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# PARENTAL WELL-BEING AND THE SEXUAL DIVISION OF HOUSEHOLD LABOR: A NEW LOOK AT GENDERED FAMILIES IN JAPAN

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## *Abstract*

Since the 1970s Japanese families are in a process of transformation – their size, housing arrangements, and lifestyles. Yet married couples with children continue to constitute the dominant form of families in Japan. While this “traditional” family model is still valid, the social environment and the economy have been going through significant changes, triggering surged public attention to people’s well-being. Against this background, this article studies the sexual division of household labor, a major feature of the postwar Japanese family system, and its relation to well-being. Data come from a nation-wide survey among 2,000 Japanese mothers and fathers of young children up to six years old. Well-being is measured in 16 separate areas on 11-point Likert satisfaction scales, with focus on the differences between mothers’ and fathers’ well-being. The sexual division of household labor is measured in actual and ideal household share contribution. We found a significant gender gap in household labor input between husbands and wives and in their satisfaction levels. Employment and working hours were found to have partial effect on husbands’, but almost no effect on wives’ mean satisfaction scores. We argue that despite all the external changes surrounding Japanese families, such as mothers’ increased labor activities, the domestic sphere has remained highly gendered and is a source of dissatisfaction of mothers relative to those of fathers.

## 1 Introduction

Since the 1970s Japanese society has been undergoing a transformation of family lifestyles. This transformation is strongly related to demographic changes such as delaying marriage, an increasing divorce rate, and a significant decline in the birthrate (Coulmas, 2008; Ochiai, 2010). These trends reflect the typical features of the so-called “second demographic transition” (van de Kaa, 1987), a concept developed in the Western European context. Notwithstanding certain differences, this concept has also been applied to Japan’s demographic change. However, in Japan, unlike in Western societies, there is neither a significant

increase in cohabitation nor in the number of children born out of wedlock (Ochiai, 2004). Furthermore, the institutionalization of non-married heterosexual and homosexual couples' partnerships has barely been an issue in Japanese policy-making so far.

Even though Japanese families are in the process of transformation, married couples with children continue to constitute the dominant form of families in Japan. Yet the environment surrounding "traditional" families has changed in recent years. Economic growth has come to a halt and irregular forms of employment have multiplied. The pension system has come under pressure, while housing and education continue to be expensive. All of these factors affect particularly young people's perception of their life and their future prospects. In fact, these changes are increasingly seen as affecting well-being. Surged interest in people's well-being and happiness can be observed in the Japanese government. In June 2010, the Cabinet adopted the so-called New Growth Strategy, emphasizing economic growth in harmony with a sustainable environment, the fulfilment of social needs, and people's happiness. It was also decided that the government should carry out research on happiness. Accordingly, the Economic and Social Research Institute (ESRI), established within the Cabinet office, initiated the so-called happiness research (*kofukudo chosa* 幸福度調査) in the same year (ESRI n.d.).

This article concerns family well-being, one of the target areas specified in the ESRI research on happiness, as response to the rising interest in the question of subjective well-being of individuals. We focus on the well-being of a particular group of people: parents with young children. A focus on this group is important for at least two reasons. First, the lifestyle of a parent has significant influence on the physical and psychological development of children (Sugawara, 2012). This is particularly true for young children who are more likely to be affected by their parent's life styles in terms of income, work style, division of household labor, and health. Thus a parent's well-being can be seen as a key element impacting a child's well-being. Second, existing research on the sexual division of household labor points to mothers' dissatisfaction with their unequally large share of domestic work (see 2.2 below). This is critical particularly for parents with young children. For, the younger the child is, the more household labor is required. In Japan, however, the level of a husband's participation in housework remains extremely low among couples with young children despite the recent public discourse on *ikumen* (イクメン) or fathers who are eager to get involved in childcare (see 2.2 below). This means that wives'

burden of performing most of the household labor is an even more serious problem to families with young children.

In this article, we use data collected in Japan in early 2012 from our joint research on parental well-being in Germany and Japan, a cooperation between the German Institute for Japanese Studies (DIJ), Humboldt University Berlin<sup>1</sup>, and the Benesse Institute for Child Sciences and Parenting (BICSP). For this article we focus on partnership well-being among married couples, and especially on gender differences within this dimension of family well-being. For in Japan, family and partnership continue to be strongly marked by traditional gender norms. Various studies point to the rigidity of the gendered division of labor among couples at home (see the next section). We link this gendered feature of Japanese families to the question of well-being, happiness, and satisfaction of those concerned, hoping to add new insights to our understanding of contemporary Japanese families.

We begin with an outline of major features of modern, postwar Japanese families and their transformation, and discuss this transformation with regards to people's well-being (section 2). In this section we review Ochiai's work on what she termed "postwar Japanese family system" (*kazoku no sengo taisei* 家族の戦後体制) and its transformation (Ochiai, 1997, 2004), in order to highlight major features of contemporary Japanese families, particularly gendered ones, which are relevant to our analysis. In section 3 we explain our methods of data collection and analysis. This is followed by the presentation of our findings in section 4. In concluding, we discuss our findings and suggest implications for future research.

## 2 Japanese Families and Well-Being

### 2.1 Gendered Postwar Japanese Family System

According to Ochiai (1997, 2004), the postwar Japanese family system rests on the following three pillars: (1) "housewifization"<sup>2</sup>, (2) reproductive egalitarianism, and (3) demographic changes leading to the emergence of new familial patterns. Ochiai uses the term housewifization to refer to women's retreat from

1 Hans Bertram is the principal investigator for the German survey.

2 For the original coining of the term, s. MIES, 1986: 16.

the labor market after marriage or childbirth. In Japan this process, which can be statistically observed as a decline in female labor force participation rates, proceeded during the period of the postwar economic growth and completed in the mid-1970s with the emergence of the to date largest number of fulltime housewives.

The second pillar, reproductive egalitarianism, is what life course researchers call the standardization of life courses (Shimazaki, 2013). As one of its major characteristics Ochiai points to a “two-child revolution” (*futarikko kakumei* 二人っ子革命), meaning that it became a standard for married couples to have two children. This means a transition from a society in which those who marry have relatively many children to a society in which almost ‘everybody’ marries and has two to three children. This reduction in children being born not only decreased the fertility rate, but it patterned the lives of a critical mass of first postwar baby-boomers, in due course creating a new norm or ideal of how a happy family should look like (Klein / Holthus, 2010).

The third pillar is related to new demographic developments Japan experienced in this period, namely the parallel development of a trend toward nuclear families like in Western industrialized societies, with the preservation of (nuclear families idealizing) three-generation, co-residing families. The combination of these two trends was made possible because of the postwar baby-boom. As the postwar baby-boomers had several siblings, one of them lived with their parents (three-generation family), while others built nuclear families without giving up the normative ideal that grown-up children are supposed to live with their aging parents to care for them.

In the late 1980s, the postwar Japanese family system entered a phase of transformation, involving both changes and continuities. This ambiguous development is particularly true for the gendered aspects of this system. In due course the three pillars were shaken by new developments: “de-housewifization”, de-standardization of life courses, and further demographic changes. De-housewifization refers to the return of women to labor (*josei no sairodoka* 女性の再労働化). That is, women who used to withdraw from the labor market upon marriage or childbirth are increasingly engaged with paid work. Yet, whereas in other post-industrialized countries the “de-housewifization” process has been completed, in Japan “it continues to be normative for mothers with young children to devote themselves to childcare” (Ochiai, 2008: 5).<sup>3</sup> Therefore “de-housewifization has not been fully realized yet” (Ochiai, 2008: 9), clearly

3 For a recent ethnographic study of Japanese housewives, see GOLDSTEIN-GIDONI, 2012.

visible in the flattening yet persistent M-curve of female labor force participation (JILPT, 2012).

The second major change, de-standardization of life courses refers to the standard way of life, based on the male breadwinner model (Osawa, 2007), of marrying and having two to three children, which has become more difficult to achieve. According to Ochiai (2004: 248), there are three conditions that used to stabilize the existence of a housewife: a) her husband does not die (at least not in the earlier stages of life), b) the husband never loses his job, and c) they never get divorced. The second and the third condition are not guaranteed any more. The life course of Japanese men used to be relatively stable with their jobs secured by the Japanese long-term employment system. This is not the case anymore. What used to be a standard for salaried men before, such as to remain at one company almost all through their life until retirement, has become something that not everyone can attain. Even the very beginning of work life, namely the transition from school to work, which used to be well coordinated by involved parties of school and company, does not necessarily work out well for everyone anymore (Brinton, 2008). These changes in the life courses of Japanese men inevitable shake the so far seemingly secured position of housewives in society.

The de-standardization of life courses is closely related to demographic changes, the third major change occurring in the postwar Japanese family system. Regardless of gender, a delay in marriage is a clear tendency among younger age cohorts and the absence of marriage as a life event can be observed in all the age cohorts in growing numbers. Also the number of children people have is decreasing. While a majority of married couples still have two children, the number of married couples who have no child is gradually increasing (NIPSSR, 2005). Furthermore, divorce and remarriage have been rapidly increasing in number in the past three to four decades (MHLW, 2005). In short, except cohabitation and the birth of illegitimate children, Japan shares most features of the second demographic transition with Western industrialized societies.

These changes are fundamental to the shift in family structure – from a cooperative one based on family (*ie* 家) as a unit to the individuals within. Within this process of individualization of Japanese families (Meguro, 1987), the postwar family system has lost its reality for the majority of Japanese people. This process of family transition comes however at the same time with a continuity of certain gendered features of the conventional family system, such as the sexual division of household labor. This division has been a focal object in

family research. Many studies have identified asymmetric contributions of husbands and wives to domestic work. It has long been argued that a wife's employment status has no significant effect on her husband's level of involvement in domestic work (Matsunobu, 2011: 75). At the same time, more recent studies found that husbands' participation in housework appears to increase while children are small (BICSP, 2012; for childcare see also Nagai, 2001, 2004; for housework, see also Matsuda, 2004). This might be interpreted to reflect the trend of *ikumen* or the rise of new fatherhood among Japanese men (see above), yet all these studies attest only a slight increase at best. This does not however mean that Japan is unique in that respect: gender strongly determines housework time in other industrialized countries as well (Shelton / John, 1996: 317).

## 2.2 Gender, Partnership, and Parental Well-Being

The sexual division of household labor is regarded as a major influence on marital and family satisfaction (Ghysels, 2013; Shelton / John, 1996). Most studies have looked at household labor and the negative relationship with women's satisfaction with partnership (Lee, 2008; Suemori, 1999; Yamato, 2006). For example, Lee (2008) used a dataset from the year 1994 of 886 mothers, age 20 to 49 in the larger metropolitan area of Tokyo to examine this relationship.<sup>4</sup> He introduced the concept of "expectation sufficiency", defined as the degree of husband's participation in household work fulfilling the wife's expectation. He operationalized this in his analysis by subtracting wives' expectations of husbands' housework participation from his actual housework share. Lee finds that for the majority of wives, their expectations, respectively "task division preferences" (Ghysels, 2013: 172), are not met, which significantly affects their partnership satisfaction negatively. In this as well as in many other studies, husband's satisfaction levels with household share remain understudied in comparison. Furthermore, the literature shows that overall marital satisfaction of married couples decreases once they become parents (Dew / Wilcox, 2011; Twenge / Campbell / Foster, 2003). Furthermore, Lee and Ono (2008) analyzed the JGSS datasets for the years 2000 to 2003 and found that generally, married Japanese women are less happy with their marriages than married men.

4 *Fufu no Seikatsu Ishiki ni kan suru Chōsa* 夫婦の生活意識に関する調査, conducted by Seikatsu Hoken Bunka Sentā 生活保険文化センター.

Drawing on the findings presented above and based on our understanding of Japanese family lives as having remained highly gender segregated in many aspects, we examine gender differences in the sexual division of household labor and its subsequent impact on the satisfaction with it. We specifically look at mothers as well as at fathers with small children, as this group seems of particular interest, and we are able to use very recent data. This also allows to understand if there is a change from the 1994 data to our dataset collected in 2012, 18 years later.

In addition, we look at how employment patterns and work time influence this satisfaction. As mentioned above, employment status does not influence input in household labor. It is however a question if that has an effect on the satisfaction with the household labor share division. We know from our counterpart study that German full-time working fathers are the most satisfied overall (Bertram / Spieß, 2011).

Also, we question if it might be more so a question of working hours rather than a person's type of employment that influence their satisfaction with the household work share. In Japan, part-time employment does not necessarily mean only part of the hours worked to those of a full-time employee. As women usually have a relatively hard time finding full-time employment after they have once dropped out of full-time employment for reasons such as raising children, part-time or temporary work first and foremost means employment without benefits. It can mean shorter hours but likewise also 40 hour work weeks.

In short, we focus in our study on how mothers and fathers differ in regards to their own perceptions of well-being. We examine in particular how levels of satisfaction with household chore share among partners correlate (1) with demographic variables, specifically employment status and (2) how the gap between the desired versus actual share in household activities also possibly is correlated with it.

We have thus formulated the following hypotheses for this paper:

- 1) There are gender differences in parent's well-being.
- 2) There are gender differences in actual and ideal household contribution.
- 3) Full-time working fathers are the most satisfied with their household share situation.
- 4) As full-time employed mothers as more pressed for time than full-time housewives and part-time employed mothers, we expect them to be least satisfied compared to other mothers.

### 3 Methods

#### 3.1 *Data*

Data for this paper comes from a mail-in survey we conducted in January and February 2012. Its original design called for surveying 1,000 mothers and 1,000 fathers from non-identical households with children between the ages of 0 and 6, before their enrollment into elementary school. The survey instrument is based on the 2009 German “Ravensburger Elternsurvey” (Parental survey, funded by Ravensburger foundation) (Bertram / Spieß, 2011) for the purpose of comparative analysis. The questionnaire, partially modified from the German one, includes 61 questions, with a total of 416 variables. The questions are categorized as follows: (1) Demographic variables, (2) subjective factors, and (3) questions about (overall and area-specific levels of) satisfaction and well-being. Underlying theoretical model of this study is a seven-dimensional model of parental well-being, encompassing material, employment, educational, partnership, personality/ health well-being, as well as family policy and social network well-being.

The participants were recruited from a sub-sample of a master sample, owned by Marsh.<sup>5</sup> While Japanese sociologists prefer random sampling for mail-in surveys, we used the master sample because it promised a higher response rate and in order to carry it out equivalent to the German counterpart study. The master sample consists of a pool of 238,705 men and 283,227 women. Of these, 34,483 are a parent with child(ren) between the ages of 0 to 6 years of age: 10,569 fathers, and 23,914 mothers. Out of this pool of parents, sampling was done through quotas. Quotas are based on gender (of the parent), residence (by dividing Japan into ten regions), percentage of single parents (oversampling) and class (based on household income levels).

The fathers and mothers who answered the parental well-being survey exhibit significant differences in most of the demographic indicators (see Appendix), except marital status, educational levels, and number of children. Almost all men (99.5%) and women (96.4%) are married. Slightly over 50 per-

5 Since 1998, this company has been building up a sample population of 521,932 people (by October 2011; by April 1 2012, the number of participants increased to 580,235) for marketing research, government opinion polls, and other social surveys (see MARSH n.d.). Included are residents from all 47 prefectures, with a wide variety of social backgrounds in terms of age, gender, and socio-economic status.

cent both of fathers and mothers have a two or four year college degree. This is concurrent with governmental statistics of the overall population, where in the year 2011 55.9 percent of women and 51.9 percent of men had a college or university degree (MEXT, 2012).

The majority of parents have two children, closely followed by one child, with no statistically significant differences between mothers and fathers. 44 parents have four or more children. As the selection criterion for a parent to participate in the survey was to have a child between ages 0 and 6, it could very well mean that some of the respondents have not concluded their childbearing phase just yet. Thus no presumption about the sample populations' birthrate can be made. At the time of the survey, the mean number of children of the respondents stood at 1.77. In Japan overall, the birthrate stands at 1.39 (CAO, 2011: 24), and among married couples, the birthrate was rather steady between 1972 and 2002, but declined to 2.05 by 2005 (Oshio, 2008: 2–3).

Fathers are significantly older than mothers with a mean age of 37.71 as compared to mothers' mean age of 34.77.<sup>6</sup> Regarding the working hours, statistics show that in 2010, 14.6 percent of men overall work more than 60 hours a week. If looked at by age group, among men in their 30s, 17.7 percent work more than 60 hours, among men in their 40s, 18.7 percent (CAO, 2011: 38). Within our dataset, employed fathers display similarly long working hours. 88.8 percent of fathers work 40 hours or more, 45.5 percent work 50 hours or more. The majority of employed mothers (43.3 percent) work in jobs up to 20 hours, only 20 percent working 40 hours or more. The difference between fathers' and mothers' working hours is just one aspect of the very different employment patterns of women and men in Japan in general and Japanese fathers and mothers in particular. Among the surveyed fathers, the large majority (87.5 percent) are regularly employed in white-collar professions (including managerial posts). The majority of mothers (61.4 percent) are not working at all, only 4.5 percent of them are regularly employed, and 34.2 percent are in part time or some other form of temporary employment. In Japan, female labor participation rates are low among women in their 30s, in which a majority of those with children retreat from the labor market. This is particularly true for

6 This is in line with typical patterns: Statistics for 2010 report a mean age of 30.5 for men and 28.8 for women at the time of first marriage (BOS, 2011). Japanese women's mean age at first births at 29.9, second births at 31.8, and at the time of the third child to have a mean age of 33.2 (CAO, 2011: 29).

mothers with young children. This appears strongly reflected in our data<sup>7</sup> (see also section 2.1).

Gendered employment patterns are also reflected in the income reported by the parents in this dataset. Whereas only 0.9 percent of fathers have no income, the figure for mothers is 54.7 percent. The majority (37.5 percent) of fathers earn between 4 and up 6 million Yen, and 84.5 percent of fathers earn between 2 and 7.99 million yen. The majority of mothers earn under 2 million Yen (n=412), this is a share of 82.7 percent of all mothers who reported any income at all (n=498).<sup>8</sup>

### 3.2 Variables

For the analysis, we used the following variables: gender, type of employment, working hours, actual household input, ideal household input, yearly household income, education, and levels of satisfaction. Levels of satisfaction were asked based on our predefined seven dimensions of well-being and cover both area-specific satisfaction levels as well as parents' overall satisfaction and happiness levels.

Respondents living together with their spouse or partner were asked about who is mostly responsible for housework duties. Many studies do not further distinguish between the diversity of household chores. Yet as we expected to find differences between the chores, we questioned about eight areas of housework separately: doing the dishes, laundry, cooking, shopping, accounting, cleaning, small home repairs ("handywork"), and staying in contact with friends.<sup>9</sup> For answers, respondents could choose between the following options: self, spouse, taking turns with spouse/partner, both partners jointly, and a third person. For asking about the ideal household share, the same categories of housework and answer choices were used.

7 In a nationwide family survey conducted by the Japan Society of Family Sociology in 2008 (NFRJ08), female respondents who had a child/children under age 6 and who were not engaged in paid employment accounted for 50.1 percent (Suzuki, 2008).

8 The Japanese tax system levies high taxes on more than 2 million Yen supplemental income to the household. Hence there is little incentive for a spouse, mostly the wife, to earn more than that annual amount.

9 The exact question asked is: *Question is only for people living together with their spouse/partner. This is about the work share with your spouse/partner. Among the chores listed below, who currently is responsible for it?*

For the questions on area-specific and overall levels of satisfaction, respondents were given 11-point Likert scales, ranging from 0 to 10 for a total of 16 questions, with 0 being the least satisfied and 10 the highest level of satisfaction. Two of these fall into the category of economic status well-being (household income, work), three relate to family policies (time, money, infrastructure)<sup>10</sup>, five focus on the respondent's self (leisure, childraising, health, education, sleep), and four are regarding the satisfaction with the person's support network, including their partnership with their spouse or partner (family's childcare support, housework share with partner, partnership, partner's childcare support). The remaining two ask for overall life satisfaction and overall happiness.

We treat gender as the independent variable and different levels of satisfaction as dependent variable. Employment and working hours act as control variables. We ran cross-tabulations and two-way ANOVA tests. In a second step, we ran correlations of the satisfaction with the housework share with other areas of well-being, as well as regression analyses to assess the impact of above mentioned independent variables on the level of satisfaction with household share.

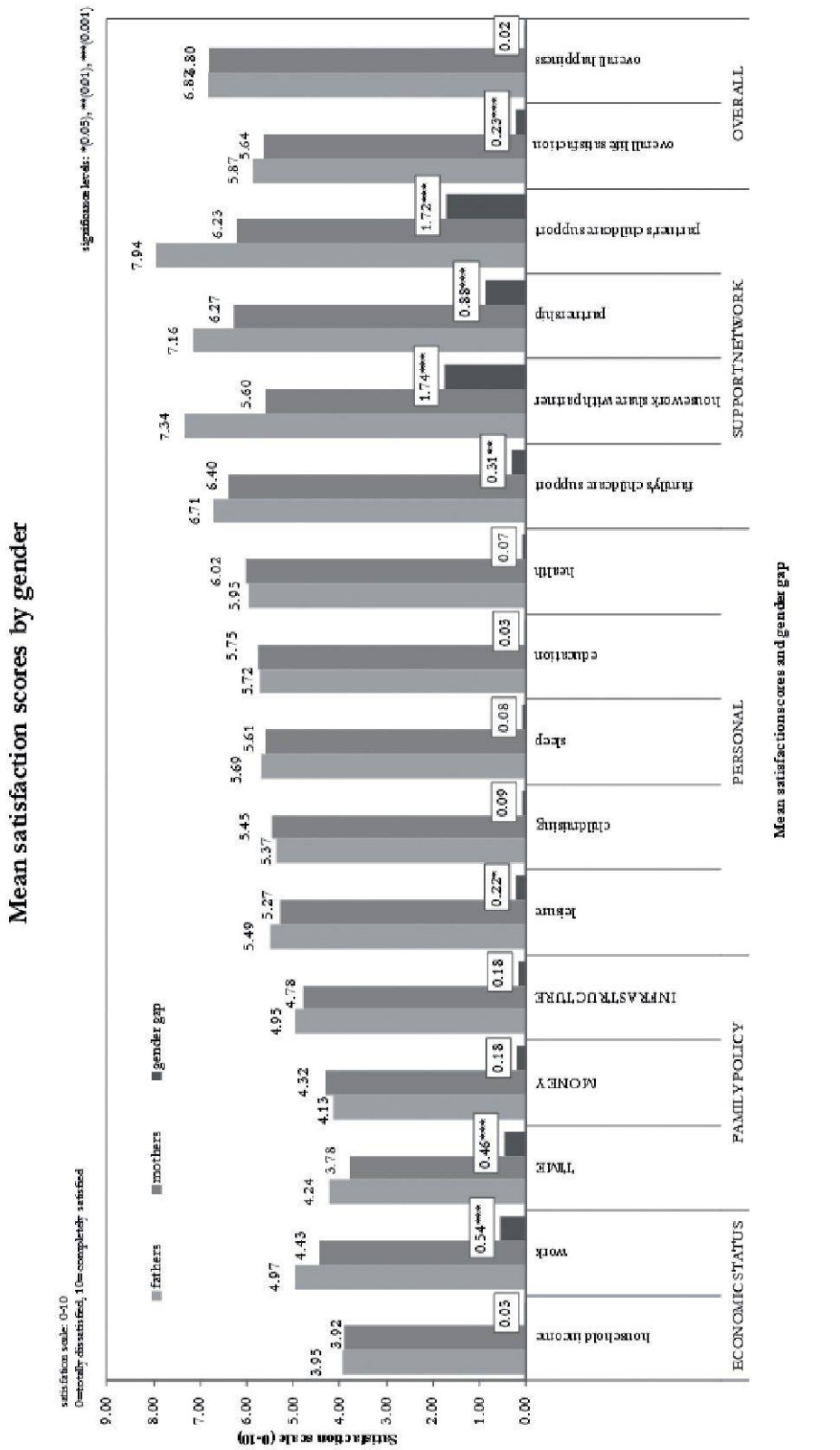
## 4 Gender Differences in Parental Well-Being

### 4.1 *Differences in levels of satisfaction between mothers and fathers*

As can be seen in Figure 1, the lowest mean satisfaction scores for fathers and mothers alike are in regards to the areas of the economy, work/ employment, and the three types of family policies. These areas have in common that they are all external, structural factors, and thus might be those areas parents feel powerless about. And it might be this feeling of powerlessness, in addition to the dire economic situation, further strained by the March 11, 2011 triple disaster, which more or less unites mothers and fathers in their levels of (dis)satisfaction.

10 The exact questions asked are: on time: *Regarding your present situation, how satisfied are you with the consideration for the work hours of employees with children (e.g. shortened working hours, no overtime, childcare leave)*. On money: *Regarding your present situation, how satisfied are you with public financial support (e.g. child support payments)*. On infrastructure: *Regarding your present situation, how satisfied are you with the provision of institutional childcare support (e.g. daycare, kindergarten)*. For more information on the division of family policies into the trias of time, money, and infrastructure, see BERTRAM / BUJARD, 2012.

Figure 1: Mean Satisfaction Scores by Gender



That might explain why, within these areas, we find only two having significant gender differences. One is work, with fathers having a mean score of 5.0; mothers' mean score however lies at 4.4. The other difference is in regards to the satisfaction with time policies, which are also related to employment, as they encompass for example work-life balance measures at companies and childcare leave policies. Here the mothers record the lowest mean satisfaction score of all areas with 3.8 (fathers mean score lies at 4.2).

Our data do not confirm the claim that parents of young children have lowered marital satisfaction. Particularly fathers' satisfaction with their partnership shows the highest mean scores of all satisfaction scores (see Figure 1 above). However it is within the partnership-related scores that we find the highest gender gap, with housework share drawing the biggest differences in levels of satisfaction between mothers and fathers. Whereas fathers have a mean score of 7.34, mothers only have a mean score of 5.60, a gap of 1.74 points. A similar gap in satisfaction between fathers and mothers can be found in regards to their partner's childcare support. Fathers report here the highest mean satisfaction with 7.94 for all categories, while mothers only have a mean satisfaction score of 6.23, an equally significant gap of 1.72 points. Thus for mothers, we can confirm the findings of the existing literature cited above, at least if compared to Japanese fathers. The gender gap is significant, although evidently we do not have longitudinal data from our respondents to see if their partnership satisfaction scores were significantly higher before becoming parents.

In summary, fathers overall show higher satisfaction levels than mothers in 10 of the 14 area-specific satisfaction levels and also in regards to their overall life satisfaction and overall level of happiness, several of these statistically significant. Mothers only report higher satisfaction than fathers in regards to money-related family policies (such as financial support), childrearing, education, and health. None of these gender differences are statistically significant. We conclude that hypothesis 1 can be confirmed.

In order to understand the relationship between housework share satisfaction with the other areas of well-being, we ran correlations, separately for men and women. Moderate strength correlations for men can be found between housework share satisfaction and leisure well-being (.336), overall satisfaction (.324) and overall happiness (.410). The findings suggest a strong relationship with partnership well-being (.692\*\*) and the satisfaction with the childcare support from the spouse (.731\*\*). Correlations for women between household share and all other 13 well-being areas can be found in most of the same categories, however throughout on a higher level, meaning that the correlations

for women are even stronger than those for men (leisure well-being .390; family childcare support .386; overall satisfaction .432; overall happiness .435; partnership well-being .724; childcare support from spouse .853). These findings clearly point to the importance of the organization of housework with one's partner and the medium to strong relationship to other areas of well-being in the lives of young parents.

#### *4.2 The Area of the Largest Gender Gap: Housework Share*

Fathers' and mothers' actual contribution to household chores greatly differs for each and every category (Table 1). In regards to the category 'self', meaning fathers and mothers claiming to be doing these chores alone, mothers spend much more time than fathers, except in home repairs. Furthermore, fathers are more likely to claim that they are taking turns in fulfilling these duties than the mothers or to state that they are doing these duties together with their spouses. One exception here is home repairs. As these are fathers and mothers from non-identical households, there is no way in giving proof to anyone's claim, but we could guess at a difference in perception of one's own personal input in contributing to housework chores. These findings concur with the analyses by Matsuda (2004) and Nagai (2004) as described in section 2.

Table 1 furthermore shows that household work is rarely performed by someone other than the parents themselves (0.3 to 1.4%). This finding points to a very small role of household or babysitter help. The outsourcing of household labor is more common in other Asian countries, but in Japan hesitation to and anxiety about having someone come into one's home to perform these chores on your behalf persists (Ochiai / Molony, 2008).<sup>11</sup>

(Next page)

*Table 1: Workshare Distribution of Household Chores*

Significance levels (Pearson Chi-square p): \* (p<0.05), \*\* (p<0.01), \*\*\* (p<0.001).

11 HOLTHUS, 2010: 224, also confirmed this in her 2008 survey on care-giving patterns among Japanese parents with pre-school children.

Household Chores	Self		Spouse/partner		Taking turns		Together		Someone else		Totals
	Father	Mother	Father	Mother	Father	Mother	Father	Mother	Father	Mother	
Finances***	28.2% (286)	70.6% (743)	40.9% (415)	9.8% (103)	3.6% (36)	1.9% (20)	27.1% (275)	17.5% (184)	0.2% (2)	0.3% (3)	Fathers: 1014 (100%) Mothers: 1053 (100%)
Cooking***	2.8% (28)	90.9% (957)	79.8% (809)	0.5% (5)	11.5% (117)	5.5% (58)	4.0% (41)	2.2% (23)	1.9% (19)	0.9% (10)	Fathers: 1014 (100%) Mothers: 1053 (100%)
Shopping***	4.7% (48)	77.2% (813)	43.0% (436)	1.4% (15)	17.5% (177)	3.1% (33)	33.7% (342)	17.2% (181)	1.1% (11)	1.0% (11)	Fathers: 1014 (100%) Mothers: 1053 (100%)
Laundry***	7.5% (76)	89.9% (947)	68.3% (692)	0.9% (10)	16.0% (162)	5.0% (53)	7.0% (71)	3.1% (33)	1.2% (12)	0.9% (10)	Fathers: 1013 (100%) Mothers: 1053 (100%)
Dishes***	10.7% (108)	82.1% (864)	51.4% (521)	2.6% (27)	26.1% (265)	10.3% (108)	10.6% (107)	3.8% (40)	1.3% (13)	1.2% (13)	Fathers: 1014 (100%) Mothers: 1052 (100%)
Cleaning***	5.6% (57)	84.2% (886)	59.0% (598)	1.5% (16)	22.6% (229)	7.6% (80)	11.4% (116)	6.1% (64)	1.4% (14)	0.6% (6)	Fathers: 1014 (100%) Mothers: 1052 (100%)
Handywork***	81.7% (828)	15.9% (167)	3.4% (34)	59.4% (625)	6.7% (68)	8.5% (89)	6.3% (64)	12.2% (128)	2.0% (20)	4.1% (43)	Fathers: 1014 (100%) Mothers: 1052 (100%)
Friends contact***	13.0% (132)	44.4% (467)	24.3% (246)	4.9% (52)	31.1% (315)	21.7% (228)	31.2% (316)	28.4% (299)	0.5% (5)	0.5% (5)	Fathers: 1014 (100%) Mothers: 1051 (100%)

The vastly higher input of time by mothers for housework (and childcare respectively) could very well contribute to their lower mean satisfaction scores in this category as described in section 4.1. However it could be argued that mothers actually do want to do these chores. Only by asking the parents about their ideal household chore distribution, can we draw more legitimate inferences about their (dis)satisfaction with the status quo. Therefore, respondents were also asked to describe their ideal chore distribution for housework.

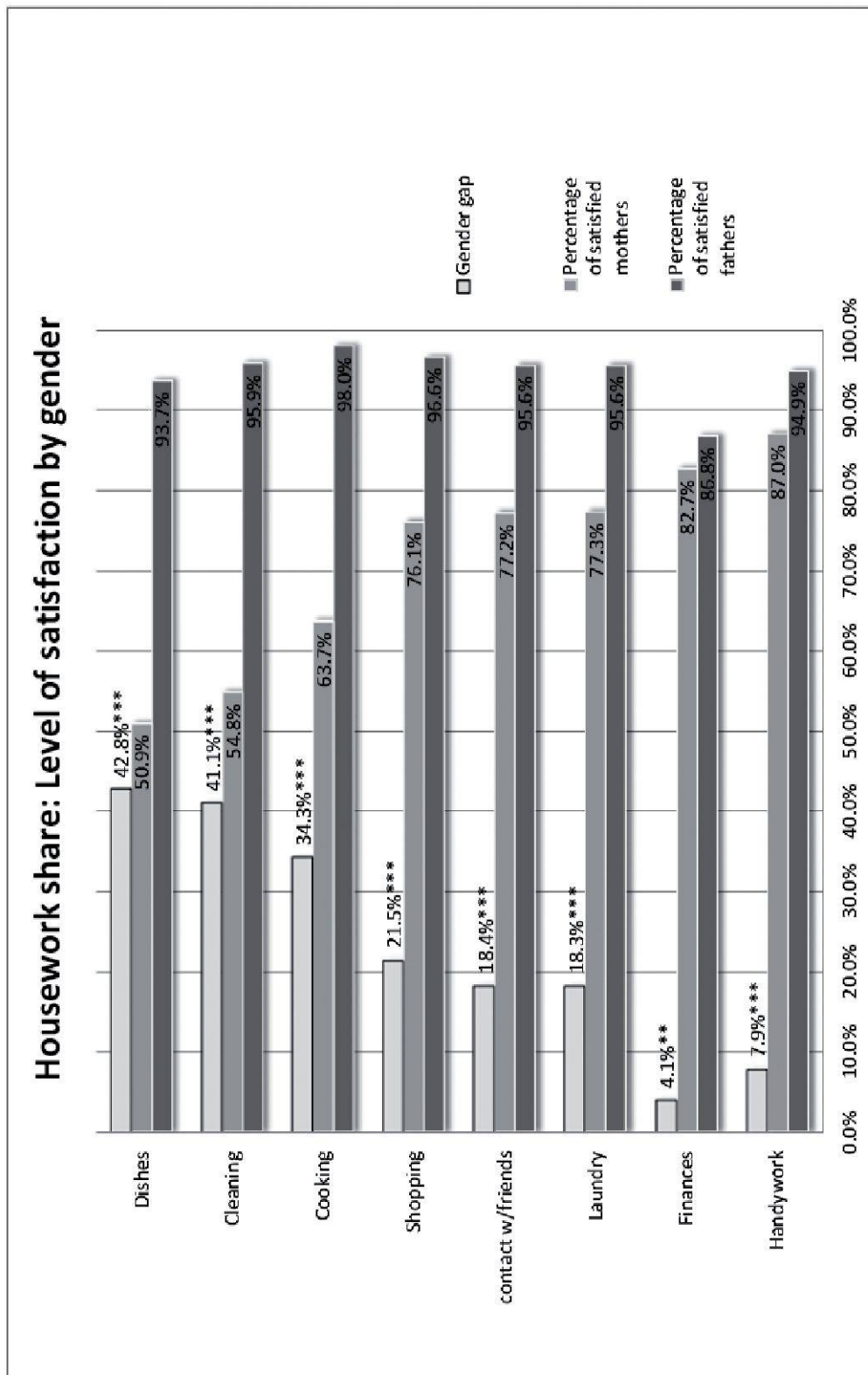
In order to calculate potential gaps between fathers' and mothers' current situation and their ideal work-share, we first created dummy variables of the variables, with 1 if they checked themselves as being (or wanting to be) the main person to do the housework, and 0 for all other options. In a second step we subtracted these dummy variables from each other, namely the ideal work-share from the actual work-share. Results could either be 0, 1, or -1. If both actual and ideal work-share are the same, meaning either the person is not doing that household chore but also does not want to do it, or vice versa, namely the person is doing the household chore and also prefers to do so, then the outcome will be 0. We consider a person doing what they think is ideal to be a satisfied person in that aspect. However, if the mother's or father's actual and ideal chore duties differ, then the result will be either 1 or -1 and the person is assumed to be in some way dissatisfied with the status quo.

Our data found the percentages of satisfied mothers to be significantly lower than those of fathers. For better visualization of the gender gap in household satisfaction, we added the category "gender gap", which is a subtraction of the percentages of satisfied mothers from those of the satisfied fathers. In Figure 2, we ranked the household categories from top to bottom by the percentages of satisfied mothers in ascending order. Whereas fathers are in the majority more than 90 percent satisfied with the status quo, it is only in the areas of home repairs ("handywork") and finances that their percentages fall within the 80th percentile. The percentage of satisfied mothers is lowest in regards to doing the dishes with only about 51 percent, which contributes to the gender gap being the highest. The gender gap in satisfaction is smallest in the areas of handywork and finances. The data confirms hypothesis 2.

(Next page)

*Figure 2: Housework Share: Level of Satisfaction by Gender*

Significance levels: \* ( $p < 0.05$ ), \*\* ( $p < 0.01$ ), \*\*\* ( $p < 0.001$ ).

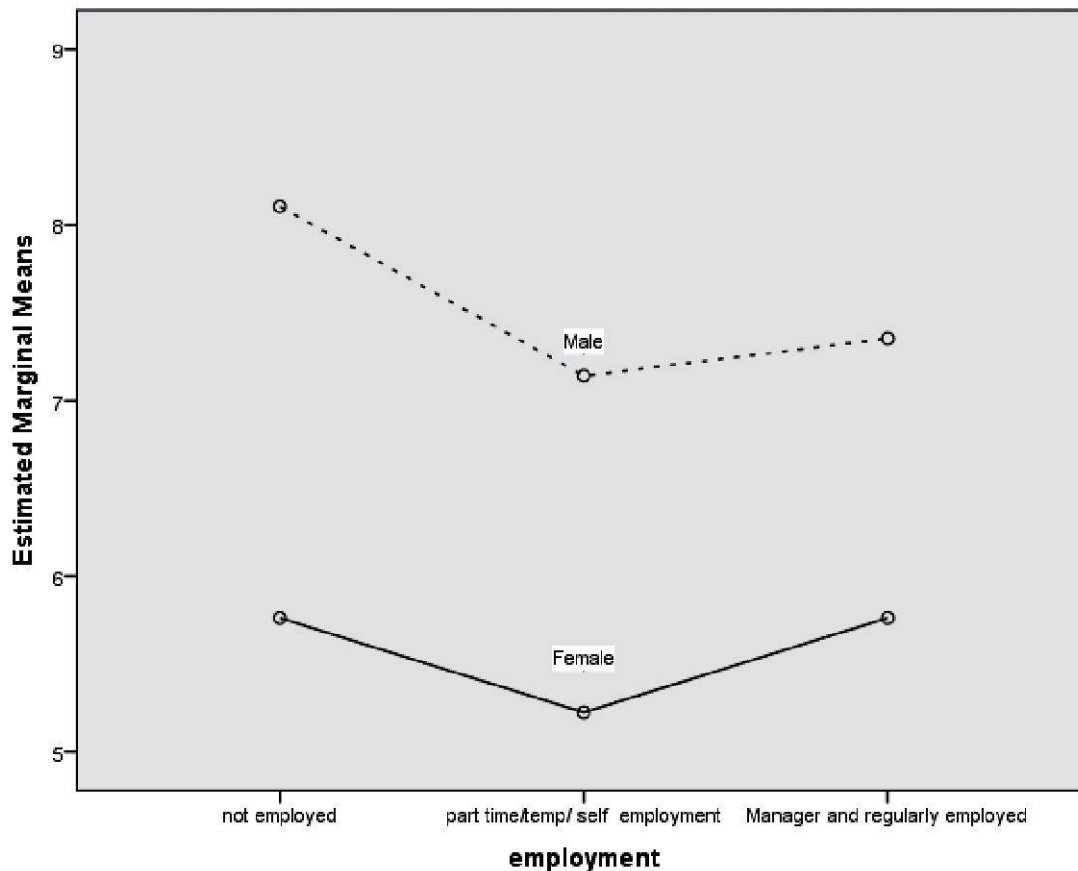


### *4.3 Influence of Employment Patterns on Parental Well-Being*

In order to test hypotheses 3 and 4, we conducted two-way between-groups analyses of variance (two-way ANOVA) to explore the impact of gender and employment status on the different areas of satisfaction. Subjects were divided into three groups according to their employment (Group 1: not working; Group 2: part time or temporary employed (incl. self employed, contract workers or employed in other ways); Group 3: regularly employed (incl. managerial positions). The interaction effect between gender and employment was statistically significant in the well-being categories of health, income, work, and overall happiness level. In regards to work as well as household income satisfaction, we can see that fathers who are not working have very low mean satisfaction scores, which increase linearly by employment pattern, with full-time employed fathers having the highest mean average satisfaction scores and almost exactly the same mean satisfaction scores than mothers. Mothers' mean satisfaction scores in these areas however only slightly increase by employment patterns, the differences not being statistically significant.

In regards to housework share, even though the interaction effect between gender and employment was not significant, there was however separately a statistically highly significant main effect for gender, as we knew already ( $p=.000$ ) and also a significant effect for employment ( $p=.033$ ). So as can be seen in Figure 3, mean scores of housework share satisfaction are lowest both for fathers and mothers when part-time employed compared to those mothers and fathers not employed. Men's satisfaction is highest when they are not working. The impact of employment onto the mean satisfaction scores with the share of household work does not therefore provide significant and conclusive results.

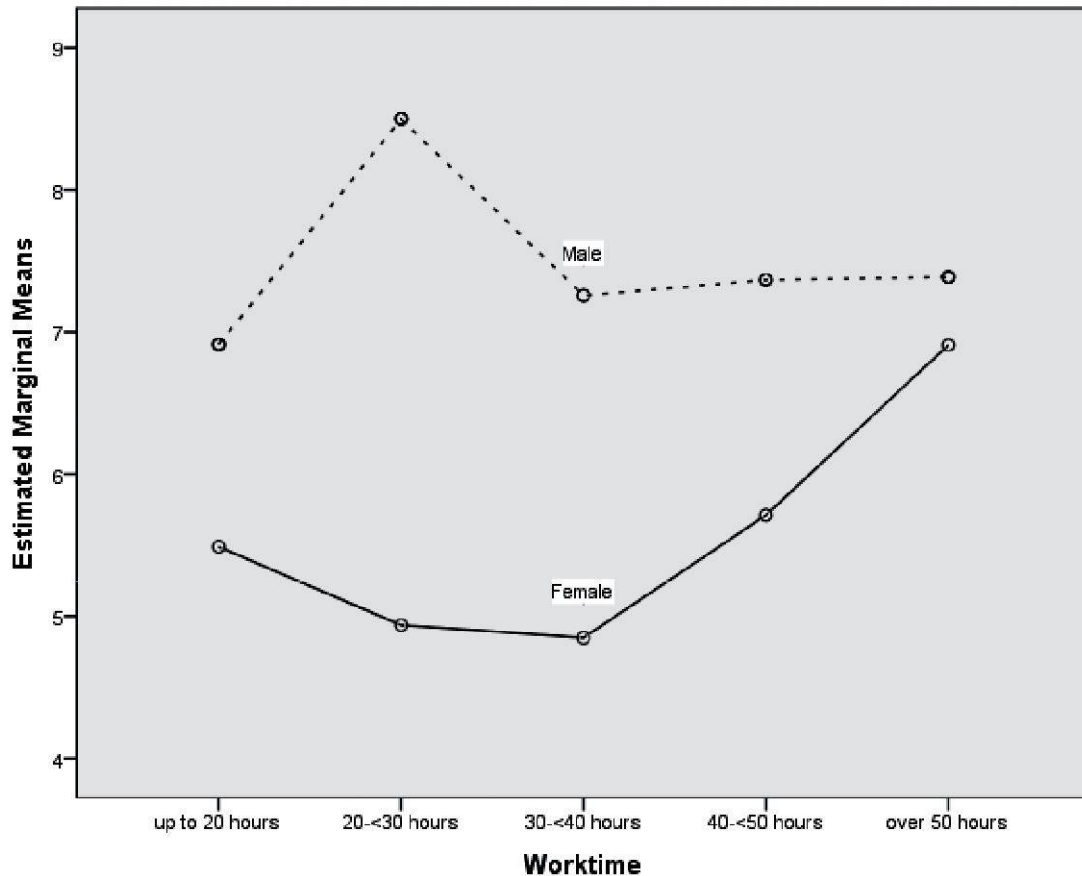
Figure 3: Mean Housework Share Satisfaction Scores by Gender and Employment



Following this, we ran two-way ANOVA tests to understand the interaction effect between gender and working hours on all areas of satisfaction, as argued above. Results show all previously statistically significant interaction effects on well-being by gender and employment pattern becoming statistically insignificant. This is also the case for the interaction effect with means of housework share (see Figure 4). With one outlier, men's mean satisfaction scores are more or less stable, no matter the amount of work-time. Among mothers however, we can see an increase in satisfaction among the highly time-constrained mothers who work 40 or more hours. These mothers seem to be getting the most help, which positively impacts their well-being. However who it is that helps with housework, the husband, other family members or outside personnel would have to be analyzed in more detail.

The analysis thus shows that both hypothesis 3 and 4 have to be rejected.

Figure 4: Mean Housework Share Satisfaction Scores by Gender and Working Hours



In a final step, in order to further understand gendered Japanese families, we performed regression analyses to assess the impact of a number of distinguishing demographic variables onto the satisfaction with housework share arrangements. The model contained six independent variables (employment, working hours, age of parent, household income, own education level, profession). The model was statistically significant (23, N=1360),  $p < .001$ ) but as a whole explains only 11.8 percent of the variance in household share satisfaction (Nagelkerke R squared). Only two variables made a unique statistically significant contribution to the model, namely gender and employment. So the regression analysis supports the importance of these two variables in particular.

## 5 Discussion and Outlook

We found that fathers with small children are significantly more satisfied overall than mothers in almost all areas of well-being covered in this survey. Mothers'

lowest overall mean satisfaction score is in the area of time-related family policies. As the large majority of women quit work upon childbirth, to reenter the job market at a later point, most likely only in substantially less paid part-time employment (the so-called “M-curve” of female employment, section 2.1), mothers’ dissatisfaction in regards to time policies comes as no surprise. As Japanese family policy does not seem to make any substantial headway in improving time policies anytime soon, the dissatisfaction among mothers is predicted to continue and to possibly lead to a further decline in married couples’ birthrates.

The largest gender gap in satisfaction is observed in regards to housework share between the partners. Here, too, mothers with small children are less satisfied with housework share than fathers with small children, regardless of employment status or working hours. Among the eight housework areas, the gender gap in satisfaction is smallest in the areas of home repairs and finances. Home repairs are generally and internationally a male dominated household chore. And finances are traditionally done by women in Japan, but this being a chore which comes with a certain degree of power attached to it, it provides the person in charge with more power than the person who has to do such menial housework as doing the dishes or cleaning for example. This can contribute to the significantly higher level of satisfaction among women in these areas compared to their dissatisfaction levels in other, “traditionally” female work like kitchen work. These findings point to three things: 1) housework should be more often analyzed not as one category, but should be divided into the different chores, which have shown to be quite diverse and to be triggering different levels of (dis)satisfaction, with issues of power between partners seemingly being of great importance; 2) the continuity of the genderedness of modern Japanese families, particularly in regards to the sexual division of labor. So despite all the external changes surrounding Japanese families, the domestic sphere has remained highly gendered and is a source of dissatisfaction of wives relative to those of husbands; and 3) the interrelatedness and significance of housework share organization between the partners within the realm of partnership well-being. We cannot discuss or fully understand partnership well-being if we do not carefully analyze the satisfaction with the household chore share between the partners.

The fact that income and education are not significantly impacting the division of household chores and the partners’ satisfaction with it seems to point to the prevalence of continuing gendered patterns of Japanese families and their

well-being, as well as to the influence of the labor market and working hours, superseding class differences.

## References

ATOH, Makoto

2008 “Japan’s Population Growth during the Past 100 Years.” In: Florian COULMAS / Harald CONRAD / Annette SCHAD-SEIFERT / Gabriele VOGT (eds.): *The Demographic Challenge: A Handbook about Japan*. Leiden: Brill, pp. 5–24.

BICSP (BENESSE INSTITUTE FOR THE CHILD SCIENCES AND PARENTING)

2012 *The Second Basic Survey of Pregnancy, Delivery and Parenting, Preliminary Data*. July 13.

BERTRAM, Hans / Martin BUJARD (eds)

2012 *Zeit, Geld, Infrastruktur – zur Zukunft der Familienpolitik*. Soziale Welt, Sonderband 19. Baden-Baden: Nomos.

BERTRAM, Hans / Katharina SPIEB (eds)

2011 *Fragt die Eltern! Ravensburger Elternsurvey: Elterliches Wohlbefinden in Deutschland*. Baden-Baden: Nomos.

BOS (Bureau of Statistics, Office of the Prime Minister)

2011 *Statistical Handbook of Japan 2011*. Tōkyō: BOS.

BRINTON, Mary

2008 *Ushinawareta Ba o sagashite: Rosuto Jenereshon no Shakaigaku* 失われた場をさがして: ロストジェネレーションの社会学. Tōkyō: NTT Shuppan.

CAO (CABINET OFFICE, 内閣府)

2011 *Heisei 23 Nenban Kodomo Kosodate Hakusho* 平成23年版子ども子育て. Tōkyō: CAO.

COULMAS, Florian

2008 *Population Decline and Ageing in Japan*. London: Routledge.

DEW, Jeffrey / W. Bradford WILCOX

2011 “If Momma Ain’t Happy: Explaining Declines in Marital Satisfaction among New Mothers.” *Journal of Marriage & Family* 73.1: 1–12.

ESRI (ECONOMIC AND SOCIAL RESEARCH INSTITUTE, 経済社会総合研究所)

n.d. <<http://www.esri.go.jp/jp/archive/koufukudo/koufukudo.html>> (09.08.2012).

GHYSELS, Joris

- 2013 “Spousal Well-Being: An Inquiry into the Links between Household Income and Parental Task Division.” In: Almudena MORENO MINGUEZ (ed): *Family Well-Being*. Dordrecht: Springer, pp. 151–175.

GOLDSTEIN-GIDONI, Ofra

- 2012 *Housewives of Japan: An Ethnography of Real Lives and Consume-rized Domesticity*. New York: Palgrave Macmillan.

HOLTHUS, Barbara

- 2011 “Child Care and Work-Life Balance in Low Fertility Japan.” In: Florian COULMAS / Ralph LÜTZELER (eds.): *Imploding Populations in Japan and Germany: A Comparison*. Leiden: Brill, pp. 203–228.

JILPT (JAPAN INSTITUTE FOR LABOUR POLICY AND TRAINING)

- 2012 *Japanese Working Life Profile 2011/2012*. Tōkyō: JILPT.

KLEIN, Axel / Barbara HOLTHUS

- 2010 *The Fertility Rate and the Economic Crisis: Discussing a Theoretical Attempt to Predict Demographic Development in Japan*. DIJ Working Paper 2010/01. Tōkyō: Deutsches Institut für Japanstudien (DIJ).

LEE Kipyong 李基平

- 2008 “Otto no Kaji Sanka to Tsuma no Fufu Kankei Manzokudo: Tsuma no Otto he no Kajisanka Kitai to sono Jusokudo no Chumoku shite 夫の家事参加と妻の夫婦関係満足度: 妻の夫への家事参加期待とその充足度に注目して.” *Kazoku Shakaigaku Kenkyū* 家族社会学研究 20.1: 70–80.

LEE, Kristen Schultz / ONO Hiroshi

- 2008 “Specialization and Happiness in Marriage: A US-Japan Comparison.” *Social Science Research* 37.4: 1216–1234.

MARSH

- n.d. <<http://www.marsh-research.co.jp/>> (07.05.2012).

MATSUDA Shigeki 松田茂樹

- 2004 “Dansei no Ikuji Sanka: Kaji Sanka o Kitei suru Yōin 男性の育児参加: 家事参加を規定する要因.” In: WATANABE Hideki 渡辺秀樹 / INABA Akihide 稲葉昭英 / SHIMAZAKI Naoko 嶋崎尚子 (eds.): *Gendai Kazoku no Kōzō to Henyō: Zenkoku Kazoku Chōsa ‘NFRJ98’ ni yoru Keiryō Bunseki* 現代家族の構造と変容: 全国家族調査 NFRJ98による計量分析. Tōkyō: Tōkyō Daigaku Shuppankai, pp. 175–189.

MATSUNOBU Hiromi 松延ひろみ

2011 “Tomobataraki Katei ni okeru Otto no Kaji Ikuji Suikō ni tai suru Tsuma no Manzokudo no Kitei Yōin ni suite 共働き家庭における夫の家事育児出挙に対する妻の満足度の規定要因について.” In: TANAKA Sigeto 田中重人 / NAGAI Akiko 永井暁子 (eds.): *Kazoku to Shigoto* 家族と仕事. Daisankai Kazoku ni tsuite no Zenkoku Chōsa (NFRJ08): Dainiji Hōkokusho, Dai’ichikan. Tōkyō: Nihon Kazoku Shakai Gakkai, Zenkoku Kazoku Chōsa I’inkai, pp. 75–88.

MEGURO Yoriko 目黒依子

1987 *Kojinka suru Kazoku* 個人化する家族. Tōkyō: Keisō Shobō.

MEXT (MINISTRY OF EDUCATION, CULTURE, SPORTS, AND TECHNOLOGY)

2012 *Monbukagaku Tōkei Yoran Heisei 24 Nenhan* 文部科学統計要覧平成24年版.

<<http://www.mext.go.jp/b-menu/toukei/002/002b/1323538.htm>>

(19.06.2012).

MIES, Maria

1986 *Patriarchy and Accumulation on a World Scale. Women in the International Division of Labour*. London: Zed Books Ltd.

MHLW (MINISTRY OF HEALTH, LABOUR AND WELFARE, 厚生労働省)

2005 *Jinkō Dōtai Tōkei: Nenpō Shuyō Tōkeihyō* 人口動態統計: 年報主要統計表.

<<http://www.mhlw.go.jp/toukei/saikin/hw/jinkou/suii05/index.html>>

(25.07.2012).

NAGAI Akiko 永井暁子

2001 “Chichioya no Kaji, Ikuji Suikō to Kodomo no Kaji Sanka he no Eikyō 父親の家事・育児遂行の要因と子どもの家事参加への影響.” *Kikan Kakei Keizai Kenkyū* 季刊家計経済研究 49: 44–53.

2004 “Dansei no Ikuji Sanka.” In: WATANABE Hideki 渡辺秀樹 / INABA Akihide 稲葉昭英 / SHIMAZAKI Naoko 嶋崎尚子 (eds.): *Gendai Kazoku no Kōzō to Henyō: Zenkoku Kazoku Chōsa ‘NFRJ98’ ni yoru Keiryō Bunseki* 現代家族の構造と変容: 全国家族調査NFRJ98による計量分析. Tōkyō: Tōkyō Daigaku Shuppankai, pp. 190–200.

NIPSSR (NATIONAL INSTITUTE OF POPULATION AND SOCIAL SECURITY RESEARCH)

2005 *Dai 13 Kai Shusseki Doko Kihon Chōsa: Kekkon to Shussan ni kan suru Zenkoku Chōsa* 第13回出生どこ基本調査: 結婚と出産に関する全国調査. Tōkyō: NIPSSR.

OCHIAI Emiko 落合恵美子

2004 *21 Seiki Kazoku he* 21世紀家族へ. 3<sup>rd</sup> Edition. Tōkyō: Yōhikaku.

2010 “Reconstruction of Intimate and Public Spheres in Asian Modernity: Familialism and Beyond.” *Journal of Intimate and Public Spheres* Pilot Issue: 2–22.

OCHIAI, Emiko / Barbara MOLONY (eds.)

2008 *Asia's New Mothers: Crafting Gender Roles and Childcare Networks in East and Southeast Asian Societies*. Kent: Global Oriental.

OSHIO, Takashi

2008 “The Declining Birthrate in Japan.” *Japan Economic Currents* 69: 1–5.

ŌSAWA Mari 大沢真理

2007 *Gendai Nihon no Seikatsu Hoshō Shisutemu: Zaihyō to Yukue* 現代日本の生活保障システム: 座標とゆくえ. Tōkyō: Iwanami Shoten.

SHELTON, Beth Anne / Daphne JOHN

1996 “The Division of Household Labor.” *Annual Review of Sociology* 22: 299–322.

SHIMAZAKI Naoko 嶋崎尚子

2013 “‘Jinsei no Tayōka’ to Raifukōsu: Nihon ni okeru Seidoka, Hyōjunka, Kojinka 「人生の多様化」とライフコース: 日本における制度化・標準化・個人化.” In: TANAKA Hiromi 田中洋美 / Maren GODZIK / Kristina IWATA-WEICKGENANNT (eds.): *Raifukōsu Sentaku no Yukue* ライフコース選択のゆくえ. Tōkyō: Shinyōsha, pp. 2–22.

SUEMORI Kei 末盛慶

1999 “Otto no Kaji Suikō oyobi jōchoteki Sapōto to Tsuma no Fufu Kankei Manzokukan 夫の家事遂行および情緒的サポートと妻の夫婦関係満足感.” *Kazoku Shakaigaku Kenkyū* 家族社会学研究 11: 71–82.

SUZUKI Fumiko 鈴木富美子

2011 “Kikon Josei no Shugyō Patān to Wāku Raifu Baransu: NFRJ no 10 Nenkan no Henka to Raifusutēji ni Chakumoku shite 既婚女性の就業パターンとワーク・ライフ・バランス—NFRJの10年間の変化とライフステージに着目して.” In: TANAKA Sigeto 田中重人 / NAGAI Akiko 永井暁子 (eds.): *Kazoku to Shigoto* 家族と仕事. Daisankai Kazoku ni tsuite no Zenkoku Chōsa (NFRJ08): Dainiji Hōkokusho, Dai'ichikan. Tōkyō: Nihon Kazoku Shakai Gakkai, Zenkoku Kazoku Chōsa I'inkai, pp. 89–109.

TWENGE, Jean M. / W. Keith CAMPBELL / Craig A. FOSTER

2003 “Parenthood and Marital Satisfaction: A Meta-Analytic Review.” *Journal of Marriage and Family* 65.3: 574–583.

VAN DE KAA, Dirk J.

1987 "Europe's Second Demographic Transition." *Population Bulletin* 42.1: 2-57.

YAMATO, Reiko 大和礼子

2006 "Otto no Kaji Ikuji Sanka ha Tsuma no Fufu Kankei Manzokukan o takameruka 夫の家事育児参加は妻の夫婦関係満足感を高めるか." In: NISHINO Michiko 西野理子 / INABA Akihide 稲葉昭英 / SHIMAZAKI Naoko 嶋崎尚子 (eds.): *Fufu, Setai, Raifukōsu* 夫婦、世帯、ライフコース. *Dainikai Kazoku ni tsuite no Zenkoku Chōsa* (NFRJ03): Dainiji Hōkokusho, Dai'ichikan. Tōkyō: Nihon Kazoku Shakai Gakkai, *Zenkoku Kazoku Chōsa I'inkai*, pp. 17-33.

Appendix: *Characteristics of Sampled Parents*

	Male % (n)	Female % (n)	Chi-square test of significance
Age	n=1031	n=1103	$\chi^2(2)=119.67$ , p=.000***
16-29	4.9% (51)	16.0% (177)	
30-39	50.0% (608)	64.7% (714)	
40+	36.1% (372)	19.2% (212)	
Marital status			$\chi^2(1)=25.48$ , p=.000***
Married	99.5% (1026)	96.4% (1063)	
Not married	0.5% (5)	3.6% (40)	
Educational level			$\chi^2(2)=.150$ , p=.928
Low ( $\leq$ high school, technical)	40.3% (414)	41.1% (452)	
College (2 and 4 year)	53.7% (552)	52.9% (582)	
Graduate school and other	6.0% (62)	6.0% (66)	
Number of children	n=873	n=954	$\chi^2(5)=2.95$ , p=.708
1 (35.1%, n=750)	40.1% (350)	41.9% (400)	
2 (38.0%, n=810)	44.4% (388)	44.2% (422)	
3 (10.1%, n=216)	12.3% (107)	11.4% (109)	
4 (2.1%, n=44)	2.6% (23)	2.2% (21)	

5 (0.3%, n=6)	0.5% (4)	0.2% (2)	
6 (0.0%, n=1)	0.1% (1)	0.0% (0)	
Missing (14.4%, n=307)			
Work content	n=990	n=409	$\chi^2(6)=183.151$ , p=.000
Specialized or artistic work	32.2% (319)	17.6% (72)	
Manager	8.8% (87)	0.2% (1)	
Admin/sales, marketing, bank	30.5% (302)	35.5% (145)	
Service industry	9.3% (92)	32.8% (134)	
Technical, blue collar work	18.4% (182)	10.3% (42)	
Agriculture, forestry, fishery	0.4% (4)	1.5% (6)	
Other	0.4% (4)	2.2% (9)	
Employment			$\chi^2(2)=1534.83$ , p=.000***
Manager / regularly employed	87.5% (900)	4.5% (49)	
· Manager	2.8% (29)	0.2% (2)	
· Regularly employed	84.6% (871)	4.3% (47)	
Parttime, temp, other employed	11.1% (114)	34.2% (376)	
· Parttime/temporary	1.8% (19)	19.8% (218)	
· Contract worker	1.0% (10)	1.5% (17)	
· Self-owned	5.4% (56)	0.9% (10)	
· Employ. in family business	1.9% (20)	2.7% (30)	
· Working at home	0.3% (3)	4.8% (53)	
· Student	0.2% (2)	0.1% (1)	
· Maternity / childcare leave	0.3% (3)	3.7% (41)	
· other	0.1% (1)	0.5% (6)	
Not working	1.5% (15)	61.4% (676)	
Household income (yearly)			$\chi^2(2)=254.04$ , p=.000***
<¥4 m	27.8% (287)	62.2% (686)	
¥4m≤10 m	65.0% (670)	33.5% (370)	
>¥10	7.2% (74)	4.3% (47)	
Personal income (yearly)			$\chi^2(7)=1665.96$ , p=.000***
No income	0.9% (9)	54.7% (601)	
≤¥1.99 m	3.4% (35)	37.5% (412)	
¥2-3.99 m	28.7% (295)	5.7% (63)	
¥4-5.99 m	37.5% (386)	1.5% (17)	

¥6–7.99 m	18.3% (188)	0.4% (4)	
¥8–9.99 m	6.7% (69)	0.0% (0)	
¥10–12.99 m	3.4% (35)	0.2% (2)	
≥¥13 m	1.1% (11)	0.0% (0)	
Own working hours	n=988	n=411	$\chi^2(4)-667.83,$ $p=.000***$
Up to 20 hours	7.1% (70)	43.3% (178)	
20<30 hours	0.4% (4)	20.0% (82)	
30<40 hours	36% (36)	16.8% (69)	
40<50 hours	43.3% (428)	13.9% (57)	
≥ 50 hours	45.5% (450)	6.1% (25)	

Significance levels (Pearson Chi-square p): \* (p<0.05), \*\* (p<0.01), \*\*\* (p<0.001).