

〔査読論文〕

Health deprivation of single mothers in Japan

Mayumi Nakamura · Mito Akiyoshi

富山大学紀要. 富大経済論集 第68巻第2・3号抜刷（2023年3月）

富山大学経済学部

Health deprivation of single mothers in Japan

Mayumi Nakamura · Mito Akiyoshi

キーワード : health, single mothers, Japan, work-life balance, gender stratification

This paper focuses on health deprivation of single mothers in Japan. Because of unfavorable laws, family policies and the structure of the labor market immanent in the dominant ideology of patriarchy, and limited social support, which characterize Japanese welfare regime (familism), and faced with adverse circumstances such as low income and poor access to resources, Japanese single mothers are often left to fend for themselves and their offspring. Our statistical analysis demonstrates some of the health consequences of this: the double burden of performing paid work and attending to family obligations leaves single mothers significantly less healthy than married mothers. Single mothers are less likely to reduce working hours even when they need to meet family obligations, while married mothers can limit their work hours if the double shift becomes too onerous, since they have alternative sources of income (husband) and/or can receive help from their husband performing household chores and child care. In sum, being a single mother in Japan often requires sacrificing her own well-being when other people in her life demand that she pay attention *their* well-being.

1. Introduction

This study sets out to elucidate particular aspects of the social

constraints that single mothers are subject to in Japan. We will argue that these social constraints are the outcome of the ideology of patriarchy, which together shapes the legal system, family policies, and labor market into a set of structural forces that reward certain courses of action and punish others. The fulcrum of power here is a social welfare system (“familism”) imbued with traditional gender and family values, in which single mothers are considered deviations from the normal family. As a result, they are often ignored and denied benefits of various kinds. One result of this predicament is poor health, which is the focus of this study. Its empirical subject is Japanese single mothers, but it has broader implications for understanding the relationship between family and gender inequality, policy decisions, and individual outcomes.

This study first reviews the literature on the poverty of single mothers in Japan and the main social structures that lead to their disadvantage: the familistic welfare regime underlying relevant parts of the legal code, a gender-segregated labor market, and limited public intervention.

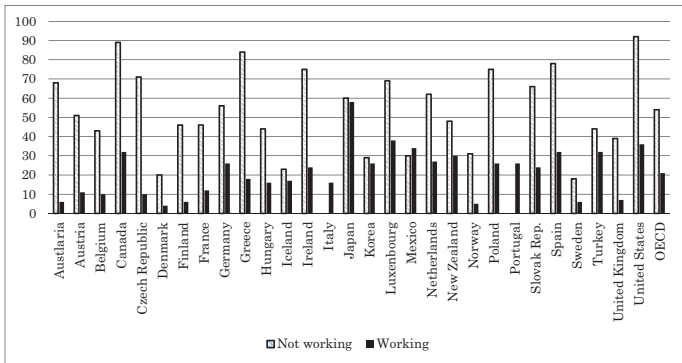
Our statistical analysis then demonstrates some of the health consequences of single mothers’ constrained choice. For example, compared to married mothers, single mothers are less likely to reduce working hours to accommodate family needs. Married mothers, on the other hand, are more likely to adjust work hours in response to childcare responsibilities and healthcare needs, since they usually have alternate source of income and household labor in their domestic partner. This provides a buffer against the impact of the double burden when it might otherwise threaten their health; single mothers do not have that buffer.ⁱ Conversely, longer work hours correlate negatively with single mothers’ health, while no analogous effect is found for married mothers. Being a single mother in

Japan means not being able to optimize her well-being when circumstances call for adjustment and adaptation.

2. The Double Burden of Single Mothers and its Background

Most Japanese single mothers live below the poverty level, often having to scrape by even when they are working. The comparative poverty rate of working Japanese single-parent households in 2008, which was mostly comprised of female-headed households,ⁱⁱ was 58%, and was the highest among OECD countries. The poverty rate of Japanese non-working single-parent households with children was 60%. Figure 1 shows that the difference in poverty rate based on employment status is negligible in Japan, while there are substantive differences in most other societies. This suggests that for Japanese single parents, having a job does not necessarily leave them better-equipped to fend off poverty.ⁱⁱⁱ The latest OECD statistics shows that the poverty ratio for single-parent households in Japan was the third highest among the OECD countries in 2018, next to South Africa and Brazil (OECD 2022).^{iv}

Fig.1 Poverty ratios of single-parent households in OECD countries^v



(OECD 2008)

The financial predicament of Japanese single mothers is not a sign of their dependence on government welfare. In fact, data show that they work hard to support themselves and their children. They had a labor force participation rate as high as 85% in the 2000s— the second-highest among OECD countries—, and yet they were more likely to be “working poor, ” typically earning less than the poverty level compared to their counterparts in most OECD countries (Zhou 2008). More recent statistics show that 81.8% of single mothers were in the labor force in 2016 (Ministry of Health, Labor and Welfare 2022a), still making Japanese single mothers’ labor force participation rate one of the highest among OECD countries (OECD 2022^{vi}). Moreover, the working day for single mothers in Japan is long. Tamiya and Shikata (2007) showed that weekday working time for single mothers with a child younger than 6 was 250 minutes for Americans, and 345 minutes for Japanese.^{vii}

In comparison to other OECD countries, Japanese public spending on family benefits has been limited. For instance, in 2008, Japan’s public spending on family benefits was 0.747% of GDP, making it the fourth lowest among OECD nations. After children’s poverty drew much attention with the release of popular books on the subject in 2008, the government deployed additional resources to support working families. In 2017, family benefit spending was raised to 1.585% of GDP, moving it to the 12th lowest rank on family benefits spending among 37 OECD countries. In other words, this considerable increase in public spending on family support still left Japan far behind the OECD average (2.115%).

The Familism Welfare Regime

The lackluster spending on family benefits and consequent single

mothers' poverty provides a quintessential example of the welfare regime known as familism (Miyamoto et al. 2003, Funahashi et al 2020), in which patriarchal values and gender inequality persist and public support is sparse.

Esping-Andersen (1990) classified welfare regimes into three types: "liberal", "corporatist-statist", and "social democratic". The liberal regime is typified by countries such as the U.S., Canada, and Australia. It aims for a small state, self-responsibility for risk management, and market-centered solutions. It emphasizes equal opportunity and social benefits are minimal. The corporatist-statist regime, typically represented by European countries such as Germany, France, and Italy, is characterized by conservatism and familism, family and religious groups have historically been mainly responsible for welfare, and traditional gender roles are presupposed (Funahashi et al. 2020). Social security is available only when family support is unavailable. Social democratic regimes, represented by Northern European countries such as Sweden, Denmark, and Norway, aim for universalism and socialization of risk. Family and markets play small roles in the provision of welfare, and the state assumes a key responsibility.

Esping-Andersen (1990) classified Japan as a mix of the corporatist-statist and liberal regimes (Miyamoto et al. 2003; Miyamoto 2004). It is characterized by conservatism and familism, with the family being historically mainly responsible for welfare. Traditional gender roles are presupposed (Funahashi et al. 2020), and social security is available only when family cannot support those in need. At the same time, Japan has the characteristics of a liberal regime, in which social security expenditure is low.

Gender inequality and heavy reliance on family as welfare provider

encode Japan's system as a regime of "familism" in the taxonomy of welfare regimes. South Korea, with its welfare system's dependence on family as well, is also included in such a regime (Miyamoto et al. 2003; Miyamoto 2004; Funahashi et al. 2020). In a similar vein, Sugimoto and Morita (2009) point out that Japan and South Korea, where gender inequality is severe and public family support is low, are characterized by "poor execution of welfare policy" and "poor execution of gender equality policy" (Sugimoto and Morita 2009: 318; Funahashi et al. 2020). According to these scholars, these two societies promise little in terms of gender equality and state provision of welfare, and deliver even less.

Familism, characterized by gender inequality and low public spending on welfare, undermines the economic standing of Japanese single mothers. The fact that households led by working single mothers are making as little as those led by non-working mothers, and the further fact that both household types are financially worse off than single-father families illustrates that in such a regime mothers outside marriage are playing an unwinnable game. If they work they will barely rise out of poverty, and if they can't work they are subject to whatever slim pickings are made available for them.

The legal system and single mothers

The Japanese legal system reinforces the familistic welfare regime, with the family register system and child custody/child support regulations particularly disadvantaging single mothers.

Family register system

The family unit, typically headed by a male patriarch, is legally

defined in Japan through *koseki seido*, the family register system. Unchanged since WWII, this system struggles to meet the the changing reality and increasing diversity of 21st-century families (Funahashi et al. 2020). It defines a family with two parents and one or more children as the normal type, while single-mother households and other variants are treated as deviations and often fall off the radar of policy makers (Funahashi et al 2020). Those who fall outside the norm may find themselves penalized as well. For instance, children born out of wedlock are listed as such in the register, and until as recently as 2013 their entitlement to an inheritance was only a half of what their legally born siblings could receive. Thus, the family register system is intended to function as a social control mechanism, not-so-subtly channeling people to adopt the path of a “normal” family.

Defined as deviants by this system, single mothers found their problems of poverty were long overlooked (Abe 2008), and were even worsened by legislation in 2002 that was intended as a reform. Unemployment at that time was low and the public still adhered to a belief in Japan as an essentially middle-class nation (*kokumin so chuuryu*). The legislative reform thus mainly focused on employment policy and *shoshika-taisaku* (measures to reverse the falling birth rate). The problem of poverty was left to a system of livelihood protection for the underprivileged (*seikatsu hogo*) and public medical assistance. Consistent with the defining features of a liberal welfare regime, livelihood protection, which covers a shortfall in living expenses, is very low in Japan. Further, only seven percent of single-mother households received it, in 2005^{viii} according to Abe (2008). More recent data from 2020 shows that about 11.7% of single mothers receive livelihood protection, which is still low considering the fact that 48.3% of single-parent households are living below

the poverty level (OECD 2022; Ministry of Health, Labour, and Welfare 2021)¹.

Child support from fathers

Traditional gender role expectations combine with the laissez-faire familistic welfare regime to produce negative effects in the area of child support policy. Japanese single mothers' economic condition suffers in part because child custody after a divorce usually goes to the mother (joint custody is not allowed in Japan), while divorced fathers are not obligated to pay child support. Only 24.3% of divorced mothers received child support from their ex-husbands in 2016 (Ministry of Health, Labor and Welfare 2016).

Shimoebisu (2008) points out that there is no social norm that pressures divorced fathers to pay child support, and the Japanese government has been consistent in not intervening to enforce such payments (Funahashi et al. 2020). In the early 2000s, this problem attracted attention as a policy issue, and several measures were undertaken. The widow welfare act was revised in 2002, specifying that the non-custodial parent must "strive" to pay child support. In 2003, the civil execution law was revised the system of compulsory execution of divorced fathers' child support payment. In 2007, the Center for Child Support Consultation (*yoikuhisodan shien senta-*) was founded to provide support to single mothers and enforce the child support payment of divorced fathers. Despite these changes, Japanese child support policy is still not enforced or compelled by the state, and divorced fathers are only encouraged to make a personal effort to provide support. As a result, only 42.9% of single mothers had a child support agreement with an ex-husband, and only 24.3% were receiving the agreed-upon support in 2016 (Ministry of Health, Labour and

Welfare 2016).

Single mothers and the labor market

The economic insecurity of single mothers is also perpetuated by gender inequality in the Japanese labor market. The lifetime employment system and the expectation of arbitrarily long work hours deter many Japanese women from pursuing a career and achieving gainful employment in the first place (Yamaguchi 2017). 46.9% leave the labor force entirely after their first birth, expecting that after returning to work they will not be able to put in the long hours demanded (Cabinet office 2018a). If they wish to return to the labor market after their children are older, obtaining full-time employment in midlife is difficult because the lifetime employment system strongly favors those already in the pipeline. In such a system, any break in career, even in the case of taking a legally permitted parental leave, is a self-inflicted wound from which few can recover. Many companies still hire full-time employees immediately upon college graduation and do not accommodate those with child-rearing or elderly care responsibilities. Thus, women who seek a return to employment in midlife often must accept low-paying part-time work.

The distinction between full-time and part-time is crucial in understanding labor market outcomes in Japan because of the country's severe labor market segmentation (Doeringer and Piore 1971; Yamaguchi 2017). Part-time work often represents the secondary sector in Japan. It is characterized by high turnover, low wages, and little prospect for skills development or promotion. In many cases it also lacks benefits such as paid sick leave, health insurance, and social security contributions by the employer. Assignment to this segment is often determined by gender rather

than the applicant's skills or preference, resulting in overemployment of (often unqualified) men and underemployment of (often highly qualified) women (Yamaguchi 2017). 70% of all part-time workers are women. 56% of female workers and 22% of male workers are part-time (Cabinet Office 2018b). Of those who work part-time because a full-time position is not available, most are female. In short, a labor market that tracks people into career trajectories based on gender effectively traps single mothers in the secondary sector as part-time workers.

Policy Shift

To make the things worse, there was a shift in single-parent policy in the early 2000s which further exacerbated the double burden of single mothers. After the enforcement of the Child Rearing Allowance Act (1961) and Act on Welfare of Mothers with Dependents and Widows (1964), single mothers had been eligible for welfare benefits. However, the 2002 revision of that latter act marked a major policy shift “from welfare to employment” (Saito 2020: 229), even though Japanese single mothers’ labor force participation rate was already as high as 80% (Ezawa 2018).

The government reduced the already-meager spending for single-mother families, setting a time limit for eligibility of the most common allowance, the *jido fuyo teate*, a supplementary allowance that all families could receive but which was not intended to cover all living expenses. The government also gradually cut off the *boshi kasan*, an additional allowance to single mothers on the *seikatsu hogo* livelihood protection system^{ix} which covers all living expenses.^x These policy shifts imposed severe strain on already-struggling single mothers laboring under the double burden of paid work in the labor market and unpaid work at home (Tamiya and Shikata

2007; Ishii and Urakawa 2018; Saito 2020).

In the late 2000s, the continuing poverty of Japanese single mothers attracted wide social attention (e.g., Abe 2008), and triggered debates (Saito 2020) which led to more changes and some reversals in policy. *Boshi kasan* was restored in late 2009. The *jido teate* was increased and expanded to include junior high school students (Yada 2021),^{xi} and in late 2019 the frequency of this allowance for single parents was doubled from three times a year to six. Various measures by national and local governments also came into effect, including educational and economic support, and enforcement of child support payments. As a result, some statistics show that the relative poverty ratio of single parents (most of whom are women) improved after 2012 (Cabinet Office 2019b).

In sum, the familism regime, characterized by gender inequality and low public intervention, contributed to Japanese single mothers' poverty through its ramifications in the legal system, in limited public spending and in labor market practices. The policy shift of 2002 exacerbated the situation, although there were signs of improvement after its peak in 2012.

Single mothers and health in other countries

Studies carried out in countries other than Japan have shown single mothers to be prone to poorer health than partnered mothers. McLanahan (1983), using U.S. data, showed that three kind of stressors — “presence of chronic life strains,” “occurrence of major life events,” and “absence of social and psychological supports” — impact single mothers more severely than married mothers. Benzeval (1998) used a British data set to discover that single mothers have poorer self-rated health than partnered mothers. Socioeconomic conditions explain the difference but not completely, and the

author suggests that other variables, such as social support and stigma, may be in play as well. Fritzel and Burström (2006), using Swedish data from the 1980s and 1990s, found that economic strain caused by a policy change worsened the self-rated health of both single mothers and coupled mothers, but more severely for poorer subgroups of single mothers. Cairney et al. (2003) showed that single mothers in Canada suffered from more depression than married mothers, and that it could be attributed to stress and lack of social support. Trujillo-Alemán et al. (2019) showed that single mothers in Spain were more likely to have poorer self-rated health than partnered mothers, and that the difference is explained by social class and employment status. Whitehead et al. (2000) conducted comparative analysis of British and Swedish data, and showed that despite a policy that specifically protects single mothers from poverty, and despite their relatively more secure position in the labor market in Sweden, in both countries single mothers' health was poor. In Britain , 50% of the poor health was explained by poverty and joblessness, while in Sweden only 3 to 13% could be explained by those variables.

All these studies suggest that single mothers are less healthy than partnered mothers, and this can be attributed to economic factors as well as other factors such as lack of social support. Few of them, however, directly target the health effects of the double burden of time spent on paid work and time spent on household chores and child care. Conjecturally, this may be because none of those countries has a familistic welfare regime with low public spending and high gender segregation. Single mothers in those countries consequently might not face as much time-strain as Japanese single mothers with their high labor force participation, long work hours, limited welfare benefits, non-supportive ex-husbands, and full-time custody

obligations. This may explain the lack of focus on time constraints of single mothers in those countries.

Single Mothers and Health Problems in Japan

Although it is known that Japanese single mothers' health is worse than that of their married counterparts, few studies have investigated the difference empirically in detail (Raymo 2015). Most studies on paid work and health in Japan have focused on married women and mothers (Inaba 1995; Matsuda 2005; Yoda 2018; Saito 2020). Few studies have focused on why single mothers measure more poorly on indexes of well-being, including health (Raymo 2015).

There are some exceptions. Saito (2020) investigated how employment status affects single mothers' and married mother's health and distress-related indexes, using propensity score matching. Being a working single mother lowered self-rated health by 20.7% compared to non-working single mothers. However, the independent variable was work status, and the study thus did not investigate the impact of variables such as work hours and number of children, or their combination effects.

Raymo and Zhou (2012) used the recursive bivariate probit model for the determinants of self-rated health for Japanese single mothers. They found that not working (compared to working) and working an irregular work schedule affect single mothers' self-rated health positively. They also found that cohabitation with a parent is correlated with poor health. They concluded that single mothers with health problems are more likely to co-reside with a parent. Their finding suggests that long work hours from employment, along with having sole childrearing responsibility, affects their health negatively. It further suggests that support of the co-

resident parent may serve as a buffer to ease the impact of the double burden, especially when the single mother is sick. Their sample, however, was limited to single mothers and could not provide comparative data on how the double burden may impact single mothers and married mothers differently.

Raymo (2015) used an ordered logit model to investigate determinants of self-rated health. He found that single mothers are significantly more likely to be worse off than married mothers. Mother's education, poor economic condition, work-life conflict, and disadvantageous life events partially account for the difference. This study controlled for work hours and child-rearing responsibilities (number and age of children) separately, and did not test their interaction effect, which could have revealed how the double burden — in effect, work hours plus child care — impacts health. He did, however, control for “work-and-life conflict,” a variable with a 0-to-15 scale combining three questions that had each been measured on a 0-to-6 scale: “In the past year, I could not do household chores and child care which I needed to do”; “The time spent for work is too long, and it is difficult to do household chores and child care”; and “Due to household chores and childcare and nursing of the elderly, it becomes difficult to concentrate on my work”. Although this captures some aspect of work and life conflict, it does not create a clear picture of how work hours and child care actually constitute this conflict.

Thus, we set out to focus on the time strain induced by the double burden on single mothers in Japan, and investigated how the combination of time spent at work and time spent at home jointly affect single mothers' health. We looked at this phenomenon using JGSS2012.

3. Hypothesis, Data, and Variables

The literature review establishes that Japanese single mothers tend to work more hours than they would deem optimal for themselves. That is, they tend to work longer hours than they wish even when they experience poor health as a result. It also suggests that the highly segmented labor market and the welfare regime deny them access to resources to meet basic needs. This section tests two hypotheses that further examine the link between single mothers' health and work hours compared with married mothers.

3.1 Hypothesis

Hypothesis 1:

Single mothers work significantly longer hours than married mothers, due to lack of financial support.

Hypothesis 2: As childrearing responsibilities and work hours increase, single mothers' health condition deteriorates more than that of their married counterparts

3.2 Data

This study uses data from JGSS2012 (Japanese General Social Surveys 2012), a nationwide cross-sectional survey employing two-stage stratified random sampling, that includes men and women aged 20 to 89 living in Japan. The data includes variables such as work hours, marital status, health condition, income sources. In order to focus on women of childbearing age, our study only includes women aged 20 to 49. Attack sample size is 9000, and valid sample is 4667.

JGSS2012 was chosen because it was the best data to test our hypothesis. The year 2012 marked the peak of single mothers' poverty after 2002 (Ministry of Health, Labour and Welfare 2019). Thus, 2012 data allow us to study the contrast between single and married mothers in the most stark form (Nakamura 2022). It also included self-rated health, as well as detailed questions on various sources of income, which are indispensable for us to test our hypothesis.

For the analysis, we use married and divorced mothers, excluding widowed and unmarried mothers. Widowed mothers are better off than divorced mothers on average (Hamamoto 2019), since they tend to have bereaved wife pension benefits, inheritance from the late husband, and life insurance proceeds. Unmarried mothers are a small minority in Japan, as low as 2.3% in 2018 (OECD 2022), since the family registration system severely discriminates against children born out of wedlock. Moreover, divorced mothers are the majority among single mothers in Japan. Thus, we focus on divorced mothers in this study.

3.3. Variables

In this study, dependent variables were weekly work hours of main job (for section 4.1.), and self-rated health (for section 4.2., reverse recoded so that higher values signify better health). Independent variables used in this analysis are: sex, age, squared age, education ("high school and less," "junior college or technical colleges", "university and higher"), yearly income (midpoint), number of children, sources of income (including income of oneself, husbands, parents, other family members, pension, unemployment insurance, social welfare, rental income, and other).

Table 1: Distribution of variables

		Full Sample				Subsample with "Health var."			
		Married mothers		Divorced Mothers		Married Mothers		Divorced Mothers	
		Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Education	High School or Less	216	51.6	29	69.0	113	54.1	15	75.0
	Junior College/ Technical College	127	30.3	10	23.8	58	27.8	4	20.0
	University/ Graduate School	76	18.1	3	7.1	38	18.2	1	5.0
	Total	419	100.0	42	100.0	209	100.0	20	100.0
Number of Children	1	128	30.5	19	45.2	62	29.7	7	35.0
	2	225	53.7	14	33.3	104	49.8	9	45.0
	3	55	13.1	9	21.4	36	17.2	4	20.0
	4 or More	11	2.6	0	0.0	7	3.3	0	0.0
	Total	419	100.0	42	100.0	209	100.0	100.0	100.0
Source of Income: Self	0	153	36.5	6	14.3	81	38.8	3	15.0
	1	266	63.5	36	85.7	128	61.2	17	85.0
	Total	419	100.0	42	100.0	209	100.0	20	100.0
Source of Income: Husband	0	9	2.1	42	100.0	6	2.9	20	100.0
	1	410	97.9	0	0.0	203	97.1	0.0	0.0
	Total	419	100.0	100.0	100.0	209	100.0	100.0	100.0
Source of Income : Parent(s)	0	408	97.4	36	85.7	203	97.1	17	85.0
	1	11	2.6	6	14.3	6	2.9	3	15.0
	Total	419	100.0	42	100.0	209	100.0	20	100.0
Source of Income: Other family Memb	0	411	98.1	40	95.2	202	96.7	20	100.0
	1	8	1.9	2	4.8	7	3.3	0.0	0.0
	Total	419	100.0	42	100.0	209	100.0	100.0	100.0
Source of Income: Pension	0	409	97.6	40	95.2	204	97.6	20	100.0
	1	10	2.4	2	4.8	5	2.4	0	0.0
	Total	419	100.0	42	100.0	209	100.0	100.0	100.0
Source of Income: Unemployment Insu	0	418	99.8	42	100.0	208	99.5	20	100.0
	1	1	0.2	0	0.0	1	0.5	0	0.0
	Total	419	100.0	42	100.0	209	100.0	100.0	100.0
Source of Income: Savings	0	410	97.9	39	92.9	203	97.1	18	90.0
	1	9	2.1	3	7.1	6	2.9	2	10.0
	Total	419	100.0	42	100.0	209	100.0	20	100.0
Source of Income: Social Welfare	0	415	99.0	32	76.2	208	99.5	14	70.0
	1	4	1.0	10	23.8	1	0.5	6	30.0
	Total	419	100.0	42	100.0	209	100.0	20	100.0
Source of Income: Rental Income	0	416	99.3	42	100.0	208	99.5	20	100.0
	1	3	0.7	0	0.0	1	0.5	0.0	0.0
	Total	419	100.0	42.0	100.0	209	100.0	100.0	100.0
Source of Income: Other	0	418	99.8	41	97.6	208	99.5	19	95.0
	1	1	0.2	1	2.4	1	0.5	1	5.0
	Total	419	100.0	42	100.0	209	100.0	20	100.0
Main Source of Income	Self	14	3.3	35	83.3	8	3.8	17	85.0
	Husband	400	95.5	0	0.0	197	94.3	0	0.0
	Parent(s)	0	0.0	3	7.1	0	0.0	2	10.0

	Other Family Members	4	1.0	0	0.0	3	1.4	0	0.0							
	Pension	0	0.0	1	2.4	0	0.0	0	0.0							
	Savings	0	0.0	1	2.4	0	0.0	0	0.0							
	Social Welfare	0	0.0	2	4.8	0	0.0	1	5.0							
	Rental Income	1	0.2	0	0.0	1	0.5	0	0.0							
	Total	419	100.0	42	100.0	209	100.0	100.0	100.0							
Residing with (a) parent(s)	0.00	396	94.5	28	66.7	198	94.7	14	70.0							
	1.00	23	5.5	14	33.3	11	5.3	6	30.0							
	Total	419	100.0	42	100.0	209	100.0	20	100.0							
Health	1 Good					92	44.0	0.0	0							
	2					50	23.9	3	15.0							
	3					46	22.0	8	40.0							
	4					20	9.6	5	25.0							
	5 Poor					1	0.5	4	20.0							
	Total					209	100.0	20	100.0							
Full Sample				Subsample with "Healthvar."												
Married Mothers				Divorced Mothers				Married Mothers				Divorced Mothers				
	Weekly Work	Self income	Family income	Weekly Work	Self income	Family income	Weekly Work	Self income	Family income	Weekly Work	Self income	Family income				
	Age	hours		Age	hours		Age	hours		Age	hours					
N	419	419	419	419	42	42	42	42	42	209	209	209	209			
Mean	39.3	18.9	110.4	646.8	38.9	33.0	189.3	264.2	38.9	18.0	108.2	628.9	40.7	32.1	209.5	281.5
Std. Deviation	6.2	17.2	142.8	304.4	6.7	15.7	127.6	174.8	6.0	17.2	145.5	294.7	6.6	14.0	147.7	173.0
Minimum	21	0	0	85	25	0	0	35	22	0	0	85	26	0	35	35
Maximum	49	65	925	2300	49	60	600	800	49	60	925	1725	49	48	600	700

4. Analysis (JGSS)

In this section, first we will show the determinants of work hours (4.1) and then, the determinants of self-rated health (4.2) and the variables that account for the differences in work hours and self-rated health between married mothers and single mothers.

4.1 Determinants of work hours

Table 2: Determinants of Work Hours

	Model 1		Model 2	
	B	S.E.	B	S.E.
Constant	-34.723	25.699	-11.589	17.643
Marital status (divorced=1; married=0)	13.263 ***	2.877	0.822	4.561
Age	2.738 *	1.387	1.183	0.943
Squared age	-0.031 †	0.018	-0.015	0.012
Junior college	-3.399 †	1.815	0.111	1.242
University/ Graduate school	-2.364	2.214	0.115	1.499
Number of children	-1.611	1.098	-0.271	0.746
Living with a parent(s)	1.737	3.057	2.982	2.312
Current income: Self			26.997 ***	1.162
Current income: Husband			-8.452 *	4.255
Current income: Parents			0.831	3.182
Current income: Other family members			-3.374	4.065
Current income: Pension			-3.341	3.477
Current income: Unemployment insurance			-1.514	11.397
Current income: Savings			-5.199	3.390
Current income: Social welfare			-6.423 †	3.387
Current income: Rental income			4.229	6.590
Current income: Other family members			4.172	8.274
Adjusted Rsquare	0.073		0.583	
F	6.166		38.904	
Significance	<.001		<.001	
N	461		461	

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

In Table 2, the results of an OLS regression model is presented. The dependent variable is weekly work hours (sum of “main work” and “additional work”), and independent variables are age, squared age, number of children (currently living with the respondent), education, cohabitation with a parent(s), and sources of income. The analysis includes divorced and married women, aged 20 to 49, living with one or more child(ren).

According to Hypothesis 1, divorced mothers work significantly longer hours than married mothers, due to the absence of other sources of financial support. Table 2 supports this hypothesis. Model 1 is a simple model controlling for basic attributes. It shows that divorced mothers work significantly more hours (13 more per week on average) than married mothers, controlling for basic attributes such as number of children, age, education, and living arrangement (cohabitation with parent(s)).

Model 2 controls for variables on various financial sources, and marital status becomes insignificant. Among financial sources, “self” significantly increases work hours for mothers (26.997 hours per week). “Husband” significantly reduces work hours (8.452 hours per week). “Social welfare” reduces work hour by 6.423 hours per week, although it is marginally significant at the 10% level).

Table 3: Cross tabulation of marital status and main source of income

	Self	Husband	Parent	Other family members	Pension	Savings	Social Welfare	Rental income	Total
Married	14	400	0	4	0	0	0	1	419
	3.3%	95.5%	0.0%	1.0%	0.0%	0.0%	0.0%	0.2%	100.0%
Divorced	35	0	3	0	1	1	2	0	42
	83.3%	0.0%	7.1%	0.0%	2.4%	2.4%	4.8%	0.0%	100.0%
Total	49	400	3	4	1	1	2	1	461
	10.6%	86.8%	0.7%	0.9%	0.2%	0.2%	0.4%	0.2%	100.0%

$\chi^2_{(7)}=340.236, p<.,001$

Table 3 is a cross-tabulation table of marital status and respondent’s main source of income. The main source of income for divorced mothers is “self”. The 83.3 percent of divorced mothers with one or more children mainly count on themselves as the main source of income, while only 3.3% of married counterparts do so. On the other hand, social welfare seems to

be not much of a source of help for divorced mothers. Only 4.8% of divorced mothers list “social welfare” as a main source of income, although 23.8% of divorced mothers aged 20-49 in the sample did receive some social welfare subsidies, while 1% of their married counterparts did so.

The findings suggest that divorced women are deprived of financial support and must count on themselves as the main source of income. Financial support from husbands reduces work hours for married mothers, while such support is not available for divorced mothers. Divorced mothers are more likely to receive social welfare than married mothers, but such support is limited. Only less than one quarter of divorced mothers receive any sort of income from social welfare. Moreover, a very few divorced mothers (4.8%) count on welfare as main source of income. Thus, divorced mothers have to work longer hours even when they have to care for children by themselves.

Having to support themselves financially while caring for child(ren) by themselves makes divorced mothers bear a double burden, which consequently takes a toll on their health.

4.2. Determinants of Self-rated Health

This section analyzes the determinants of health for Japanese single and married women.

Table 4: The determinants of Self-rated Health

	Model 1			Model 2		
	B	S. E.	Exp (B)	B	S. E.	Exp (B)
Constant	0.751 **	0.148	2.119	8.545	5.752	5143.194
Marital Status (divorced=1; married=0)	-0.952 *	0.473	0.386	-0.104	0.632	0.901
age				-0.421	0.307	0.656
age squared				0.005	0.004	1.005
University/ Graduate School				1.202 *	0.486	3.328
Junior college				0.385	0.360	1.469
Highschool or less (reference)						
work hours/ per week				-0.031 †	0.017	0.970
# or children				0.630 *	0.249	1.878
Interaction # of children*work hours				-0.001 **	0.000	0.999
living with one's parent (s)				0.500	0.615	1.649
one's own income				-0.002	0.002	0.998
family income				0.001 †	0.001	1.001
Chi-square	4.042			31.129		
DF	1			11		
Significance	0.044			0.001		
-2 Log likelihood	289.74			262.65		
Cox & Snell R Square	0.017			0.127		
Nagelkerke R Square	0.024			0.176		
N	229			229		

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

This section tests Hypothesis 2 (As childrearing responsibilities and work hours increase, single mothers' health condition deteriorates more than that of their married counterparts). This is a dichotomous logistic regression model with a dichotomous self-rated health variable as the

dependent variable. The cases included in this analysis are those women aged 20-49, with one or more children. The self-rated health condition was answered on a 5 point scale which ranges from 1 (good) to 5 (poor). One and two (“good” and “relatively good”) of the original scale was recoded as 1 and three to five (“average”, “relatively poor” and “poor”) are recoded as 0.

Model 1 of Table 3 shows that single mothers’ health condition is significantly poorer than that of married mothers. However, in Model 2, after controlling for education, work hours, number of children, interaction between number of children and work hours, cohabitation with a parent(s), income, and family income, the mother’s marital status become insignificant. Among the variables, mother’s education (university-educated mothers are healthier), work hours (those who work longer hours are less healthy, though it was significant at 10% level), number of children (those with more children are healthier), interaction between the number of children and work hours, and family income (those with more family income are healthier, although it was marginally significant at 10% level) are significant. The interaction term is significantly negative, suggesting that if mothers work longer hours and have more children, they are less healthy. The findings in Model 2 explain why single mothers are less healthy than their married counterparts in Model 1. The average work hours are longer for single mothers, while they have to take care of children without spouse’s help. Single mothers suffer from the double burden of work and childrearing. While married mothers may reduce work hours when their work and home responsibilities are high, single mothers do not have this option. This double burden affects single mothers’ health.

5. Discussion

In this study we tested the impact that the double burden has on the health of single mothers, using JGSS2012 micro data. We hypothesized that “Single mothers work significantly longer hours than married mothers, due to lack of financial support” (hypothesis 1) and “As childrearing responsibilities and work hours increase, single mothers’ health deteriorates more than that of their married counterparts” (hypothesis 2). The results of the analysis support our hypotheses.

Single mothers work significantly longer hours, controlling for other variables, and they are significantly less healthy than married mothers. Moreover, the interaction term (the combination effect) of the number of children and work hours has significantly more negative effects on single mothers’ health than that of married mothers. When household responsibility and work responsibility become excessive, married mothers can reduce work hours and/or receive domestic help from the husband to reduce the negative health impact. Single mothers do not have this option.^{xii}

Japanese single mothers are in a particularly disadvantaged position compared to their counterparts in other advanced countries (OECD2022), due largely to the peculiar welfare regime in which they find themselves (Funahashi et al. 2020; Miyamoto et al. 2003; Miyamoto 2004). Their poverty rate is one of the highest among OECD countries, even when they are working (OECD2008). Familism — a hybrid of corporatist-statist and social democratic welfare regimes — leaves patriarchal gender ideology in control, obsolete legal systems in place, and the labor market gender-segregated, while public spending for income supplementation is low (Funahashi et al. 2020; Miyamoto et al. 2003; Miyamoto 2004). Moreover, the practice of giving divorced mothers custody of their children while

failing to enforce the father's child-support obligations, leaves women further disadvantaged economically.

Previous studies suggested such disadvantages had consequences for women's health, but few did empirical studies on the determinants of poor health of single mothers compared to married mothers. The exceptions — Raymo (2015) and Saito (2020) — did not test the combined effect of paid work (work hours) and unpaid work (i.e., number of children) on single mothers and married mothers, and did not explore the health gap between them. We hypothesized that the interaction effect has a more severe impact on Japanese single mothers' health than on that of married mothers. Our findings support this hypothesis and explain the health gap between married and single mothers. Since many Japanese single mothers do not have any resource buffer against the double burden of paid and unpaid work, they suffer more directly and more severely from it.

But why does unprotected exposure to the double burden affect their health? It is probably because lack of free time interferes with sleep. Single mothers sleep less than married mothers (Nakamura 2022), and lack of sleep is known to have significant negative effects on health (Ministry of Health, Labour and Welfare 2022a; Åkerstedt et al. 2019). This finding suggests that time-poverty may be one of the most overlooked types of impoverishment that Japanese single mothers face, and that further exploration of it will reveal the full extent of the inequities that exist there.

[1] We would like to thank anonymous reviewers and editors for the comments and help they have kindly provided. We also would like to thank Taiki Nakamura for his contribution, who worked as a part of this study as his undergraduate thesis project, and Gerald Lombardi for his comments and advice.

Acknowledgement:

The data for this secondary analysis was provided by the GESIS Data Download System. The Japanese General Social Survey (JGSS) is designed and carried out by the JGSS Research Center at Osaka University of Commerce (Joint Usage / Research Center for Japanese General Social Surveys accredited by MEXT) with support from the Osaka University of Commerce. JGSS-2012 was funded by MEXT Promotion of Joint Research Center Program. The project was conducted in cooperation with the Institute of Social Science at the University of Tokyo.

REFERENCE

- Abe, Aya. 2008. *Kodomo no Hinkon: Nihon no Fukohei wo Kangaeru (Poverty of Children: Inequalities in Japan)*. Tokyo: Iwanami Shoten.
- Akaishi, Chieko. 2009. *Nihon no Boshi-setai no genjo to genzai no mondai ten: Tojisha dantai no shiten kara (Current state and issues of Japanese single-mother household: From the viewpoint of the interest party)*,” The Cabinet Office HP, https://www8.cao.go.jp/shoushi/shoushika/meeting/zero_pro/k_6/pdf/s5.pdf.
- Åkerstedt T, Ghilotti F, Grotta A, Zhao H, Adami HO, Trolle-Lagerros Y, Bellocco R (February 2019). "Sleep duration and mortality - Does weekend sleep matter?". *Journal of Sleep Research*. **28** (1): e12712. doi:10.1111/jsr.12712. PMC 7003477. PMID 29790200.
- Cabinet Office. 2018a, ““Daiisshi shussan zenngo no josei no keizoku shugyo ritsu” oyobi shussan ikuji to josei no shugyo jokyo ni tsuite (The ratio of women who keep

- working around the time of their first birth and the relationship between birth and childrearing and employment status),” The Cabinet Office HP, (http://www.cao.go.jp/wlb/government/top/hyouka/k_45/pdf/s1.pdf).
- Cabinet Office. 2018b, *Danjo kyodo sankaku hakusho. (Gender Equality White Paper)*.
- _____.2019a. “kodomo no hinkon taisaku ni okeru omo na shisaku ni tuite: Heisei 31 nendo seifu yosan an” in Cabinet office HP (https://www8.cao.go.jp/kodomonohinkon/yyushikisya/k_10/pdf/ref2.pdf).
- _____.2019b.”Kokumin seikatsu kiso chosa no gaikyo” <https://www.mhlw.go.jp/toukei/saikin/hw/k-tyosa/k-tyosa19/dl/03.pdf>).
- Committee on the Elimination of Discrimination against Women. 2016. “Concluding Observations on the Combined Seventh and Eighth Periodic Reports of Japan.” https://tbinternet.ohchr.org/Treaties/CEDAW/Shared%20Documents/JPN/CEDAW_C_JPN_CO_7-8_21666_E.pdf
- Doeringer, Peter B. and Michael J. Piore. 1970. *Internal Labor Markets and Manpower Analysis*. Lexington, Mass.: Heath.
- Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton, N.J.: Princeton University Press.
- Ezawa, Aya. 2018. “Single Mothers, Welfare Reform, and Poverty in Japan,” *Journal of Ohara Institute for Social Research*, 711:19-32. http://oisr-org.ws.hosei.ac.jp/images/ozl/contents/711_03.pdf
- Funahashi, Keiko, Naomi Yuzawa, Akiyo Uozumi, and Naoko Soma. 2020. “International Comparison of Social Policies for Single Parent Families : Introduction to the Special Issue” *Journal of Ohara Institute for Social Research*, 746:1-16.
- Hamamoto, Chizuka. 2019. “Living Conditions of Divorced or Widowed Elderly Women,” *Journal of social security research / National Institute of Population and Social Security Research* 4 (1): 20-32. <https://www.ipss.go.jp/syoushika/bunken/data/pdf/sh19040103.pdf>
- Inaba, Akihide. 1995. “Gender, Role Strain, and Psychological Distress Structure of the Relationship between Gender and Social Stress,” *Japanese Journal of Family Sociology* 7:94-104.
- Ishii, Kayoko, and Kunio Urakawa, 2018, “Shotoku to jikan no hinkon kara miru seiki/hiseiki no kakusa” in Masahiro Abe and Isao Yamamoto eds. *Tayouka suru nihonjin no hatarakikata: hiseiki/josei/koreisha no katsuyaku no ba wo saguru*. Tokyo: Keio University Press: 67-89.
- Japan Institute for Labour Policy and Training. 2006. *Shugyo Shakai sankai nika nsuruChosa (Survey on Employment and Social Participation)*. <https://www.jil.go.jp/institute/research/2007/031.html>.
- Japan Institute for Labor Policy and Training. 2019. “Boshi setai no hinkonritsuwa gowarigoe, 13%ga deep poor setai.” (More than 50% of single-mother households are poor, 13 percent are classified as ‘deep poor’) Japan Institute for Labor Policy and Training. <https://www.jil.go.jp/press/documents/20191017.pdf>.

- Matsuda, Shigeki, 2005, "The Relationship between Women's Work and their Psychological Distress in Japan: Family Friendly Policies and Quality of Roles" *Journal of Social Science* 57(1) : 113-25.
- Ministry of Health, Labor and Welfare. 2003. "Boshi setai tou shisaku ni kansuru kihon hoshin kenkyukai ni okeru torimatome ni tsuite (Summary on Basic Policy Workshop on policies for single-parent household)," Ministry of Health, Labour and Welfare HP, <https://www.mhlw.go.jp/houdou/2003/03/h0312-4.html>.
- _____. 2012. "Heisei 23nendo Zenkoku Boshi setai tou Chosa Kekka Hokoku (Report on National Survey on Single-parent Families 2011) ," Ministry of Health, Labour and Welfare HP, https://www.mhlw.go.jp/seisakunitsuite/bunya/kodomo/kodomo_kosodate/boshi-katei/boshi-setai_h23/index.html.
- _____. 2016. "Heisei 28nendo Zenkoku Hirori oya setai tou Chosa Kekka Hokoku (Report on National Survey on Single-parent Families 2016)," Ministry of Health, Labour and Welfare HP, <https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000188147.html>.
- _____. 2019a. "Jinko Dotai Chosa Jinko Dotai Toukei kakuteisuu rikon" in Estat HP <https://www.e-stat.go.jp/dbview?sid=0003411869>.
- _____. 2019b. "Kokumin seikatu kisochocha no gaikyo" in Ministry of Health, Labor and Welfare HP, <https://www.mhlw.go.jp/toukei/saikin/hw/k-tyosa/k-tyosa19/dl/03.pdf>.
- _____. 2021. "Seikatsu hogo no hi-hogosha chosa (Reiwa 3 nen 1gatsubun gaisu) no kekka wo happyou shimasu" in Ministry of Health, Labour and Welfare HP. <https://www.mhlw.go.jp/toukei/saikin/hw/hihogosya/m2021/dl/01-01.pdf>.
- _____. 2022a. "Heisei 28 nendo zenkoku Hitori oya setai tou chousa kekka no gaiyou ni tsuite" in Ministry of Health, Labour and Welfare HP. https://www.mhlw.go.jp/file/05-Shingikai-12601000-Seisakutoukatsukan-Sanjikanshitsu_Shakaihoshoutantou/0000190571.pdf
- _____. 2022b. "Suimin to seikatu shukan byou tononofukai kankei ," in (Ministry of Health, Labour and Welfare HP. <https://www.e-healthnet.mhlw.go.jp/information/heart/k-02-008.html>).
- Miyamoto, Taro, Ito Peng, Takafumi Maibashi. 2003. "Nihon gata fukushi kokka no ichi to odtai" in Esping-Andersen, Gøsta ed. *Tenkanki no fukushi kokka* Tokyo: Waseda University Press. pp.295-336.
- Miyamoto, Taro. 2004. "Fukushi kokka no ruikai to dotai: Kinnen no kenkyu doko kara" https://www.cao.go.jp/zei-cho/history/1996-2009/gijiroku/kiso/2004/pdf/kiso_b13d.pdf.
- Nakamura, Mayumi, and Mito Akiyoshi. 2015. "What Determines the Perception of Fairness Regarding Household Division of Labor between Spouses?" *PLoS ONE* 10 (7): e0132608. <https://doi.org/10.1371/journal.pone.0132608>.
- Nakamura, Mayumi. 2022. "Singuru maza no suimin to kenko: JGSS2021 wo mochiita bunseki kara (Single mothers' sleep and health: Analysis of JGSS2021 data)" paper presented at the Japan Sociological Society, Annual meeting 2022.

- National Institute of Population and Social Security Research. 2018. “Jinko Tokei Shiryo-shu (Population statistics reference material),”, National Institute of Population and Social Security Resaearh HP, http://www.ipss.go.jp/syoushika/tohkei/Popular/P_Detail2018.asp?fname=T06-14.htm&title1=
- Nishi, Fumihiko, 2017. “Singuru mazaa no saikin no genjou.” (Recent facts about single mothers.). Statistical Bureau of Japan, <http://www.stat.go.jp/training/2kenkyu/pdf/zuhyou/single5.pdf>.
- OECD. 2008. “Growing Unequal? Income Distribution and Poverty in OECD Countries” https://read.oecd-ilibrary.org/social-issues-migration-health/growing-unequal_9789264044197-en#page140.
- _____. 2022. OECD Family Database, OECD HP, <https://www.oecd.org/els/family/database.htm>.
- Raymo, James, 2015, “Singuru mazaa no kofuku-do, kenko to Keizai-teki werubiiingu (Single mother’s happiness, health and economic wellbeing), “Japan Institute for Labour Policy and Training, *Kosodate setai no werubiiingu: Hahaoya to kodomo wo chushin ni (Wellbeing of the families with small children: With a focus on mothers and children). JILPT Shiryo Siruizu (JILPT Paper Series)*, 146:100-119. No.146: 100-119 <https://www.jil.go.jp/institute/siryo/2015/146.html>.
- Raymo, James, and Yanfei Zhou. 2012. “Living arrangements and the well-being of single mothers in Japan,” *Population Research Policy Review*. 31(5): 727-749. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3490400/>
- Saito, Tomohiro. 2020. “The Effect of Single Mother’s Employment on their Health in Japan,” *Sociological Theory and Methods* 35(2): 228-242.
- Shimoebisu, Miyuki. 2008. *Yoikuhisaku ni miru kokka to kazoku: Boshisetai no shakaigaku (Family, State & Child Support Policy)*. Tokyo: Keiso Shobo.
- Shirahase, Sawako. 2005. *Shoshi korei shakai no mienai kakusa: jenda-, sedai, kaiso no yukue*. Tokyo: University of Tokyo Press.
- Statistics Bureau. Survey on time use and leisure activities. 2011. Available: <http://www.e-stat.go.jp/SG1/estat/List.do?bid=000001044385&cycode=0>. Accessed 10 May 2014. Japanese.
- Sugimoto, Kiyoe, and Akemi Morita. 2009. *Singuru mazaa- no kurashi to fukushi seisaku: nihon, amerika, denmaaku, kankoku no hikaku chousa*. Tokyo: Minerva Shobo.
- Tamiya, Yuko, and Masato Shikata. 2007. “Work and childcare in single mother families: a comparative analysis of mother's time allocation,” *The quarterly of social security research*, 43(3):219-231.
- Yada, Wakako. 2021. “Jido teate seido no hensen (teate shikyugaku/shotoku seigen/fuyokojo)” document submitted to House of Councillors Committee on Cabinet. <https://yatawaka.com/activity/2021/photos/20210518195556.pdf>
- Yamaguchi, Kazuo, 2017. *Hatarakikatano danjo fubyoudou. (Gender inequality in work and occupations)* Tokyo: Nippon Keizai Shinbun.

- Yoda, Shohei. 2018. "Employment and Psychological Distress among Married Women: Evidence from Panel Data," *Japanese Journal of Family Sociology* 30(1): 98-106.
- Zhou Yanfei. Single mothers today: Increasing numbers, employment rates, and income. In: Japan Institute Labour Policy and Training, editor. *Research on employment support for single mothers, JILPT Research Report no. 101*. Japan Institute Labour Policy and Training. (in Japanese); Tokyo: 2008. pp. 26–38.

-
- i It is true that husband's contribution to household chore and child care is quite limited in Japan than in other advanced countries (e.g., Statistic Bureau 2011). However, it is also known that, when there is a need in the family (i.e., existence of young children), husband's contribution increases (Shirahase 2005). Also, when wife's work load and child care responsibility become overload, the existence of alternative income (husband's income) make it easier adjust wife's work load. Thus, although Japanese husband's contribution to household chore and child care is quite limited, it still works as a "buffer" to ease the burden of double shift for married mothers.
- ii 84.39% of child custody goes to mother in 2019 (Ministry of Health, Labour and Welfare 2019).
- iii Although single-father households and single-mother households are both poorer than two-parent households, the financial difficulty of single-parent householding is predominantly an issue of single-mother households: single-father households earn about 3.6 million yen on average from fathers' paid work while single-mother households earn about 1.8 million yen on average from paid work (Ministry of Health, Labor and Welfare 2012).
- iv Separate figures for the working single parent and non-working single parent for Japan was not available for 2018.
- v Since Switzerland did not have separate figures for 'working' and 'non-working' single-parent household, it was excluded from the graph.
- vi OECD(2022) did not have the figure of Japanese single mother's labor force participation rate. The authors compared the figures of other OECD countries to the one from the Ministry of Health, Labour and Welfare (2016),
- vii The data was based on Survey on time use and leisure activities 2001, and American Time Use survey 2003.
- viii More specifically, Abe (2008) used the statistics from two different years to calculate the ratio. She used the statistics from 2003 for the number of all the single-mother households (about 1225,000 households) and used the statistics from 2005 for the number of single mother households (about 90,000 households) which received "*seikatsu hogo*."

- ix The percentage of Japanese single mothers who depend on “*seikatsu hogo*” liblihood protection which cover all the living cost was about 10% in 2009, much lower than their counterparts in the U.S.(Akaishi 2009). There is very strong stigma against receiving “*seikatsuhogo*”, and even among single mothers who apply for it, the denial rate is high (Akaishi 2009). Akaishi (2009) estimates that 70 to 80% of Japanese single mothers earn wages lower than the amount of the welfare allowance and are thus living under the official poverty level. And yet, single mothers applying for welfare are encouraged to seek work instead even when they have young children.
- x “*Boshi kasan*” was revived in late 2009, after the advent of new administration.
- xi During the process there was some name changes (from “*jido teate*” to “*kodomo teate*” “*tokubetsu sochi no kodomo teate*” to current “*child allowances*) and the income cap of the familly of the recipient was once removed in 2010, but reinstated in 2012. Overall, the amount of child allowances was improved after 2010, compared to what it was before 2010.
- xii One possible “*buffer*” to save Japanese single mothers from the double burden is coresiding with their parents. Although cohabitation with one’s parents did not significantly ease the impact on single mother’s health in our study, many other studies show its positive impact, including self-rated health (Raymo and Zhou 2012).

(原稿受付2022年9月29日, 採択決定2022年11月28日)

