# Has COVID-19 led to a more equitable division of labor in South Indian households? 

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#### Abstract

Due to cultural reasons, women have traditionally done the bulk of the household work in South Indian homes. The COVID-19 crisis however has forced both spouses to be in the house all the time. This paper examines how the household roles have changed since the beginning of the crisis, and how these roles may continue to shift in the aftermath. In this paper, 960 married employees from software companies headquartered in Hyderabad and Bangalore were surveyed. Their responses were analyzed to assess changes in traditional household roles. Our findings support our thesis that the COVID-19 lockdown is leading to a more equitable distribution of labor. This is true for all household chores studied, including cooking, cleaning, and taking care of children. Follow-up studies will need to assess whether these changes are temporary or not.


Keywords: COVID-19, Indian households, gender roles, labor distribution, gender equity, Indian culture, male privilege

## BACKGROUND

In many societies the traditional role of the husband has been the "bread-winner", and the traditional role of the wife has been to take care of household chores as well as the children. In many western societies, this traditional model of division of labor has gradually evolved over the years, especially in the case of dual-income families. However, in societies such as India, the traditional division of labor is pretty much intact. The COVID-19 lockdown has forced married couples to stay in the house throughout the day, with a strictly enforced work-from-home policy. This study examines how these new changes brought about by COVID-19 lockdowns have affected household labor distribution.

Reviewing various macro trends, one would expect India to adhere to a more traditional distribution of labor. According to multiple studies, macro factors have an enormous role to play in labor distribution[1]. For example, it was shown that more egalitarian countries tended to have a more equitable division of household labor [1]. Another study, done by Feinian Chen, found that a change from agricultural to non-agricultural jobs in China had a major impact on household labor distribution in the country [2]. Many of these macro trends were identified through rigorous economic analysis [3].

Perceptions of equity factor in when considering what is exactly a distribution of household labor that avoids injustice. Over the years it has been established that ideological and marital factors
must be included in any analysis of perceptions of fairness in housework [4]. In addition, factors such as the partners' adherence to the traditional gender ideology, alternatives to the marriage for wives, and equity across key domains of the relationship have been proven to have a lot of weight when evaluating perceptions of household equity [5]. The study of these perceptions has also led to some interesting findings regarding how the nature of women's attempts to elicit change in household labor distribution is critical to whether the change actually occurs [6].

The pivotal role mental health plays in our daily lives is widely understood. The recent focus, brought upon by the media, has shown the tremendous impact on mental health during the COVID-19 lock down. In a study by Beth Anne Shelton and Daphne John, household labor distribution was shown to correlate with the mental health of couples [7]. In particular, perceptions of fairness were linked with psychological well-being. These results were further reinforced in a study done by Jill Suitor, who believes that household labor distribution had the largest impact on marital happiness [8]. In a different study, a correlation between household labor and depression was identified, partially explaining the gender difference in depression [9]. All of these studies suggest that our perceptions of equity play a larger role in our mental health and in labor distribution than we think.

One major area of focus in household labor distribution is the analysis of dual income families. In these situations, both members of the couple work, and thus traditional biases such as gender roles

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can be examined in a controlled environment. In regard to gender roles, in recent times there have been several papers addressing a "shift" in labor distribution, leading to a more equitable situation for women [10]. The circumstances that lead to such situations were analyzed. In a study done by Scott Coltrane on 20 dual earner families, it was found that there were some families in which fathers performed most of the tasks traditionally done by mothers, especially when it came to taking caring of their children [11]. In those families, it was found that women felt less overwhelmed and were able to balance their job with their household work [11]. A separate study done by Coltrane further reinforces these findings. Coltrane finds that families with equal labor distribution often have husbands who become attached to the "father role" [12]. On the contrary, there have also been several studies showing that women who assume their traditional household roles tend to be happier, reporting a lower amount of marital conflict [13].

Children have also shown to be an interesting way of measuring the distribution of household labor from a different perspective. There are two competing theories describing children's labor participation: a) children usually perform household labor when their parents assign it to them as a socializing experience or b) children usually perform household labor when structural constraints prevent the parents from performing the work [14]. The interactions that occur between children and their family members in intergenerational households has also yielded some fascinating results [15]. In that respect, the division of household labor among children with regard to gender has also displayed some trends that resemble the gender work divide in adults [16].

Another factor to consider when looking at household labor distribution is whether the couple is in retirement or not. The majority of the studies on this topic say that retired couples tend to have a more egalitarian distribution of labor [17]. This common hypothesis is known as the "convergence hypothesis" [18]. The opposite of this hypothesis is known as the "continuity hypothesis" [19]. The continuity hypothesis posits that the gender gap in labor will remain throughout the entire marriage. Both of these hypotheses are the main contenders in this part of the field. Given that retirement plays a large role in household labor distribution, one might posit that unemployment plays an important role as well. However, this turns out to not be the case. A study by Boas Shamir suggests that labor distribution remains largely unaffected by structural conditions [20]. Another study produced similar results, showing that on average unemployed couples did more housework, but men continued to perform more "men-related" jobs and women "women-related jobs" [21].
Besides the various global factors referred to in my literature review, there are some uniquely Indian aspects to labor distribution in Indian households. One important societal and cultural factor is caste, which is assumed to play a pivotal role in determining household labor equity [22]. These distributions also vary tremendously with geographic location in India, such as whether the couple lives in a town or a village, income levels, education levels, and exposure to western society[23]. In this paper, we studied labor distribution in South Indian households both preCOVID and during-COVID.

## METHODS

In order to gather data from South Indian households with married couples, I designed a survey that addressed important questions regarding household labor distribution. The survey was distributed
to employees of software companies headquartered in Hyderabad and Bangalore in South India. Since the sample I am considering is comprised of engineers and upper-level employees of the company, the sample is made up of primarily professional households. So, I would not generalize these findings outside the professional class in South India.

I received a total of 1936 responses, of which 1591 were completed responses where all the required questions in the survey were answered. Of these completed responses, 960 respondents selected "married" as their status. Our analysis in this paper is focused on these married respondents.

The survey is split up into 3 parts: demographic information of the person filling out the survey, pre-COVID distribution of labor regarding common household chores, and during-COVID distribution of labor on those same chores.

In the demographic information section, here are the questions I asked, along with their answer choices:

1) What is your full name?
2) What is your gender?
a) Male
b) Female
3) What is your age?
a) $18-24$
b) $25-34$
c) $35-44$
d) $45-54$
e) $55-64$
f) $65+$
4) What is your marital status?
a) Married
b) Unmarried
5) Number of parents in household?
a) 0
b) 1
c) 2
d) 3
e) 4
6) Number of children in household?
a) 0
b) 1
c) 2
d) 3
e) 4
7) What is the husband's monthly income (if applicable)?
a) Rs. 0 (does not work)
b) Rs. 20,000
c) Rs. 20,000-50,000
d) Rs. 50,000-200,000
e) Above Rs. 200,000
8) What is the wife's monthly income (if applicable)?
a) Rs. 0 (does not work)
b) Rs. 20,000
c) Rs. 20,000-50,000
d) Rs. 50,000-200,000
e) Above Rs. 200,000
9) Where do you live?
a) Hyderabad
b) Bangalore
c) Other
10) What language do you speak at home?
a) Telugu
b) Kannada
c) Tamil
d) Malayalam
e) Hindi
f) English
g) Other

In the before-COVID section I asked the participant about the household duty distribution in their house BEFORE the COVID lockdown. In the during-COVID section I asked the participant about the household duty distribution in their house DURING the COVID lockdown. Here are the questions from each of the sections:

1) Who did most of the cooking every day?
2) Who usually cleaned the house?
3) Who primarily took care of the children?

In both of the sections the questions and answer choices were the same. They were asked to pick more than one answer choice if
applicable. Each of the above questions had the following answer choices:
a) Wife
b) Husband
c) Mother/Mother-in-law
d) Father/Father-in-law
e) Domestic help
f) Children

## RESULTS

The number of people in various categories in the survey: 1591
Married individuals: 960
Husbands: 742
Husbands from ages 25-34: 404
Husbands who have children living with them: 572
Husbands from ages 25-34 who have children living with them: 254
Wives: 218
Wives from ages 25-34: 149
Wives who have children living with them: 143
Wives from ages $25-34$ who have children living with them: 82
Single earner families: 227
Dual earner families: 183

## Income

Since we had made an answer to the income question optional by indicating "if applicable", I suspect that all those whose spouse was not working did not answer the income question for their spouse. This resulted in me having to discard 540 responses where the question regarding spouse's income was not answered. The balance 420 responses were divided as below:

Dual earner (selected a non-zero income for both spouses): 183
Husband earner and wife zero-income: 217
Wife earner and husband zero-income: 10
Respondent selected zero-income for both husband and wife: 10


Figure 1: Husbands cooking, cleaning, and taking care of the children: The percentage at the end of each bar represents the fraction of husbands out of our total sample of husbands surveyed who answered a particular answer choice. Notice the increase across the board in the number of husbands cooking, cleaning, and taking care of the children during COVID.

Husbands between the ages 25-34 cooking, cleaning, and taking care of the children


Figure 2: Husbands between the ages 25-34 cooking, cleaning, and taking care of the children:
The numbers at the end of each bar represent the number of young husbands (ages 25-34) whoanswered a particular answer choice. Notice the increase across the board in the number of young husbands cooking, cleaning, and taking care of the children during COVID.


Figure 3: Are husbands cooking: The percentage at the end of each bar for "What wives think" represents the fraction of wives out of our total sample who answered a particular answer choice. The same logic can be applied to "What husbands think", except using the total husbands sample instead of the wives' sample. Notice how husbands thought themselves to be doing much more cooking than they did before, but how only a few wives agreed.

Are husbands cleaning?


Figure 4: Are husbands cleaning: The percentage at the end of each bar for "What wives think" represents the fraction of wives out of our total sample who answered a particular answer choice. The same logic can be applied to "What husbands think", except using the total husbands sample instead of the wives' sample. Notice how both husbands and wives thought that husbands did more cleaning during the COVID lockdown than before. However, the change in husbands' perceptions of themselves exceeds that of the wives.


Figure 5: Are husbands taking care of the children: The percentage at the end of each bar for "What wives think" represents the fraction of wives out of our total sample who answered a particular answer choice. The same logic can be applied to "What husbands think", except using the total husbands sample instead of the wives' sample. Notice how both husbands and wives thought that husbands took more care of the children during the COVID lockdown than before.


Figure 6: Husbands in single earner and dual earner households: The percentage at the end of each bar represents the fraction of single/ dual earner husbands who answered a particular answer choice. Notice how across the board single earner families had larger increases in all 3 categories when compared to dual earner families.

## DISCUSSION

Since the data was gathered from employees of software companies in Hyderabad and Bangalore, the data is representative of the professional class in South India. Our findings must accordingly be interpreted narrowly.

Out of a sample of 742 husbands, 116 cooked before the COVID lockdown, and 176 cooked during the COVID lockdown. Although this $51.72 \%$ increase is significant, the change was even more prominent in a subsample of 461 young (ages 25-34) husbands, where the increase was $59.38 \%$. This growth is backed up by the husbands' responses when they were asked about who they thought did most of the cooking before and during the COVID lockdown. The total fraction of husbands who believed that they themselves did most of the cooking during the COVID lockdown changed from $13.47 \%$ to $21.42 \%$. This perception was not shared by the wives however, who showed almost no change when asked about who did most of the cooking before and during the COVID lockdown. These findings regarding the perceptions of who is doing more work were replicated in a separate study, where $21 \%$ of men thought that they did most of the cooking/cleaning, but only $3 \%$ of the wives agreed[24].

Out of a sample of 742 husbands, 198 cleaned before the COVID lockdown, and 325 cleaned during the COVID lockdown. This is
a massive $64.14 \%$ increase across the husbands in question, and a $13.32 \%$ difference in the total fraction of husbands. Interestingly enough, this time the subsample of young husbands (ages 25-34) had a slightly less significant increase of $50.84 \%$. Both of these trends are indicative of a positive change in household labor distribution when it comes to cleaning. One can only speculate that the reason for there being a larger increase in husbands who started cleaning versus cooking during the COVID lockdown could be because most Indian men may not know how to cook. The differences in the cooking and cleaning data can be attributed to a "skill barrier" rather than a cultural barrier. In terms of perceptions, both husbands and wives believed that the husbands were doing more cleaning during the COVID lockdown. There was a $14.42 \%$ increase in the total fraction of husbands who thought they were doing the majority of the cleaning during the COVID lockdown when compared to before the COVID lockdown. The wives believed this as well though not as strongly, with the total fraction of wives who perceived their husbands as doing most of the cleaning increasing only by $9.17 \%$.
Out of a sample of 742 husbands, 312 primarily took care of the children before the COVID lockdown, and 391 primarily took care of the children during the COVID lockdown. This is a $25.32 \%$ increase across the husbands in question, and $8.23 \%$ increase across the total fraction of husbands who were thought
to primarily take care of the children. This change was replicated in the subsample of young husbands (ages 25-34), with a $22.76 \%$ increase across the young husbands in question. Since husbands are forced to stay at home, there is naturally going to be an increase in the amount of time they spend with their children. In terms of perceptions, both husbands and wives believed this increase to be true. Looking at the total sample, $8.35 \%$ more husbands and $7.79 \%$ more wives thought that husbands primarily took care of the children during the COVID lock down. In a similar, US study of households during COVID, both husbands and wives agreed that husbands were doing more in taking care of children, though the husbands over-estimated their contribution [25].

In order to compare dual and single earner families, I decided to filter through respondents whose incomes were indicative of them being part of a single earner family and see how they answered the 3 questions above. I did a similar analysis on those who were in dual earner households.

Looking at my cooking data for dual earner respondents, I noticed that there was a $1.09 \%$ total fractional increase in the number of husbands who started cooking during the COVID lockdown. This change was much more prominent in single earner households however, with a $4.41 \%$ total fractional increase. The perceptions for husbands in dual earner families in regard to this during the COVID lockdown were explored in a separate study, in which $29 \%$ of the husbands thought they were cooking/cleaning during the lockdown, but only $6 \%$ of the wives agreed [24].

In the cleaning data for dual earner respondents there was an $8.19 \%$ total fractional increase in the number of men who cleaned during the COVID lockdown. The change was even higher in single earner respondents with a $11.01 \%$ total fractional increase. The high magnitude of these increases follows my reasoning that most people know how to clean, and thus more husbands were able to help during the lockdown in this area.
Finally, in dual earner families there was a $6.55 \%$ total fractional increase in the number of husbands who took care of their children during the COVID lockdown. There was a $7.93 \%$ increase in single earner families.

Across all three questions, single earner families tended to have more significant increases in husbands taking on more household responsibilities than dual earner families. In India, it is likely for a dual earner family to be of a higher economic/education class than a single earner family. This could perhaps explain the separate trends for single and dual earner families, as it has been shown in separate studies that class has a large role to play in the division and perceptions of household labor [13]. In particular, wives in single earner families could have very different perceptions of what is considered equitable than wives in dual earner families. A separate study in which it was said that wives' alternatives to their marriages have a great impact on labor division equity further reinforces this point [5]. Wives in single earner families likely do not have the proper education to pursue their career interests, which might make them think that the division of household labor is fair and that they are "pulling their own weight".

## CONCLUSION

Clearly, the COVID lockdown has caused some of the preestablished gender norms in regard to household labor distribution to be changed as married couples were required to stay at home. In order to see if these changes are temporary or long lasting, I plan to
do another survey a few months after the COVID lockdown. The other important aspect to be explored is whether these observations translate to other professional classes in India besides technology workers. Further study is also required to see how these results compare to urban centers in Northern India.

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