# Time spent on paid and unpaid work: findings from 'Work, Attitudes and Spending' surveys

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#### **Abstract**

This document gives some findings from 'Work, Attitudes and Spending' (WAS) surveys carried out so far, related to time-use: paid and unpaid work. In each WAS survey, the respondent was asked how much time he or she spent on paid employment, and on how much time they spent doing certain types of unpaid housework. For respondents who were married or cohabiting at the time of the interview, the respondent was also asked how long their partner (i.e. their husband or wife) spent on the same tasks. Because similar questions were used in these different countries, we can compare and contrast time-use in these countries. Results reported here can also be compared with other time-use surveys.

#### Introduction

This document gives results from analysing data from the 'Work, Attitudes and Spending' (WAS) household surveys completed so far. WAS data are available for ten countries; in each country, there is often more than one survey, as explained in the appendix. The aim of WAS surveys is to give a nationally-representative sample in each country, but the limited funds available for WAS surveys required compromises – for example, the India surveys only include urban, rather than rural, households in the samples. The questionnaire can be downloaded from website <a href="https://www.was-survey.org">www.was-survey.org</a> for all ten countries.

The following Table 1 shows the WAS sample sizes in each country (for all surveys combined, in a country such as India where there was more than one WAS survey in the same country). Each survey provides data from a few thousand respondents; the largest WAS sample size is from Nigeria (about 5,000 cases in each year, in the 2003 and 2005 Nigerian surveys). More details of the WAS surveys are shown in the appendix to this document.



Table 1: Sample sizes in WAS surveys

country	Number of people interviewed
Brazil	1031
Egypt	5143
Chad	2587
Nigeria	10059
Cameroon	3500
Congo-Brazzaville	3150
Kenya	4036
South Africa	3500
India	7783
Indonesia	2003

In this document, the term 'married' is used as an abbreviation for 'married or cohabiting'; similarly, 'husband' includes male cohabiting partners, as well as men who are legally married. Some of respondents live in polygamous marriages; for a polygamous man, it is not clear which wife he is referring to when he refers to time-use by his wife.

### Different ways to collect time use data

Many sources of time-use data exist. In India, for example, time-use surveys have been carried out by Alexander (1991); Kaur & Punia (1988); and Sethi (1989). Unfortunately, the methods used by different researchers varies, which makes it difficult to compare findings (within a country, or between countries). This paper has the advantage that the methods used by WAS surveys in all ten countries is fairly similar, making comparisons easier – but even in WAS surveys, there have been changes to the questionnaire, which makes comparison more complicated.

The aim of collecting time-use data in WAS surveys is to investigate the balance of power between husband & wife or cohabiting partners. For example, if a husband is unemployed but his wife is in paid work (at the time of the interview), we might expect that he would do more unpaid work such as cooking and childcare. But human behaviour is complicated – for example, it is possible that cultural forces may influence the extent to which men are prepared to do the housework (Simister, forthcoming). It is often claimed that women do a disproportionate amount of domestic chores, such as cleaning; WAS data can



shed light on whether or not such patterns exist, and (if they do) whether all households are similar in this respect.

WAS surveys do not include a diary, in which respondents are asked to record every activity they carry out over a period of (for example) two weeks. In many ways, this use of diaries is an ideal approach: it allows researchers to produce a very detailed data set. However, it is a very expensive method, and beyond the budget of WAS surveys. Instead, the WAS surveys use a much simpler method: they ask the respondent to estimate the typical amount of time they spend on various tasks (in a typical week).

For this document, all numbers are rounded to the nearest whole number to simplify tables (except where the average was less than 1 hour: in such cases, one decimal place is used). More precise estimates can be obtained by downloading WAS data (obtainable free of charge, at website <a href="https://www.was-survey.org">www.was-survey.org</a>).

In this document, all time-use is reported in hours per week, for each person. Only time spent by adults is recorded in WAS surveys – it is impossible to tell (from WAS surveys) how much work children do. In each selected household, only one adult was interviewed – about half of the respondents were male, and half were female. It is possible that the data on the <u>partner</u> of the person interviewed is less accurate than data on the person themselves: perhaps many people do not know how much time their husband or wife spend on paid work or housework, and their estimate may not be very accurate.

For each time-use variable in this document, I feel that the variable is comparable between surveys in different countries. Readers should be aware, however, that there are reasons to question this assumption: for example, the questionnaire was written in English, and then translated into local languages – this may result in misleading findings, if the translation was inaccurate. In some countries (such as Cameroon), there are dozens of languages; if we find apparent differences between ethnic groups within a country, we cannot be confident that this is a real difference in behaviour – it may be due to translation problems (in Africa, it is common to refer to a group of people who speak one language as a 'tribe').

It is difficult for respondents to estimate how much time they spend on housework, partly because it's possible to do two things at once. Time-use data on childcare is particularly difficult, because it is possible to ensure children are playing safely at the same time as doing something else (such as cleaning). For this reason, this document does not study data on childminding; but WAS surveys in all ten countries include data on time spend minding children (see website <a href="https://www.was-surveys.org">www.was-surveys.org</a> for details).

The WAS surveys may be failing to measure some types of housework, such as ironing, because of the way the questionnaire is worded in each country. As far as I am aware, there is no universally accepted definition of what the word 'housework' means.

### Do women do as much paid work as men?

We might expect most paid work is done by men, rather than women: this is often described as a 'traditional' division of labour. As countries become more 'modern', we might the gender division of labour to decline; but all WAS surveys carried out so far have taken place in poor countries. This section considers evidence on paid employment.



Table 2 has four columns of numbers: the two at the centre of Table 2 report paid work by men, whereas the two columns on the right show paid work by women (the second and third numeric columns show married respondents only; whereas the first and fourth columns show a mixture of married & unmarried respondents). Of the first two numeric columns, the first column shows the amount of work which male respondents said they did per week; the second shows the amount (married) female respondents said her husband did. In most countries, male & female respondents seem to be approximately in agreement about the amount of time men spend at paid work: for example, men and women in Brazil both said that on average, men do about 41 hours per week of paid work. The most noticeable difference between male and female respondents is in Cameroon, where men reported doing 24 hours' paid work; whereas Cameroon women reported that their husband does 37 hours per week. Similarly, the two right-hand columns in Table 2 indicate general agreement between women and men, as regards the amount of paid work done by women.

Table 2: paid work by women and men, by gender of respondent

country	-	oaid work: usband	Hours of paid: self/wife	
Country	Male Female respondents		Male respondents	Female respondents
Brazil	41	41	15	14
Egypt	36	31	4	5
Chad	37	44	13	23
Nigeria	22	32	14	13
Cameroon	24	37	14	13
Congo-Brazzaville	41	44	27	28
Kenya	42	38	21	29
South Africa	25	27	16	15
India	50 53		4	4
Indonesia	38	43	16	13

Table 2 shows a clear pattern that in general (in these ten countries), men seem to do more paid work than women do. The largest difference between male time-use and female time-use is in India: a typical man seems to do about 52 hours per week (taking the average of 50 and 53 hours for male and female respondents, in the middle of Table 2); whereas a typical woman does about 4 hours per week. Egypt also shows a large difference between men and women, regarding paid work. But in Congo-Brazzaville and Kenya, women seem to do about 28 hours per week paid work: not much less than the 43 hours done by men (43 is the average of 41 and 44 hours, from male & female respondents).



#### Who does most housework: men, or women?

A 'traditional' division of labour is usually assumed to mean where most or all housework is done by women rather than by men. Table 3 shows data on time spent cooking, and confirms this prediction: almost all of the cooking (in households interviewed in WAS surveys) was done by women, rather than men. There seems to be general agreement between women & men about this topic: for example, Brazilian men reported that a woman (on average) spent about 12 hours per week on cooking, which is not very different to the estimate of 11 hours per week by female respondents.

Table 3: unpaid work cooking by women and men, by gender of respondent

Country	•	nt cooking self/husband	hours spent cooking (per week): self/wife		
	male respondents	female respondents	male respondents	female respondents	
Brazil	4	2	12	11	
Chad	1 1		16	14	
Nigeria	4 1		16	15	
Cameroon	3	2	13	11	
Congo-Brazzaville	6	4	14	12	
Kenya	4	2	12	11	
South Africa	2 1		8	7	
India	1 0.4		18	18	
Indonesia	0.4	0.2	6	6	

Note that it isn't clear exactly what the people interviewed meant by 'cooking': for example, does it include washing-up the utensils and pans used to cook with? It seems likely that the word 'cooking' would be interpreted in a broad sense, to include all types of food preparation (including making sandwiches, for example, even if they were made from raw ingredients). In Table 3, the number '0.4' (time spent cooking by Indian men, according to women interviewees) means 0.4 hours, which is about 24 minutes. This type of time-use data is not available for Egypt.

Another type of housework included in WAS surveys is cleaning. There are different types of cleaning; this document examines time spent on two types: cleaning the house; and washing clothes. Laundry might include time spent carrying clothes to a laundrette and back, to use washing machines (or, in a rural area, carrying clothes to a nearby river). Table 4, unlike Tables 2 and 3, does not report data from male and female respondents (because there are two types of cleaning, the table would become rather complicated if responses from male & female respondents were kept separate); analysis of WAS data (not reported in this document) indicates that men gave fairly similar responses to women.



It is not clear what the people interviewed meant by cleaning their home, but it is likely to include tasks such as tidying things away, sweeping/mopping floors, and cleaning windows. The translation of the question (from English, to the local language) might influence the interpretation of the question.

Table 4: time spent on cleaning and laundry, by women and men

Country	time spent	by husband	time spent by wife		
Country	cleaning cleaning home clothes		cleaning home	cleaning clothes	
Brazil		0.3		5	
Chad	1	2	6	8	
Nigeria	3	4	8	8	
Cameroon	3	3	5	6	
Congo-Brazzaville	4	5	9	9	
Kenya	2	2	5	6	
South Africa	1	1	7	6	
India	1	0.4	8	8	
Indonesia	1	0.5	5	7	

Table 4 shows time-use on cleaning in nine of the ten countries studied (this question was not asked in Egypt; the Brazil survey asked about cleaning clothes, but did not include a question on cleaning the home). Table 4 makes it clear that almost all cleaning (of the home, and of clothes) is done by women rather than by men. This suggests that all nine countries in Table 4 are 'traditional' rather than 'modern', as regards the division of labour between men and women; this finding is similar to the patterns in Tables 2 and 3 above.

Another type of 'housework' which WAS surveys include was shopping – the WAS questionnaire referred to regular shopping for food, rather than types of shopping which might be considered a leisure activity, such as shopping for clothes. Table 5 reports data on this type of time-use.

In Table 5, there is a clear difference between men and women, in all ten countries studied: women tend to spend more time shopping than men do. The difference is very clear in Indonesia, where men spend about 0.4 hours per week shopping for their family, compared with about 6 hours per week for women. It appears that male respondents are in broad agreement with female respondents, in Table 5.



Table 5: time spent shopping by women and men, by gender of respondent

Country	hours spen by hus			t shopping vife
	male	female	male	female
	respondents	respondents	respondents	respondents
Brazil	2	1	2	2
Egypt	2	1	8	6
Chad	1 1		9	7
Nigeria	4	4	6	7
Cameroon	2	2	7	5
Congo-Brazzaville	6	5	11	10
Kenya	3	2	7	6
South Africa	1 1		3	3
India	4 3		5	5
Indonesia	0.4	0.3	6	6

To summarise the ideas discussed above, Tables 2 to 5 suggest that all ten countries studied by WAS surveys tend to follow a fairly "traditional" division of labour, in which most unpaid housework is done by women; and most paid work is done my men.

It may be interesting to consider another question: do men do more, or less, work than women overall? It is possible to add the time spent on each type of housework shown above (cooking, cleaning, laundry, and shopping) and the amount of paid work, to get an overall total time spent. Note, however, that paid work may have been interpreted as meaning time spent at work, and ignore time spent travelling to and from work (time spent travelling to work wasn't included in WAS surveys).



Table 6: time spent on paid work and housework, by women and men: excluding childcare

	husband			wife		
Country	paid work	housework	total	paid work	housework	total
Brazil	41	3	44	14	16	30
Egypt	33	1	34	5	24	29
Chad	39	5	44	18	29	46
Nigeria	25	11	36	14	32	46
Cameroon	28	8	36	13	23	36
Congo-Brazzaville	42	12	54	28	31	58
Kenya	40	7	47	25	22	47
South Africa	26	4	30	15	20	35
India	51	2	53	4	34	38
Indonesia	40	1	41	14	14	28

Unlike Tables 3 and 4 above, Table 6 includes Egypt (there was a general question on housework in Egypt; but the Egyptian questionnaire did not give enough detail for Egypt to be included in Tables 3 or 4 above). Table 6 confirms the pattern in Tables 2 to 6 above: most paid work is done by men, and most unpaid work is done by women. Table 6 also indicates that the total amount of work (paid & unpaid) for men is broadly similar to that for women: for example, the total amount of time spent in Chad is 44 hours for men, and 46 hours for women. In some countries (such as India), the total time spent by men is more than that by women; in other countries (such as ), women spend more time than men. However, a weakness of Table 6 is that it excludes childcare – a task usually carried out by women. Table 7 below produces an alternative version of Table 6; but Table 7 includes childcare.



Table 7: time spent on paid work and housework, by women and men: including childcare

Country	husband				Wife		
	paid work	housework	total	paid work	housework	total	
Brazil	41	20	61	14	62	76	
Egypt	33	3	37	5	34	38	
Chad	39	12	51	18	61	78	
Nigeria	25	18	43	14	53	66	
Cameroon	28	15	43	13	44	57	
Congo-Brazzaville	42	29	71	28	68	95	
Kenya	40	15	56	25	41	67	
South Africa	26	8	33	15	38	54	
India	51	7	58	4	46	50	
Indonesia	40	3	43	14	29	43	

Table 7 is similar to Table 6. The difference between these two tables is that Table 6 excludes childcare; whereas Table 7 <u>does</u> include childcare. This time, we see a more consistent pattern – the total number of hours of work (paid and unpaid combined) is now generally much higher for women than for men: for example, in Brazil, the average man does 61 hours of work per week; whereas the average woman does 76 hours per week. The exception to this pattern is India, where men do more hours than women (58 hours for men, compared to 50 hours per week for women).



## Has time-use in India changed since 1992?

This section focuses on India, because India provides an opportunity to assess long-term trends. The first WAS survey took place in India in 1992, and a similar survey has been repeated in 1997, 2002, and 2007. However, the number of cities has increased steadily since 1992 (Simister & Mehta, 2010); so to ensure comparability over time, all four WAS India samples are limited to the two cities in which fieldwork was carried out in all four years of the WAS survey: Mumbai (formerly called Bombay), and Chennai (formerly called Madras). Table 8 reports data from these four surveys.

Table 8: time-use in two Indian surveys (Mumbai and Chennai), including childcare

Year	husband			wife		
	paid work	housework	total	paid work	Housework	total
1992	47	1	48	5	30	35
1997	54	6	60	4	50	55
2002	52	8	60	4	50	54
2007	57	9	66	3	58	62

Table 8 shows some fairly clear trends from 1992 to 2007. We see the number of hours of paid work by men increasing from 47 hours per week (in 1992) to 57 hours per week (in 2007). Women did more housework in 2007 than they did in 1992 (increasing from 30 to 58 hours per week). In each year, men did more work (paid work and housework combined) than women, but this difference was smaller in 2007 than in 1992. As Simister & Mehta (2010) point out, India has been through many changes over the period from 1992 to 2007 – it is not clear which change(s) are responsible for the different time-use patterns shown in Table 8.

Bhoite (1988: 235) claimed that that many Indian women are forced to spend hours every week on basic processing of food before it can be cooked, such as grinding wheat using a mortar & pestle; and the 1991 Indian Census found only 15% of Indian households had a water tap in their home (Nanda, 1994: p. 691). But we might expect modern technologies (such as food processors) to reduce this burden for women between 1992 and 2007 – rather than *increasing* the amount of time spent on housework, as Table 8 suggests. Vanek (1974: p. 120) reported that the amount of time spent on housework by non-employed women in the USA hardly fell over the last fifty years, despite the greater use of time-saving technology such as washing-machines: higher standards of cleanliness are now expected of women – for example, clothes are now cleaned more frequently than they were in previous decades.



#### Are urban areas different to rural areas?

This section considers the possibility that time-use in urban households is different to time-use in rural households. Not all WAS surveys can be used to assess this topic: in some countries (such as South Africa, India, and Indonesia), WAS surveys only interviewed households in urban areas. But in five countries, WAS surveys include a rural sample as well as an urban sample (in Kenya, the non-urban sample should be described as 'peri-urban', rather than 'rural').

Table 9: time use in urban and non-urban areas, in five countries

0 1		hι	ısband	wife		
Country		paid work	housework	paid work	housework	
	City	36	3	6	33	
Egypt	Rural	32	3	4	34	
	City	38	11	18	58	
Chad	Rural	41	13	17	69	
Nigorio	City	26	18	15	52	
Nigeria	Rural	25	18	12	54	
Comoroon	City	29	15	14	44	
Cameroon	Rural	26	16	13	43	
Vanua	City	46	14	31	39	
Kenya	peri-urban	37	16	23	43	

Table 9 indicates that (for all of these five countries), men and women tend to do more paid work in urban areas than in rural areas (the only exception being men in Chad). Among these five countries, the biggest difference between paid work time in urban and rural areas is seen in Kenya. Regarding unpaid housework (by woman and by men), the difference between urban and rural areas is generally much smaller than it was for paid work. But in Chad and Kenya, women tend to do much more housework in rural areas (or in peri-urban areas) than women do in urban areas. It is not clear why such differences exist, but they may be associated with local culture.



## Attitudes, and time spent on paid work & housework

It is often claimed that attitudes are related to behaviour. To investigate whether there is a link between attitudes & behaviour, Table 10 divides the WAS sample in each country according to their attitude to the statement 'A wife should always obey her husband' (disagree, agree, or neither). The time-use of men does not seem strongly related to this attitude, for either paid or unpaid work. But among women, there appears to be a relationship: women who disagree with this statement tend to do more paid work, and less unpaid work (housework). Note, however, that this is not a consistent pattern: it does not apply in every country. Even if there is such a relationship, it isn't clear which is cause & which is effect (do feminist women refuse to do as much housework? Or do women who do more paid work become feminist, as a result of their exposure to modern ideas?) It is difficult to answer questions on causality using a cross-section dataset such as WAS surveys.

Table 10: time use on paid work or housework including childcare, by attitude to gender roles

	Dis/agreement with: 'A wife		men		women
Country	should always obey her husband'	paid work (per week)	cooking/cleaning/ laundry/shopping/ childcare (per week)	paid work (per week)	cooking/cleaning/ laundry/shopping/ childcare (per week)
Egypt	agree	34	3	5	35
	neither	28	3	6	35
	disagree	40	2	9	29
Chad	Agree	39	12	18	61
	neither	41	15	20	54
	disagree	36	14	18	63
Nigeria	Agree	25	18	14	53
	neither	23	25	11	53
	disagree	18	16	13	46
Cameroon	Agree	28	15	13	44
	Neither	26	17	16	42
	disagree	24	13	14	42
Congo-Brazzaville	Agree	42	29	28	68
	neither	49	17	23	68
	disagree	42	32	27	61
Kenya	agree	40	16	25	42
	neither	41	16	30	36
	disagree	39	12	28	38
South Africa	Agree	24	13	13	40
	neither	25	17	16	37
	disagree	30	13	19	37
India	Agree	53	9	4	54
	neither	56	9	3	57
	disagree	53	10	5	54
Indonesia	Agree	41	3	13	29
	neither	40	6	19	35
	disagree	39	4	15	28



## Summary

This document has outlined some findings from WAS surveys, as regards time-use. There seem to be some consistent patterns between the ten countries studied, as regards time-use; however, more research is needed to assess whether or not a pattern found here would apply in all countries.

WAS surveys are a useful resource, for researchers investigating time use in the ten countries studied by the ten WAS surveys carried out so far. Ideally, it would be desirable to compare time-use data from different surveys, but in practice it is difficult to do so because of various practical questions (such as the question wording varying from one survey to another).

This research document has offered some evidence that WAS time-use data can shed light on household behaviour. I hope more researchers will use empirical data, such as the WAS survey data examined in this document, to investigate why people behave the way they do.

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## Appendix: Details on WAS surveys

This document uses data from the following WAS household surveys (all of which were commissioned by John Simister, the author of this report). The program of WAS surveys is ongoing, so more data should be available in future years.

Table A1: Overview of WAS surveys

Year	Locations studied	Country	Fieldwork organisation
1992	Bombay and Madras	India	IMRB
1994	Rio de Janeiro & Sao Paulo	Brazil	Marplan
1997	Bombay, Madras, Delhi, Calcutta	India	IMRB
2000	eleven cities	South Africa	Markinor
2001	Palembang, Jakarta, Bandung, Surabaya	Indonesia	Univ. Indonesia
2002	the same four cities as the above line	Indonesia	Univ. Indonesia
2002	6 cities	India	IMRB
2003	37 locations	Nigeria	RMS
2004	44 locations	Kenya	SBO
2005	37 locations	Nigeria	RMS
2005	seven governorates	Egypt	CSSA
2007	11 cities	India	IMRB
2008	some but not all regions	Chad	Cible
2009	all regions	Cameroon	Cible
2011	several regions	Congo-Brazzav	ille Cible

The right-hand column in the above Table A1 is the organization which carried out the interviewing. The codes above are abbreviations of the following organisations: the Indian Market Research Bureau Ltd; Marplan Brasil Itda.; Markinor Pty Ltd.; The University of Indonesia; Research & Marketing Services Ltd; SBO Research Ltd (formerly called Strategic Business Opportunities Ltd); CSSA: FEPS, University of Cairo; and Cible Ltd.

