

The Impact of COVID-19 on the Lives of Garment Workers in Central Bangladesh¹

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Abstract

This paper assesses the impact of the global coronavirus pandemic (COVID-19) on garment workers in factories in Gazipur and North Dhaka, Bangladesh, using a sample of 1,587 individuals working in the sector at the start of the pandemic and another 381 individuals who previously worked in the sector. Using telephone surveys, we assess key outcomes in employment, health, income, and consumption. The survey will be repeated annually for a period of at least one year to trace the longer-term impacts of the pandemic on workers from the sector.

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1 Executive Summary and Key Results

The readymade garment sector accounts for more than 80 percent of Bangladesh's exports and more than one-eighth of GDP. The COVID-19 pandemic caused a short, sharp reduction in output, as factories largely ceased production from the last week of March until 24 April 2020. We conducted surveys with more than 2,000 garment sector workers, and report here on the sample of 1,587 workers who were employed in the sector at the start of the disruptions arising from COVID-19. Among the main finds from the survey:

- Three percent of respondents reported losing their jobs at the garment factories between March and June.
- Among those continuing to work in the sector, income fell by half in April, but then recovered to around 90 percent of pre-COVID levels by May.
- The households of workers largely smoothed the April income shock, with food expenditures falling by 8 percent and savings and transfers falling by much larger amounts. Food expenditures and transfers fully recovered in May, with the remaining wage reduction absorbed by a reduction in savings.
- Knowledge of COVID-19 and measures to prevent infections were widespread. 99 percent of respondents were able to correctly identify at least one symptom, and 95 percent reported behavior modifications to reduce the spread. In addition, about 90 percent of workers indicated that their factories had introduced precautionary measures against COVID-19.
- We find surprisingly modest levels of reported anxiety, at least in the May survey.
- We find indications of a shift in intra-household bargaining for a subsample of women for whom we can match the newly collected data to data from previous projects. These women report more autonomy in work-related aspects, and more joint decision-making for decisions about larger household expenditures and women's mobility compared to the situation pre-COVID.

We completed a third round of the survey in September 2020 and this report will be updated to include data from that survey in the near future. We expect to carry out further rounds in coming months.

2 Introduction

The readymade garment sector is the largest source of formal employment in Bangladesh. Employing 4 million workers, the sector also accounts for more than 80 percent of Bangladesh's exports and around 12 percent of the country's GDP. COVID-19 had a sharp and severe impact on the sector, first through input supply chain disruptions, then through the cancelation of more than [\\$3 billion \(USD\)](#) in orders, and finally through factory closures aimed at reducing the local spread of the disease. The order cancelations and factory closures in April resulted in a [72 percent fall in exports](#) in April and May 2020, relative to year-earlier levels. Some buyers refused to take delivery even on orders that were in process, and others demanded substantial price discounts on the orders.² These actions left both factories and workers vulnerable. Against the threat of large-scale layoffs, the government of Bangladesh established a loan-based salary payment scheme to pay the basic wages of RMG sector workers affected by lost work for up to three months. In late March, the spread of COVID-19 accelerated in Bangladesh and the government ordered an extended national holiday, forcing factories to close.

Against this turbulent background, a salient question is how the shocks to production affected the income, expenditures and transfers of the sector's workers. We provide data on this with repeated surveys of almost 2,000 workers in the readymade garment sector. The surveys provide information on income, expenditures, transfers to family, and health. In this paper we report on the first two surveys, conducted by telephone in May and July 2020. The surveys measure the effect of COVID-19 on garment sector workers over time. The sample was drawn from workers in factories that participated in recent projects conducted by the Readymade Garment Productivity Project. These factories are somewhat larger than average and are all first-tier suppliers of well-known European and American brands. Within these factories, most of our sample are either sewing machine operators or production line supervisors. We intend to survey this sample quarterly and will update this document as the data from the additional surveys become available.

The garment sector is a particularly important source of employment for women, who account for more than two-thirds of sewing section workers and over half of employment in the sector more broadly (Bangladesh Labour Force Survey, 2017; Menzel and Woodruff, 2019).

² The Worker Rights Consortium compiled a list of buyers who honoured previous commitments, and those who did not. See <https://www.workersrights.org/issues/covid-19/tracker/>.

Moreover, although garment production is concentrated in the regions in and around Dhaka and Chittagong, the sector's workers come from throughout the country. Around three-quarters of production workers employed in factories in the greater Dhaka are migrants from other parts of the country. Many of these workers send regular remittances to family members remaining in their places of origin (Lee et al. 2019). Through remittances sent to family in their origin locations, a healthy garment sector plays an outsized role in supporting population throughout Bangladesh. Thus, the impact on the sector's workers has an effect that extends well beyond the households of workers in Bangladesh.

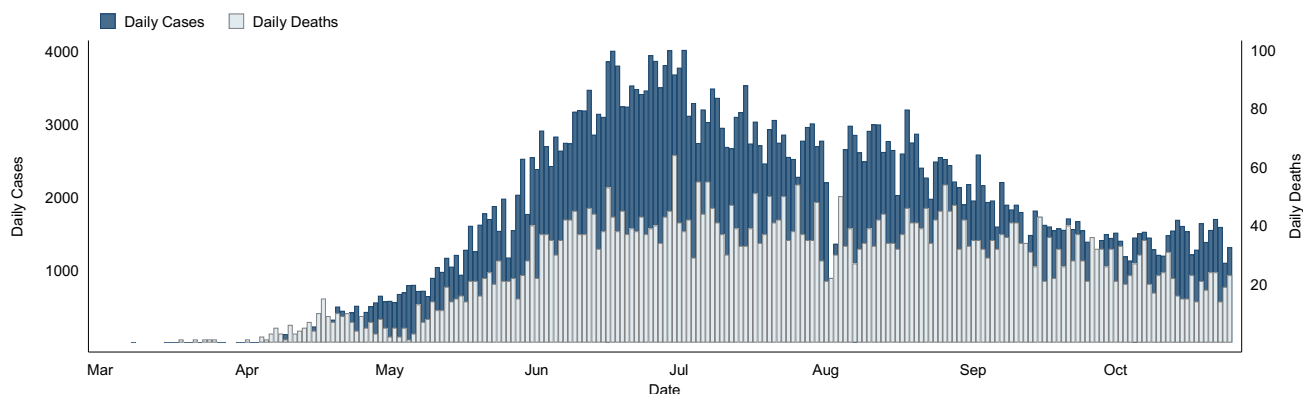
Our survey complements related work in Bangladesh and in other locations. Meyer et al. (2020) report on phone surveys of garment sector workers in Ethiopia. Layoffs and quits were much more common in their setting, and they document a high rate of return to home villages by women separated from garment sector employment. We find much less separation from employment in the months following the initial COVID-19 shock.

3 Background

The first cases of “pneumonia of unknown origin,” latter dubbed as coronavirus disease or COVID-19, came to be known in December 2019 and January 2020. Initially it was clustered in Wuhan, Hubei province, China. Before long, the first case outside of China was confirmed in Thailand on 13 January 2020. COVID-19 was announced a Public Health Emergency of International Concern on 30 January 2020 and a global pandemic on 11 March 2020 ([World Health Organization](#)).

Bangladesh recorded its first confirmed case of COVID-19 on 8 March 2020. On 16 March 2020, all educational institutes were closed and remained closed as of late September. By 18 March 2020, the government of Bangladesh (GoB) adopted a National Preparedness and Response Plan (NRRP) with an estimated budget of US\$29.55 million. The GoB announced a general shutdown of all economic activities effective initially from 26 March until 4 April. The general shutdown was later extended until 25 April.

Figure 1: COVID-19 daily cases and daily death rates for Bangladesh



Source: JHU CSSE COVID-19 Data. <https://github.com/CSSEGISandData/COVID-19>.

In the private sector, the garment sector was one of the first to re-start activities. Several garment factories began production at the end of April under adjusted conditions, including staggered shifts and a rotating schedule.³ Initially, the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), the sector's main trade association, directed factories to reopen at 30 percent capacity from 26 April. BGMEA allowed factories to increase capacity to 50 percent from 2 May, conditional on a successful experience in the first phase. The BGMEA directive also urged member factories to prioritize workers living nearby and exclude workers who were more vulnerable (e.g. aged over 50). Certain sections within the factories were also prioritized, such as finishing and sampling sections.

According to the local news media, these directives were largely ignored despite emphasized caution from the International Labour Organization. A reported 1,820 factories resumed operations on 26 April and another 1,427 by 27 April.⁴ By the end of April, it is widely believed that 70 to 80 percent of the production capacity had resumed and possibly remained as such over the next several months.

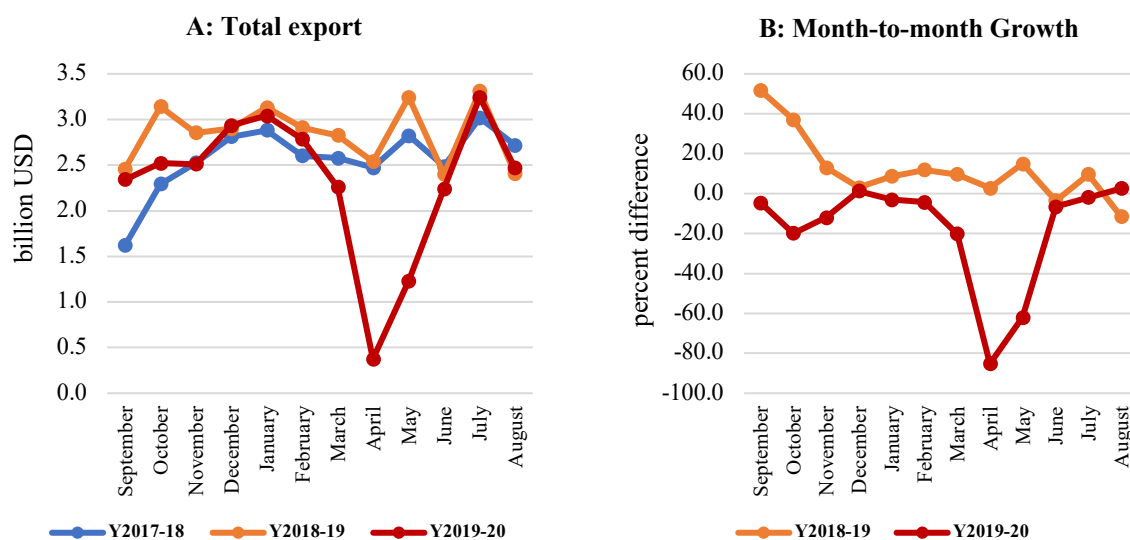
³ Miglani, Sanjeev, and Paul, Ruma. 2020. "Bangladesh garment factories reopen, while India looks to ease its lockdown." *Reuters*, April 27. <https://www.reuters.com/article/us-health-coronavirus-southasia/bangladesh-garment-factories-reopen-while-india-looks-to-ease-its-lockdown-idUSKCN2290WI>

⁴ The Daily Star. 2020. "As factories reopen, ILO calls for safer workplace." *The Daily Star*, April 29. <https://www.thedailystar.net/business/news/factories-reopen-ilo-calls-safer-workplace-1897747>

During the April shutdowns, both civil society and the government strongly urged factories not to lay off workers and to continue to pay their salaries. On the part of the government, the Department of Inspection for Factories and Establishment (DIFE) issued a circular to that effect. However, an estimated 10 percent of the garment sector workers lost their jobs during this time and some of the subcontracting factories were also closed.

Amidst this turmoil, the garment sector is showing a rebound (see Figure 2). After a 72 percent fall in exports in the April-May period, exports returned to within [7 percent of year-earlier levels in June](#) and are running above year-earlier levels in the first three months of the current fiscal year beginning in July (BGMEA Trade Information). For example, in July 2020, the apparel sector's export receipt was USD 3.24 billion, 2 percent lower than the previous July last. In August 2020, the exports registered a 2.6 percent increase over year-earlier levels, the first such increase since December 2019.

Figure 2: Total apparel export



Source: EPB, compiled at BGMEA website.

The GoB announced an early stimulus package for the RMG sector on 25 March 2020. The package initially included a fund of 5000 crore taka (about 591 million USD), an amount later increased twice to reach a final amount of 10,500 crore taka (about 1.24 billion USD). The support program was designed as a loan to businesses at a subsidized interest rate of 2 percent for payment of wages to workers and a grace period of six months. The program paid workers directly through

electronic transfers (mobile money). This had the side effect of greatly speeding up movement to electronic payments. On 5 April 2020, the Prime Minister announced a more comprehensive support package that included social safety net supports, increased public expenditure, and expansionary monetary policies. The GoB also sought 1 billion USD in support from the IMF and the WB to finance these programs.

The two main industry groups, in particular BGMEA, initiated additional support programs targeting specific groups of workers. An example is the “Lactating mother aid fund”, in partnership with GAIN, which included 800 taka monthly support for three years. Aid also came from outside of Bangladesh. The European Union announced a plan to make payments to workers laid off from garment sector jobs:

“The European Union (EU), the largest export destination for the country’s apparel goods, [provided] Bangladesh with a €113 million grant to pay three months of wages to one million workers laid off by readymade garment factories amid the COVID-19 pandemic. Under the grant, a worker [received] Tk 3,000 a month for June, July, and August. Workers who were laid off due to the closure of factories, after the government decided to shut down all businesses in March, and did not join another factory and are still unemployed, [have been] eligible for the cash support.”⁵

However, the stimulus package is facing some implementation bottleneck and yet to be disbursed (as of 3 September 2020).⁶

4 Survey

4.1 Survey Design

We designed a phone survey to gather information from workers about wage payments and coping strategies in the face of the industry turmoil. Our survey takes advantage of contact data for workers recently surveyed for other projects. The first round of the survey began just after the normal May pay date for workers (7 May) and was completed about a month later, on 9 June. The survey thus covered the main period of disruption resulting from the COVID-19 pandemic, with data from the pre-pandemic period collected via recall. This version of the report also uses data

⁵ Ovi, Ibrahim Hossain. 2020. “EU to provide €113m as wages for 1m RMG workers in Bangladesh.” *Dhaka Tribune*, June 2. <https://www.dhakatribune.com/business/2020/06/02/eu-to-provide-97m-for-1m-rmg-workers-wages-for-3-months>

⁶ RMG Bangladesh. 2020. “EU incentives for garment workers are 'hanging' in indecision (translated).” *RMG Bangladesh*, September 3. <https://bit.ly/2ZTA4fc>

from the second round of the survey, which began on 26 June and was completed on 30 July.⁷ The survey includes modules on demographics; employment; household income, expenditure, and consumption; and health knowledge and behaviors. A measure of stress (The Generalized Anxiety Disorder Scale, GAD-7) and household bargaining are also collected and matched to previous garment worker survey data through unique worker IDs.

4.2 Sampling Frame

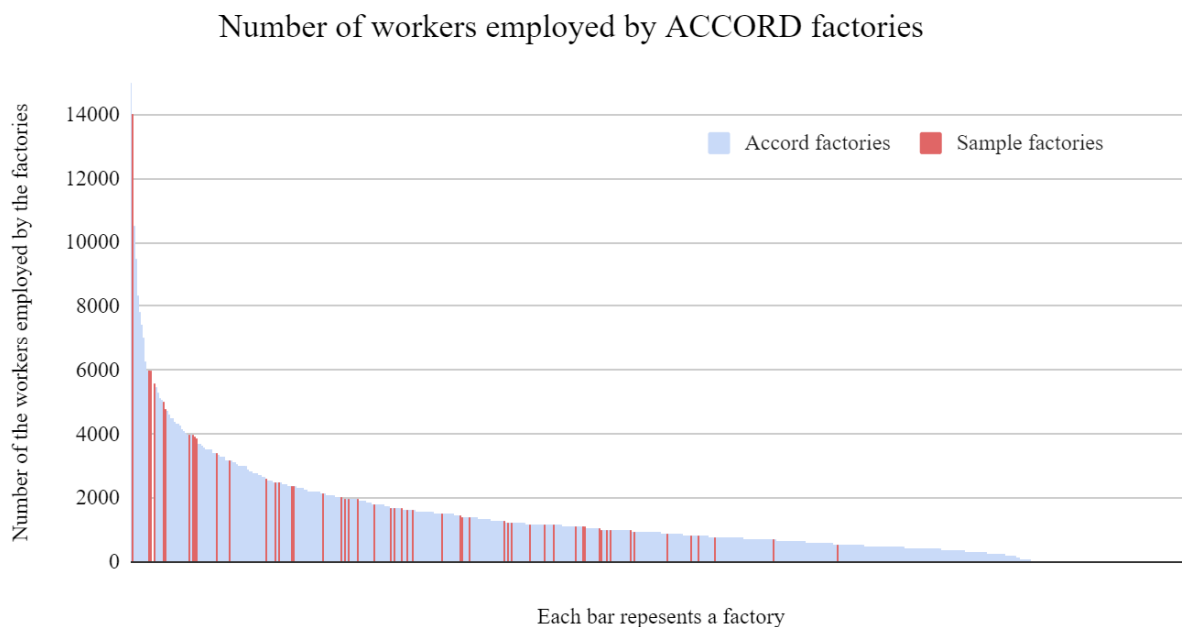
We drew our survey sample from a large database of garment workers in factories located in Dhaka division. The sampling frame consisted of 9,336 garment workers for whom we had contact information from surveys implemented during nine previous projects. These projects took place between 2015 and 2020 and involved 63 unique factories. The sample is limited to workers in lower levels of the hierarchy—line operators, helpers, and line supervisors.

We have information about the individual’s gender, their designation as enumerated in the last available survey with them, and their factory affiliation in the last available survey for everyone in the sampling frame. The factories themselves are larger than average for export-oriented factories in Bangladesh and are all direct suppliers of large European or American buyers. Figure 3 shows the distribution by number of employees of factories included in our sampling frame relative to the 2000 factories that were suppliers to at least one buyer signing the Accord or Alliance.⁸ The figure shows that the factories that are part of our sampling frame are more likely to be drawn from the left-hand part of the distribution.

⁷ A third wave of the survey was completed in September and will be incorporated in a later version of this report.

⁸ The Alliance for Bangladesh Worker Safety and the Accord on Fire and Building Safety in Bangladesh were both formed after the Rana Plaza factory collapse in 2013. These two organizations cover around 2,000 factories (roughly half of the factories active in the country) that are primary suppliers to Accord or Alliance buyers.

Figure 3: Number of workers employed by ACCORD factories and factories in our sample



Within these factories, we sample four distinct types of workers. The first group is line operators or helpers drawn randomly from selected lines in the factory. We view this subsample as largely representative of workers in these categories in the sampled factories. The majority of workers in the sampling frame—6,788 of 9,366, or 72 percent—are in this group. A second group is a smaller number of operators who were subject to an intervention in the earlier projects. These workers were selected by the factories to participate in programs and are likely to have higher levels of education and tenure in the sector compared with typical workers. There are 1,099 workers in this subsample, or 12 percent of the sample. Finally, the sampling frame includes production line managers selected in the same two ways as the operators were: some—1,121 or 12 percent of the sample—were not directly involved in any intervention, and a smaller number—328 or 3.5 percent of the sample—took part in interventions in previous projects. As with the operators, the supervisors participating in training programs were selected by factories and are typically somewhat more experienced and more educated than the remainder of the sampling frame. Moreover, the sampling frame oversamples line managers relative to operators, as in most projects we surveyed all, or at least a majority, of the line managers but only three or four of the 20 or more operators and helpers on a line. Table 1 presents the breakdown of the sampling frame across gender, last designation, and treatment status subgroups.

Table 1: Breakdown of sampling frame across gender, last designation, and treatment status

		Male		Female	
		<u>Control</u>	<u>Treatment</u>	<u>Control</u>	<u>Treatment</u>
Line Operator/ Helper	N	1801	195	4987	904
	Percent	19.3	2.1	53.4	9.7
Line Supervisor	N	925	177	196	151
	Percent	9.9	1.9	2.1	1.6

4.3. Sampling

Our aim was to draw a panel of about 2,000 respondents. Since we expected significant non-response, especially from older contacts, we initially sampled twice our targeted number of respondents. Thus, from the sampling frame, we drew 4,000 respondents via stratified random sampling. The strata consisted of 343 (factory x designation x gender x treatment status) groups. Compared to the sampling frame breakdown in Table 1, we oversampled line supervisors to allow us to make statements about all eight subgroups shown in Table 1. In practice, we wrote a computer program which assigned a random rank to each individual within each stratum, and a random rank for each factory. Following the random order of factories, for each of the eight subgroups we then assigned individuals with rank 1 in the factory-specific strata to be sampled, followed by rank 2, 3, etc., until we had reached the desired number of respondents in each of the eight subgroups. Table 2 shows the breakdown across the eight subgroups for the 4,000 sampled respondents.

Table 2: Breakdown of sampled respondents across gender, last designation, and treatment status

		Male		Female	
		<u>Control</u>	<u>Treatment</u>	<u>Control</u>	<u>Treatment</u>
Line Operator/ Helper	N	870	80	2000	200
	percent	21.8	2.0	50.0	5.0
Line Supervisor	N	380	160	180	151
	percent	9.5	4.0	4.5	3.2

4.4. Attrition and panel sample

The survey team was instructed to contact all 4,000 respondents, but to stop surveying once the targeted number of 2,000 respondents was reached. In wave 1, we interviewed 2,112 respondents. These then represented our targeted panel respondents for the next rounds. In wave 2, we successfully re-interviewed 1,918 (91 percent) of these respondents. These 1,918 are the panel on which we report results below.

For this analysis, we focus on the 1,587 workers who reported that they were employed in the sector in February 2020. The remaining 331 workers told us they had left the garment sector prior to the disruptions from COVID-19. Dropping these workers allows us to give a cleaner picture of the effect of the COVID-19 shock on income and coping strategies of individuals employed in the sector.

5 Preliminary Results

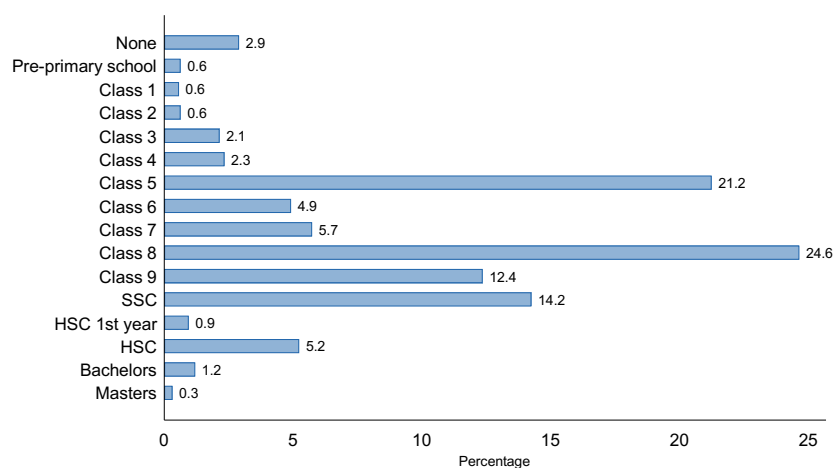
5.1 Demographics

Of the 1,587 respondents in the analysis panel, 53 percent are female and 47 percent are male. Relative to sewing floor workers in the sector, this represents an over-sampling of males. Most of the oversampling of males comes from the oversampling of line managers. Around 75 percent of sewing floor production workers are female, while over 90 percent of line managers are male (Menzel and Woodruff, 2019). Given that about one-fifth of our sample consists of line managers, a random draw would yield a sample that is 38 percent male. The average age of the sample is 29.4 and approximately 86 percent of respondents are married. As of May 2020, 94 percent of respondents were currently living in the Dhaka area. Approximately 73 percent of respondents hold the position line operator, while 18 percent are line supervisors and 4 percent are line chiefs.

Table 3: Demographic summary statistics

	Mean	Median	Standard Deviation
Age	29.4	29	5.3
Household size	3.2	3	1.7
Number of children	1.3	1	0.8
Years of education	7.4	8	2.8
Years of experience in RMG sector	9.1	8.5	4.5
Female	53%	<i>Current District</i>	
Male	47%	Dhaka	26%
Married	86%	Gazipur	40%
		Narayanganj	17%
		Tangail	10%
		Other	7%
<i>Position</i>			
Line Operator	73%		
Line Supervisor	18%		
Line Chief	4%		
Other	5%		
Observations	1587		

Figure 4: Education level



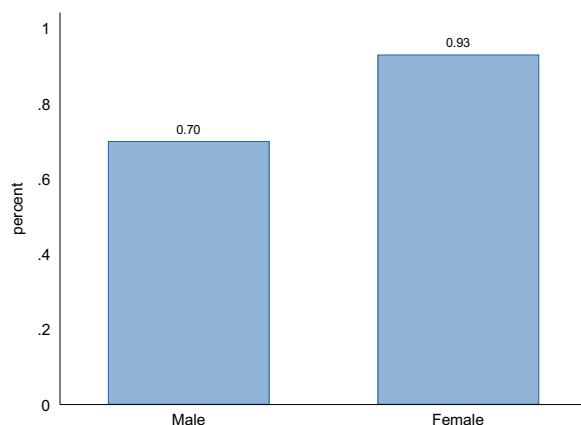
Only 7.6 percent of respondents have received any level of higher education, with the majority of respondents having an education level between Class 5 and Class 8.

5.2 Employment

The interrelation of COVID-19 and employment has been of key interest to governments and policymakers in virtually every space. Within the garment district in Bangladesh, our data indicate that employment was affected less than expected given the magnitude of the shock. In the July survey, only 3 percent of our respondents reported having lost their job at a garment factory since February (an increase of two percentage points compared with the April survey), though an additional 6 percent report that they left the sector voluntarily. While the government shutdown was most certainly a financial setback for factories and employees alike, employment in the garment district has remained high, as most factories reopened—albeit under adjusted circumstances—within a month of the country-wide shut down.

Among the 1,587 in the relevant sample, 1,441 were still working in the sector in July, implying that 146 (9 percent) left the sector after February 2020. Of those who left the sector after February, the majority report leaving voluntarily. Only 4.2 percent report being laid off because their factory closed, while 28 percent report being laid off even though their factory continued to operate. Men are more likely to report having found other work (Figure 5): among those leaving the sector after February, 93 percent of females and 70 percent of males were economically inactive in June.

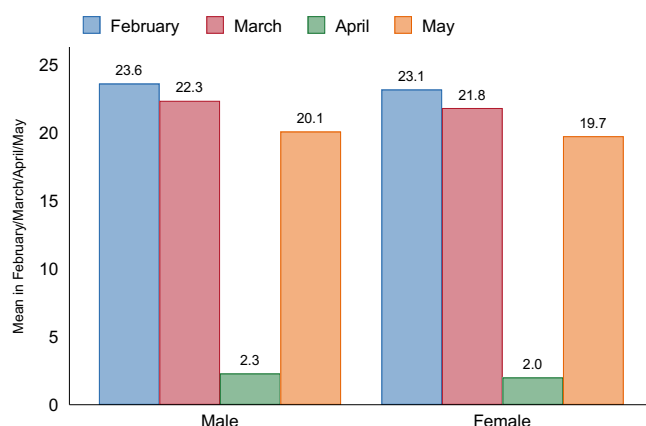
Figure 5: Percent of people who have left the garment sector and are no longer economically active (N=146)



Though only a small share of our panel reports being laid off, a larger share report that their factory laid off at least some workers. In each survey round, we asked workers about layoffs since the start of February in their factory. In the May survey round, 13 percent of workers reported their

factory made some layoffs; by July the percentage had increased to 26 percent. Recognizing that workers may not be fully informed about layoff decisions, we view these data as suggestive. In the July survey, managers are slightly less likely to report layoffs in their factory (21 percent) than operators and helpers are (26 percent). A separate survey of high-level managers in only 2 of 44 factories reported that their factory formally laid off any workers. While the number of layoffs in our sample was small, workers experienced a short, sharp decrease in working days during the month of April. The number of days worked from month to month strongly mirrors the government general holiday, with several factories reopening at the end of April. The number of days worked in the month recovers quickly in May but remains well below February levels. This may owe to the staggered schedules necessitated by the reopening of factories.

Figure 6: Days worked in the factory by month



5.3 Income and Expenditure Shocks

In May, we asked respondents their total salary—including overtime and any bonuses—for February, March and April. In July, we ask the same information for May. Figure 6 shows the average salary reported by workers and Figure 7 the same data for males and females, separately. We see that, following the factory shutdowns at the end of March, salary for the month of April fell by 47 percent from March. Salary payments recovered in May, with total payments far exceeding any prior month because of the Eid bonuses paid in May. Excluding the Eid bonus, regular salary (including overtime payments) was much higher in May compared with April but remained around 10 percent lower than February of March. These data suggest that while salary was drastically affected in April, the May levels were only modestly lower relative to earlier months, coming close to returning to pre-COVID-19 levels.

Figure 7: Monthly salary with Eid bonus

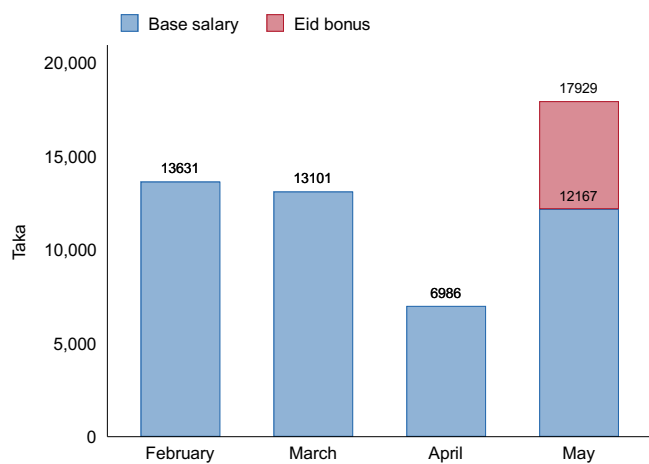


Figure 8: Monthly salary with Eid bonus by gender

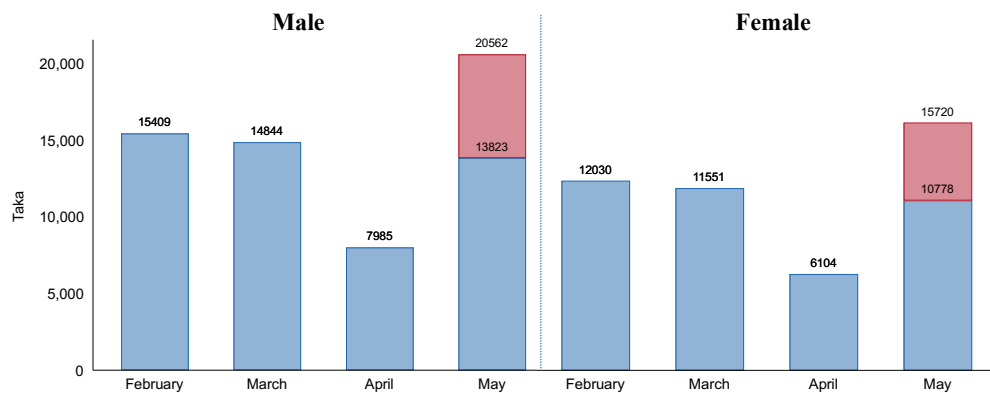
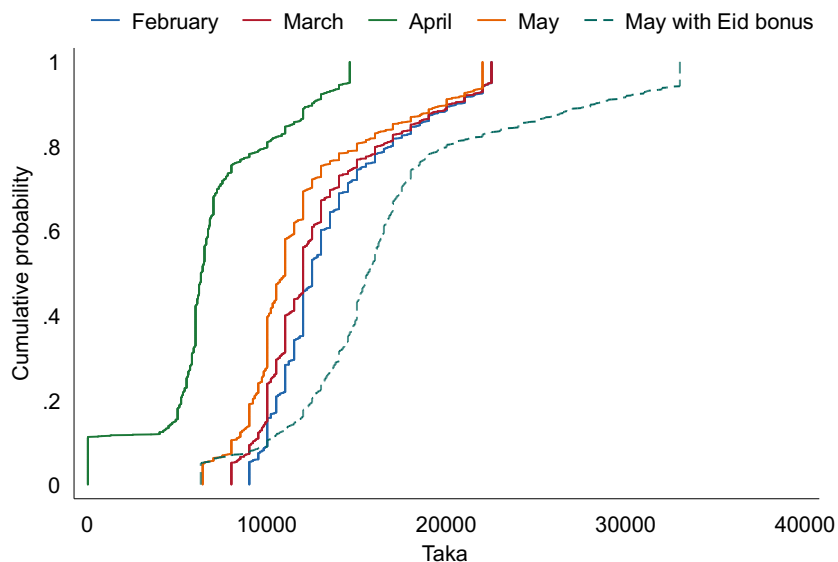


Figure 9: CDF of salary by month

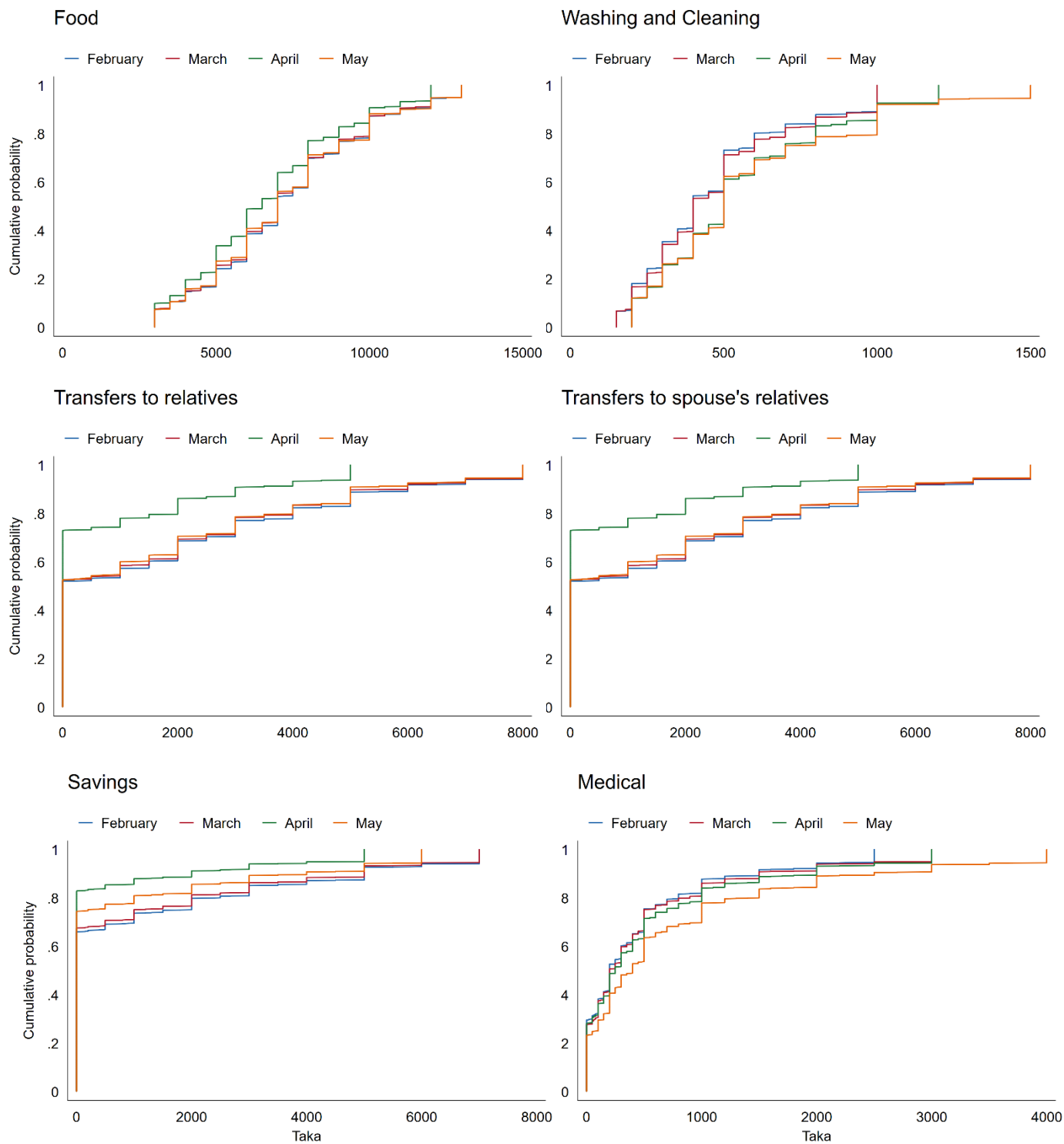


We next examine how the April income shock was absorbed by the households. Simple accounting implies that households must have either reduced consumption on food or other items, reduced transfers, or reduced (net) savings. Looking first at total household food expenditures, we see a decrease of 8 percent from March to April. As with monthly salary, food expenditure returned to close to earlier levels in May, though remained just below February and March levels. Transfers and savings both followed similar patterns, but with sharper changes: transfers fell by 54 percent and savings by 55 percent from March to April, but both transfers and savings recovered in May (see Table 4). While transfers were at pre-COVID levels in May, the recover in savings was not complete, with May savings around 79 percent of pre-COVID levels. Among other expenditures, purchases of washing and cleaning items grew steadily from month to month, while medical expenditures underwent a sharp increase in May, jumping over 34 percent and representing 8.4 percent of that month's salary.

Table 4: Household expenditures by month (taka)

	Feb	Mar	Apr	May
Food	7400	7341	6781	7358
Washing and cleaning	508	515	592	653
Transfers to relatives	2007	1935	901	1903
Transfers to spouse's relatives	828	767	343	784
Savings	1367	1306	585	1081
Medical	709	662	763	993
Total	12,819	12,526	9,965	12,772

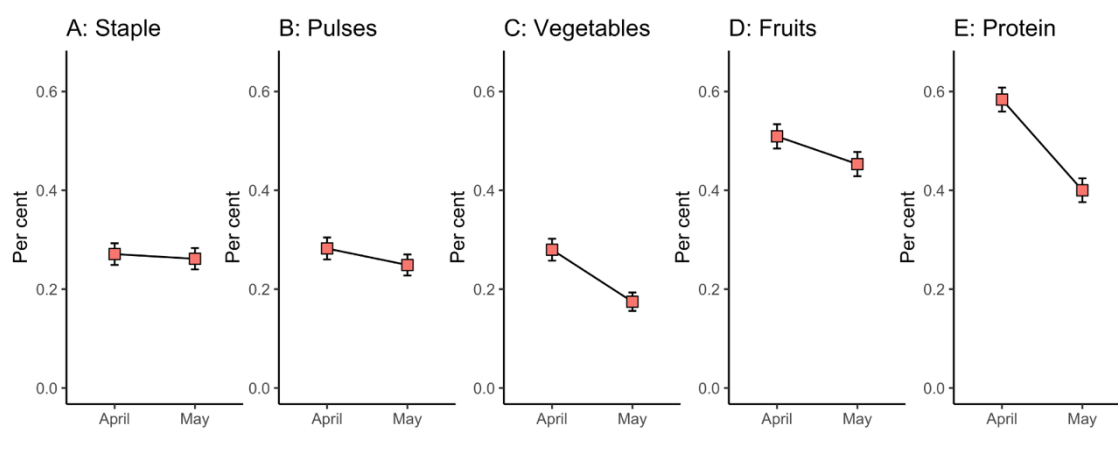
Figure 10: CDFs of household expenditures by month (taka)



5.4 Household Consumption

Next, we explore to what extent the respondents compromised consumption of different food items during the early months of the pandemic. We focused on five broad food groups: staples (primarily rice and other cereals), pulses (the major source of protein in Bangladesh), vegetables, fruits, and protein (which included meat, fish, poultry, eggs, and milk). In the first round of survey, we asked the respondents whether they consumed more, the same, or less in April compared to February (the pandemic broke out in March). In the second round, we asked the same questions, but the respondents compared consumption between April and May. We defined a binary outcome for each food group suggesting whether the household unambiguously experienced a reduction in consumption in April and May. We present the findings in Figure 11.

Figure 11: Fraction of households reducing consumption by food category

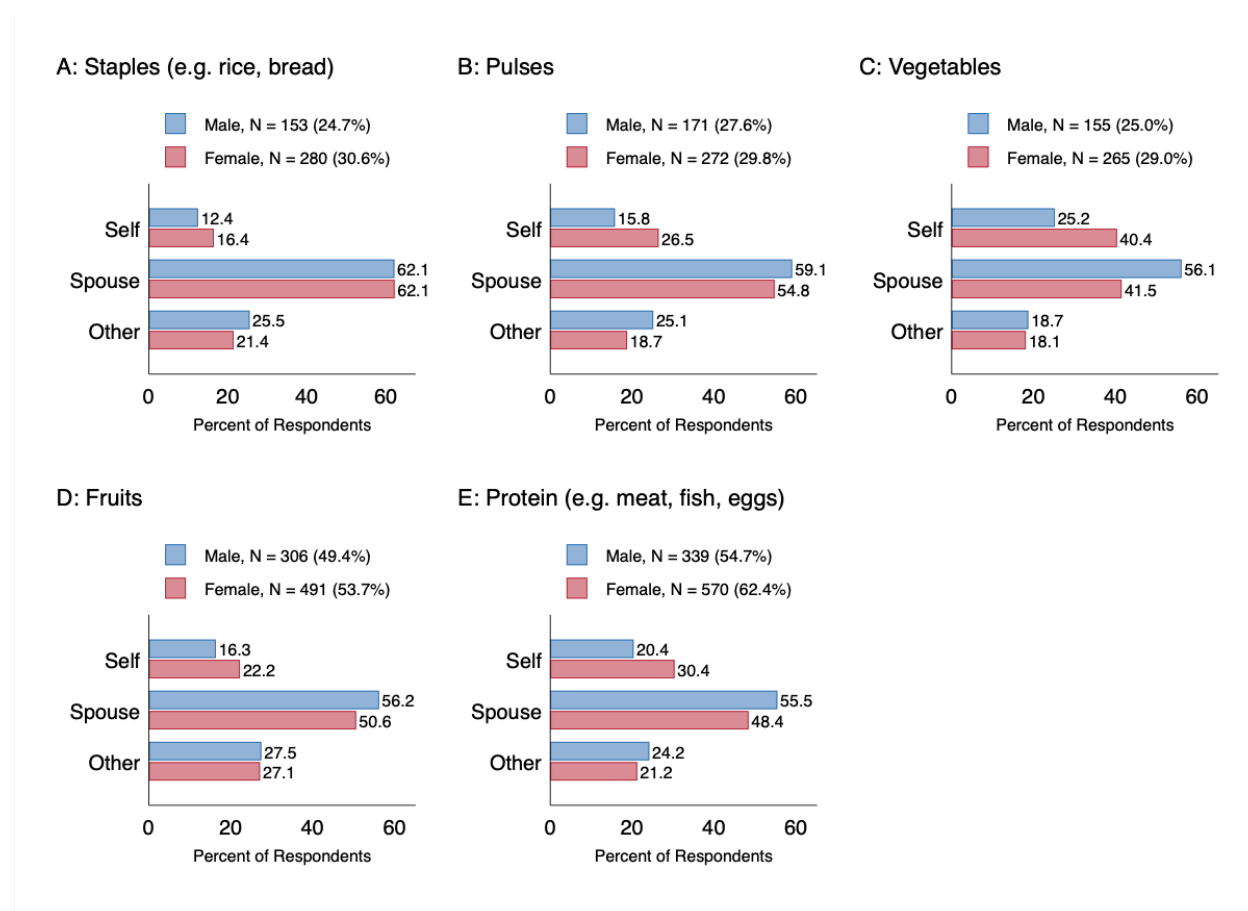


The data indicate a shift in consumption from protein-rich foods (meat, fish, eggs and dairy) and fruits to relatively more staples (grains). In April, about 58 percent of the respondents reported lower consumption of meat, fish, eggs and dairy compared to February, while 51 percent reported lower consumption of fruits. The situation improved somewhat in May as 40 percent reported reduced consumption of protein-rich foods and 45 percent reported a reduction in fruit consumption, both compared to February levels. With regard to staples (grains), only 27 (26) percent of the respondents reported that they reduced consumption in April (May) compared to the pre-pandemic period in February. The results are similar for pulses as 28 percent and 25 percent of the respondents reported consuming pulses less in April and May, respectively. About 28 percent of the respondents reported reduced consumption of vegetables in April, compared with

18 percent in May. As we noted earlier, average income returned to near pre-pandemic levels by May and hence it is not surprising to find that the households did not need to compromise their consumption as much as they had to immediately after the lockdown and factory closure in April; overall consumption began reverting to the “normal” levels in May.

How were the cuts in consumption allocated within the household? In a telephone survey, we were somewhat limited in how much detail we could capture. However, when respondents reported a reduction in any category of consumption, we asked them “whose consumption decreased the most.” In Figure 12, we show the responses in the sample of households with more than one member. The blue bars show the data for male respondents and the red bars for female respondents. For each gender, the bars sum to 100 and show the percentage of times the respondent lists her/himself, their spouse, and other household members.

Figure 12: Allocation of consumption reductions across household members



There are two patterns in the data. First, workers of both genders protect themselves. For consumption cuts in all categories they are most likely to report that their spouse had the largest cut in consumption. They report themselves less than one-third of the time in all categories with the exception of females and vegetables. Second, male respondents are more likely to have protected their own consumption than female respondents. In all categories, female respondents are more likely than male respondents to say that they had the largest cut in consumption.

5.5 Health and COVID-19

The survey also asked about health knowledge and health conditions. Knowledge of COVID-19 symptoms was very high, with 99 percent of respondents saying they knew the symptoms of the disease caused by coronavirus and being able to correctly identify at least one of the main symptoms (see Figure 12).

Figure 12: Reported knowledge of symptoms of COVID-19

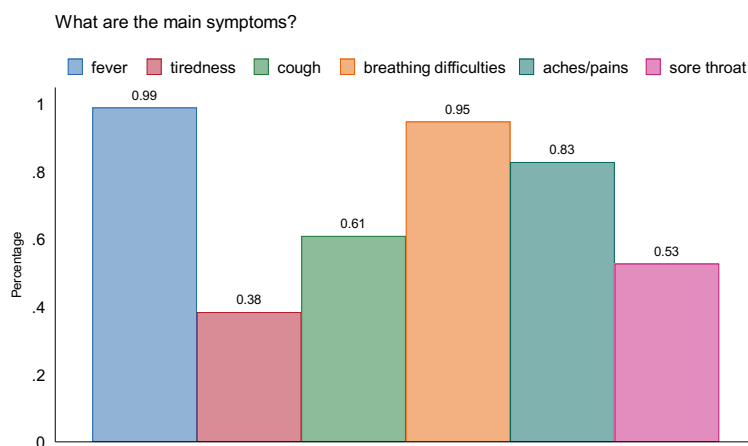
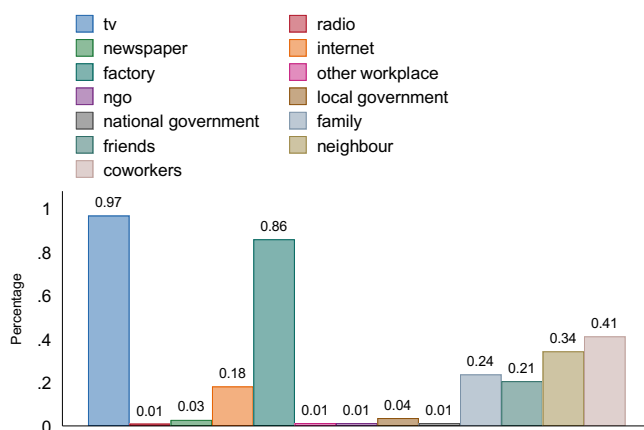


Figure 13 shows the sources of information about COVID-19, with television being the most important source, mentioned by 99 percent of respondents, and factories being the only other source mentioned by more than half of respondents (86 percent). Other important sources of information—mentioned by between 16 percent and 41 percent of the respondents—were the internet, family, friends, neighbors, and coworkers.

Figure 13: Sources of information for precautions against infection



In May, only 3 percent of respondents indicated that someone in their household had been ill with a fever, cough, or shortness of breath, with 6 percent indicating someone in their neighborhood had suffered the same symptoms.

Figure 14 shows reported changes in behavior by the respondent and their household, with 95 percent of respondents indicating that their family has changed behavior in response to COVID-19. The overwhelming majority of respondents increased their handwashing and mask usage, while 76 percent began staying at home more. 30 percent avoided using public transport. Other measures mentioned by respondents include drinking more hot water and washing their clothes more frequently upon returning from outside the house.

Figure 14: Household behavior change

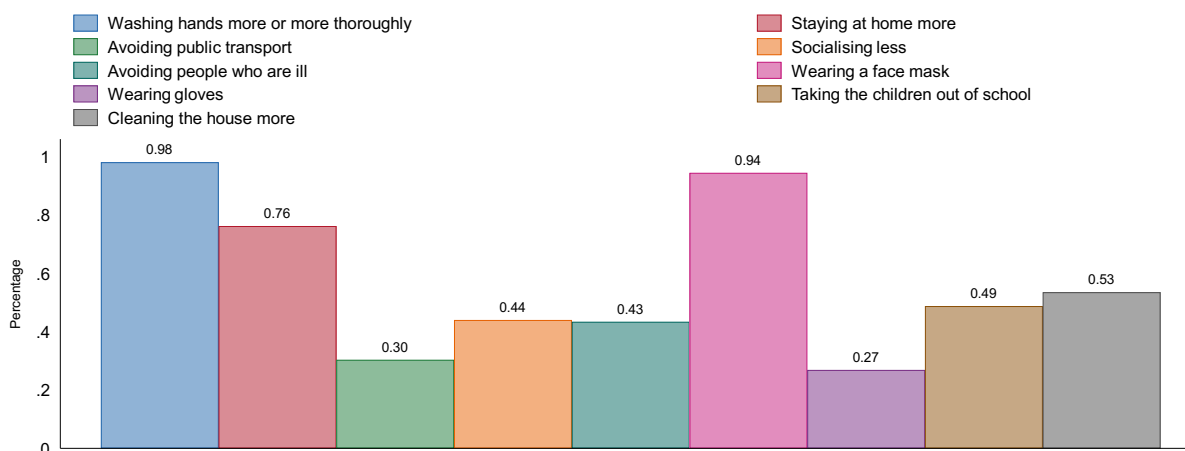


Table 5: Precautions factories have taken against the coronavirus by percent

	Percent
Protective equipment	0.99
Sending sick workers home	0.95
Encouraging hygiene measures	0.76
Encouraging social distancing	0.81

91 percent of respondents indicated that their factory has introduced precautions against the coronavirus since February, and 94 percent of workers state they are “very satisfied” (60 percent) or “somewhat satisfied” (34 percent) with steps taken by their factories to reduce the spread of the coronavirus.

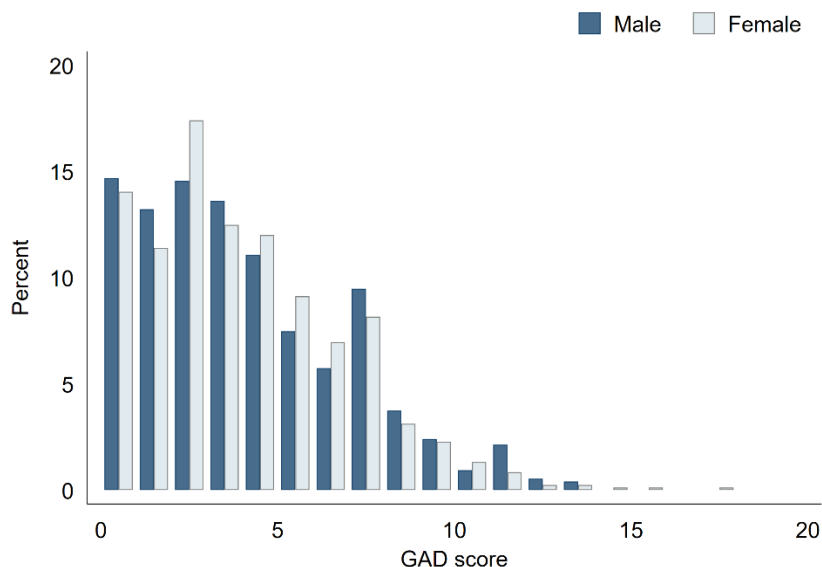
5.6 Mental Health

In the May survey, we asked respondents the seven questions from the Generalized Anxiety Disorder (GAD-7) diagnostic. The questions ask how frequently over the two weeks prior to the survey respondents experienced “feeling nervous, anxious or on edge,” “difficulty relaxing” and the questions of that sort. Kroenke et al. (2007) suggest that a score 8 or greater indicates a reasonable cut-point for severe anxiety. Using this threshold, we find that almost 10 percent of respondents suffered from severe anxiety. For a significant subset of the sample, we had a previous measure of anxiety from an earlier survey. Surprisingly, we find that those in this subsample (see Table 6), report being less anxious in May than they were at the time of the earlier survey.

Table 6: GAD-7 Score (Generalized Anxiety Disorder)

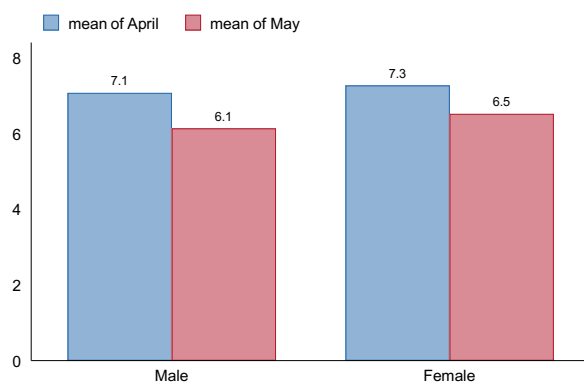
	Obs	Total mean	Male	Female	Percent of respondents with a score ≥ 8
April 2020	1587	3.59	3.62	3.56	9.51%
Matched April 2020	974	3.68	3.62	3.72	9.14%
Pre COVID	974	3.78	3.77	3.78	14.78%

Figure 15: Histogram of GAD-7 score for April



Despite unexpectedly low reported stress levels, respondents did identify several underlying sources of stress. Worry was a pervasive sentiment amongst respondents in regard to providing food for their families, with 82 percent expressing difficulties feeding everyone in the household in April. This percentage decreased to 65 percent in May.

Figure 16: Worry level on ability to feed household



5.7 Household Bargaining

We observe indications that bargaining power within households shifted towards more joint decision-making for decisions about larger household expenditures and women's mobility, but find that women reported more autonomy in work-related decisions. The first wave of the

survey asked respondent to indicate who in the household made decisions for seven different areas shown in Figures 17 and 18. These ranged from decisions about mobility (e.g. taking a bus or other public transport to run an errand), to decisions about work (e.g. taking up work outside the home for income) and larger household expenditures (e.g. purchases of large household appliances). We recode these responses into two dummy variables indicating whether 1) women made the decisions alone and whether 2) women made the decisions jointly with other household members. For 192 women, we are able to match the new data to surveys from previous years. Figures 17 and 18 demonstrate the percentage of women reporting sole decision-making and joint decision-making for all seven decisions across the pre- and post-COVID surveys.

Figure 17 indicates that a larger share of women report deciding on their own whether to take up a work offer or an offer for a promotion when comparing post-COVID and pre-COVID responses. In contrast, more women report joint decision-making in Figure 18 (and less decision-making on their own in Figure 17) for decisions about larger household expenditures and women's mobility now compared to the pre-COVID surveys. While these patterns are only suggestive, they could indicate that the households' tighter financial situation and potentially more time spent at home together both led to more joint decision-making in households and at the same time enabled women to have a greater say about their income-earning activities.

Figure 17: Percent of female respondents reporting “I alone decide” (n=192)

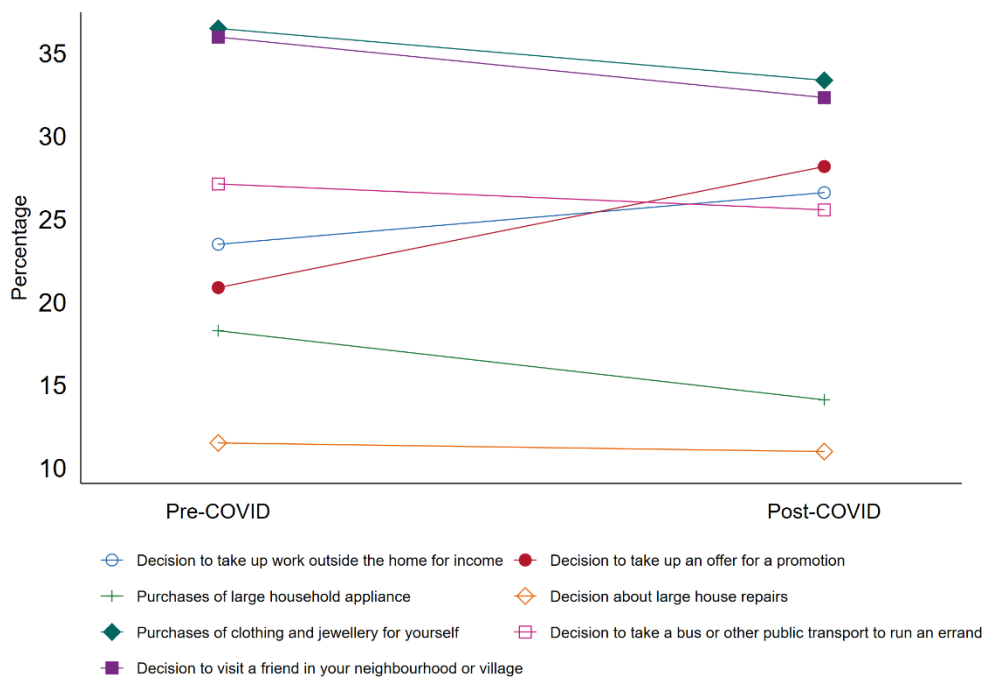
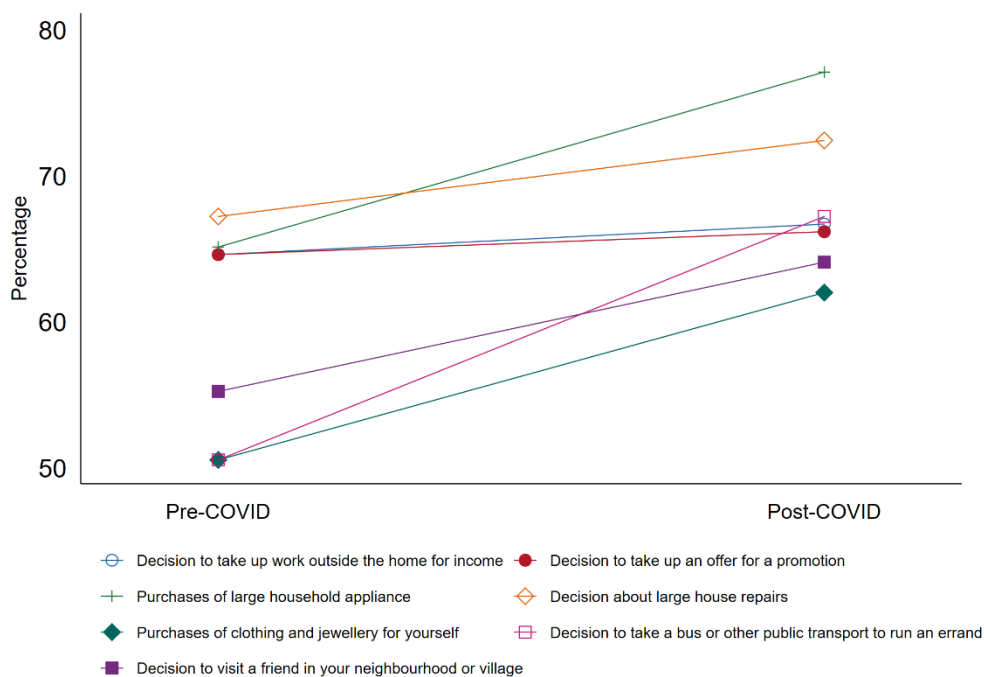


Figure 18: Percent of female respondents reporting deciding jointly (n=192)



6 Conclusion

Garment workers suffered a short, sharp shock to income in April 2020. From May, production in the factories represented in our sample returned to much closer to normal, with incomes returning to around 90 percent of pre-pandemic levels. As the main export markets experience a second wave in the fall and winter of 2020-21, it is unclear whether the situation will be maintained at these levels. We find that the households of workers reduced food consumption in April by around 8 percent, but returned to more normal expenditure levels by May. Transfers to other households fell much more sharply in April, and there may have been more severe knock-on effects in those recipient households. However, within the households of workers themselves, the data indicate overall modest effects on either consumption or mental health, at least in the short run. Future waves of the survey will help us understand the cumulative effects of the pandemic.

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