

## Marriage Counterfactuals in Japan: Variation by Gender, Marital Status, and Time

## Structured Abstract

### Background

This paper takes a unique perspective on the debate surrounding the deinstitutionalization of marriage. Rather than examining how diversification of family behaviors (external context) relates to marriage, it considers how perceptions of marriage (the internal context) vary across relevant stakeholders.

### Objective

We ask whether perceived consequences of marriage differ for married vs. unmarried people and men vs. women and over time.

### Methods

Based on data from the 1994 *National Survey on Work and Family Life* in Japan and the 2000 and 2009 *National Survey of Family and Economic Conditions* (NSFEC) in Japan (N = 8,467) we use unique measures of perceived consequences of marriage (“marriage counterfactuals”) to examine social, economic, psychological, and personal dimensions (i.e., respect, living standard, emotional security, freedom, and overall satisfaction).

### Results

Ordinal regression results reveal that marital perceptions worsened over time (especially in terms of living standard and freedom), consistent with worsening economic conditions. We also find that unmarried people tend to view marriage more favorably than their married counterparts (especially freedom and respect), while men view marriage consequences (except for living standard) more favorably than women.

### Conclusions

Despite more negative change over time in perceptions of marriage among the never-married than the ever-married, the traditional breadwinner-homemaker model of marriage continues to be important and influential in Japan, and cultural beliefs regarding traditional marriage persist in spite of structural changes.

### Contribution

Research and theory on family change should pay more attention to the internal marriage context more fully than it has in the past.

## Introduction

With the advent of delayed marriage, cohabitation, lifetime singlehood, same-sex unions, and the like (Heuveline and Timberlake 2004, Heuveline, Timberlake, and Furstenberg 2003, Kiernan 2001, Jones 2005, Jones and Yeung 2014) it is clear that marriage as an institution has been changing throughout many parts of the world. As behavioral changes surrounding the marriage institution abound, attitudes towards, and perceptions related to, marriage and family have also shifted away from traditional norms of universal marriage and childbearing (Fuwa 2014, Gubernskaya 2010) and towards greater individualism and tolerance for diversity of personal and family behaviors (Lesthaeghe 2014, Thornton and Young-DeMarco 2001). Scholars debate whether these changes point to a process of marriage deinstitutionalization (Cherlin 2004) or diversification of the family form (for detailed discussion of this debate see Knapp and Wurm 2019, Lauer 2010). However, putting aside questions of how alternatives to marriage (i.e., contexts external to the institution) may be driving deinstitutionalization/ diversification, in this paper we focus on a less-studied aspect of marriage, namely, how evaluations of the marital experience (i.e., the internal context) are changing over time and across relevant stakeholders.

To gauge such internal factors, we use responses to a unique set of survey questions (that we refer to as “marriage counterfactuals”) which asked respondents to indicate how their life would be different (in terms of social, economic, psychological, and personal dimensions) if they had a marital status that differed from the one they held at the time of the survey. Questions about marriage are often general in nature, such as when survey respondents, regardless of marital status, are asked whether it is necessary to be married or whether people are happier being married, or when married individuals are asked to provide global

assessments of their marital happiness or satisfaction (cf. Gubernskaya 2010, Hertog and Iwasawa 2011, Lee and Ono 2008, Qian and Sayer 2016, Retherford, Ogawa, and Matsukura 2001, Treas, Lui, and Gubernskaya 2014, Tsuya and Mason 1995). However, overall, the literature lacks a comprehensive grasp of the way marriage is perceived within the general population, especially along dimensions (other than economic benefits) that are usually seen as inducements to marriage (e.g., social status, emotional security, and overall personal satisfaction). Moreover, evidence of how perceptions might be shifting among those whose choices will shape the future of the institution (i.e., the not-yet-married) is altogether absent, making it difficult to assess normative shift and, therefore, to fully assess concepts such as the “deinstitutionalization of marriage.”

Our study is set in Japan in the period between 1994 and 2009, an important socio-historical context for such a research topic for several reasons. First, while some marriage and family trends in Japan are similar to those in Western countries (e.g., increasing delays in marriage and rates of lifetime singlehood) (Jones 2005, Raymo et al. 2015), others, especially those related to alternatives to traditional marriage (e.g., cohabitation, single-parenthood, and same-sex marriage), are quite dissimilar from those seen in Western countries (Raymo, Iwasawa, and Bumpass 2009, Rindfuss et al. 2004). Thus, with limited participation in marriage alternatives, Japan stands out as a setting in which to consider how changes internal to marriage, rather than external to it, are at the heart of underlying changes in the institution.

Our study setting is important for another reason: marriage in Japan<sup>1</sup> is a highly gendered institution, and is still largely (although not exclusively) characterized by a man-as-breadwinner/woman-as-homemaker model of household labor division that is heavily dependent on the employment opportunities available to men. However, starting in the 1990s, the Japanese economy sank into a prolonged recession and the labor market began shifting toward a higher prevalence of non-regular or non-standard work, especially for young men. These changes affected the marriage market and threatened the viability of the traditional breadwinner role, making it difficult for men to realize their marriage intentions (Piotrowski, Kalleberg, and Rindfuss 2015). Because of the tight link between fertility and marriage in Japan (and much of East Asia), where the vast majority of childbearing occurs exclusively within legal, marital unions, failure to realize marriage intentions is concomitantly linked to failure to realize fertility intentions (Jones 2007). This is significant, because fertility levels in Japan are very low: since the mid-2000s, the total fertility rate has been around 1.4 (Tsuya 2015). Understanding counterfactual marriage perceptions, especially of the unmarried population, during a period of economic change and labor market restructuring, is therefore important to understanding the wider context surrounding the low fertility phenomena in Japan and other countries.

We pose the following research question: did perceptions of consequences of marriage in Japan change over time, and by marital status and gender, in the period between the mid-1990s and the late 2000s? In what follows, we describe the Theory of Conjunctural Action (TCA) (Johnson-Hanks et al. 2011) as a frame for understanding how perceptions of marriage may

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<sup>1</sup> At this time of writing, same-sex marriage is not legally recognized in Japan, thus our analysis is limited to heterosexual marriage.

change over time by marital status and gender. We then provide an overview of the setting for our research, Japan during the mid-1990s to the late 2000s, before describing our research design and presenting our results. We conclude by discussing how our findings contribute to the larger debate over the changes in the marriage institution, particularly from the perspective of the institution's internal context.

## **Background**

The *Theory of Conjunctural Action* (TCA) (Johnson-Hanks et al. 2011), is a meta-theoretical framework that views human action as emerging out of historically contingent configurations of social structures in which social action can occur (*conjunctures*). These conjunctures arise out of the dynamic interplay over time of virtual (a.k.a., schematic, or mental/abstract representations of aspects of the world) and material (perceptible things that can be tangible, visual, or auditory, that instantiate schemas) dimensions of social structure. Actors socially define these situations (construal) and relate them to their identities in the process of engaging in social action.

Following this framework, we see marriage as a durable form of organization (a social institution), characterized by symbolic systems, bundled patterns of behavior (sometimes referred to as a “package deal” that links such states as partnership, parenthood, employment, and home ownership – cf. Townsend 2002), or systems of social relations. Most importantly for our present research, we view marriage as corresponding to a set of “evaluative schemas” that define what is appropriate, correct, and honorable, or alternatively, what is disagreeable or undesirable. Particularly, we examine what generally could be perceived as consequences of

marriage in terms of social (respect from others), psychological (emotional support, overall personal satisfaction), and economic (standard of living) dimensions, as well as a personal cost (freedom).

TCA is an especially appropriate framework to apply to Japan during the period under review. It views materials as embodying and undergirding schemas; hence fluctuations in material circumstances correspond to changes in schemas. Of relevance to marriage, worsening economic conditions (a material change), can create tension or incompatibility between longstanding schemas related to marriage and the realities facing individuals contemplating its costs/benefits, creating distinct conjunctures (perhaps experienced as cohort or period effects in the general population). Characteristics of worsening economic conditions (such as lower income, increased job demands, or general employment uncertainty) or factors associated with mass economic shifts (e.g., the change from an industrial to a service base), may lead people to view marriage as a less viable economic avenue for improving one's standard of living or other facets of well-being. Indeed, the most prominent explanation for reduced or delayed partnership and family formation patterns is persistently high unemployment and unstable work (see Kreyenfeld, Andersson, and Pailhe 2012 for an overview).

However, schemas related to marriage (and the materials that support them) do not exist solely in the minds of individuals. They are also widely held by communities of interacting individuals, albeit being unevenly (and non-randomly) distributed across socially meaningful characteristics, such as gender, marital status, and so on. Hence, although some schemas shared by a community of individuals (especially deep schemas) exist at a societal level, others learned through more circumscribed social interaction inhere mainly within groups that occupy

different social positions that often propagate highly nuanced schemas, leading to the potential for different conjunctures among subgroups of a population.

Material changes, are therefore liable to change schemas related to marriage for the general population, but they do not necessarily do so in a uniform way. Schematic asymmetries are often particularly pronounced between two sets of groups that relate to marriage in path-dependent ways: the married and the unmarried and men and women. It is well established in the literature that marriage provides benefits for married people that are not enjoyed by unmarried people, especially in terms of health, well-being, and economic stability (e.g., Waite 1995, Waite and Gallagher 2001, Wells and Zinn 2004), although benefits are likely due to both selection and causal effects and may vary by marital quality and gender of the spouse (Carr and Springer 2010, Fincham and Beach 2010). Married couples commonly benefit from economies of scale because they share economic resources such as income, residence, and financial assets. There are also benefits, especially for men, in terms of emotional security from intimate partnerships. For the never married, in addition to potentially accessing these benefits, the possibility of becoming married represents an important social marker of the transition to adulthood, particularly for men, and is thus afforded a unique type of social status (Nock 1998). Nevertheless, there are also perceived costs to marriage, such as potential loss of personal freedom or individual ambition (Regnerus and Uecker 2011) due to marriage being a “greedy institution” (cf. Coser 1974, see also Gerstel and Sarkisian 2006). In sum, the consequences of marriage perceived by single people may differ from those perceived by those who are already married. Comparing the perceptions of both married (those embodying the current state of the institution) and unmarried (those embodying its possible change), especially over time,



therefore provides the more comprehensive perspective needed to fully assess whether, and how, marriage is changing in Japan.<sup>2</sup> It also is important to examine variation in men's and women's perceived benefits and/or costs of marriage in a setting such as Japan, where gender remains a powerful influence on the division of paid versus unpaid labor within marriage (Boling 2008, Bumpass et al. 2009, Choe et al. 2014, Nemoto 2008, Raymo et al. 2015, Tsuya et al. 2012), and where changing economic circumstances may exacerbate already gendered perceptions of the value of marriage.

### *Marriage and Family in Japan*

Marriage and family behaviors and attitudes in Japan can be characterized as: (1) changing in some of the same ways as they have in Western countries, (2) differing in other ways from patterns in Western countries, and (3) continuing to privilege highly the traditional breadwinner-homemaker model of marriage. Since the post-War era, and accelerating after the 1970s, rates of marriage and childbearing declined steadily, while age of first marriage and childbearing have increased (Brinton 1992, Raymo et al. 2015). The Japanese total fertility rate dropped from 4.4 in 1945 to a rate of 1.4 more recently (Frejka, Jones, and Sardon 2010, Retherford, Ogawa, and Matsukura 2001, Tsuya 2015). According to statistics from the Statistical Handbook of Japan (2018), the mean age at first marriage rose over a 20-year period by 2.6 years for men (to an age of 31.1) and 2.8 years for women (to an age of 29.4) as of 2017, while the percentage of lifetime singlehood was 23.4 percent for men and 14.1 percent for women, and mother's average age at first birth rose from 25.6 in 1970 to 30.7 in 2017.

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<sup>2</sup> For a discussion of the usefulness of examining beliefs about marriage among unmarried adults, see for example, Hall (2006).

Alternatives to traditional marriage in Japan are less common than in Western countries.<sup>3</sup> Nonmarital cohabitation rates, although increasing, remain among the lowest in the world. Those that do occur, moreover, tend to be short in duration and a precursor to traditional marriage rather than an alternative to it, both of which are anomalous relative to a number of Western countries (Raymo, Iwasawa, and Bumpass 2009, Raymo et al. 2015, Tsuya 2006a). Also in contrast to many Western countries, rates of non-marital childbearing are very low due to a strong birth-in-wedlock culture and marriage and fertility being treated as concomitant structures in Japanese society (Boling 2008). Finally, the divorce rate also remains low compared to countries like the United States (Taniguchi and Kaufman 2014), although it is increasing (NIPSSR 2014, Park and Raymo 2013, Raymo, Fukuda, and Iwasawa 2013).

With respect to family-related attitudes, late 1990s Japan saw a disproportionate increase in non-traditional work and family attitudes that, in general, paralleled international patterns, with cohorts becoming progressively less traditional than their predecessors (at least up to the cohorts born before 1960; see Piotrowski et al. (2019b)). Women's attitudes are becoming less traditional more quickly than men's (e.g., Kawamura 2011), and men's attitudes are being more constrained by normative social contexts (in other words, more beholden to expectations of culture and peers) than women's (Choe et al. 2014). Changes in beliefs about the consequences of women's paid employment (i.e., the view that the family suffers as a consequence) occurred through intra-cohort change (especially for men), while beliefs about

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<sup>3</sup> Engagement in marriage alternatives varies by educational level in Japan. Nonmarital cohabitation and premarital and bridal pregnancy are most frequent among less-educated Japanese women (Raymo, Iwasawa, and Bumpass 2009, Raymo et al. 2015, Raymo and Iwasawa 2008, Tsuya 2006b), and divorce is negatively correlated with education (Raymo, Fukuda, and Iwasawa 2013).

the importance of women's employment (i.e., attitudes about dual-earning couples and women's paid work contributing to their independence) occurred through the process of cohort replacement, especially for women (Lee, Tufiş, and Alwin 2010). Notably, the non-traditional attitudinal shifts observed by Choe et al. (2014) and Piotrowski et al. (2019b) in the 1990s leveled off during the early 2000s, similar to shifts observed in the United States (Cotter, Hermsen, and Vanneman 2011).

In spite of family-related behavioral and attitudinal shifts, marriage as part of a package that bundles together various family roles and obligations (childcare, caring for dependent elders) along gender lines remains profoundly entrenched in Japan (Kamo 1994, Tsuya and Mason 1995, Tsuya et al. 2012, Yu 2005). Cultural and structural factors continue to sustain the traditional marriage model in Japan, along with its gendered division of labor. The traditional East Asian family is markedly more patriarchal, patrimonial, patrilineal, and patrilocal than in the West (Chen and Li 2014, Chu and Yu 2010, Kim and Park 2010), and thus, an institution that is more favorable and valuable to men. A number of characteristics of Japan, including its very low immigrant population and rate (Boling 2008) and overall high population homogeneity (Levey and Silver 2006), have reduced opportunities and pressures to deviate from such powerful, collectivist traditions. Accordingly, the value of marriage, especially for men, has remained firmly fixed in Japanese collective consciousness.

Structural factors, including high living, housing, and education costs, a relatively weak welfare system, and, arguably most important, economic and labor market factors, also have sustained the traditional marriage model in Japan (Park and Sandefur 2005, Retherford and Ogawa 2006). Indeed, Japan's marriage traditionalism has long been bolstered by the

structuring of the country's economic and labor institutions. In the post-War era, the country adopted a lifetime employment system (Cole 1971, Koike 1983, Lincoln and Nakata 1997), which created high costs for employers and thus demanded high levels of devotion (in hours and years) from regular employees (Brinton 1993, Edwards 1988, Ogasawara 1998, Yu 2002). The resulting work environment encouraged "voluntary" job exit among some workers perceived to be less suitable, which invariably included mostly women (Brinton 1988, 1989, Ogasawara 1998). The result was a set of gender-stratified tracks for education, professional training, employment, and promotion (Brinton 1993, Ogasawara 1998) that placed men on a path to life-long breadwinner status and women into the permanent homemaker (and sometimes supplementary earner) role. In other words, the labor market and marriage were mutually reinforcing. At the height of this arrangement, the Japanese economy experienced three decades of unprecedented growth.

### *The Changing Economy and Marriage*

Japan's economic bubble burst at the end of 1989, precipitating a fifteen-year downturn from which the economy has never fully recovered (Hoshi and Kashyap 2004, Hutchison, Ito, and Westermann 2006). The traditional employment system downsized in the face of the longest and deepest economic recession seen in the industrial world since the 1930s, substantially weakening the employer-employee commitment contract (Ahmadjian and Robbins 2005, Ahmadjian and Robinson 2001, Lincoln and Nakata 1997, Yu 2010). Other important economic shifts include the rise of the service sector, increasing agricultural efficiency, and the outsourcing of manufacturing and manual-labor jobs and a general emergence of a precarious workforce (Choe et al. 2014). Despite these changes, Japanese firms from the 1990s onward

retained many of the core (employer-benefiting) elements of the permanent employment system (Kato 2001, Kelly 2006, Thelen and Kume 1999, Yu 2010), including long work hours, scarce leave time, and minimal employee freedom. Arguably these and other features of the contemporary economic environment, including gender-segregated workplaces and a culture of women's hypergamy in a time of falling economic prospects for men occurring in tandem with women's increasing presence in both education and the workforce, have been antagonistic to Japan's traditional model of marital participation (Miyoshi 2014, Park and Smits 2005, Smits and Park 2009, Thornton 1994, Tsay and Wu 2006, Xu, Ji, and Tung 2000).<sup>4</sup>

Behavioral responses to these economic and other structural changes, though modest by international standards, included increased rates of premarital sex, cohabitation, extramarital childbearing, and divorce (Choe et al. 2014, Rindfuss et al. 2004). Although the majority of young Japanese people value and desire marriage, they also express concern about having enough money in a marriage (Kawamura 2011, NIPSSR 2017) and their standard of living declining after, or because of, marriage (Boling 2008). Rising economic pressures and declining opportunities may make it difficult for individuals to reconcile their financial concerns with their marriage and/or fertility goals (Piotrowski et al. 2018, Rossier and Bernardi 2009).

### *Gender and Japanese Marriage*

In spite of contradictory forces of tradition and change, the meanings and outcomes of marriage in Japan remain highly gendered by the prevailing labor structure. Despite ongoing economic stagnation, Japanese men continue to work very long hours (50 hours per week on

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<sup>4</sup>Other Japanese-marriage-antagonistic factors include the decline of parental matchmaking and traditionally structured dating markets (Choe et al. 2014, Rindfuss et al. 2004).

average; Tsuya et al. (2012)). Moreover, Japanese culture frames marriage as more essential for men than women (Choe et al. 2014), as it supports their prescribed roles as breadwinners and employees, and men internalize and act in accordance with these cultural beliefs. Research finds, moreover, that in Japan, marital happiness is related to income and both husband's and wife's employment status (Lee and Ono 2008, Kaufman and Taniguchi 2009). Married Japanese men benefit from a spouse's physical and emotional caretaking, and they are more likely than women to see marriage as providing emotional security and support and as a source of happiness (Boling 2008, Inaba 2004). Furthermore, as men living in a patriarchal society, they likely have stronger investment in maintaining the *status quo* than women.

Meanwhile, although employment rates increased modestly among married Japanese women (Brinton 2011), work-family conflict leads many Japanese wives to adopt a strategy of sequencing employment and family responsibilities (Rindfuss and Brewster 1996, Yu 2002, 2005). Economic dependence on their husbands (Gershuny 2000, Raymo and Iwasawa 2005, Shirahase 2003) leaves them shouldering a potentially onerous load of housework and intensive rearing of children (Davis and Greenstein 2004, Fuwa 2004, Hirao 2001, Kamo 1994, Tsuya and Mason 1995), along with possible co-residence with parents or in-laws. In contrast, men who marry see little change in their (already low) share of housework, despite husband's housework being correlated with both spouses' reported marital satisfaction (Davis and Greenstein 2004, Tsuya et al. 2012, but also see Qian and Sayer 2016 for discussion about housework share and marital satisfaction).

Given the gender asymmetries in Japanese marriage, women's ideas about navigating employment and family tracks may be (unsurprisingly) more carefully considered and

calculated than are men's (Choe et al. 2014). In Nemoto's (2008) interviews with highly-educated, never-married Japanese women, respondents often expressed reluctance about marriage, especially as it relates to their autonomy, ability to avoid sexist partners, and marriage's potential to lower their standard of living. Nemoto, Fuwa, and Ishiguro (2013) also found ambivalence toward marriage among the highly-educated, never-married Japanese men in their interview study because of weaker social pressure to marry and marriage age norms and the men's concerns that they will lose autonomy and freedom once they marry. Unmarried Japanese adults (women and men) often enjoy comfort, freedom, and limited responsibilities while single, especially if they live with their parents (Boling 2008, Yoshida 2017), though many scholars and the media see coresidence with parents as problematic, referring to such people as "Parasite Singles" (Masahiro 2001, Ronald and Hirayama 2009). Not surprisingly, then, "freedom of action and lifestyle" has been given as one of the chief merits of being single among most never-married respondents of both genders in national Japanese surveys conducted since the 1980s (NIPSSR 2017).

In spite of the potential benefits of remaining single, national survey data also indicate the vast majority of Japanese singles express relatively strong intentions to marry, with women holding stronger intentions to marry than men despite having less to gain in terms of personal career ambitions and economic independence (Kawamura 2011). Among both never-married young women and men, having one's own "children and family" and "psychological relief" are the two most commonly reported benefits of marriage, with a higher percentage of women than men (49 percent versus 36 percent in 2015) giving the former as a primary benefit. Kaufman and Taniguchi (2010) found that never-married Japanese report being significantly less

happy than those of other marital statuses (married, divorced, widowed), especially if they held “pro-marriage” attitudes. Attesting to the continued importance of marriage, Yoshida’s (2017) interviews with two cohorts of Japanese women indicate multiple structural and cultural factors have contributed to Japanese women “drifting” into singlehood more than actively choosing it, including gender segregation in workplaces (making it difficult for women and men to meet), long work hours (leaving little time for relationships), and gendered prejudices (e.g., men viewing career women as unfeminine and uninterested in marriage).

For both men and women, recent economic changes may present an important barrier to marriage. Kawamura (2011) found single Japanese women and men ages 20-39 viewed affordability and wives’ employment in such terms, with women more strongly viewing these as barriers than men. Because securing regular, stable employment is now more challenging for men, possibly the primarily economic benefit of traditional marriage for women is decreasing in both absolute and relative (to men) terms. Additionally, un- and underemployment may have left some men feeling they are undesirable candidates for marriage (Yoshida 2017).

## **Hypotheses**

Based on the preceding discussion, we advance the following hypotheses. First, following overall expectations of the Theory of Conjunctural Action (TCA) we predict a general decline across marital statuses (i.e., among both the married and unmarried) in the perceived benefits (personal/psychological, social, and economic) or costs (in the case of personal freedom) of marriage over the time period examined, concomitant with the worsening economic situation in Japan. In the case of unmarried people, the less favorable economic climate may lead them



to see marriage as especially out-of-reach (as compared to their married counterparts) and therefore of less benefit. Second, given the characteristics of the traditional man-as-breadwinner and woman-as-homemaker model of marriage, we predict at all time points that, everything else being equal, men will perceive marriage as more beneficial than women, with one exception: women may perceive marriage as more beneficial economically than men. Third, we expect over the time period men will view the benefits of marriage as less advantageous (increasingly less positive) and the cost of marriage as more disadvantageous (increasingly more negative); we do not expect similar changes over time for women.

## **Methods**

### *Data*

We use repeat cross-sectional data from the 1994 *National Survey on Work and Family Life* in Japan and the 2000 and 2009 *National Survey of Family and Economic Conditions* (NSFEC) in Japan. The data collection was directed by Keio University and was carried out by Shin Joho Center. Data collection for each year used a similar approach: a two-stage nationally representative probability sample of men and women ages 20-49. The first stage used geographic primary sampling units, based on population census tracts, and the second stage used the basic residence registration (*jumin kihon daicho*) system.

Sample individuals were first contacted with a postcard explaining the research project and informed that a fieldworker would visit to drop off a self-administered questionnaire. After the completed questionnaires were collected, respondents were given two things: 1) a gift certificate worth ¥ 2000 (approximately US\$20) and 2) a postcard to notify the survey agency in

the event of an address change. In Japan, research suggests that drop-off self-administered surveys generally have higher response rates than personal interviews (Yamada and Synodinos 1994).

### *Sample*

All respondents, ages 20-49<sup>5</sup> of both genders, were used in the analysis, with the exception of the following two groups. First, we excluded any respondents (about 4 percent of the overall sample) who were previously married (i.e., divorced, separated, or widowed) as they were not asked survey items used for our dependent variables. Second, we used list-wise deletion to drop any cases having missing data on any of the variables used in our analysis (an additional 6 percent of cases). Our analytical sample has a total of 8,465 respondents.

### *Measures*

Our dependent variables – the “marriage counterfactual” measures – include a series of questions about each respondents’ perceived consequences of having an alternate marital status. Specifically, if respondents were married, they were asked to imagine how their life would be different if they were unmarried right now, and vice-versa. A series of questions asked about five specific perceived differences: respect, emotional security, standard of living,

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<sup>5</sup> The data collection also captured some respondents who were 50 years old. In 1994, the age range was wider (i.e., up to 60 years old), but we limited the analysis to only those between the ages of 20 and 49 to keep comparability with the 2000 and 2009 data.

freedom, and overall satisfaction; the following includes a translation<sup>6</sup> of the actual item asked about in the survey.

<b>Mnemonic</b>	<b>Survey Question</b>
Respect	Respect from others
Emotional Security	Your sense of emotional security
Living Standard	Your standard of living
Freedom	Your freedom to do the things you enjoy
Overall	Your overall satisfaction

In each case, respondents were asked to indicate how these aspects would be better or worse than their present marital status (i.e., not married if currently-married and vice-versa). Each is measured on a 5-point Likert scale, which had the following categories: “Much Worse”, “Somewhat Worse”, “Same”, “Somewhat Better” and “Much Better.” For married respondents, we reverse coded these items so that for both married and non-married respondents higher values indicated the benefits of married life over singlehood (doing so facilitated pooling the data for some analysis).

Gender (men = 1), marital status, and year of survey (i.e., 1994, 2000, 2009) are our main independent variables of interest. We also include measures of basic demographics, such as age (in years), education, employment status, urban upbringing, and homeownership. We used dummy variable coding (including a series of dummy variables, as needed) for several measures, including: education (high school and below, junior college or professional school,

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<sup>6</sup> We believe that the following may represent better translations than those shown in the table (taken from the technical materials for the studies): freedom - “freedom to do what I want to do”; emotional security - “emotional peace/ease”; overall - “satisfaction about everyday life in general.”

and college and beyond), employment status (for regular work, non-regular work, and not in the labor force), urban upbringing, and homeownership.

### *Research Design and Analytical Approach*

The marriage counterfactual measures are the dependent variables. We performed the analysis separately by marital status and by gender, although we also pooled the data (with marital status and gender as independent variables) for some analysis. Because our dependent variables are measured at an ordinal level, we used a series of ordered logit models to examine the association of our outcomes and the main independent variables, net of controls.<sup>7</sup> To examine the magnitude of results, we computed predicted probabilities from the model estimates, varying the value of some variable(s) of interest while keeping the other variables at their actual value in the dataset.

### **Results**

Table 1 shows a distribution of the marriage counterfactual measures, separately by marital status and gender. It shows that across marital statuses and genders, respondents were mostly neutral (although more optimistic than pessimistic) about respect accruing from marriage, but generally much more optimistic about emotional security and overall satisfaction, while much more pessimistic about personal freedom. Compared to women, men tended to be more optimistic about respect and emotional security, but women were more inclined to see

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<sup>7</sup> In preliminary analysis we used confirmatory factor analysis and latent class analysis to create continuous and categorical variables, respectively, from these observed items. However, results suggested that these items were capturing different aspects of marriage and we therefore could not identify any meaningful underlying commonalities in the measures.

standard of living as a potential benefit of marriage. Finally, compared to the never-married, currently married respondents tended to see standard of living as more of a marriage benefit.

[Table 1 about here]

Table 2 shows descriptive statistics, separately by marital status and gender. A slightly higher proportion of men in the sample are never-married compared to women (43 vs. 36 percent); the sample is gender-balanced, although there are slightly fewer men than women among the currently married, and slightly more women among the never-married. The average age is higher, as one would expect, for currently married respondents compared to their never-married counterparts (37.5 vs. 27.8 years), but it is similar for men and women overall (around 33 years). The distribution of education is similar for both marital status groups, with around half in the lowest category (high school and below), followed by junior college or professional, and college and beyond. There is evidence of educational tracking by gender, as noticeably more women have junior college or professional degrees (38 percent), while over twice as many men have a college degree or beyond (31 vs. 15 percent). The majority of respondents of both marital statuses are employed as regular workers, although the proportion is smaller for the currently married and is clearly very gendered, with the majority of women either working as non-regular workers or not in the labor force (probably due to married women dropping out of the labor force to take care of young children). Urban upbringing is notably higher among the never-married compared to the currently-married (74 vs. 57 percent), although similar for men and women (around 60-some percent for each). Homeownership varies by marital status with over half of currently-married respondents owning homes compared to less than a fifth of

never-married respondents, but there is little difference by gender. The distribution by year shows that most respondents, around half, were surveyed in the year 2000.

[Table 2 about here]

Table 3 shows ordered logit regression results for the pooled sample. Differences between never-married and currently-married are statistically significant on only two dimensions: perceived respect and freedom, both which are positively associated with being never-married (i.e., the never-married see more benefits to them than the currently married). As expected, with the exception of living standard, men tend to see higher benefit of marriage compared to women. Given the pressures of the breadwinner role, it is not surprising that men are less likely to see standard of living as a benefit. Also expected, across years, the perceived benefits of marriage are lower in 2000 and 2009, relative to year 1994, but only in terms of living standard and freedom, perhaps exemplifying the deteriorating economic conditions and possibly rising individualism.

[Table 3 about here]

Next, we consider separate models for men and women (Table 4) and for married and unmarried (Table 5), for which we include predicted probabilities (see Figures 1 and 2, respectively). Surprisingly, differences over time do not appear to be gendered: men and women both see lower advantages to marriage in terms of living standard and freedom (albeit for women, the effect of living standard in 2009 is not significant as it is for men). So, although on the whole men anticipate greater benefits to marriage compared to women, both genders see declines over time on at least these two dimensions. From the predicted probabilities

(Figure 1) the most pronounced time trend is for living standard, for which the proportion of men who perceived it as worse (i.e., either 'much worse' or 'somewhat worse') increased especially between 1994 and 2000 (from 10 to 14 percent and 25 to 29 percent, respectively), although by 2009 the trend had leveled out; for women, the differences across time were less pronounced. From Table 4, we can also see some differences in the effect of marital status by gender. Specifically, relative to their married counterparts, never-married women, but not men, see more benefits to marriage in terms of respect, emotional security, and overall satisfaction. For both genders, never-married individuals are more likely than their married counterparts to perceive freedom as a benefit, while living standard operates in contrasting ways for men and women (with the never-married men seeing it as less beneficial relative to married men).

Turning to results by marital status (Table 5), across nearly every counterfactual dimension the perceived benefits of marriage are lower in the years 2000 and 2009 compared to year 1994. However, as expected, the coefficients for these dimensions tend to be significant more frequently among the never-married than the currently-married; the main exception being freedom, which is negative for both currently-married and never-married (living standard is also significantly lower in 2000 compared to 1994 for the currently-married). Looking at the predicted probabilities (Figure 2), many of the differences across years are modest, although there is a noticeable difference in perceptions toward living standard, where, among the never-married, the predicted percent indicating 'somewhat worse' changed from 25 in 1994 to 37 in 2000 to 31 in 2009; similarly, the predicted percent of respondents indicating 'much worse' increased from 7 to 13 between 1994 and 2000, then dropped to 10 in 2009. There was also a notable increase among the never-married reporting that freedom was 'much worse' between

1994 and 2000 (a change from 18 to 26 percent). From the table we see that the gender effect (within a given marital status) operates mostly the same way across counterfactual items, with nearly all coefficients being statistically significant (and mainly positive). The one exception is for freedom, for which gender (men) is significant (and positive) for the currently-married, but not for the never-married. Put differently, compared to their counterpart women, currently-married men, but not never-married men, are more likely to see a benefit to freedom from marriage. Across all other dimensions, currently-married and never-married men generally see more benefits to marriage than women (except for living standard, which women are more likely to see as a benefit).

[Tables 4 and 5, and Figures 1 and 2, about here]

With respect to the other independent variables in the models, perceived respect and overall satisfaction are higher among those with a college (or beyond) education compared to the reference category (high school or below), but this is mainly the case for men and the never-married in the case of respect; emotional security tends to increase with education; living standard is perceived to be lower for those with a junior college or professional (relative to the reference category), but mainly for women (recall educational tracking discussed earlier) and currently-married. Living standard is related to employment status, with both non-regular workers and those who are not in the labor force expecting greater benefit from marriage relative to the reference category, regular workers; non-regular workers also perceive greater freedom from marriage (both findings holds across gender and marital status). Homeownership is associated with greater perceived respect, living standard, and overall satisfaction, although this pattern holds mostly for the currently-married, not the never-married.



## Conclusion

Using a unique set of measures found on three waves of cross-sectional Japanese data, we examine whether perceptions of overall personal satisfaction and perceptions of marriage as beneficial (or not) for respect, emotional security, standard of living, and personal freedom varied over time and by gender and marital status. We frame our analysis using insights from the Theory of Conjunctural Action (TCA), which deals with the interplay of material and schematic aspects of social structure over time and across subgroups within a population.

Overall, most results are consistent with our hypotheses and the tenets of the Theory of Conjunctural Action (TCA). The time trends we observe indicate a general worsening perception of marriage over time on two dimensions, living standard and freedom, concomitant with a period that witnessed a pronounced economic downturn in Japan. Specifically, with controls for several demographic factors, pooled sample results indicate respondents in 2000 and 2009 perceived lower living standard and freedom benefits than respondents in 1994. Within a TCA framework, we interpret this as an example of how the material circumstances that once supported a gendered division of labor within marriage and the marriage market as a whole (i.e., strong job prospects, stable employment, and robust economic conditions), are beginning to weaken, precipitating a decline in the perceived benefits of marriage.

Consistent with the view that schemas related to marriage (and the materials that support them) are differentially distributed within the population, we predicted that those whose choices will shape the future of the institution (i.e., the not-yet-married) would be differentially impacted by these macro-societal changes over time (in contrast to their already-

married counterparts). Results by marital status confirm that the period effects we observed were indeed more pronounced for never-married respondents than for currently-married ones, especially in terms of emotional support, and to a lesser extent respect and overall satisfaction. Within a TCA framework, we see this as emblematic of a more unfavorable marriage market and economic situation facing unmarried people, which leads them to construe the situation differently than those considering their marriage prospects in earlier time periods.

Finally, given marital benefits accruing to men from the man-as-breadwinner and woman-as-homemaker household division of labor, we predicated that, with the exception of living standard (owing to the economic climate), men would perceive various dimensions more favorably compared to women. Indeed, results of the pooled sample indicate that men see every aspect but this one more favorably than women. However, contrary to our other hypothesis, that men would be especially likely to see benefits of marriage less favorably over time, results showed a lack of pronounced gender difference in this regard. Perhaps the worsening economic situation changed the perceptions of marriage for both genders in such a way that women, as well as men, saw fewer benefits from marriage.

We close with four major conclusions, which we link to the broader literature and debate about marriage and family change. First, although certain benefits of marriage are viewed more positively among the never-married than the currently-married, there has been far more negative change over time in perceptions of marriage benefits among the former than the latter. Consistent with other research on attitudes in Japan (Choe et al. 2014, Lee, Tufiş, and Alwin 2010, Piotrowski et al. 2019a), our findings suggest that ideas about marriage are changing. However, our research highlights the usefulness of examining perceptions of marital

relationships among those who have not yet entered such unions (i.e., the never-married). If trends continue, the demographic implications for Japan (and elsewhere) are very consequential, especially considering the tight link between marriage and fertility in Japan, and the wide acknowledgement in the academic (cf. Tsuya 2015) and popular press (Siripala 2018) that Japan's marriage and fertility rates are at record low levels at a time when uncertain employment prospects are making the "marriage package" unattractive for both men and women.

Second, the findings indicate that (survey) research and theory on family change should examine the internal marriage context more fully than generally has been done in the past. Relatively little attention, in particular, has been paid to some of the dimensions of marriage (e.g., respect, personal freedom, emotional security) we examined. The heretofore-dominant focus in the literature on the external context surrounding marriage (especially related to marriage alternatives and diversification/deinstitutionalization of the marriage institution) largely ignores these factors and the internal context more generally, leading to an incomplete picture of the contemporary institution. Our findings highlight that perceptions of marriage are changing on a number of dimensions, including social, economic, psychological, and personal. In light of the rigidly-defined roles that characterize Japanese marriage, perceptions of personal freedom, were particularly interesting, and may signal a shift towards greater individualization of Japanese society. Specifically, perhaps the perceived advantages of remaining single, vis-à-vis the heavy burden of some traditional aspects of marriage, is finding increasing support within the cultural milieu, an outcome well anticipated by a theory such as TCA.

In spite of the changing perceptions suggested by the results for marital status (particularly perceptions of personal freedom), our third conclusion is that the traditional breadwinner-homemaker model of marriage continues to be important and influential in Japan. Men perceived more benefit to all of the marital dimensions we examined except for standard of living, for which women perceived more benefit. Fourth, the results, particularly those for gender, indicate how cultural beliefs regarding the traditional marriage model persist in spite of the structural changes that occurred in Japan, especially in the economy and labor market. As Yu and Kuo (2018, p. 243) point out, the collectivist nature of East Asian cultures may lead “individuals to be more comfortable with dissonance between their behaviors and attitudes.” Thus, Japanese men and women are likely to marry (and stay married) even if personal costs have risen and benefits of marriage have declined over time. The implication of these two insights is that scholars need to carefully consider the setting within which they examine the association between marriage and structural changes. We propose that a theoretical framework such as the Theory of Conjunctural Action (TCA) is particularly well-suited to such a task, in that it recognizes that the interplay between materials and schemas is path-dependent (meaning that events are determined by preceding historical events) and thus embedded within a given socio-historical context. TCA also recognizes that in adjudicating between cultural and structural influences, it is the interplay of both elements that must be considered, rather than either one in isolation.

Some limitations of our approach need to be considered in light of our results. First, our analysis is based on cross-sectional data, and thus should not be used to infer causality between marriage counterfactual measures and their determinants. Second, a larger set of

items would have been desirable to more fully assess the consequences associated with marriage (such as, for example, measures of health and well-being). Despite its weaknesses, our paper also has a number of strengths. It uses a unique set of questions asked to both the married and unmarried over a period in which important structural changes (e.g., in the economy and labor market) occurred. It also examines the internal context of marriage in a non-Western setting which contrasts in interesting ways with the Western context upon which much of the prevailing scholarship on marriage and familial change, mostly oriented toward the external context of marriage, is based. Future research on the internal context of marriage in other settings is needed to better appreciate the significance of marital changes and their embeddedness in larger cultural and social structural transformations.

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Table 1: Distribution of Perceived Marriage Benefits by Marital Status and Gender

	Cur Mar %	Nev Mar %	Men %	Women %	Total %
<b>Respect</b>					
Much Worse	1.48	0.69	0.87	1.45	1.17
Somewhat Worse	4.87	2.28	2.16	5.45	3.85
Same	65.01	72.03	62.33	72.92	67.77
Somewhat Better	22.58	21.69	27.91	16.84	22.23
Much Better	6.07	3.30	6.72	3.34	4.98
<b>Total</b>	100.00	100.00	100.00	100.00	100.00
<b>Emotional Security</b>					
Much Worse	4.13	1.83	2.48	3.93	3.22
Somewhat Worse	9.58	5.80	5.68	10.37	8.09
Same	25.30	25.50	23.86	26.82	25.38
Somewhat Better	36.94	43.98	40.63	38.83	39.71
Much Better	24.06	22.89	27.35	20.04	23.60
<b>Total</b>	100.00	100.00	100.00	100.00	100.00
<b>Living Standard</b>					
Much Worse	10.59	11.20	13.35	8.44	10.83
Somewhat Worse	23.32	33.55	27.99	26.73	27.34
Same	36.16	35.75	36.92	35.13	36.00
Somewhat Better	19.27	16.28	14.73	21.28	18.09
Much Better	10.67	3.21	7.01	8.42	7.74
<b>Total</b>	100.00	100.00	100.00	100.00	100.00
<b>Freedom</b>					
Much Worse	36.49	25.02	30.39	33.49	31.98
Somewhat Worse	35.48	49.17	40.02	41.66	40.86
Same	21.06	21.87	23.93	18.96	21.38
Somewhat Better	4.75	2.91	4.03	4.03	4.03
Much Better	2.22	1.02	1.63	1.86	1.75
<b>Total</b>	100.00	100.00	100.00	100.00	100.00
<b>Overall</b>					
Much Worse	4.13	3.12	3.35	4.09	3.73
Somewhat Worse	12.01	9.79	8.62	13.53	11.14
Same	29.31	30.55	27.60	31.88	29.80
Somewhat Better	35.09	41.27	39.00	36.12	37.52
Much Better	19.46	15.26	21.43	14.38	17.81
<b>Total</b>	100.00	100.00	100.00	100.00	100.00
<i>N</i>	5138	3329	4120	4347	8467

Note: Respondents asked to indicate (rank) how life would be different (on five dimensions) if their marital status was different (i.e., never-married became married or married became never-married). Reverse-coding used for married respondents, so that 'Much Better' refers to becoming married or staying married.

Table 2: Descriptive Statistics for Independent Variables

	Currently Married		Never Married		Women		Men	
	mean	sd	mean	sd	mean	sd	mean	sd
Never Married					0.36	0.48	0.43	0.49
Gender (Men)	0.46	0.50	0.53	0.50				
Age	37.52	6.83	27.83	6.20	33.56	8.11	33.86	8.11
Education								
HS and Below	0.52	0.50	0.46	0.50	0.47	0.50	0.53	0.50
JC or Professional	0.27	0.44	0.29	0.45	0.38	0.49	0.16	0.37
College and Beyond	0.21	0.41	0.25	0.43	0.15	0.36	0.31	0.46
Employment Status								
Regular	0.57	0.50	0.67	0.47	0.40	0.49	0.83	0.38
Non-Reg	0.20	0.40	0.17	0.37	0.29	0.45	0.09	0.28
Not if LF	0.23	0.42	0.16	0.37	0.32	0.47	0.08	0.28
Urban Upbringing	0.57	0.49	0.74	0.44	0.62	0.48	0.65	0.48
Homeowner	0.56	0.50	0.19	0.39	0.43	0.50	0.40	0.49
Year								
1994	0.24	0.43	0.13	0.33	0.18	0.39	0.20	0.40
2000	0.45	0.50	0.53	0.50	0.49	0.50	0.48	0.50
2009	0.31	0.46	0.35	0.48	0.33	0.47	0.32	0.47
Observations	5138		3329		4347		4120	

Table 3: Ordered Logit Regressions of Pro-Marriage Counterfactual

	Respect	Emotional	Living Stand	Freedom	Overall
Never Married	0.20*** 0.060	0.090 0.052	-0.089 0.051	0.51*** 0.053	0.081 0.051
Gender (Men)	0.71*** 0.054	0.39*** 0.046	-0.25*** 0.045	0.17*** 0.046	0.40*** 0.046
Age	0.025*** 0.0037	-0.0078* 0.0032	0.027*** 0.0032	0.026*** 0.0032	0.0051 0.0032
Education					
HS and Below	-	-	-	-	-
JC or Professional	-0.025 0.057	0.19*** 0.048	-0.14** 0.048	-0.069 0.049	0.072 0.048
College and Beyond	0.15* 0.058	0.46*** 0.051	-0.049 0.050	-0.065 0.052	0.43*** 0.051
Employment Status					
Regular Work	-	-	-	-	-
Non-Reg	0.0051 0.068	-0.049 0.058	0.31*** 0.057	0.17** 0.058	0.0099 0.057
Not in LF	-0.051 0.067	0.031 0.056	0.31*** 0.055	0.057 0.056	0.083 0.055
Urban Upbringing	-0.066 0.049	-0.042 0.042	0.0070 0.042	0.11* 0.043	-0.045 0.042
Homeowner	0.16** 0.054	0.087 0.046	0.12* 0.046	0.067 0.047	0.14** 0.046
Year					
1994	-	-	-	-	-
2000	-0.085 0.065	0.012 0.056	-0.33*** 0.055	-0.33*** 0.056	-0.0061 0.056
2009	-0.086 0.070	0.11 0.060	-0.12* 0.060	-0.33*** 0.061	0.12 0.060
Cut Points					
Constant	-3.29*** 0.18	-3.27*** 0.15	-1.48*** 0.14	0.24 0.14	-2.69*** 0.15
cut2					
Constant	-1.78*** 0.16	-1.92*** 0.14	0.18 0.14	2.01*** 0.14	-1.18*** 0.14
cut3					
Constant	2.27*** 0.16	-0.38** 0.14	1.78*** 0.14	3.83*** 0.15	0.38** 0.14
cut4		3			
Constant	4.28*** 0.17	1.37*** 0.14	3.24*** 0.14	5.07*** 0.16	2.16*** 0.14
Total	8467	8467	8467	8467	8467
-2 LL	15295.4	22966.8	24480.8	21154.9	23540.8
AIC	15325.4	22996.8	24510.8	21184.9	23570.8
BIC	15431.1	23102.5	24616.4	21290.6	23676.5

Standard errors in second row

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

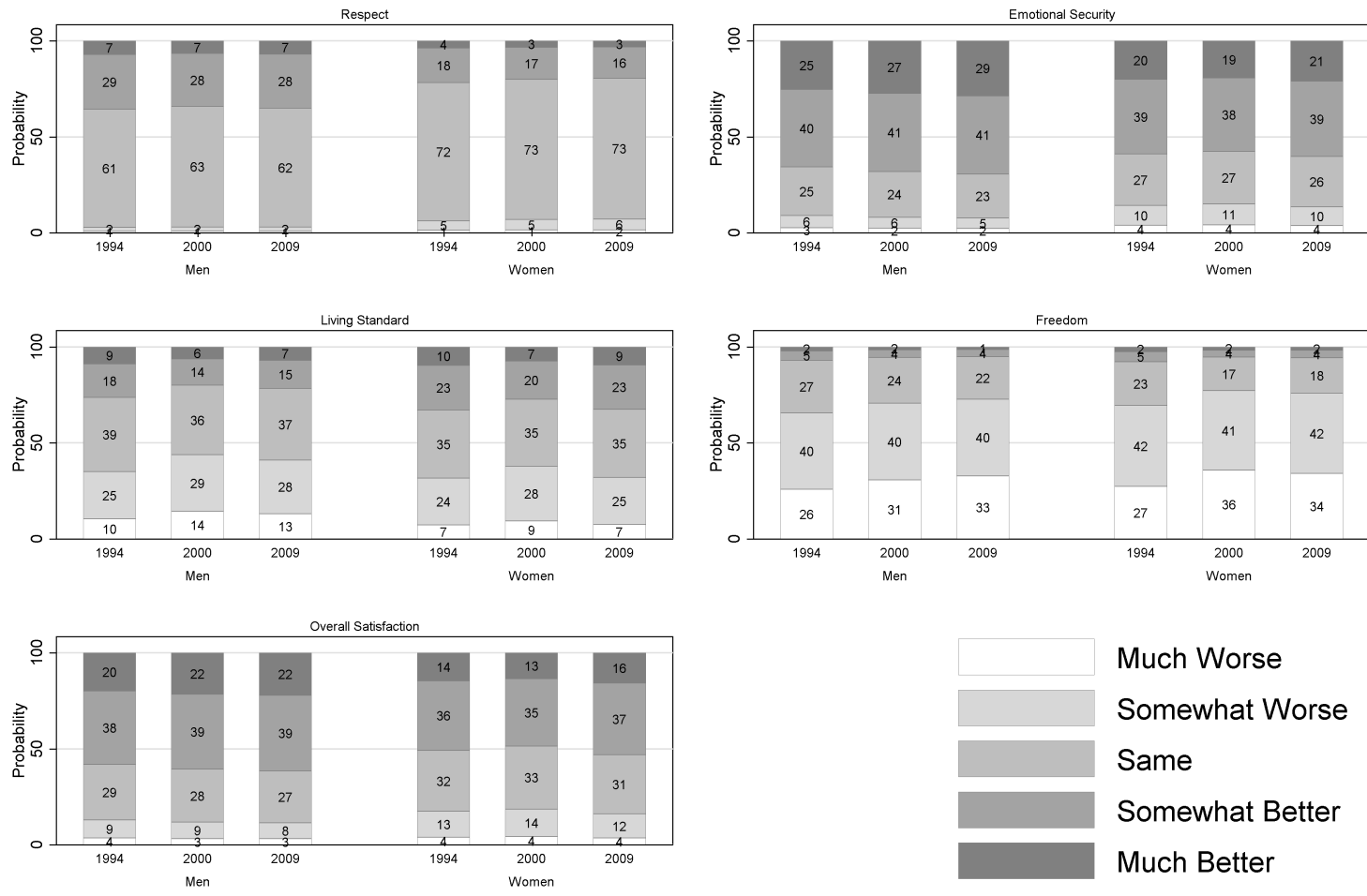
Table 4: Ordered Logits Regressions of Pro-Marriage Counterfactual, by Gender

	Respect		Emotional		Living Standard		Freedom		Overall	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Never Married	0.22* 0.098	0.13 0.082	0.36*** 0.080	-0.12 0.074	0.22** 0.079	-0.33*** 0.072	0.79*** 0.083	0.24** 0.074	0.26** 0.079	-0.068 0.073
Age	0.023*** 0.0054	0.027*** 0.0051	-0.0069 0.0044	-0.0073 0.0046	0.040*** 0.0044	0.016*** 0.0045	0.029*** 0.0046	0.026*** 0.0046	0.0048 0.0044	0.0062 0.0046
Education										
HS and Below	-	-	-	-	-	-	-	-	-	-
JC or Professional	-0.042 0.075	-0.016 0.091	0.21*** 0.061	0.15 0.081	-0.16** 0.061	-0.11 0.081	-0.13* 0.062	0.031 0.082	0.076 0.061	0.051 0.081
College and Beyond	0.035 0.10	0.20** 0.072	0.48*** 0.084	0.43*** 0.065	-0.087 0.082	-0.034 0.064	-0.17* 0.085	-0.014 0.065	0.37*** 0.083	0.45*** 0.065
Employment Status										
Regular Work	-	-	-	-	-	-	-	-	-	-
Non-Reg	-0.058 0.088	0.098 0.12	0.069 0.072	-0.050 0.11	0.31*** 0.072	0.48*** 0.11	0.16* 0.074	0.40*** 0.11	0.024 0.072	0.17 0.11
Not in LF	-0.14 0.089	0.17 0.12	0.17* 0.072	0.082 0.11	0.43*** 0.071	0.23* 0.11	0.11 0.074	0.24* 0.11	0.17* 0.072	0.11 0.11
Urban Upbringing	-0.026 0.072	-0.10 0.067	0.030 0.059	-0.14* 0.061	-0.032 0.058	0.041 0.060	0.077 0.060	0.12* 0.062	0.035 0.058	-0.14* 0.061
Homeowner	0.19* 0.080	0.15* 0.073	0.14* 0.065	0.073 0.066	0.22*** 0.065	0.026 0.066	0.096 0.066	0.065 0.067	0.17* 0.065	0.14* 0.066
Year										
1994	-	-	-	-	-	-	-	-	-	-
2000	-0.10 0.095	-0.070 0.088	-0.054 0.079	0.10 0.080	-0.29*** 0.078	-0.37*** 0.079	-0.40*** 0.080	-0.24** 0.080	-0.088 0.078	0.10 0.080
2009	-0.14 0.10	-0.031 0.096	0.057 0.085	0.17 0.087	-0.021 0.084	-0.26** 0.086	-0.33*** 0.086	-0.34*** 0.087	0.095 0.085	0.14 0.086
Cut Points										
Constant	-3.48*** 0.26	-3.76*** 0.27	-3.03*** 0.20	-3.79*** 0.21	-0.98*** 0.19	-1.71*** 0.19	0.34 0.20	0.073 0.19	-2.69*** 0.20	-2.98*** 0.21
cut2										
Constant	-1.86*** 0.23	-2.50*** 0.23	-1.61*** 0.19	-2.54*** 0.20	0.84*** 0.19	-0.16 0.19	2.18*** 0.20	1.79*** 0.20	-1.07*** 0.19	-1.61*** 0.19
cut3										
Constant	2.15*** 0.23	1.64*** 0.21	-0.16 0.19	-0.86*** 0.19	2.38*** 0.19	1.51*** 0.19	3.86*** 0.21	3.76*** 0.21	0.46* 0.19	-0.019 0.19
cut4										
Constant	4.15*** 0.25	3.66*** 0.22	1.60*** 0.19	0.89*** 0.19	3.95*** 0.20	2.83*** 0.20	5.06*** 0.23	5.05*** 0.23	2.28*** 0.19	1.73*** 0.19
Total	4347	4120	4347	4120	4347	4120	4347	4120	4347	4120
-2 LL	7464.7	7817.0	12119.1	10796.1	12499.5	11910.9	10729.8	10370.4	12229.4	11276.7
AIC	7492.7	7845.0	12147.1	10824.1	12527.5	11938.9	10757.8	10398.4	12257.4	11304.7
BIC	7582.0	7933.5	12236.4	10912.6	12616.8	12027.5	10847.1	10486.9	12346.7	11393.3

Standard errors in second row

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Figure 1. Predicted Probabilities of Marital Counterfactuals, By Gender



N = 4,120 (Men), N = 4,347 (Women)

5



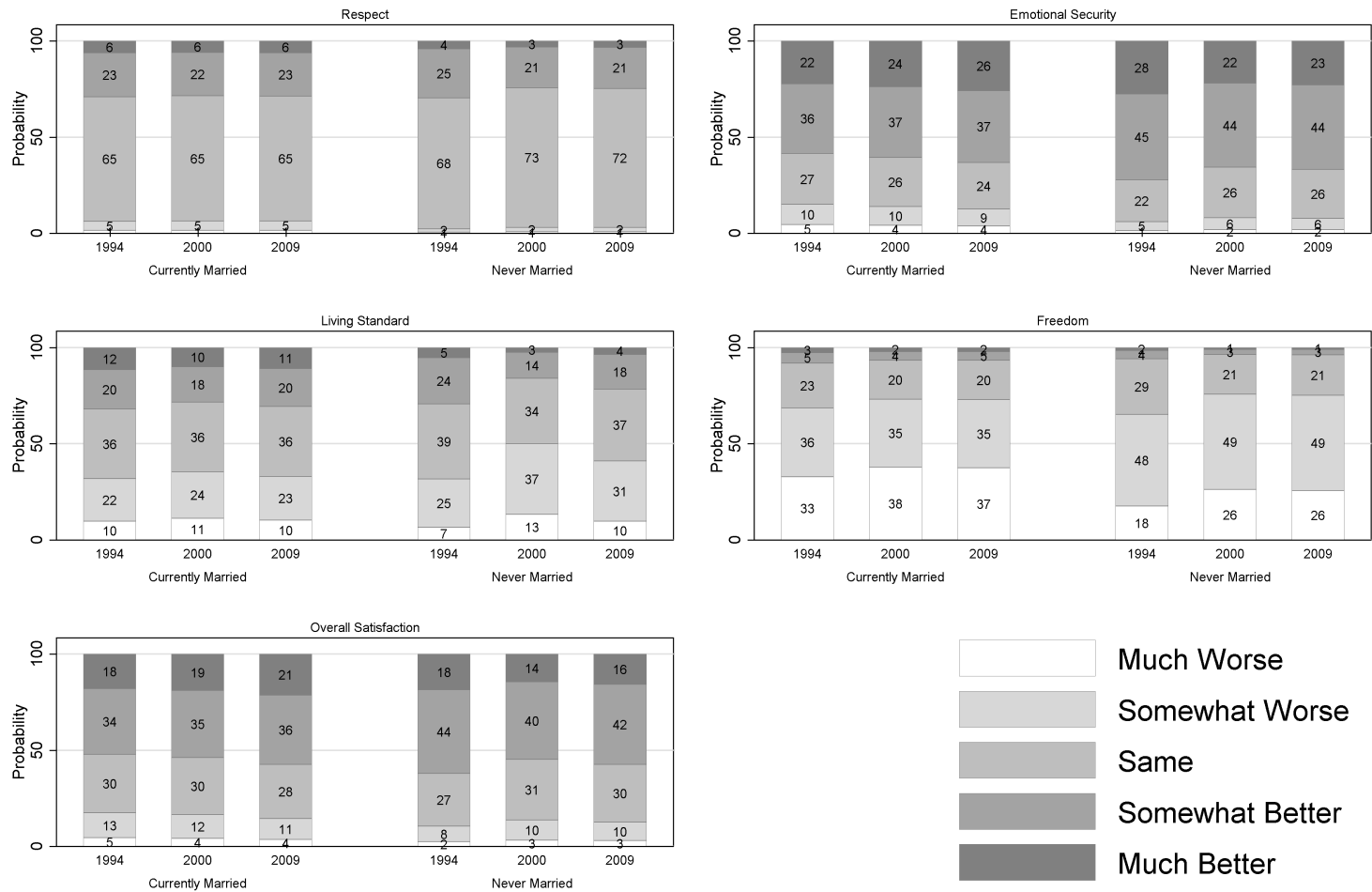
Table 5: Ordered Logits Regressions of Pro-Marriage Counterfactual, by Marital Status

	Respect		Emotional		Living Standard		Freedom		Overall	
	Cur Mar	Nev Mar	Cur Mar	Nev Mar	Cur Mar	Nev Mar	Cur Mar	Nev Mar	Cur Mar	Nev Mar
Gender (Men)	0.56*** 0.082	0.80*** 0.084	0.58*** 0.072	0.20** 0.067	-0.16* 0.070	-0.35*** 0.066	0.33*** 0.073	-0.048 0.068	0.50*** 0.071	0.29*** 0.067
Age	0.031*** 0.0047	0.014* 0.0064	-0.0012 0.0041	-0.015** 0.0053	0.035*** 0.0040	0.015** 0.0053	0.040*** 0.0042	0.0059 0.0055	0.018*** 0.0041	-0.015** 0.0053
Education										
HS and Below	-	-	-	-	-	-	-	-	-	-
JC or Professional	-0.027 0.072	0.032 0.098	0.22*** 0.062	0.11 0.079	-0.17** 0.062	-0.079 0.078	-0.030 0.063	-0.094 0.081	0.11 0.062	0.0030 0.079
College and Beyond	0.086 0.075	0.26** 0.095	0.57*** 0.067	0.26** 0.081	-0.031 0.066	-0.096 0.079	-0.067 0.068	-0.073 0.082	0.53*** 0.067	0.27*** 0.080
Employment Status										
Regular Work	-	-	-	-	-	-	-	-	-	-
Non-Reg	-0.19* 0.093	0.23* 0.11	0.0056 0.081	0.084 0.093	0.25** 0.079	0.49*** 0.093	0.19* 0.081	0.26** 0.095	0.0027 0.080	0.13 0.092
Not in LF	-0.25* 0.096	0.21 0.11	0.17* 0.082	0.044 0.091	0.35*** 0.080	0.37*** 0.091	0.11 0.083	0.22* 0.094	0.16* 0.081	0.091 0.091
Urban Upbringing	-0.098 0.059	0.032 0.088	0.0023 0.052	-0.17* 0.073	0.044 0.051	-0.067 0.071	0.13* 0.053	0.046 0.074	0.012 0.052	-0.17* 0.073
Homeowner	0.16* 0.063	0.0092 0.11	0.12* 0.055	-0.16 0.095	0.13* 0.055	-0.13 0.095	-0.027 0.056	0.16 0.097	0.16** 0.055	-0.14 0.095
Year										
1994	-	-	-	-	-	-	-	-	-	-
2000	-0.027 0.074	-0.28* 0.14	0.087 0.065	-0.31** 0.12	-0.17** 0.064	-0.79*** 0.12	-0.22*** 0.066	-0.51*** 0.12	0.063 0.065	-0.30** 0.12
2009	-0.014 0.081	-0.26 0.15	0.20** 0.072	-0.26* 0.12	-0.059 0.071	-0.42*** 0.12	-0.21** 0.072	-0.48*** 0.12	0.22** 0.071	-0.20 0.12
Cut Points										
Constant	-2.96*** 0.23	-4.32*** 0.31	-2.59*** 0.19	-4.60*** 0.23	-0.86*** 0.17	-2.44*** 0.20	1.01*** 0.18	-1.31*** 0.20	-1.94*** 0.18	-3.99*** 0.21
cut2										
Constant	-1.44*** 0.20	-2.84*** 0.25	-1.27*** 0.18	-3.11*** 0.20	0.63*** 0.17	-0.54** 0.19	2.55*** 0.18	0.87*** 0.20	-0.42* 0.18	-2.46*** 0.20
cut3										
Constant	2.30*** 0.20	1.89*** 0.24	0.16 0.18	-1.31*** 0.19	2.19*** 0.18	1.15*** 0.19	4.22*** 0.19	3.02*** 0.21	1.08*** 0.18	-0.80*** 0.19
cut4										
Constant	4.18*** 0.21	4.21*** 0.25	1.80*** 0.18	0.62** 0.19	3.50*** 0.18	3.17*** 0.21	5.42*** 0.20	4.40*** 0.26	2.74*** 0.18	1.20*** 0.19
Total	5138	3329	5138	3329	5138	3329	5138	3329	5138	3329
-2 LL	9971.5	5202.1	14315.4	8519.9	15243.4	9073.5	13121.9	7790.4	14490.4	8932.5
AIC	9999.5	5230.1	14343.4	8547.9	15271.4	9101.5	13149.9	7818.4	14518.4	8960.5
BIC	10091.1	5315.7	14435.1	8633.5	15363.0	9187.1	13241.5	7903.9	14610.0	9046.1

Standard errors in second row

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Figure 2. Predicted Probabilities of Marital Counterfactuals, By Marital Status



N = 5,138 (Currently Married), N = 3,329 (Never Married)