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Navigating Educational Disruptions: The Gender Divide in Parental Involvement and Children's Learning Outcomes

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Abstract

This study analyzes the adjustment in time allocation to school support activities by mothers and fathers during the pandemic in 22 Latin American and Caribbean countries, exploring the repercussions on labor market outcomes and children's learning losses. Our analysis reveals that mothers experienced a disproportionate increase in time dedicated to children's educational support compared to fathers, particularly when mothers could work from home. The results suggest that these differential adjustments were more pronounced in countries with stringent school closure measures and limited access to in-person instruction. Even as mobility restrictions eased and schools reopened, the additional responsibilities taken on by mothers remained above pre-pandemic levels. Mothers also significantly increased the time spent on non-educational childcare, though to a lesser extent than educational support. We also show evidence that indicates a decrease in maternal participation in the labor force and a rise in flexible labor arrangements as mothers allocated more hours to child-related duties. Our study also provides descriptive evidence that child learning losses were less severe in countries where the gender disparity in pandemic-related school support was greater.

Keywords: Time Use; Childcare; Labor; Pandemic; Latin America.

 \emph{JEL} Classification: I1, J13, J21

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1 Introduction

Despite significant advancements in reducing gender disparities in labor markets in recent years, substantial differences still exist, both in the workplace and within households. In most countries, women's participation rates in the labor market remain markedly behind those of men. In the Latin American and Caribbean region (hereafter LAC), this disparity is particularly pronounced, with the gender gap in labor force participation reaching 23 percentage points (World Bank, 2023). At the household level, the disparity is equally pronounced. Women in the LAC region dedicate, on average, 36 hours a week to caregiving and domestic duties, compared to only 16 hours contributed by men. This gap expands even further in families with young children, highlighting a significant imbalance in household responsibilities (ECLAC, 2023). 2

Supporting school activities is often very time consuming and therefore one of the factors contributing to gender inequalities in the distribution of family responsibilities. Active parental involvement is crucial for children's education, as it has been shown to decrease school absenteeism, improve behavior toward peers and teachers, and improve academic outcomes (Desforges and Abouchaar, 2003; Mahuro, 2016; Axford et al., 2019). Beyond parental involvement, factors such as school resources and peer effects also play a vital role in the learning process (Agostinelli et al., 2021). The disruptions caused by the COVID-19 pandemic have severely impacted these aspects, leading to considerable learning setbacks. During this period, parental involvement became even more essential to mitigate these losses, at least partially (Andrew et al., 2020; Neidhöfer et al., 2021; Grewenig et al., 2021; Agostinelli et al., 2021; Azevedo et al., 2021; Jack et al., 2023; Jakubowski et al., 2023; Bracco et al., 2024; Jakubowski et al., 2024). From the onset of the pandemic until July 2021, the LAC region experienced the longest school closures worldwide, with significantly fewer fully open school days (Lopez Boo et al., 2023). In many countries, schools remained closed for extended periods, and traditional face-to-face learning shifted to online formats, affecting children's ability to interact socially.

Although both men and women faced challenges in taking on the role of educators due to their

¹In 2022, the female labor force participation rate was 51%, while the rate for men was 74% (World Bank, 2023).

²In households with children under five years old, women allocate on average 50 hours a week to care and domestic activities, while men assign 20 hours (ECLAC, 2023).

³Evidence from before the pandemic has also shown that school closures lead to education losses (Jaume and Willén, 2019).

own capabilities and the labor market impacts of the crisis, a major differential adjustment in the time dedicated to helping children with education and homework is expected. Before the pandemic, childcare responsibilities predominantly fell on women globally, and this trend was particularly pronounced in the LAC region (ECLAC, 2023). During the pandemic, the majority of the additional childcare burden resulting from school and daycare closures was also shouldered by women (Costoya et al., 2022; Hoehn-Velasco et al., 2022). Furthermore, the literature on the COVID-19 pandemic indicates that the labor outcomes of women were more negatively impacted than those of men. In the LAC region, women were more likely to stop working or shift to informal jobs, mainly due to an increase in childcare responsibilities, thus exacerbating the asymmetric effects of the crisis (Cucagna and Romero, 2021; Cueva et al., 2021; Monroy-Gomez-Franco, 2021; Juarez and Villaseñor, 2024; Hoehn-Velasco et al., 2022; Higa et al., 2023; Kugler et al., 2023; Tribin-Uribe et al., 2023; Viollaz et al., 2023). Conversely, the option to work from home provided a mitigating effect on the severity of job losses for women with children, facilitating the reconciliation of labor market activities with family responsibilities (Berniell et al., 2023). Given these precedents, we can expect an increase in the gender gap in the time allocated to supervising children in school-related activities.

In this paper, we explore parental involvement in the educational activities of children by examining how mothers and fathers in the LAC region adjusted the time they allocated to these tasks during the pandemic. The literature reporting gender gaps in the time assigned to childcare activities during this period is extensive, but little is known about the component of childcare related to school support activities.⁴ Our analysis considers the shift from on-site to online classes at the onset of the pandemic and investigates how this transition affected the time mothers and fathers spent supporting their children's education. Using a comprehensive dataset from multiple countries, we also compare the gender gap in time allocated to educational support activities with that dedicated to other childcare tasks (excluding school support). For the rest of this document, we refer to all activities related to taking care and supporting children with their education as "child-related responsibilities", while "childcare" refers to care activities other

⁴Recent studies reporting gender gaps in childcare time in developed countries include Sevilla and Smith (2020), Zamarro and Prados (2021) and Pabilonia and Vernon (2023). Costoya et al. (2022) and Hoehn-Velasco et al. (2022) are examples for the LAC region. With the only exception of Costoya et al. (2022), these studies do not distinguish between educational support activities and other childcare activities.

than school support, such as feeding, playing with them, etc. To date, limited research such as Costoya et al. (2022) has addressed this topic, showing that the increase in the gender gap in the time spent on unpaid work among Argentine couples during the first year of the pandemic was primarily due to the time dedicated to supporting children with school-related activities. We expand on this study to contribute to the sparse literature that analyzes gender gaps in the time parents assign to school-support activities, a crucial input for children's education, especially during school closures. More broadly, our work also adds to the literature on gender inequalities in caregiving activities.

To perform this analysis, we employ data from the High-Frequency Phone Surveys (HFPS), nationally representative datasets that cover 22 countries in LAC. These surveys were conducted in two waves during 2021, with the first wave spanning from May to July 2021 and the second from October 2021 to December 2021. The HFPS offers a distinctive opportunity to investigate how households restructure child-related responsibilities. Unlike many surveys conducted during the pandemic, the HFPS captures labor dynamics and includes questions about changes in childcare and educational support, thus offering valuable information not commonly available in most other surveys. Moreover, having information on several countries allows us to explore heterogeneities in how mothers and fathers adjusted their use of time depending on the severity of the school closing measure and on the type of classes children were attending (online versus face-to-face). Finally, our dataset contains information on two points in time, mid-2021 and late-2021, allowing us to explore whether gender gaps in time use and labor market adjustments persisted even after the pandemic eased and schools reopened. In contrast, previous literature has focused mainly on the first year of the pandemic.⁵

Our findings reveal significant gender differences in response to school closures during the pandemic. Mothers were approximately 12 percentage points more likely than fathers to increase their participation in educational support activities. Furthermore, mothers increased the time they spent caring for their children more than fathers, with a gender gap of 6 percentage points. This increase in child-related responsibilities coincided with women reducing their participation in the labor force by 14 percentage points, decreasing their working hours, and increasing their

⁵See, for instance, Berniell et al. (2023) for gender gaps in labor outcomes and Pabilonia and Vernon (2023) for gender gaps in the time assigned to childcare activities.

self-employment by 8 percentage points relative to fathers. These results underscore the dual burden women faced during the pandemic and are consistent with existing research. For example, Berniell et al. (2021) found that flexible employment arrangements can help women remain in the labor market after becoming mothers. Similarly, Alon et al. (2020) highlighted that the employment losses during the COVID-19 pandemic were significantly greater for women than for men.

Furthermore, our analysis suggests that these differential adjustments between mothers and fathers were more pronounced in contexts with prolonged school closures and limited access to in-person instruction. In particular, the increase in the gender gap in educational support activities was greater in households where women earned more than men before the pandemic -often referred to as non-traditional households. Mothers' level of education in such households is higher, suggesting that they are likely to be more invested in their children's education and more motivated to fill the gaps left by online or hybrid schooling. This, combined with the broad increase in work-from-home feasibility, might explain the disparity in the gender gap in educational support activities between traditional and non-traditional households. Indeed, our findings indicate that although both parents experienced greater responsibilities related to children while working from home, mothers were 7 percentage points more likely than fathers to engage in educational support activities. Importantly, these disparities persisted as schools began to gradually reopen during the collection of our second wave of data, suggesting the lasting impacts of school closures on child-related responsibilities and the quality of female employment. Furthermore, our study provides descriptive evidence that larger gender gaps in increased time spent on educational support were associated with smaller learning losses among children. This result suggests that greater participation of mothers in educational support activities relative to fathers can help mitigate learning losses for children. However, this gender gap may come at the cost of negatively impacting mothers' labor market outcomes.

The remainder of the paper is organized as follows. Section 2 describes the data. Section 3 presents the econometric approach that we employ. Sections 4, 5, and 6 discuss the main results. Section 7 ends with some concluding remarks.

2 Data and Descriptive Statistics

2.1 High Frequency Phone Surveys

Our primary data source is the second phase of the High Frequency Phone Surveys (HFPS), conducted by the United Nations Development Programme and the World Bank in 2021 to monitor the ongoing impact of the coronavirus pandemic on household welfare in the Latin American and Caribbean (LAC) region. This phase of the survey collected data in two waves: the first from May to July 2021, and the second from October to December 2021. The HFPS provides nationally representative and harmonized data from 22 countries, including Argentina, Belize, Bolivia, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, and Uruguay. Together, these countries account for approximately 60% of the population of the region.

We specifically focus on the second phase of the High-Frequency Phone Surveys (HFPS) due to enhancements in the questionnaire used compared to the initial phase in 2020. The updated survey included critical questions that captured changes in the allocation of time to educational support and childcare activities compared to the pre-pandemic period. These variables are central to our analysis, offering a unique lens to examine the impact of mobility restrictions and changes in educational provision on gender inequalities in time use during the pandemic in multiple countries.⁶

The HFPS of the LAC region collected data using a random digit dialing sample technique. The eligible respondents to the HFPS were adults 18 years of age or older living in a household with a landline or where at least one member has a cellphone, but only one respondent per household was interviewed and answered individual and household-level questions.⁷ These features of the data collection could, nonetheless, lead to bias. To address the nonrandom selection of households, the HFPS provide adjusted sampling weights that we use throughout the analysis.

⁶Several studies have used the first phase of the HFPS collected during 2020 to analyze the gendered impacts of the COVID-19 pandemic in employment losses. For example, Kugler et al. (2023) and Berniell et al. (2023) report higher job loss rates for women compared to men in LAC and in other regions.

⁷Survey estimates for each country are representative of households with a landline and households for which at least one member has a cellphone. Similarly, the survey is representative of individuals 18 years of age or older who have an active cellphone number or a landline at home. See more details at Mejía-Mantilla et al. (2021). The coverage of landline telephones ranges between 93% and 99% in Latin America (SEDLAC, 2024), while the pattern of mobile cellular subscriptions per 100 people is about 110, a level similar to that of North America (108) and the countries of the OECD (122), according to information from the World Bank and the International Telecommunication Union (World Bank, 2023).

To avoid results being disproportionally determined by more populous countries, we re-scaled weights to add up to 1 within each country. The second source of bias, i.e., collecting data from only one person per household, has been shown to bias estimates of measures such as the employment rate. However, Kugler et al. (2023) show that the bias is of similar magnitude between population groups defined by gender, education, or urban/rural location, which means that the HFPS data provide an accurate picture of group disparities, which is the main objective of our analysis.

We focus our analysis on respondents between 25 and 54 years of age who reported being married or living with a partner and have at least one biological child of school age (i.e., between 5 and 17 years of age). The original HFPS data provide information for 16,329 and 18,070 individuals aged 25 to 54 years in waves 1 and 2, respectively. In the sample, about 58% (or 19,904 adults) are married or partnered. Among married and partnered individuals, 59% have at least one biological child of school age. Our final sample includes 11,746 observations that yield 10,830 observations with complete information on child-related and labor activities for use in the main analysis.⁸

We define three main outcome variables as indicators that take the value one when a person says that compared to just before the pandemic, they increased their time allocated (i) to child-related responsibilities (school-support activities *or* childcare), (ii) to school-support activities, and (iii) to childcare, and zero otherwise. The HFPS does not include information on exact childcare hours and relies on self-reporting. However, employing a binary variable of increased time allocated to childcare or educational support activities can mitigate recall, aggregation, and social desirability biases compared with using detailed hour-based information. Moreover, even if fathers may overreport increased childcare activities due to social desirability bias, our findings would represent a lower bound of the true differential adjustment in time-use between mothers and fathers.

In order to understand how women and men managed to accommodate any increase in time

⁸The proportion of married and partnered individuals with a non-biological child is less than 9%. Our results, presented in Section 4, hold when defining the sample as respondents who have at least one school-age child, regardless of the child's biological relationship with the head of the household.

⁹The questions are "Currently, the amount of time you spend on childcare tasks such as feeding, playing with, caring for children, compared to just before the pandemic, increased, stayed the same, or decreased?", and "Currently, the amount of time that you dedicate to accompanying children in education and homework compared to just before the pandemic, increased, remained the same or decreased?"

devoted to childcare or helping their children with educational activities, we explore how their labor outcomes changed with respect to the pre-pandemic period. We use three labor outcomes that we define comparing the employment status at the moment of the interview and that from the pre-pandemic period. The outcomes are indicator variables taking the value one when (i) the person transitioned from activity to inactivity, (ii) when a person employed both before and during the pandemic reduced their working hours, and (iii) when a person employed before and during the pandemic moved from a salaried job to self-employment, and zero otherwise.

Table A.1 presents summary statistics for women and men and for each survey wave separately. The women in our sample are younger than the men, but there is no gender difference in having tertiary education. Women and men do not differ in the composition of the households where they live: the number of school-age (own) children is similar, and they are similarly likely to have younger kids. However, women surveyed in the second wave were more likely to live with people 65 years or older, while in the first wave they were less likely to live in urban areas.

Regarding the main outcome variables, Table A.1 shows that in both waves mothers reported a disproportionate increase in the time they dedicated to their children's education and to care activities even twenty months after the pandemic onset, with larger gender gaps in the education support-related variable. The share of women who increased the time assigned to educational support surpassed that of men by 13 percentage points, while the difference was between 7 and 8 percentage points for time allocated to care activities. Moving to labor market outcomes, in both waves of the survey women were less likely to participate in the labor market or be employed and more likely to be unemployed. When employed, women worked fewer hours and were more likely to work from home compared to men. Finally, when comparing the pre-pandemic labor market status with that at the moment of the survey, we find that women were between 13 and 15 percentage points more likely than men to leave the labor force, 9 percentage points more likely to reduce their working hours in the first wave, and between 4 and 7 percentage points more likely to move from salaried to self-employment.

2.2 Context

The main focus of our paper is to analyze the gender gaps in the change in time allocated to school-support and care activities with respect to the pre-pandemic period. A crucial component

of these gaps is the severity of the school closing measures since the start of the pandemic and up to the moment of the survey. The observed gender gaps reported in the survey could be the result of having the schools completely or partially closed when the data was collected but could also reflect that schools were closed when the pandemic started and the gender gaps in school-support activities persisted over time.

In Figure A.1 we show for each country and for three different periods, the share of days in the four possible severity levels of the school closing measure according to the Oxford Covid Policy Tracker (Hale et al., 2021). The three time periods are the first pandemic quarter (April to June 2020), the first wave of the HFPS (May to July 2021) and the second wave of the survey (October to December 2021). The four possible severity levels of the school closing measure are: no measure at all, recommend closing or all schools open with alterations compared to pre-COVID operation (Level 1), require closing some education levels or categories, e.g., only high school or only public schools (Level 2), and require closing all education levels (Level 3). The first quarter of the pandemic was characterized by very strict school closing measures: 17 out of 21 countries with data had schools fully closed, while the remaining 4 required closing some levels during some or all days of this period. During wave 1 of the survey, school closing measures were less strict in most countries with important heterogeneity across them. For instance, Honduras, Mexico and Panama continued having their schools fully closed, Belize, Guatemala and El Salvador only recommended having schools closed, and Nicaragua and Dominica did not have any school closing measure in most days of this period. During wave 2 of the HFPS, most countries continued relaxing their schools closing measure. Exceptions include Guatemala, Guyana, Dominica and Jamaica where measures became more strict. The heterogeneity observed across countries over time underscores the value of using a comprehensive dataset covering multiple countries, different from previous contributions focused on a particular country (e.g., Costoya et al. (2022)).

3 Methodology

To study gender gaps in how time allocated to school-support and childcare activities changed since in-person education switched to online or hybrid learning, we estimate the following linear

probability model:

$$Y_{icw} = \beta_0 + \beta_1 Female_{icw} + \beta_2 Female_{icw} \times W_2 + \theta X'_{icw} + \delta W_2 + \gamma_c + \epsilon_{icw}. \tag{1}$$

The dependent variable Y_{icw} denotes, alternatively, increases in the provision of (i) school-support activities or childcare, (ii) school-support activities, and (iii) childcare, with respect to the prepandemic period, when schools were fully opened, for person i, in country c, and wave w. Variable $Female_{icw}$ indicates whether person i is a woman and W_2 is an indicator for the second wave of the survey, which allows us to capture, through the interaction term, any difference between survey waves in the gender gap in changes in the provision of school-support activities, childcare, or either of the two as time progressed and mobility restrictions were lifted. X'_{icw} includes age groups and education level indicator variables, 10 number of school-age own children (from 5 to 17 years old), household composition indicators (whether any person older than 64 and whether any child 0 to 4 years old live in the household), and an indicator of urban location. The model also includes country fixed effects (γ_c). The error term ϵ_{icw} is clustered at the country level.

We also estimate an expanded version of model (1) where we include an interaction between $Female_{icw}$ and the indicator of whether the person has any child younger than school age (variable $Child0 - 4_{icw}$ below):

$$\begin{array}{ll} Y_{icw} & = & \beta_0 + \beta_1 Female_{icw} + \beta_2 Female_{icw} \times W_2 + \beta_3 Female_{icw} \times Child0 - 4_{icw} \\ \\ & + & \beta_4 \times Female_{icw} \times Child0 - 4_{icw} \times W_2 + \theta_w X'_{icw} + \delta W_2 + \phi Child0 - 4_{icw} + \gamma_c + \epsilon_{icw}. \end{array} \tag{2}$$

The intuition is that in households having both school-age children and younger kids, child-care needs probably increased by more with respect to the pre-pandemic period in comparison to households having only school-age children. Considering that childcare responsibilities fall mostly on women, we can expect a larger gender gap in the increase in childcare time in households having children in both age ranges. Regarding school-support activities, having children ages 0 to 4 could mean that women increased the time assigned to these activities to a lesser

¹⁰Ages were grouped in three categories: 25-34, 35-44, and 45-54 years old. Education level is captured through an indicator of whether the respondent has at least some tertiary education.

extent than women without young children resulting in a smaller increase in the gender gap.

We extend our analysis by studying gender gaps in labor market transitions. An increase in time allocated to childcare or school-support activities may be related to different labor market transitions for women and men. This is due to higher employment losses among women and a greater likelihood for them to decrease their labor participation following increased demand for childcare. We provide suggestive evidence of how school closure and the change from onsite to online education affected labor market transitions differentially for women and men by estimating models (1) and (2) using as outcome variables indicators of whether between the moment of the survey and just before the pandemic started person *i* transitioned from activity to inactivity and indicators defined as one when the person reduced the number of working hours, or transitioned from being an employee to self-employment.

We also provide estimates of model (2) separating the sample by the severity level of the school closing measure, by whether children are attending in-person versus online or hybrid classes at the moment of the survey, and by the pre-pandemic level of gender inequality in each country. Finally, we present a descriptive analysis where we relate the estimated gender gaps in the increase in time assigned to education-support activities to children learning losses obtained from Neidhöfer et al. (2021).

4 Results

4.1 Gender Gaps in Time Allocation

School closures prompted households to partially substitute traditional on-site education with online classes and school support at home while also increasing childcare responsibilities due to children spending more time in the household. In this section, we test whether these additional responsibilities were distributed equitably between mothers and fathers.

Table 1 reveals that during the pandemic, the time allocated to child-related responsibilities saw a disproportionate increase among mothers in comparison to fathers. Specifically, women saw an approximately 10 percentage-point higher (18%) rise in their responsibility for child-related duties and while the increase associated with childcare activities was 6 percentage points (14%),

it escalated to 12 percentage points (26%) in the case of educational support activities.¹¹ Notably, the heightened dedication to childcare was larger for women with children aged 0 to 4 years. In contrast, we do not find any statistically significant gender difference in the case of educational support activities when comparing families with and without children aged 0-4.

Our findings also reveal that during wave two, when mobility restrictions and school closures started to be lifted, child-related responsibilities diminished in households. However, the increased share of these responsibilities by mothers did not change and remained at levels higher than the pre-pandemic period. We delve into the role of school closures in these results in the subsequent section.

Recent literature suggests that highly-educated households are more likely to substitute traditional education (Neidhöfer et al., 2021), and that more educated women are more likely to work from home (Berniell et al., 2023) and subsequently balance childcare with work. In Table A.1 we show that women in our sample were more likely to work from home compared to men. Table 2 evaluates how the previous results change depending on the ability to work from home for the sub-sample of working mothers and fathers. Results show that both fathers and mothers working from home increased their child-related responsibilities; however, mothers increased their probability of engaging in educational support activities by between 6 and 7 percentage points more than fathers.

4.2 Gender Gaps in Labor Outcomes

Where did women find the additional hours to dedicate to caregiving and educational support compared to men during the pandemic? Recent research suggests that mothers adjusted their labor market outcomes more significantly than fathers (Zamarro and Prados, 2021; Farré et al., 2022; Pabilonia and Vernon, 2023; Berniell et al., 2023). This adjustment often involved reducing their work hours, transitioning to part-time roles, or exiting the workforce entirely.

Table 3 shows that women increased their probability of transitioning to inactivity compared to men. The specifications that add controls for the presence of children ages 0-4 indicate that the labor transition for mothers of younger children is relatively larger.

¹¹These results hold when defining the sample as women and men who reported being married or living with a partner and have at least one school-age children, regardless of the children's biological relationship with the household head. See Table A.2 in the Appendix.

Our analysis in Table 3 also indicates that working women were more likely to reduce their work hours while holding the same pre-pandemic occupation, and to switch from wage employment to self-employment, although these adjustments were smaller during the second wave. ¹²

Together, our results show that mothers disproportionately increased their time spent in childcare and educational support activities compared with fathers by decreasing their labor participation and transitioning to more flexible jobs. Importantly, once the restrictions started to ease, mothers continued providing more childcare and educational support than at pre-pandemic levels. This result can be explained by several factors. Their decreased labor force participation and increased flexible labor arrangements were permanent, allowing them to maintain their increased childcare responsibilities. Additionally, work-from-home jobs became more prevalent after the pandemic, especially for women. Table A.1 shows that women's work-from-home arrangements increased from 32% to 39% between 2020 and 2021, while for men, it remained the same or slightly decreased from 23% to 22%. Moreover, in Table 2, we show that the increased children's care and educational support was higher for women working from home. This increased time at home and the strong relationship between working from home and education (Berniell et al., 2023) could make it more likely for women to continue providing higher levels of educational support than their male counterparts.

5 Unpacking Heterogeneities in Time Allocation and Labor Outcomes

5.1 The Relationship with Prevalent Gender Norms

In this section, we explore how differences in the prevailing gender norms across households and countries can influence our results. Specifically, we analyze whether adjustments in labor market outcomes and time allocated to childcare and educational support during the pandemic vary between households with different economic dynamics. We categorize households as "traditional" if the male member earned more than the female member before the pandemic, and "non-traditional" if the female member earned more. This analysis aims to understand how traditional and non-traditional income roles affect the gender disparities observed in response to

¹²Results on labor outcomes hold when defining the sample as women and men who reported being married or living with a partner and having at least one school-age child, regardless of the children's biological relationship with the household head. See Table A.3 in the Appendix.

the challenges of the pandemic.¹³ We also exploit information from the 2019 Gender Inequality Index (GII) provided by the United Nations Development Programme (UNDP) to divide countries according to their prevailing gender inequalities before the pandemic. In this section, we show the analysis comparing traditional and non-traditional households; results, available in the Appendix (Tables A.4 and A.5), are similar when dividing the sample in low and high GII countries.

Table A.6 suggests that women disproportionately increased their participation in educational support activities in both types of households. Their relative responsibilities increased by approximately 7 and 11 percentage points (13% and 24%) in traditional and non-traditional households, respectively. Following the results from Table 2, a possible explanation could be that women in non-traditional households were more likely to work from home and consequently, to increase time allocated to educational support activities more than men. However, women are about 12 percentage points more likely to work from home in both traditional and non-traditional households. In contrast, in non-traditional households, mothers tend to be more educated than fathers compared to traditional households: mothers in non-traditional households are seven percentage points more likely than fathers to have completed tertiary education, while in traditional households they are three percentage points less likely to be highly educated than fathers. By being more educated, mothers in non-traditional households are also likely to be more invested in their children's education and more motivated to fill the gap left by online or hybrid schooling. Although we do not have data to test for this mechanism, the literature shows that parental education is a key factor in explaining investments in children's education, particularly at early ages (Cunha and Heckman, 2007; Cunha et al., 2010), supporting this explanation.

Results for abor outcomes show a different pattern. Table A.7 suggests that the adverse labor adjustments were more prevalent in traditional households than in non-traditional households. This finding is likely associated with mothers being more educated than fathers in non-traditional households. Moreover, despite a broader increase in work-from-home possibilities, Berniell et al. (2023) showed that the ability to work from home only protects mothers' employment in low gender-inequality environments. The switch from activity to inactivity (column 2) was 16 per-

¹³The question is "Before the pandemic, who made more money: you or your partner?". This question is answered only by those already employed before the pandemic. Therefore, the sample for this analysis comprises fewer observations as it does not include individuals with no earnings.

centage points larger for women compared to men in traditional households, while the gender gap was 6 percentage points in non-traditional households. Similarly, in traditional households, women were 12 percentage points more likely to reduce their working hours (column 4) and 10 percentage points more likely to move from wage employment to self-employment (column 6). In non-traditional households, on the other hand, the gender gap did not change in the case of working hours. It increased by 6 percentage points in the case of movements from wage employment to self-employment. However, the difference across groups in transitions to self-employment is not statistically significant.

5.2 The Relationship with School Disruptions

In this subsection, we explore potential heterogeneities in the gender gap in changes in the provision of child-related activities according to the stringency of school closures based on data from Oxford Covid Policy Tracker (OxCGRT) (Hale et al., 2021).¹⁴ For each country and wave we calculate the average value of the school closing measure from the start of the pandemic and up to the end of the wave such as a higher value means a higher severity level. Then, we calculate the cross-country median value corresponding to each wave and separate the sample in countries with a low school closing severity measure (countries with a severity measure below the median) from those with a high severity measure in each wave (countries with a severity measure equal or above the median).¹⁵

The results in Table A.8 suggest that the disproportionate increase in mothers' educational support activities compared to fathers was higher in countries that experienced high school closures (about 15 percentage points or 19%) compared to those that experienced low school closures (8 percentage points or 34%), despite the differences across groups not being statistically significant at traditional confidence levels. Results also suggest that this difference between groups of countries almost vanished in wave two. Consistent with these findings, Table A.9 shows that the probabilities of transitioning between employment statuses were consistently higher for mothers

¹⁴Data from OxCGRT is not available for St. Lucia.

¹⁵In the first wave of the survey the cross-country median value of the school closing severity measure was 2.5, while it was 2 in the second wave. Countries classified as having low school closing severity measures in both waves include Belize, Nicaragua, Haiti, Guyana, Paraguay, Uruguay, Dominica and Jamaica. Countries with high school closing severity measures in both waves are Honduras, Costa Rica, Panama, Mexico, Argentina, Chile, Bolivia, Ecuador and Dominican Republic. The remaining countries (Guatemala, El Salvador, Peru and Colombia) changed their status between waves.

than for fathers in countries with stricter school-closure policies. This trend was particularly pronounced compared with countries with milder measures, especially when analyzing transitions to self-employment, where the difference between the two groups is statistically significant.

An additional analysis focuses on the modality of schooling during the second year of the pandemic. Households in the HFPS indicated if the children were participating in online classes, in-person, or a combination of both. Results from Table A.10 suggest that even though mothers increased their educational support responsibilities compared to fathers under the three education modalities, the availability of in-person instruction led to this increase being approximately 3 percentage points lower, although the differences are not statistically significant at traditional confidence levels. Moreover, households in which virtual classes persisted in wave 2 experienced a subsequent increase in the mother's share of educational support tasks. Importantly, the availability of in-person classes prevented mothers from increasing their childcare responsibilities relative to fathers. Once again, these gender gaps in changes in the provision of child-related activities have consequences for labor outcomes. The findings in Table A.11 indicate that mothers tended to experience more adverse changes in their labor market outcomes than men, regardless of the schooling modality. However, the need to reduce work hours or transition to self-employment appears only in households where children attended online or hybrid classes.

6 Connecting Gender Gaps in School-Support Activities with Children Learning Losses

The evidence presented so far indicates that mothers were significantly more likely than fathers to increase the time they dedicated to education-support activities during 2021. As we discussed in Section 1, recent studies have shown that school closures and shifts in the delivery of education negatively impacted children's learning outcomes (Azevedo et al., 2021; Neidhöfer et al., 2021; Jack et al., 2023; Jakubowski et al., 2023; Bracco et al., 2024; Jakubowski et al., 2024, e.g.). In this section, we analyze descriptively the association between these two pieces of evidence. First, we use estimates of years of schooling lost due to the COVID-19 pandemic available for 12 of the

¹⁶Related to this evidence of learning losses, data from wave 2 of the HFPS shows that 56% of mothers and 53% of fathers think their child was learning less or much less than before the pandemic.

countries in our sample in Bracco et al. (2024).^{17,18} Second, we use estimates of model (1) where the outcome variable is the indicator of increase in the time allocated to school-support activities for each of the 12 countries separately.

Panel A of Figure 1 presents the cross-country relationship between the observed shares of mothers and fathers who increased the time assigned to education support activities and the estimated learning losses. In all countries, mothers were more likely to increase their involvement in education support activities compared to fathers; moreover, the association with children's learning losses is positive. Although weak, the positive relationship could indicate that parents increased their involvement when they perceived their children were lagging in terms of expected learning. Panel B shows the relationship between the estimated gender gap in the likelihood of increasing the time assigned to school support and children's learning losses. The gender gap is positive in all countries, i.e., mothers were more likely than fathers to increase their time assignment, and the negative association suggests that a differential involvement of mothers in supporting their children with school-related activities could be a reason behind the smaller learning losses.

Although only speculative, this descriptive analysis points to a trade-off between gender inequalities in the assignment of family responsibilities and gender inequalities in labor outcomes. Active parental involvement is a crucial input in children's education, and although the participation of mothers in these tasks could be more successful in terms of children's education outcomes, a differential involvement can come at the cost of negative impacts on mothers' labor outcomes, as we have shown in section 4.2. A valuable area for future research would be to explore whether gender gaps in the increase in time allocated to educational support activities and in the labor market persist as children catch up in their studies.

7 Concluding Remarks

In this paper, we investigate the adjustments made by mothers and fathers in allocating time to support their children's educational activities during the pandemic in Latin America and the Caribbean—a region that experienced the longest school closures globally. Active parental

¹⁷Countries included in the analysis are Argentina, Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Mexico, Paraguay, Peru, and Uruguay.

¹⁸The authors estimate learning losses by combining information about school closures, availability of offline and online learning, educational background, and labor and health shocks.

involvement is critical for effective learning; however, the degree of involvement during the pandemic varied depending on parents' capacity to assume teaching roles, their employment status, the feasibility of working from home, and existing gender norms.

Different from most of the previous literature, our paper distinguishes between adjustments in time allocated to educational support and other childcare activities. Moreover, our data coverage allows us to evaluate persistent gender gaps beyond the pandemic period and their relation to the heterogeneity in school closing measures adopted by the countries.

Using data from the High-Frequency Phone Surveys across 22 LAC countries, our findings indicate that mothers were 12 percentage points more likely than fathers to increase the time spent on educational support activities relative to the period before the pandemic. This widening gender gap in educational support was notably larger than the gap in other childcare activities, which increased by 6 percentage points. Additionally, our data reveal that mothers were more likely to cease working, reduce their hours, or shift from wage employment to self-employment. These results underscore the disproportionate impact of the pandemic on women, highlighting significant employment losses and an unequal distribution of unpaid care work—including both educational support and general childcare—that more heavily affected mothers' labor market participation compared to fathers'.

Our analysis of heterogeneities reveals that the increase in the gender gap in time allocated to educational support activities was more pronounced in non-traditional households, where women were the primary earners before the pandemic, compared to traditional households. It was also particularly significant under stricter school closure measures and during periods when children were attending online classes. The capacity to work from home, combined with mother's higher education played a crucial role in these dynamics. Although both fathers and mothers who worked from home took on greater child-related responsibilities, mothers exhibited a notably higher likelihood of engaging in educational support activities, with a 7 percentage point increase over fathers. Interestingly, these trends did not revert even as schools began to gradually reopen. This persistence highlights the enduring impact of school closures on the distribution of child-related responsibilities within households and the quality of female employment, suggesting that the shifts induced by the pandemic could have long-lasting effects on gender roles and

labor dynamics.

Finally, we descriptively examine the relationship between the disproportionate increase in time that mothers, compared to fathers, devoted to school support activities and estimates of children's learning losses. Previous research has shown that school closures and the transition to online or hybrid learning models have adversely affected children's educational outcomes, while active parental involvement has been crucial in mitigating these effects. Our findings indicate that in countries where the gender gap in participation in school support activities widened significantly, children's learning losses were comparably smaller. Although speculative, this result suggests that the greater participation of mothers in educational support activities than fathers may help mitigate children's learning losses. However, this gender gap could negatively impact mothers' labor market outcomes. Future research should investigate whether gender disparities in the time allocated to educational support activities and the labor market persist as children catch up on their studies.

Conflict of interest

The authors have no conflict of interest to declare.

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Tables and Figures

Table 1 Gender differences in Childcare Provision, 2021

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or	educ. support	Child	lcare	Educ. Support	
Female $(1 = yes)$	0.0990	0.0899	0.0568	0.0353	0.118	0.116
, ,	[0.0202]***	[0.0232]***	[0.0226]**	[0.0244]	[0.0194]***	[0.0185]***
Female x Wave 2	-0.00782	-0.0111	0.00576	0.0127	0.00430	-0.00629
	[0.0206]	[0.0224]	[0.0222]	[0.0261]	[0.0216]	[0.0248]
Female x Any Children 0-4		0.0318		0.0745		0.00797
		[0.0255]		[0.0335]**		[0.0198]
Wave 2	-0.0541	-0.0451	-0.0446	-0.0487	-0.0673	-0.0559
	[0.0214]**	[0.0248]*	[0.0192]**	[0.0238]*	[0.0197]***	[0.0202]**
Any Children 0-4	0.0581	0.0535	0.0816	0.0406	0.0411	0.0467
	[0.0130]***	[0.0218]**	[0.0114]***	[0.0222]*	[0.0157]**	[0.0175]**
Observations	11,626	11,626	11,626	11,626	10,830	10,830
R-squared	0.062	0.063	0.055	0.056	0.069	0.069
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.659	0.659	0.487	0.487	0.583	0.583
Outcome Mean Male	0.551	0.551	0.413	0.413	0.449	0.449

Note: Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

Table 2 Gender differences in Childcare Provision and Work from Home ability, 2021

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or	educ. support	Chile	dcare	Educ. S	Support
						_
Female $(1 = yes)$	0.0927	0.0914	0.0354	0.0320	0.103	0.102
•	[0.0255]***	[0.0258]***	[0.0299]	[0.0298]	[0.0220]***	[0.0219]***
Female x Wave 2	-0.0757	-0.0774	-0.0388	-0.0412	-0.0616	-0.0630
	[0.0244]***	[0.0245]***	[0.0281]	[0.0280]	[0.0253]**	[0.0255]**
Female x Any Children 0-4	0.0440	0.0433	0.0838	0.0833	0.0103	0.00995
	[0.0291]	[0.0289]	[0.0409]*	[0.0408]*	[0.0261]	[0.0258]
Wave 2	-0.0467	-0.0462	-0.0548	-0.0543	-0.0588	-0.0584
	[0.0257]*	[0.0257]*	[0.0249]**	[0.0249]**	[0.0211]**	[0.0210]**
Any Children 0-4	0.0464	0.0463	0.0259	0.0256	0.0460	0.0458
	[0.0257]*	[0.0257]*	[0.0303]	[0.0302]	[0.0219]**	[0.0219]**
WFH $(1 = at least half of the time)$	0.0738		0.0723		0.0665	
	[0.0233]***		[0.0291]**		[0.0213]***	
Female x WFH	0.0492		0.0399		0.0617	
	[0.0267]*		[0.0280]		[0.0285]**	
WFH share		0.0792		0.0737		0.0673
		[0.0266]***		[0.0331]**		[0.0229]***
Female x WFH share		0.0552		0.0573		0.0691
		[0.0299]*		[0.0326]*		[0.0302]**
Constant	0.398	0.397	0.291	0.291	0.307	0.307
	[0.0314]***	[0.0318]***	[0.0359]***	[0.0361]***	[0.0220]***	[0.0220]***
Observations	7,975	7,975	7,975	7,975	7,441	7,441
R-squared	0.068	0.068	0.058	0.058	0.075	0.074
Countrols	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.642	0.642	0.468	0.468	0.566	0.566
Outcome Mean Male	0.538	0.538	0.399	0.399	0.442	0.442

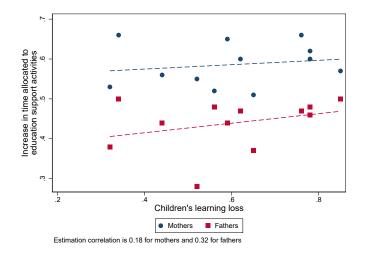
Note: Results for a sample of working mothers and fathers. Education level, household composition, age group and area of residence controls are included. In columns 1, 3 and 5 the work-from-home ability is defined as one when the person worked from home more than half of the weekly working hours; in columns 2, 4 and 6, it is a continuous measure capturing the share of weekly working hours that were performed from home. Standard errors clustered at the country level in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

Table 3 Transitions in the Labor Market, 2021

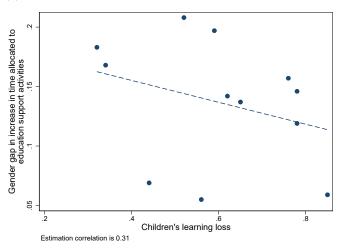
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Active to	Inactive	Reduced ho	Reduced hours of work		r to Self-Employed
Female $(1 = yes)$	0.144	0.132	0.0833	0.0903	0.0898	0.0800
	[0.0104]***	[0.0105]***	[0.0205]***	[0.0241]***	[0.0127]***	[0.0107]***
Female x Wave 2	0.00638	0.000681	-0.0540	-0.0645	-0.0341	-0.0390
	[0.0122]	[0.0128]	[0.0279]*	[0.0323]*	[0.0134]**	[0.0191]*
Female x Any Children 0-4		0.0422		-0.0289		0.0413
		[0.0220]*		[0.0323]		[0.0380]
Wave 2	-0.00779	-0.00553	0.0584	0.0631	0.105	0.116
	[0.00883]	[0.00991]	[0.0188]***	[0.0199]***	[0.0107]***	[0.0110]***
Any Children 0-4	0.0236	0.00363	0.0206	0.0316	0.0128	0.0154
	[0.00562]***	[0.00912]	[0.0139]	[0.0201]	[0.00842]	[0.0108]
Observations	9,425	9,425	5,165	5,165	6,093	6,093
R-squared	0.083	0.085	0.024	0.024	0.054	0.055
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.204	0.204	0.359	0.359	0.177	0.177
Outcome Mean Male	0.063	0.063	0.305	0.305	0.125	0.125

Note: Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis.

* denotes statistical significance at 10%, ** at 5%, *** at 1%.



(a) Increase in mothers and fathers school support time



(b) Estimated gender gap in school support time

Figure 1 Increase in time allocated to school support activities and children's learning losses

A Online Appendix Tables

A.1 Descriptives

Table A.1 Descriptive statistics

		Wave	1		Wave	2
	Women	Men	Gender gap	Women	Men	Gender gap
Age	37.27	39.81	-2.538***	37.42	40.14	-2.72***
Tertiary education	0.30	0.30	0.002	0.30	0.32	-0.02
Number of own children 5-17	1.70	1.72	-0.02	1.67	1.69	-0.018
Has own children 0-4	0.29	0.30	-0.013	0.28	0.28	-0.001
HH members 65+	0.15	0.14	0.007	0.16	0.14	.017*
Urban	0.65	0.67	026*	0.61	0.63	-0.015
Increased care or education support time	0.71	0.59	.119***	0.64	0.54	.109***
Increased care time	0.51	0.44	.074***	0.47	0.39	.084***
Increased education support time	0.61	0.47	.137***	0.56	0.43	.134***
Active	0.69	0.91	221***	0.71	0.95	244***
Employed	0.57	0.85	282***	0.59	0.90	311***
Unemployed	0.12	0.06	.062***	0.11	0.05	.067***
Weekly hours of work	32.41	43.26	-10.855***	32.46	44.33	-11.87***
Works from home	0.32	0.23	.083***	0.39	0.22	.164***
Transitioned from activity to inactivity	0.21	0.08	.131***	0.20	0.05	.148***
Reduced working hours	0.35	0.27	.086***	0.36	0.34	0.02
Transitioned from wage employment to self-employment	0.15	0.07	.074***	0.22	0.17	.044***

Note: Sample of women and men between 25 and 54 years of age who reported being married or living with a partner and having at least one child or daughter of school age.

A.2 Additional Results

A.2.1 Alternative sample definition

Table A.2 Gender differences in childcare provision using a different sample definition , 2021

Daniel and a data	(1)	(2)	(3)	(4)	(5)	(6)	
Dependent variable:	Childcare or educ. support		Child	dcare	Educ. Support		
F 1 . (1	0.0000	0.0022	0.0500	0.0427	0.117	0.117	
Female $(1 = yes)$	0.0998	0.0933	0.0588	0.0427	0.117	0.116	
	[0.0197]***	[0.0213]***	[0.0199]***	[0.0208]*	[0.0216]***	[0.0202]***	
Female x Wave 2	-0.00724	-0.0127	0.00215	0.00465	0.00650	-0.00277	
	[0.0208]	[0.0208]	[0.0222]	[0.0240]	[0.0240]	[0.0254]	
Female x Any Children 0-4		0.0235		0.0581		0.00446	
•		[0.0225]		[0.0287]*		[0.0204]	
Wave 2	-0.0507	-0.0406	-0.0374	-0.0365	-0.0612	-0.0531	
	[0.0202]**	[0.0229]*	[0.0178]**	[0.0208]*	[0.0204]***	[0.0214]**	
Any Children 0-4	0.0653	0.0655	0.0912	0.0646	0.0464	0.0495	
•	[0.0119]***	[0.0178]***	[0.0112]***	[0.0182]***	[0.0140]***	[0.0158]***	
Observations	13,244	13,244	13,244	13,244	12,300	12,300	
R-squared	0.062	0.062	0.054	0.054	0.070	0.070	
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	
Outcome Mean Female	0.651	0.651	0.482	0.482	0.572	0.572	
Outcome Mean Male	0.543	0.543	0.411	0.411	0.438	0.438	

Note: Sample of respondents who reported being married or living with a partner and having at least one school-age children, regardless of the children's relationship with the household head, i.e., they can be sons/daughters or stepsons/stepdaughters. Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis.

^{*} denotes statistical significance at 10%, ** at 5%, *** at 1%.

Table A.3 Transitions in the Labor Market using a different sample definition, 2021

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Active to	Inactive	Reduced ho	Reduced hours of work		orker to Self-Employed
Female $(1 = yes)$	0.141	0.128	0.0805	0.0888	0.0972	0.0893
•	[0.00975]***	[0.0108]***	[0.0198]***	[0.0239]***	[0.0125]***	[0.0121]***
Female x Wave 2	0.00502	-0.00104	-0.0474	-0.0628	-0.0365	-0.0428
	[0.0117]	[0.0123]	[0.0260]*	[0.0309]*	[0.0134]**	[0.0197]**
Female x Any Children 0-4		0.0469		-0.0349		0.0341
		[0.0205]**		[0.0331]		[0.0346]
Wave 2	-0.00754	-0.00438	0.0546	0.0616	0.103	0.114
	[0.00855]	[0.00961]	[0.0185]***	[0.0207]***	[0.00995]***	[0.0113]***
Any Children 0-4	0.0187	-0.00138	0.0227	0.0367	0.0106	0.0145
	[0.00478]***	[0.00717]	[0.0127]*	[0.0166]**	[0.00736]	[0.00995]
Observations	10,715	10,715	5,763	5,763	6,853	6,853
R-squared	0.080	0.081	0.024	0.024	0.051	0.053
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.206	0.206	0.361	0.361	0.184	0.184
Outcome Mean Male	0.069	0.069	0.305	0.305	0.125	0.125

Note: Sample of respondents who reported being married or living with a partner and have at least one school-age children, regardless of the children's relationship with the household head, i.e., they can be sons/daughters or stepsons/stepdaughters. Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis.

^{*} denotes statistical significance at 10%, ** at 5%, *** at 1%.

A.2.2 Results by Gender Inequality Index (GII)

Table A.4 Heterogeneity in Childcare Provision by Low/High GII

Panel A: Low GII (3) (5) (1) (2) (4) (6) Childcare Educ. Support Dependent variable: Childcare or educ. support Female (1 = yes)0.122 0.107 0.0920 0.0715 0.134 0.146 [0.0265]*** [0.0307]*** [0.0355]** [0.0231]*** [0.0230]*** [0.0356]* Female x Wave 2 -0.0190 -0.0176 -0.00464 0.00656-0.0124 -0.0161 [0.0379] [0.0367][0.0321][0.0432][0.0352][0.0395]Female x Any Children 0-4 0.0573 0.04840.0830[0.0485][0.0590][0.0471]Wave 2 -0.0524-0.0414-0.0505 -0.0523 -0.0737 -0.0593 [0.0391] [0.0396][0.0322][0.0347][0.0360]* [0.0328]Any Children 0-4 0.0638 0.0569 0.07760.04030.05210.0516[0.0189]*** [0.0348][0.0163]*** [0.0340][0.0256]* [0.0329] Observations 4,911 4,911 4,911 4,911 4,548 4,548 R-squared 0.065 0.066 0.0580.059 0.070 0.071Country FE Yes Yes Yes Yes Yes Yes Outcome Mean Female 0.677 0.677 0.508 0.508 0.603 0.603 Outcome Mean Male 0.554 0.554 0.406 0.406 0.454 0.454

Table A.4 – Continued

Panel B: High GII

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or educ. support		Child	Childcare		. Support
Female $(1 = yes)$	0.0872	0.0798	0.0380	0.0129	0.0973	0.102
•	[0.0279]**	[0.0331]**	[0.0255]	[0.0290]	[0.0266]***	[0.0263]***
Female x Wave 2	-0.00427	-0.00669	0.00788	0.0157	0.0177	0.00505
	[0.0227]	[0.0264]	[0.0309]	[0.0317]	[0.0258]	[0.0320]
Female x Any Children 0-4		0.0235		0.0781		-0.0139
		[0.0328]		[0.0442]		[0.0188]
Wave 2	-0.0517	-0.0453	-0.0341	-0.0402	-0.0613	-0.0534
	[0.0248]*	[0.0334]	[0.0254]	[0.0347]	[0.0230]**	[0.0264]*
Any Children 0-4	0.0509	0.0461	0.0809	0.0366	0.0284	0.0371
	[0.0180]**	[0.0287]	[0.0165]***	[0.0310]	[0.0193]	[0.0212]
Observations	6,482	6,482	6,482	6,482	6,069	6,069
R-squared	0.058	0.058	0.050	0.051	0.066	0.066
Controls FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.640	0.640	0.464	0.464	0.562	0.562
Outcome Mean Male	0.543	0.543	0.410	0.410	0.441	0.441

Notes: Countries defined as low (high) GII if their values of 2019 are below (above) Latin America's median value. The GII is not available for Dominica.

Education level, household composition, age group and area of residence controls are included.

Standard errors clustered at the country level in parenthesis.

Table A.5 Heterogeneity in Labor Outcomes by Low/High GII

Panel A: Low GII (1) (3) (4) (2) (5)(6) Active to Inactive Reduced hours of work Wage Worker to Self-Employed Dependent variable: Female (1 = yes)0.139 0.128 0.0542 0.0670 0.0875 0.0709 [0.0144]*** [0.0108]*** [0.0297] [0.0376] [0.0150]*** [0.00872]*** Female x Wave 2 0.0161 0.00909 -0.00592-0.0189 -0.0142 -0.0138 [0.0141][0.0142][0.0325][0.0500][0.00752]* [0.0137]Female x Any Children 0-4 0.0446-0.0603 0.0749 [0.0382][0.0433][0.0524]Wave 2 -0.0103 0.0226 0.0910 -0.0114 0.0201 0.103 [0.00908]*** [0.00832]*** [0.0139][0.0177][0.0180][0.0232]Any Children 0-4 0.0122 -0.0186 0.0197 0.0243 -0.000641 -0.00148 [0.00804][0.0169][0.0226][0.0402][0.0105][0.0206]Observations 4,053 4,053 2,328 2,328 2,699 2,699 R-squared 0.071 0.073 0.021 0.021 0.065 0.068 Country FE Yes Yes Yes Yes Yes Yes Outcome Mean Female 0.190 0.190 0.348 0.348 0.168 0.168 Outcome Mean Male 0.047 0.047 0.304 0.304 0.109 0.109

^{*} denotes statistical significance at 10%, ** at 5%, *** at 1%.

Table A.5 - Continued

Panel B: High GII

	(4)	(2)	(2)	(4)	(=)	(6)
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Active to	Inactive	Reduced ho	Reduced hours of work		to Self-Employed
Female $(1 = yes)$	0.150	0.140	0.114	0.124	0.0954	0.0951
	[0.0155]***	[0.0177]***	[0.0273]***	[0.0309]***	[0.0203]***	[0.0168]***
Female x Wave 2	-0.00228	-0.00900	-0.0950	-0.104	-0.0471	-0.0569
	[0.0198]	[0.0216]	[0.0435]*	[0.0454]**	[0.0242]*	[0.0340]
Female x Any Children 0-4		0.0351		-0.0326		0.00291
,		[0.0303]		[0.0434]		[0.0527]
Wave 2	-0.00436	-0.00101	0.0889	0.102	0.117	0.125
	[0.0114]	[0.0121]	[0.0292]**	[0.0301]***	[0.0168]***	[0.0194]***
Any Children 0-4	0.0276	0.0125	0.0151	0.0412	0.0190	0.0252
·	[0.00614]***	[0.0104]	[0.0165]	[0.0224]*	[0.0116]	[0.0113]*
Observations	5,160	5,160	2,699	2,699	3,248	3,248
R-squared	0.091	0.092	0.030	0.031	0.047	0.047
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.217	0.217	0.377	0.377	0.193	0.193
Outcome Mean Male	0.075	0.075	0.304	0.304	0.136	0.136

Notes: Countries defined as low (high) GII if their values of 2019 are below (above) Latin America's median value. The GII is not available for Dominica.

Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis.

* denotes statistical significance at 10%, ** at 5%, *** at 1%.

A.3 Heterogeneous Results

A.3.1 Traditional/Non-Traditional Type of Household

Table A.6 Heterogeneity in Childcare Provision by Traditional/Non-Traditional Type of Household

Panel A: Traditional Households

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or	educ. support	Child	lcare	Educ. Support	
Female $(1 = yes)$	0.0638	0.0583	0.0257	0.00826	0.0703	0.0717
•	[0.0207]***	[0.0260]**	[0.0208]	[0.0253]	[0.0169]***	[0.0240]***
Female x Wave 2	-0.00157	-0.0398	0.0260	0.0104	0.0270	-0.00360
	[0.0303]	[0.0358]	[0.0401]	[0.0479]	[0.0295]	[0.0408]
Female x Any Children 0-4		0.0199		0.0689		-0.00711
		[0.0466]		[0.0456]		[0.0473]
Wave 2	-0.0648	-0.0277	-0.0704	-0.0712	-0.110	-0.0756
	[0.0219]***	[0.0285]	[0.0328]**	[0.0337]**	[0.0238]***	[0.0319]**
Any Children 0-4	0.0737	0.0799	0.0900	0.0311	0.0790	0.106
	[0.0197]***	[0.0474]	[0.0186]***	[0.0429]	[0.0241]***	[0.0498]**
Observations	3,190	3,190	3,190	3,190	2,976	2,976
R-squared	0.064	0.066	0.053	0.055	0.068	0.070
Countrols	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.693	0.693	0.512	0.512	0.611	0.611
Outcome Mean Male	0.622	0.622	0.467	0.467	0.520	0.520

Table A.6 – Continued

Panel B: Non-Traditional Households

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or	educ. support	Child	lcare	Educ. Support	
Female $(1 = yes)$	0.0733	0.0751	0.0179	0.00783	0.111	0.0976
•	[0.0350]**	[0.0377]*	[0.0375]	[0.0332]	[0.0296]***	[0.0388]**
Female x Wave 2	0.00287	-0.00739	0.0347	0.0341	0.00520	-6.10e-05
	[0.0434]	[0.0476]	[0.0451]	[0.0484]	[0.0370]	[0.0446]
Female x Any Children 0-4		-0.00682		0.0375		0.0524
		[0.0697]		[0.0754]		[0.0690]
Wave 2	-0.0557	-0.0476	-0.0629	-0.0444	-0.0716	-0.0788
	[0.0288]*	[0.0327]	[0.0284]**	[0.0261]	[0.0285]**	[0.0282]**
Any Children 0-4	0.0750	0.0840	0.127	0.154	0.0437	-0.0175
	[0.0222]***	[0.0501]	[0.0247]***	[0.0605]**	[0.0284]	[0.0485]
Observations	3,312	3,312	3,312	3,312	3,098	3,098
R-squared	0.069	0.069	0.075	0.076	0.069	0.070
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.649	0.649	0.481	0.481	0.588	0.588
Outcome Mean Male	0.564	0.564	0.429	0.429	0.459	0.459
P-val difference to Panel A		0.689		0.991		0.562

Note: Households are traditional (non-traditional) if the male partner of a couple earned more (less) than the female partner. Education level, household composition, age group and area of residence controls are included in the set of control variables. Standard errors clustered at the country level in parenthesis. * denotes statistical significance at 10%, *** at 5%, *** at 1%.

Table A.7 Heterogeneity in Labor Outcomes by Type of Household

Panel A: Traditional Households

		T $unet \Lambda$. T uu	111011111 110115611	เบเนร		
Dan and dant are sightles	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Active to	Inactive	Reduced no	ours of work	wage worker	to Self-Employed
Female $(1 = yes)$	0.184	0.161	0.121	0.120	0.111	0.0994
-	[0.0151]***	[0.0174]***	[0.0291]***	[0.0371]***	[0.0197]***	[0.0173]***
Female x Wave 2	-0.0236	-0.0178	-0.0638	-0.0542	0.0491	0.0367
	[0.0226]	[0.0272]	[0.0498]	[0.0601]	[0.0255]*	[0.0338]
Female x Any Children 0-4		0.0886		-6.10e-05		0.0471
·		[0.0398]**		[0.0702]		[0.0599]
Wave 2	-0.00243	-0.00911	0.0670	0.0512	0.0800	0.0974
	[0.0122]	[0.0144]	[0.0280]**	[0.0432]	[0.0167]***	[0.0170]***
Any Children 0-4	0.0413	-0.0193	0.0115	-0.00596	0.0599	0.0539
·	[0.0155]**	[0.0203]	[0.0301]	[0.0478]	[0.0242]**	[0.0217]**
	2 100	2.100	1.00	1.00	1.000	1.000
Observations	3,190	3,190	1,606	1,606	1,909	1,909
R-squared	0.090	0.092	0.046	0.046	0.089	0.091
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.218	0.218	0.393	0.393	0.226	0.226
Outcome Mean Male	0.041	0.041	0.290	0.290	0.112	0.112

Table A.7 – Continued

Panel B: Non-Traditional Households

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Active to	Inactive	Reduced ho	ours of work	Wage Worke	r to Self-Employed
Female $(1 = yes)$	0.0666	0.0647	0.0705	0.0698	0.0656	0.0661
•	[0.0218]***	[0.0237]**	[0.0357]*	[0.0479]	[0.0178]***	[0.0210]***
Female x Wave 2	0.0743	0.0609	-0.0436	-0.0507	-0.0597	-0.0587
	[0.0272]**	[0.0236]**	[0.0452]	[0.0629]	[0.0205]***	[0.0245]**
Female x Any Children 0-4		0.00834		0.00203		-0.00218
		[0.0337]		[0.0776]		[0.0311]
Wave 2	-0.0214	-0.0216	0.0972	0.106	0.137	0.134
	[0.0156]	[0.0160]	[0.0251]***	[0.0316]***	[0.0189]***	[0.0197]***
Any Children 0-4	0.0210	-0.00379	0.0225	0.0355	-0.00835	-0.0147
	[0.0145]	[0.0283]	[0.0222]	[0.0545]	[0.0177]	[0.0238]
Observations	2,960	2,960	1,727	1,727	2,034	2,034
R-squared	0.076	0.077	0.033	0.033	0.067	0.067
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.164	0.164	0.336	0.336	0.140	0.140
Outcome Mean Male	0.050	0.050	0.302	0.302	0.135	0.135
P-val difference to Panel A		0.001		0.001		0.194

Notes: Households defined as traditional (non-traditional) if the male member of a couple earned. more (less) than the female member.

Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis.

^{*} denotes statistical significance at 10%, ** at 5%, *** at 1%.

A.3.2 Low/High Severity of School Closures

Table A.8 Heterogeneity in Childcare Provision by Low/High Severity of School Closures

Panel A: Low Severity of School Closures

		71. Low Scotting	, , , , , , , , , , , , , , , , , , ,		(5)	(()
B 1	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or	educ. support	Child	care	Educ.	Support
Female $(1 = yes)$	0.0773	0.0661	0.0450	0.0246	0.0868	0.0839
	[0.0351]**	[0.0399]	[0.0294]	[0.0382]	[0.0319]**	[0.0304]**
Female x Wave 2	-0.0240	-0.0356	-0.0312	-0.0400	0.00727	-0.00533
	[0.0335]	[0.0389]	[0.0290]	[0.0384]	[0.0334]	[0.0340]
Female x Any Children 0-4		0.0365		0.0666		0.00978
-		[0.0283]		[0.0439]		[0.0210]
Wave 2	-0.0716	-0.0671	-0.0559	-0.0572	-0.0698	-0.0656
	[0.0284]**	[0.0379]	[0.0258]*	[0.0316]*	[0.0343]*	[0.0401]
Any Children 0-4	0.0606	0.0388	0.0834	0.0393	0.0446	0.0355
	[0.0195]**	[0.0257]	[0.0157]***	[0.0261]	[0.0231]*	[0.0243]
Observations	4,591	4,591	4,591	4,591	4,293	4,293
R-squared	0.082	0.082	0.076	0.077	0.088	0.088
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.659	0.659	0.489	0.489	0.573	0.573
Outcome Mean Male	0.570	0.570	0.433	0.433	0.455	0.455

Table A.8 – Continued

Panel B: High Severity of School Closures

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or educ. support			Childcare		Support
Female $(1 = yes)$	0.124	0.113	0.0760	0.0522	0.148	0.145
	[0.0185]***	[0.0230]***	[0.0315]**	[0.0298]	[0.0167]***	[0.0153]***
Female x Wave 2	-0.0172	-0.0139	0.00947	0.0268	-0.0142	-0.0230
	[0.0265]	[0.0289]	[0.0343]	[0.0358]	[0.0256]	[0.0323]
Female x Any Children 0-4		0.0390		0.0869		0.0135
		[0.0425]		[0.0545]		[0.0349]
Wave 2	-0.0534	-0.0409	-0.0386	-0.0449	-0.0688	-0.0524
	[0.0355]	[0.0328]	[0.0246]	[0.0258]	[0.0325]*	[0.0271]*
Any Children 0-4	0.0612	0.0695	0.0877	0.0480	0.0411	0.0574
	[0.0203]**	[0.0332]*	[0.0159]***	[0.0364]	[0.0252]	[0.0261]**
Observations	6,776	6,776	6,776	6,776	6,294	6,294
R-squared	0.051	0.052	0.044	0.045	0.056	0.057
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.654	0.654	0.482	0.482	0.585	0.585
Outcome Mean Male	0.534	0.534	0.394	0.394	0.441	0.441
P-val difference to Panel A		0.212		0.535		0.108

Notes: Countries defined as with low (high) stringency of school closures depending of they are below (above) cross-country median value. Stringency measured from the start of the pandemic and up to the end of the wave. Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis.

Table A.9 Heterogeneity in Labor Outcomes by Low/High Severity of School Closures

Panel A: Low Severity of School Closures (1) (2) (3)(4)(5)(6)Wage Worker to Self-Employed Dependent variable: Active to Inactive Reduced hours of work 0.0661 Female (1 = yes)0.138 0.0809 0.0765 0.0677 0.113 [0.0140]*** [0.0161]*** [0.0260]** [0.0352]** [0.0158]*** [0.0131]*** Female x Wave 2 0.00763 0.00920-0.0182 -0.0458 -0.0129 -0.00708 [0.0152][0.0500][0.0564][0.0229][0.0264][0.0233]Female x Any Children 0-4 0.0857 -0.05720.0323 [0.0275]*** [0.0492][0.0356]Wave 2 0.00205 0.00651 0.0708 0.0841 0.0805 0.0873 [0.0137][0.0143][0.0429][0.0480][0.0163]*** [0.0188]*** Any Children 0-4 0.0195 -0.00953 0.0352 0.0589 0.0146 0.0113 [0.00832]** [0.0186]* [0.0167]*** [0.0129][0.0103][0.0134]Observations 4,362 4,362 2,251 2,251 2,694 2,694 0.092 0.095 0.032 0.032 0.052 0.053 R-squared Country FE Yes Yes Yes Yes Yes Yes Outcome Mean Female 0.221 0.174 0.221 0.337 0.337 0.174 Outcome Mean Male 0.093 0.093 0.282 0.282 0.124 0.124

^{*} denotes statistical significance at 10%, ** at 5%, *** at 1%.

Table A.9 – Continued

Panel B: High Severity of School Closures

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Active to	Inactive	Reduced ho	ours of work	Wage Worke	r to Self-Employed
Female $(1 = yes)$	0.149	0.146	0.106	0.108	0.113	0.0983
	[0.0136]***	[0.0111]***	[0.0255]***	[0.0308]***	[0.0171]***	[0.0171]***
Female x Wave 2	0.00253	-0.00744	-0.0857	-0.0899	-0.0588	-0.0644
	[0.0179]	[0.0134]	[0.0391]**	[0.0455]*	[0.0187]***	[0.0299]*
Female x Any Children 0-4		0.00980		-0.00818		0.0676
		[0.0308]		[0.0459]		[0.0639]
Wave 2	-0.0163	-0.0162	0.0484	0.0482	0.107	0.117
	[0.0145]	[0.0170]	[0.0265]*	[0.0273]	[0.0158]***	[0.0173]***
Any Children 0-4	0.0168	0.00300	0.00279	0.00141	0.0124	0.00686
	[0.00774]*	[0.0129]	[0.0171]	[0.0280]	[0.00930]	[0.0157]
Observations	5,501	5,501	3,032	3,032	3,593	3,593
R-squared	0.074	0.075	0.020	0.020	0.056	0.058
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.199	0.199	0.380	0.380	0.191	0.191
Outcome Mean Male	0.048	0.048	0.316	0.316	0.126	0.126
P-val difference to Panel A		0.167		0.176		0.033

Notes: Countries defined as with low (high) stringency of school closures depending of they are below (above) cross-country median value. Stringency measured from the start of the pandemic and up to the end of the wave. Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis.

^{*} denotes statistical significance at 10%, ** at 5%, *** at 1%.

A.3.3 Class Modality

Table A.10 Heterogeneity in Childcare Provision by Class Modality

Panel A: Virtual Classes

		ici 21. Viritiii Ciii				
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or	ldcare or educ. support		lcare	Educ. Support	
Female $(1 = yes)$	0.114	0.105	0.0808	0.0542	0.132	0.123
•	[0.0185]***	[0.0245]***	[0.0246]***	[0.0286]*	[0.0181]***	[0.0183]***
Female x Wave 2	0.0182	0.0168	0.0169	0.0238	0.0321	0.0501
	[0.0200]	[0.0250]	[0.0337]	[0.0444]	[0.0228]	[0.0235]**
Female x Any Children 0-4		0.0338		0.0976		0.0292
		[0.0430]		[0.0530]*		[0.0295]
Wave 2	-0.0447	-0.0386	-0.0126	-0.0180	-0.0440	-0.0458
	[0.0206]**	[0.0232]	[0.0249]	[0.0303]	[0.0181]**	[0.0187]**
Any Children 0-4	0.0758	0.0648	0.0874	0.0292	0.0675	0.0631
	[0.0191]***	[0.0384]	[0.0163]***	[0.0423]	[0.0197]***	[0.0275]**
Observations	4,845	4,845	4,845	4,845	4,845	4,845
R-squared	0.063	0.063	0.056	0.058	0.068	0.068
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.725	0.725	0.531	0.531	0.651	0.651
Outcome Mean Male	0.586	0.586	0.424	0.424	0.490	0.490

Table A.10 – Continued

Panel B: In-Person Classes

	(1) (2)		(3)	(4)	(5)	(6)
Dependent variable:	Childcare or educ. support		Chile	dcare	Educ. Support	
Female $(1 = yes)$	0.0727	0.0855	-0.00621	-0.0311	0.0708	0.0978
•	[0.0310]**	[0.0287]***	[0.0259]	[0.0232]	[0.0218]***	[0.0204]***
Female x Wave 2	-0.00582	-0.0208	0.0306	0.0597	0.00843	-0.0431
	[0.0277]	[0.0342]	[0.0351]	[0.0368]	[0.0232]	[0.0311]
Female x Any Children 0-4		-0.0386		0.0788		-0.0818
		[0.0436]		[0.0457]*		[0.0473]*
Wave 2	-0.0647	-0.0739	-0.0558	-0.0832	-0.0553	-0.0448
	[0.0371]*	[0.0358]*	[0.0280]*	[0.0257]***	[0.0404]	[0.0360]
Any Children 0-4	0.0713	0.0600	0.121	0.0580	0.0138	0.0255
	[0.0394]*	[0.0345]*	[0.0325]***	[0.0245]**	[0.0427]	[0.0313]
Observations	1,870	1,870	1,870	1,870	1,870	1,870
R-squared	0.071	0.072	0.078	0.079	0.074	0.076
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.589	0.589	0.420	0.420	0.465	0.465
Outcome Mean Male	0.523	0.523	0.406	0.406	0.380	0.380

Table A.10 – Continued

Panel C: Hybrid Classes

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Childcare or educ. support		Chile	dcare	Educ. Support	
Female $(1 = yes)$	0.0850	0.0753	0.0387	0.0387	0.118	0.112
	[0.0317]**	[0.0323]**	[0.0291]	[0.0361]	[0.0335]***	[0.0345]***
Female x Wave 2	-0.0185	-0.0364	0.0154	-0.00923	-0.0141	-0.0342
	[0.0424]	[0.0468]	[0.0298]	[0.0344]	[0.0437]	[0.0477]
Female x Any Children 0-4		0.0435		-0.000908		0.0328
		[0.0659]		[0.0761]		[0.0578]
Wave 2	-0.0453	-0.0237	-0.0657	-0.0561	-0.0490	-0.0186
	[0.0431]	[0.0537]	[0.0362]*	[0.0485]	[0.0440]	[0.0495]
Any Children 0-4	0.0117	0.0161	0.0574	0.0483	0.0125	0.0395
	[0.0196]	[0.0525]	[0.0210]**	[0.0583]	[0.0221]	[0.0468]
Observations	3,023	3,023	3,023	3,023	3,023	3,023
R-squared	0.066	0.067	0.053	0.054	0.073	0.075
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.663	0.663	0.473	0.473	0.577	0.577
Outcome Mean Male	0.576	0.576	0.413	0.413	0.455	0.455
P-val difference Panel A vs. Panel B		0.602		0.018		0.360
P-val difference Panel A vs. Panel C		0.365		0.702		0.751
P-val difference Panel B vs. Panel C		0.776		0.065		0.639

Note: Education level, household composition, age group and area of residence controls are included.

Table A.11 Heterogeneity in Labor Outcomes By Class Modality

Panel A. Virtual Classes

	Panel A: Virtual Classes							
	(1)	(2)	(3)	(4)	(5)	(6)		
Dependent variable:	Active to	Inactive	Reduced ho	ours of work	Wage Worke	r to Self-Employed		
Female $(1 = yes)$	0.149	0.138	0.109	0.119	0.0938	0.0861		
	[0.0125]***	[0.0147]***	[0.0251]***	[0.0314]***	[0.0124]***	[0.0158]***		
Female x Wave 2	0.00402	-0.000994	-0.139	-0.147	-0.0386	-0.0585		
	[0.0176]	[0.0173]	[0.0383]***	[0.0450]***	[0.0312]	[0.0451]		
Female x Any Children 0-4		0.0412		-0.0471		0.0337		
·		[0.0328]		[0.0433]		[0.0471]		
Wave 2	-0.00270	-0.00257	0.119	0.112	0.131	0.147		
	[0.0100]	[0.0131]	[0.0274]***	[0.0330]***	[0.0199]***	[0.0223]***		
Any Children 0-4	0.0191	-0.00481	-0.0226	-0.0221	0.0120	0.0122		
,	[0.00810]**	[0.0121]	[0.0298]	[0.0306]	[0.0117]	[0.0156]		
Observations	4,020	4,020	2,213	2,213	2,648	2,648		
R-squared	0.070	0.071	0.034	0.034	0.060	0.062		
Country FE	Yes	Yes	Yes	Yes	Yes	Yes		
Outcome Mean Female	0.197	0.197	0.381	0.381	0.184	0.184		
Outcome Mean Male	0.050	0.050	0.324	0.324	0.127	0.127		

Standard errors clustered at the country level in parenthesis.

^{*} denotes statistical significance at 10%, ** at 5%, *** at 1%.

Table A.11 – Continued

Panel B: In-Person Classes

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Active to	Active to Inactive		ours of work	Wage Worke	er to Self-Employed
Female $(1 = yes)$	0.119	0.117	-0.00979	0.0240	0.0439	0.0352
•	[0.0271]***	[0.0246]***	[0.0273]	[0.0358]	[0.0396]	[0.0351]
Female x Wave 2	0.0194	0.00551	0.0708	0.0485	0.00354	-0.00649
	[0.0333]	[0.0415]	[0.0393]*	[0.0523]	[0.0478]	[0.0457]
Female x Any Children 0-4		0.00557		-0.133		0.0356
		[0.0900]		[0.0955]		[0.0914]
Wave 2	-0.0161	-0.0138	0.0713	0.0975	0.0987	0.129
	[0.0299]	[0.0274]	[0.0344]*	[0.0417]**	[0.0288]***	[0.0306]***
Any Children 0-4	0.0187	0.00733	0.0733	0.160	0.0475	0.0929
	[0.0128]	[0.0290]	[0.0331]**	[0.0356]***	[0.0275]*	[0.0213]***
Observations	1,465	1,465	796	796	913	913
R-squared	0.120	0.121	0.075	0.078	0.070	0.075
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.209	0.209	0.275	0.275	0.144	0.144
Outcome Mean Male	0.098	0.098	0.259	0.259	0.120	0.120

Table A.11 – Continued

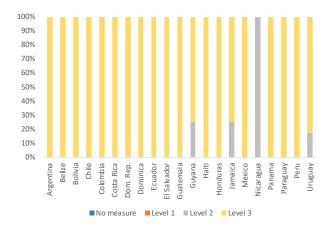
Panel C: Hybrid Classes

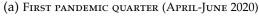
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Active to Inactive		Reduced ho	educed hours of work		er to Self-Employed
Female $(1 = yes)$	0.0967	0.108	0.0956	0.0624	0.0940	0.0867
	[0.0176]***	[0.0180]***	[0.0466]*	[0.0464]	[0.0306]***	[0.0257]***
Female x Wave 2	0.0406	0.00449	-0.0545	-0.0454	-0.0127	-0.00366
	[0.0167]**	[0.0186]	[0.0566]	[0.0495]	[0.0349]	[0.0419]
Female x Any Children 0-4		-0.0586		0.139		0.0345
		[0.0485]		[0.0654]**		[0.0772]
Wave 2	-0.0144	-0.00878	0.0768	0.0744	0.0626	0.0651
	[0.0140]	[0.0189]	[0.0241]***	[0.0205]***	[0.0172]***	[0.0174]***
Any Children 0-4	0.00292	-0.00321	0.0481	0.00605	0.00278	0.00537
	[0.0160]	[0.0280]	[0.0210]**	[0.0403]	[0.0186]	[0.0321]
Observations	2,449	2,449	1,405	1,405	1,622	1,622
R-squared	0.087	0.090	0.034	0.036	0.071	0.071
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean Female	0.188	0.188	0.358	0.358	0.192	0.192
Outcome Mean Male	0.063	0.063	0.291	0.291	0.116	0.116
P-val difference Panel A vs. Panel B		0.675		0.453		0.226
P-val difference Panel A vs. Panel C		0.222		0.086		0.980
P-val difference Panel B vs. Panel C		0.810		0.754		0.261

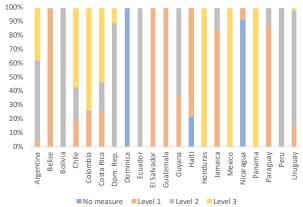
Note: Education level, household composition, age group and area of residence controls are included. Standard errors clustered at the country level in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

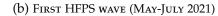
A Online Appendix Figures

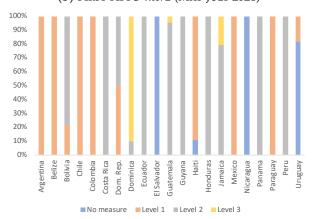
A.1 Descriptives











(c) Second HFPS wave (October-December 2021)

Figure A.1 Severity of school-closing measures by country and time