Traditional Gender Roles Persist: The Impact of Remote Work on Household Dynamics Amidst the COVID-19 Pandemic in Japan

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Abstract

Despite the increase in female labour participation following "Abenomics," traditional gender roles persist in Japanese households, contributing to a significant disparity in housework. This study investigates the impact of remote work on household time allocation amidst the COVID-19 pandemic in Japan. Utilizing panel data from Osaka University's Preference Parameter Study, we analyse doubleincome households from 2018 and 2021 to 2023. Our findings indicate that before the pandemic, teleworking husbands spent more time on both market and non-market work compared to their non-teleworking counterparts. However, this trend reversed post-pandemic, with teleworking husbands reducing their time spent on both types of work. This shift may be attributed to the unpreparedness of both employers and employees for the sudden transition to remote work, as well as challenges related to workers' adaptability to new technologies. Our study underscores the persistent influence of traditional gender roles and highlights the need for supportive policies to address these disparities.

Introduction

Many married women in Japan face significant challenges such as the heavy burden of housework and childcare responsibilities [1]. This challenges often prompt them to opt for more flexible forms of employment instead of full-time positions [2]. Additionally, these household obligations may hinder their ability to take on overtime hours, which can convey a negative signal to employers [3]. Without support for housework and childcare, women are frequently overlooked for promotion opportunities [4]. Nevertheless, it is crucial to acknowledge that many men, especially those in full-time positions, already endure long working hours [5].

The onset of the COVID-19 pandemic in April 2020 brought about significant shifts in economic activity, resulting in reduced work hours. Concurrently, social distancing measures, including widespread adoption of remote work, led to a decline in commuting time. This shift in work dynamics potentially freed up more time for male workers to handle household chores.

Therefore, our study aims to explore the gendered impacts of telework and the COVID-19 pandemic on time allocation in household chores.

Data

This research utilizes panel datasets from Osaka University, specifically the 2016-2018 and 2021-2023 Preference Parameter Study (PPS). By pooling these datasets, we gathered a total of 12,501 observations from married individuals, which we categorized into double-income and single-income households. To simplify the analysis, our study focuses exclusively on the sample from double-income households from the 2018 and 2021-2023 (PPS). This specific group includes 1,052 observations who reported their time allocation to work and housework during these periods.

Chart 1. Gender Disparity within Double Income Households on Time Allocation (in Minutes per week)

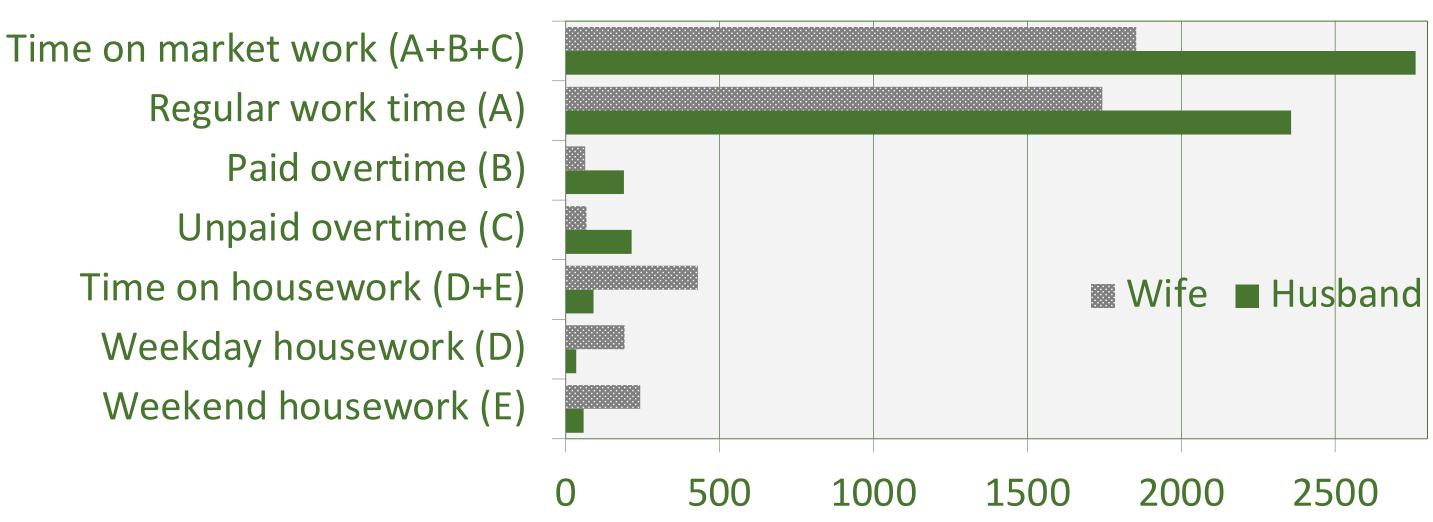
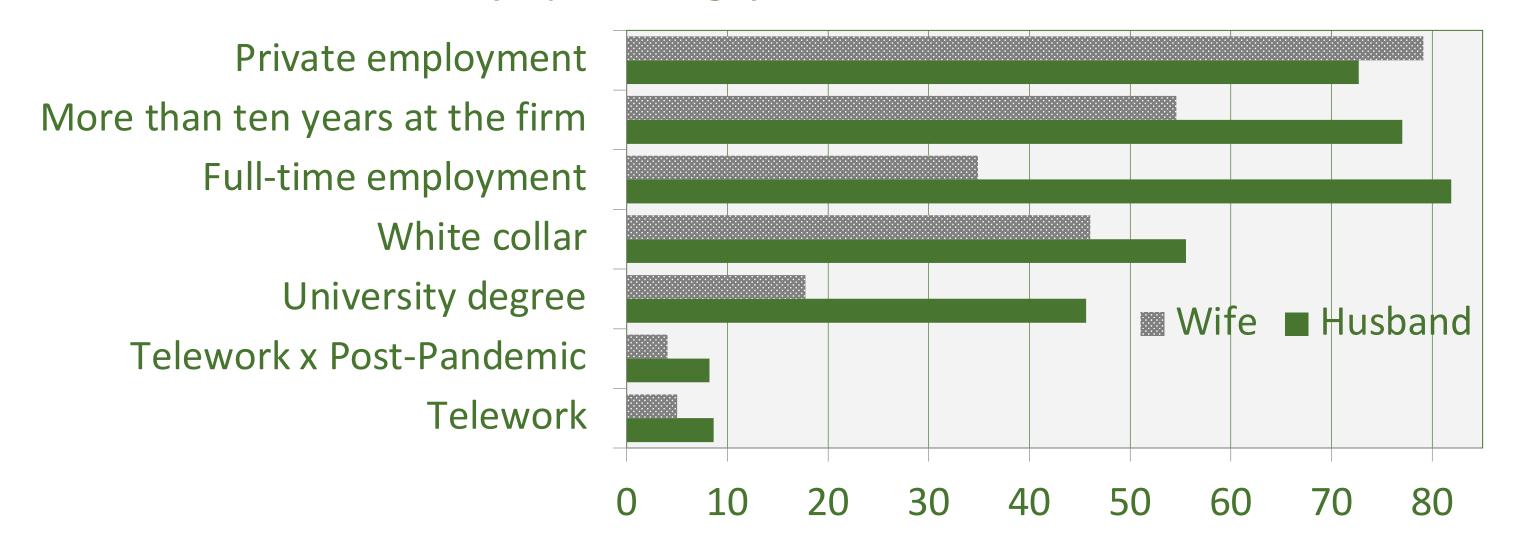


Chart 2. Gender Disparity within Double Income Households on Other Characteristics (in percentage)



Method

To disentangle confounding effects, we employ a difference-in-differences analysis.

$$\ddot{y}_{it} = T\ddot{e}le_{it}\gamma + P\ddot{o}st_{it}\delta + (Tele * Post)_{it}\theta + \ddot{X}_{it}\beta + \ddot{u}_{it}$$

To observe change within an individual over time, we focus on the within-transformation model, as shown in the above equation. y_{it} represents outcome variables of an individual i^{th} in period t. Tele represents telework behaviour. Post represents periods after COVID-19 were categorised as a pandemic. Tele*Post represents an interaction term. X represents a vector of control variables. u represents a vector of the residual term.

Results

Table 1. The Gendered Effects of Telework, Pandemic and Interactions on Time Allocation

Market work Non-market work Variables Total work hour (A+B+C) Work hour (A) Paid overtime overtime (B) Unpaid overtime overtime (D+E) Weekday Weekend (D) Weekday Weekend (D) Weekday Weekend (D) Weekday (E)	11111		•					
Variables work hour (A+B+C) Work hour (A) Paid overtime overtime overtime (B) Unpaid work (D) Weekday Weekend (D) Weekday Weekend (D) Husbands Tele 585.9* 474.9 156.0 4.988 115.9** 61.88 54.06** (351.0) (584.8) (372.1) (295.2) (48.26) (37.76) (26.26) Post -119.9* -50.26 -36.81 -75.60* 3.365 10.38 -5.628 (61.34) (81.59) (51.91) (39.35) (8.490) (6.648) (4.666) Tele x Post -620.4* -756.8 0.249 16.95 -126.6** -69.71* -57.02**		Market work			Non-market work			
Tele 585.9* 474.9 156.0 4.988 115.9** 61.88 54.06** (351.0) (584.8) (372.1) (295.2) (48.26) (37.76) (26.26) Post -119.9* -50.26 -36.81 -75.60* 3.365 10.38 -5.628 (61.34) (81.59) (51.91) (39.35) (8.490) (6.648) (4.666) Tele x Post -620.4* -756.8 0.249 16.95 -126.6** -69.71* -57.02**	Variables	work hour	hour	overtime	overtime	work		
Post (351.0) (584.8) (372.1) (295.2) (48.26) (37.76) (26.26) (-119.9* -50.26 -36.81 -75.60* 3.365 10.38 -5.628 (61.34) (81.59) (51.91) (39.35) (8.490) (6.648) (4.666) Tele x Post -620.4* -756.8 0.249 16.95 -126.6** -69.71* -57.02**	<u>Husbands</u>							
Post -119.9* -50.26 -36.81 -75.60* 3.365 10.38 -5.628 (61.34) (81.59) (51.91) (39.35) (8.490) (6.648) (4.666) -126.6** -620.4* -756.8 0.249 16.95	Tele	585.9*	474.9	156.0	4.988	115.9**	61.88	54.06**
Tele x Post (61.34) (81.59) (51.91) (39.35) (8.490) (6.648) (4.666) (1.59) (1.5		(351.0)	(584.8)	(372.1)	(295.2)	(48.26)	(37.76)	(26.26)
Tele x Post -620.4* -756.8 0.249 16.95 -126.6** -69.71* -57.02**	Post	-119.9*	-50.26	-36.81	-75.60*	3.365	10.38	-5.628
		(61.34)	(81.59)	(51.91)	(39.35)	(8.490)		
(359.6) (589.3) (375.0) (297.1) (49.35) (38.61) (26.87)	Tele x Post							
		(359.6)	(589.3)	(375.0)	(297.1)	(49.35)	(38.61)	(26.87)
Obs. 947 579 581 597 949 944 931	Obs.	947	579	581	597	949	944	931
R-squared 0.161 0.168 0.175 0.162 0.065 0.059 0.076	R-squared	0.161	0.168	0.175	0.162	0.065	0.059	0.076
No. of id 526 377 379 387 526 522 518	No. of id	526	377	379	387	526	522	518
<u>Wives</u>	Wives							
Tele 407.9 -113.9 -77.41 -8.859 27.61 36.30 -6.618	Tele	407.9	-113.9	-77.41	-8.859	27.61	36.30	-6.618
(274.5) (491.1) (172.6) (141.2) (72.70) (34.14) (47.43)		(274.5)	(491.1)	(172.6)	(141.2)		(34.14)	(47.43)
Post -14.63 16.47 -2.192 0.489 27.73* 9.308 13.18	Post							
(55.34) (70.89) (24.72) (19.60) (16.70) (7.846) (11.06)						` '	•	
Tele x Post -559.7** -201.9 69.56 24.97 37.23 -2.033 39.82	Tele x Post	-559.7**	-201.9	69.56	24.97	37.23	-2.033	39.82
(243.2) (421.4) (148.1) (120.6) (66.60) (31.28) (43.47)		(243.2)	(421.4)	(148.1)	(120.6)	(66.60)	(31.28)	(43.47)
Obs. 926 562 563 578 934 930	Obs.	926	562	563	578	934	934	920
R-squared 0.157 0.204 0.201 0.162 0.121 0.132 0.107	R-squared	0.157	0.204	0.201	0.162	0.121	0.132	0.107
No. of id 523 370 370 375 526 526 521	No. of id	523	370	370	375	526	526	521

Notes: These estimates are adjusted for demographic characteristics, work characteristics, and income characteristics of survey respondents and their spouses. Market work estimates are also adjusted for the time spent on housework of survey respondents and their spouses, whereas non-market work estimates are adjusted for the total time spent on work of survey respondents and their spouses. Respondents' household characteristics and attitude characteristics are controlled for in the estimates. * and ** represent 90% and 95% confidence level, respectively.

Discussion

The contrasting trends in telework behavior before and after the pandemic underscore how worker autonomy shapes both productivity and household involvement. Before the pandemic, husbands who opted for telework did so voluntarily, often to save time on morning routines and commuting [6]. According to Garcia [7], this saved time boosted mental health and focus, leading to greater productivity, longer work hours, and increased participation in household chores.

In contrast, husbands who began teleworking after the pandemic did so out of necessity. Unlike many pre-pandemic teleworkers who had possibly worked remotely for several years and were accustomed to balancing market and non-market tasks, these husbands were less familiar with this work style. This lack of choice and unfamiliarity, combined with pandemic-induced mental fatigue, led to reduced engagement in both market work and household responsibilities.

In terms of household dynamics, many wives are more likely to work part-time or on temporary contracts, making them more susceptible to furloughs or reduced work hours. As a result, women often became primarily responsible for the additional cleaning required during the pandemic.

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