time between mothers and fathers.

### Gender by grade interactions

Next, we also track if changes over time between parents with children in the 4th or 5th grade compared to parents with children in the 6th or 7th grade are more pronounced for mothers and fathers. In Figure 10, we present mean outcomes for mothers and fathers with children in the 4th or 5th grade or in the 6th or 7th grade in both wave 1 and wave 2.

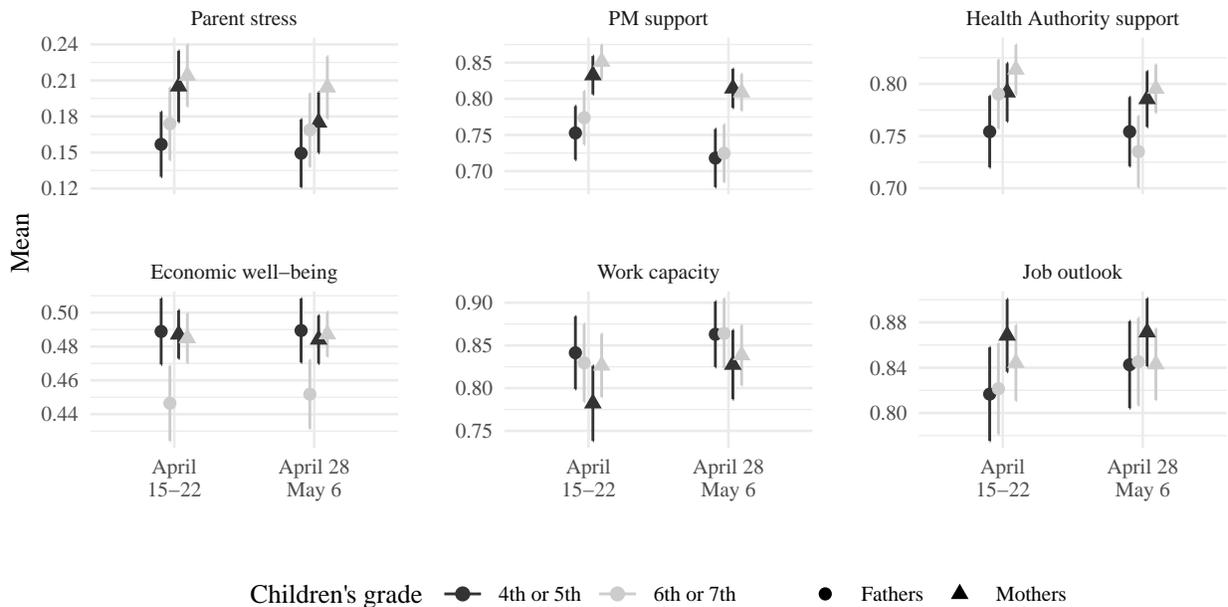


Figure 10: Gender differences, grade cut-off included. Please note varying y-axis used for easier comprehension and the y-axis is truncated, i.e. does not cover the full range of the outcomes. We reversed the coding for Job outlook so that higher values represent less concern, to be in line with the general direction of positive economic outlook coding.

In Figure 11, we present model estimates from comparisons between mothers/fathers with children who went back to school and mothers/fathers whose children did not. As above we present both models without and with controlling for background covariates. We use the same battery of control variables except for gender, which we split the sample by

instead. We see that most outcomes are unaffected for both mothers and fathers. There is, however, only a statistically significant drop in support among parents of older children for the Health Authorities among fathers. For mothers the drop is in the same direction but small in magnitude.

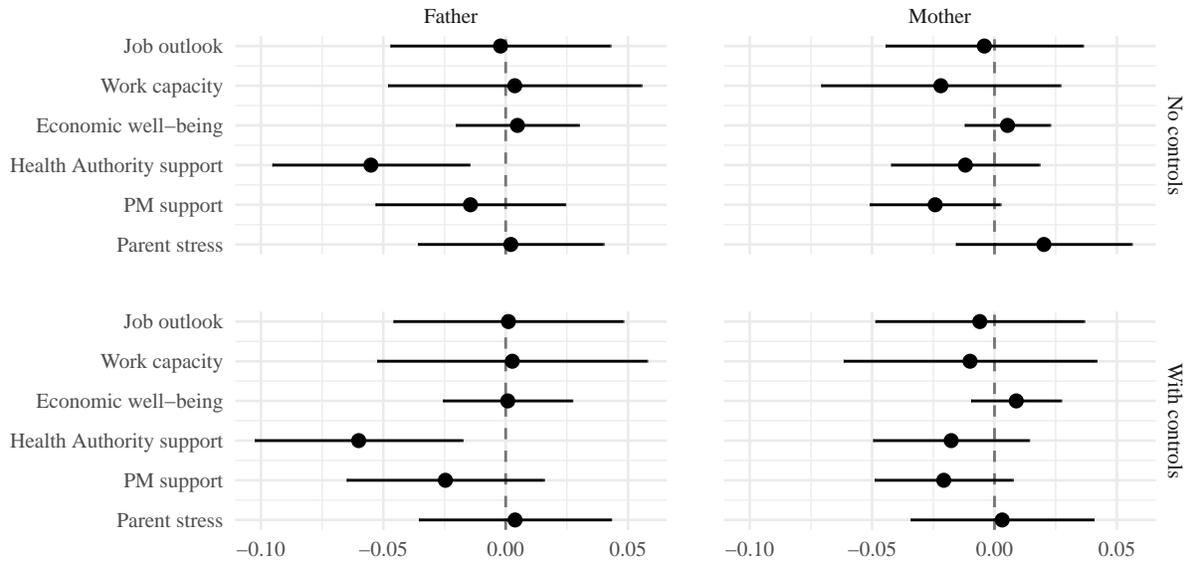


Figure 11: Model estimates (OLS coefficients) for differences in development over time by children's grade for mothers and fathers.

To see if the difference in changes between genders are statistically significant, we present in Figure 12 only the interaction coefficient between gender and grade from multiplicative interaction models. We see that all interaction coefficients have confidence intervals that include zero. Accordingly, we cannot say that mothers or fathers are more affected by having a child go back to school or stay home.

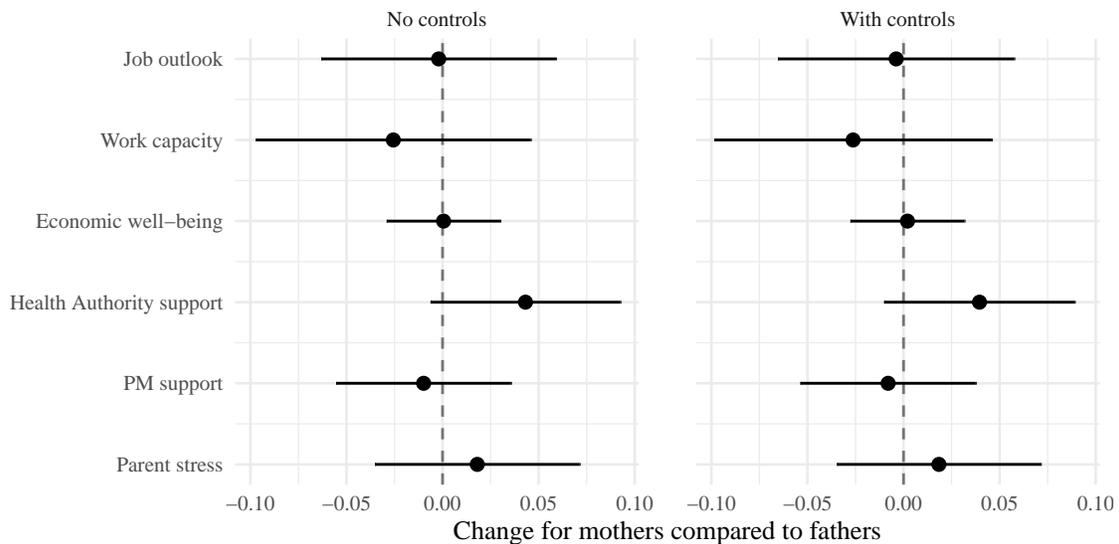


Figure 12: Interaction estimates (OLS coefficients) for differences in development over time between mothers and fathers over grade.

## Results: within-family differences

Finally, we take a look at within-family differences for children who went back to school and children who did not. In our sample, some parents have both children in the 4th or 5th grade and children in the 6th or 7th grade. We have omitted these parents so far, but they give us an opportunity to study within a family, how parents rate the well-being of those of their children who went back to school and those of their children who did not. We have a total of 139 of such families.

In Figure 13, we present the results of these comparison. For each wave, we show the mean of the within family differences for the well-being of the children who went back to school and the children who did not. For most outcomes, we see that parents tend to rate their older children higher, but the differences are small. We think this may be because the well-being items to some extent also tap into how mature children are and parents then rate their children relative to each other. Crucially, such a difference in rating should be stable over time and it will not affect the comparisons between children over time.

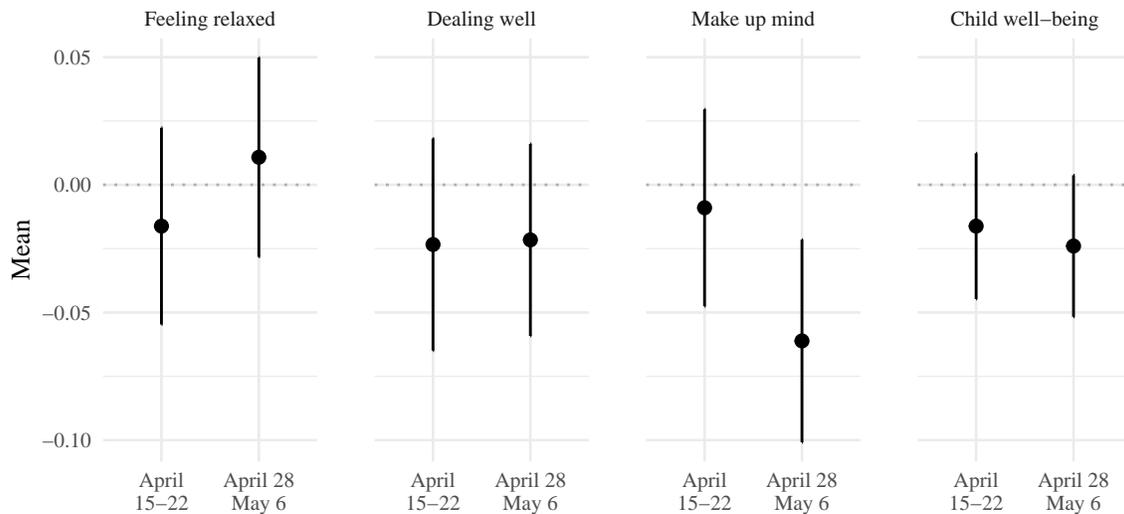


Figure 13: Average within family difference between returning (4th or 5th grade) child's well-being and staying at home child's well-being (6th or 7th grade). Original values range from 0 to 1 on each item. Please note that the y-axis is truncated, i.e. does not cover the full range of the outcomes.

When we compare the difference between the two rounds, we see that they are small and not in a systematic direction for the individual items. As reported by the parents, children who went back to school felt more relaxed, were equally good at dealing with problems, but less able to make up their minds in comparison with their (step-)siblings staying at home. The differences are generally small and only the difference for making up one's mind is statistically significant (models not shown). For the full scale, we see a very small drop for children going back to school in comparison with their siblings staying home, but it is estimated with a lot of uncertainty.

When we compared the well-being of children in different families, we did not find any evidence of an effect of going back to school. We see a similar result when we make the same comparisons for children within the same family.

## Future steps and limitations<sup>3</sup>

We presented results regarding a vast array of parent and child level outcomes in the midst of the COVID-19 crisis and the step-by-step re-opening of the Danish society. While health, psychological, and economic well-being are always central for better understanding how citizens are doing, this has been especially important under the exigent circumstances generated by COVID-19 related lockdown. The lockdown and also the stepwise re-opening will likely carry long-term effects for many citizens, thus it is imperative to assess as many different outcomes as possible, in order to inform and update public policy.

While data regarding the societal effects of the COVID-19 pandemic and subsequent research are in urgent need, we regard it even more important in this setting to also highlight the limitations of our presentation of the first wave of our survey. First and foremost, while the two waves cover a two week period, we can, at best, speak to short term and likely small differences in many outcomes. Furthermore, the re-opening was timed directly after Easter, a likely non-representative period in many families' lives.

Second, and related, we lack measures for the same sample from the lockdown period, or prior to that period, which creates difficulties in confidently assigning many direct effects explicitly to the re-opening. Third, our analysis does not (yet) speak to potential differences regarding households with single parents and variation associated with how different occupations or jobs presented different requirements and opportunities during and after the lockdown. Finally, we are assuming that parents took the opportunity to send their eligible children back to school, however we have never ascertained this through a dedicated survey question.

With these caveats in mind, we presented a set of important results, indicating no major differences in parental and child outcomes between those families that had 4th or 5th grade kids and those with children in the 6th and 7th grades.<sup>4</sup> There are no fast-paced gains or losses in any of our main outcomes of interest, thus the gradual re-opening seems to be an appropriate label. Looking at the short-term changes, overall, we find that this group of parents has experienced a decline in suspicion of infection, stress, support for the Prime Minister and the health authorities, and they were better able to take care of their work after the lockdown eased.

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<sup>3</sup>*Disclaimer: edited version from previous report.*

<sup>4</sup>We have checked a more strict comparison (5th and 6th grades only), with the same steps, and our results are unchanged. Thus, the small differences are not due to grouping 4th and 5th respectively 6th and 7th grade children together.

## **Additional information**

### **Exact question wording**

#### **Health outcome**

We track the health implications through the proportion of families that experience an increasing number of COVID-19 symptoms. The children in the 4th and 5th grade will be in touch with more people, potentially exposing themselves more to virus symptoms and, in general, their parents can spend more hours at work or outside the home among other people.

To measure household health outcomes, we asked *Which of the following statements best describes your families??? situation?* Respondents could mark any number of the first three options below, or the last option:

- At least one person in my household has been tested positive for coronavirus.
- At least one person in my household has been tested negative for coronavirus.
- At least one person in my household has shown symptoms that could be coronavirus, but has not been tested for the virus.
- No-one in my household has shown symptoms of coronavirus.

#### **Emotional well-being**

##### **Children**

We study the effect of social isolation on emotional well-being. Some children have been allowed to return to school and their friends, while slightly older children remained socially isolated from their peers at home. By tracking parents??? reports of their children???s well-being, we get important insights about the psychological effects of social isolation.

We asked the parents to assess three items from the seven-item *Short Warwick-Edinburgh Mental Well-being Scale* on behalf of their children (Stewart-Brown et al. 2009). For the oldest child, we asked: *Of the children in your household who are in the 4th to 7th grade, please think of the oldest one. How well would you say that each of the following statements have applied to him or her over the latest week:*

- He or she has been feeling relaxed
- He or she has been dealing with problems well
- He or she has been able to make up his or her own mind about things

Respondents answered on a scale ranging from '1 = at no time' to '5 = all the time'. For the second-oldest child, we changed *oldest* to *second-oldest* and so forth. We asked them to assess the well-being of all the children in the 4th to 7th grade in the household, so we also have children who are (step-)siblings with children in the 4th to 7th grade.

##### **Parents**

Along the same lines, parents should be less stressed when they do not have to support their children being schooled from home. Balancing parenting and work from home is a hard task, so we track their level of stress if their child(ren) returned to school.

To measure parents' stress, we used three items from the seven-item short-form DASS (Depression Anxiety Stress Scales) stress scale (Henry and Crawford 2005). The question wording was: *Please read each statement. How much did each statement apply to you over the past week? There are no right or wrong answers:*

- I found it hard to wind down
- I felt I was rather touchy
- I was intolerant of anything that kept me from getting on with what I was doing

Respondents answered on a scale ranging from '1 = Did not apply to me at all' to '4 = Applied to me very much, or most of the time'.

### **Government support**

We track the support for the government and the handling of the crisis from the Health Authorities. Current support of the government and the policy it has implemented is very high.<sup>5</sup> However, it is unclear whether the same logic or mechanisms regarding support for restrictive measures should apply to the stages of gradual re-opening of the society. While most restrictions applied uniformly to most families, the lift of the ban hits families differently; it makes it likely that the support will change at a different pace (Rosset, Giger, and Bernauer 2017). Learning how citizens respond to sanctions that apply specifically to themselves will be important in shaping crisis management and communication of various measures.

The Danish Prime Minister, Mette Frederiksen, has been the political face on the response to the coronavirus. She has headed the most important press briefings and announcements. Therefore, we measured support for her as a proxy for general government support. Specifically, we asked: *Overall, how do you think that Mette Frederiksen is doing as PM?*

The Danish Health Authorities (Sundhedsstyrelsen) and Statens Serum Institut (SSI) have been the administrative face of the response to the coronavirus and their handling of the situation has been subject of much debate. To measure support for the administrative response, we asked *Overall, how do you think that the Health Authorities represented by The Danish Health Authorities and Statens Serum Institut are handling the COVID-19 pandemic?*

On both items, respondents could reply from '1 = Very bad' to '5 = Very good'.

### **Economic impact**

Finally, we track the (perceived) economic impact on the families. Parents should have an easier time caring for their job when their child(ren) is at school. As some parents will have all their children back in school, but others only some or none, we can leverage this information to identify the effect of school lockdowns for different families. Learning how school lockdowns affect families' economic situation will be important for learning about the long-term effect of the current sanctions and their potential to contribute to economic inequality.

We included three items to measure economic impact on the household, individual ability to do one's job, and concerns with future employment. First we asked *How has the Corona crisis affected your household's economic situation?*, where respondents could answer on a scale ranging from '0 = substantially worsened' to '10 = substantially improved'. Second, we asked *Compared to a regular work week before the Coronavirus, what percent of your work obligations would you say that you will be able to meet this week?* Respondents could write in a number between 0 and 100. A few

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<sup>5</sup><https://www.altinget.dk/artikel/ny-maaling-taarnhoej-opbakning-til-mette-frederiksen>

respondents wrote in a number between zero and one. We interpreted these numbers as proportions and rescaled them to percent. Finally, we asked *Considering your current working conditions, how concerned are you with your employment situation in the coming months?* Here respondents could answer from ‘1 = Not concerned at all’ ‘4 = Very concerned’.

## Descriptive statistics for parents

In Figure 14, we compare parents whose children were sent back to school and parents whose children were not on our outcomes of interest, we compare them on a number of background covariates to establish if they are fairly similar. The covariates are age, sex, education, household income, and region. For education, we code everyone who self-reported a bachelor’s degree or higher as ‘1’. Household income is based on self-reported income in brackets and we rescale the income to be in the middle of the bracket. The top-bracket is open to the right, so here we assign the minimum value.

In Figure 10, we plot means and 95% confidence intervals for parents of children in the 4th or 5th grade and for parents in the 6th and 7th grade. We only include parents who were included in both survey rounds. There are no major differences except for age, where parents with children in higher grades are a little older. This is unsurprising as older children will on average have older parents.

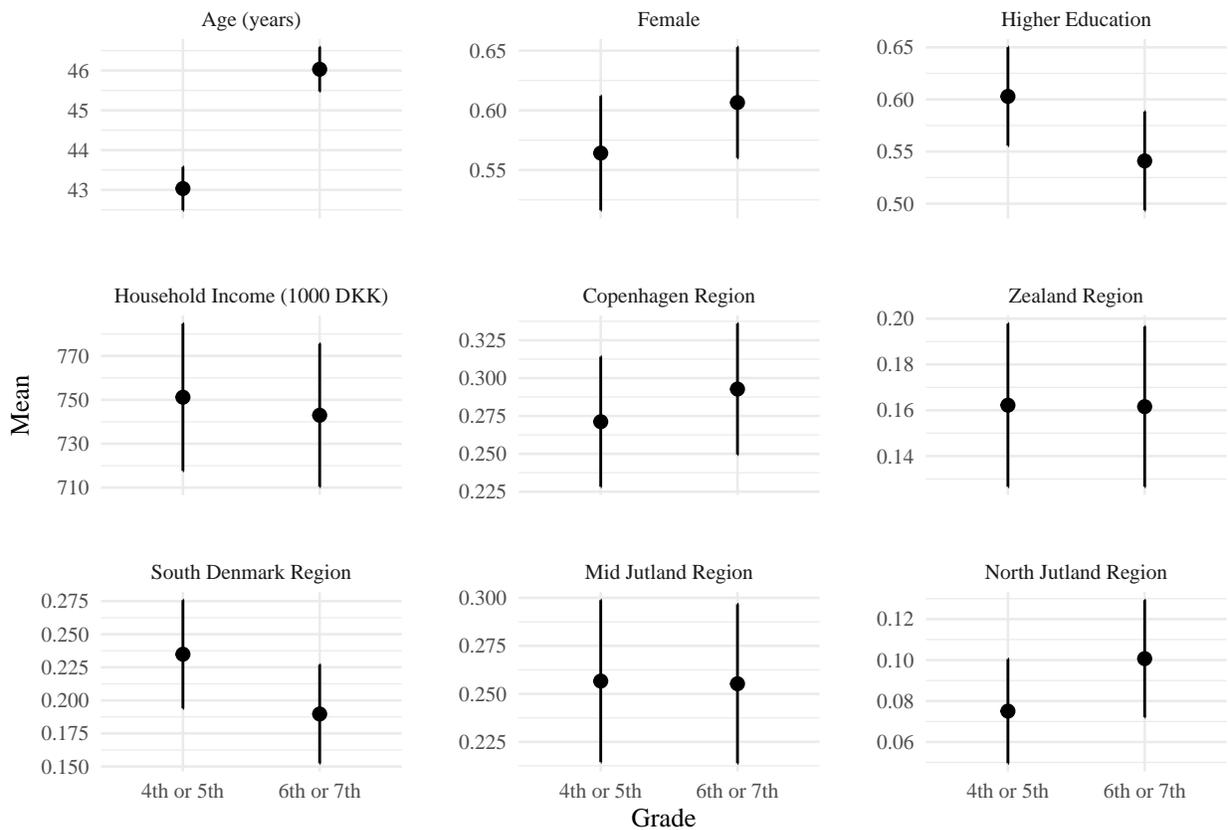


Figure 14: Descriptive statistics for parents. With the exception of age, no systematic differences on parent characteristics between those families that had child(ren) return to school and those that did not.

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