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# Gendered Trajectories to Tolerance: Men's and Women's Changing Attitudes toward Homosexuality in Japan, 1981–2019

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## ABSTRACT



Gender and sexuality are context-specific constructions. Yet, among the increasing volume of quantitative studies on changing attitudes toward homosexuality, scholars have failed to understand the role of gender in shaping attitudinal change. This study sheds light on the hitherto overlooked aspect of gender in analyzing changing attitudes toward homosexuality in a non-Western context. Drawing on Japanese data from the World Values Survey, I use a linear decomposition technique to estimate relative contributions of cohort replacement and intra-cohort change effects on overall change and examine the difference in changes between men and women. The results show clear gendered patterns in attitudinal change over the past four decades. Including the Japanese case in the literature allows for theoretical arguments on how persistent patriarchy and deeply embedded heteronormative practices perpetuate hegemonic masculinity and associated homophobia. Although the recent rapid liberalization of attitudes among men might shine a light on the emergence of inclusive masculinity, I argue that hegemonic masculinity is still at play, especially among older generations. Future research may address whether changing attitudes can be a catalyst for social change or merely a vestige of hegemonic masculinity that legitimizes a more subtle form of homophobia in the contemporary era.

## KEYWORDS

Attitudes; homosexuality; intracohort change; cohort replacement; masculinity; gender; social change; Japan

## Introduction

Tolerance toward homosexuality is often viewed as an indication of progressive social change. The topic has thus received increasing scholarly attention from sociologists and public opinion researchers in recent years (see Adamczyk & Liao, 2019). Numerous scholars have documented attitudinal change using large-scale social surveys across regions, such as the General Social Survey (Loftus, 2001; Treas, 2002; Twenge, Carter, & Campbell, 2015) and the European Social Survey (Hooghe & Meeusen, 2013; van den Akker, van der Ploeg, & Scheepers, 2013). Despite this increase in quantitative studies on the topic, two things are missing. First,

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there is a dearth of research on non-Western contexts (Adamczyk & Cheng, 2015; Cheng, Wu, & Adamczyk, 2016). Second, few studies have considered the context of gender as a backdrop to their empirical work. These two issues are intertwined and matter synchronously as gender and sexuality are inter-related, context-specific constructions and changing attitudes toward homosexuality should thus be understood differently across countries and regions. The growing body of scholarship on Western contexts thus far lacks transferability to non-Western contexts. Furthermore, this means that scholars have yet failed to fully understand how gender matters in changing attitudes toward homosexuality over time. Accordingly, the lack of a non-Western, gender perspective as an analytical lens presents a significant limitation in the literature.

This study sheds light on the role of gender in changing attitudes toward homosexuality in a non-Western context. I add to the literature by demonstrating the gendered patterns of attitudinal change in the Japanese context. While some studies have examined attitudes toward homosexuality in East Asia as part of an effort to decentralize the Western gaze in the literature, some focus on East Asia as a whole (Adamczyk & Cheng, 2015) or specifically on Taiwan (Cheng et al., 2016), and very little attention has been given to Japan. While I have documented trends in Japanese attitudes toward homosexuality elsewhere (Naka, 2021), here I focus on explaining the role of gender in shaping the way attitudes change. In so doing, I draw on data that documents the recent transformation of men's and women's attitudes toward homosexuality and illuminate how gender plays a role in shaping attitudinal change, with theoretical implications for broader social change pertaining to sexuality in contemporary Japan.

The Japanese case is useful for addressing the lack of transferability in the literature on Western contexts and understanding how gender matters in relation to changing attitudes toward homosexuality. Although Japan is broadly comparable to Western societies in terms of economic development and democracy (e.g., the level of national economic affluence and universal suffrage granted to all Japanese citizens), since its modernization the country has been characterized by persistent patriarchy that manifests in the fundamental institution of the state and is codified in archaic family law (Germer, Mackie, & Wöhr, 2017; Titus, 1980; Wakakuwa, Paskowitz, & Paskowitz, 2001), which is maintained in everyday heteronormative practice among the present-day Japanese families (Tanaka, 2012; White, 2018). Using the Japanese case thus enables me to analyze the gendered patterns of attitudinal change that may be shaped by the traditional yet enduring gender norms to which Japanese men and women are expected to comply, without conflating economic and political confounders that might also play a role in changing attitudes.

In analyzing the gendered patterns of changing attitudes toward homosexuality in Japan, I make three distinct contributions to the literature. First, I point to the importance of outlining the country-specific context of gender in the case study country as a backdrop to empirical work. This helps to motivate and make sense of the quantitative findings through a gender lens, theoretically linking attitudinal change to larger social change pertaining to sexuality among the public. Numerous studies on both Western and non-Western contexts (Adamczyk & Cheng, 2015; Cheng et al., 2016; Hooghe & Meeusen, 2013; Loftus, 2001; Treas, 2002; Twenge et al., 2015; van den Akker et al., 2013) and even some rare studies on Japan (e.g., Kamano, 2017) have pointed to the role of gender in *shaping* attitudes, showing that men have less tolerant attitudes toward homosexuality than their female counterparts. Yet less is known about the role of gender in *changing* attitudes over time and how they might be linked to the country-specific context of gender as a construct.

Second, I distinguish between the two different sources of attitudinal change: cohort replacement and intracohort change (Ryder, 1965). This differentiation is central to examining attitudinal change over time because both effects yield different implications for possible patterns of social change that the case study country might be experiencing. I pay particular attention to intracohort change effects because increasing tolerance toward homosexuality occurs mainly because of these effects (Andersen & Fetner, 2008; Baunach, 2011, 2012; Hart-Brinson, 2018; Treas, 2002). Although cohort replacement effects are positive (i.e., more people have approving attitudes), the direction of overall change may be negative if intracohort change effects are negative and the effect size is larger than that of cohort replacement. A change in attitudes driven primarily by cohort replacement will result in gradual change merely as a result of demographic dynamics, with change concentrated among more recent birth cohorts. Change that results mainly from intracohort change occurs more quickly, with the potential to transform attitudes over short periods and among a broader segment of the population.

Third, by using this analytical approach to centralize the gender perspective while decentralizing the Western gaze in my work, I illuminate how changing attitudes toward homosexuality are gendered, arguing that gender is integral to understanding attitudes toward homosexuality. In addition, I discuss theoretical implications in light of how micro-level attitudinal change can be linked to macro-level social change that may be emerging within the case study country.

## **Theorizing gender and attitudes in Japan**

### ***Gendered institutions and deeply embedded practices***

Gender and sexuality are both context-specific constructions. In Japan, I point to the roles of *Tenno-sei* (the Emperor System) and the *koseki* (the family register system) in constructing the hegemonic notions of masculinity and

femininity, which perpetuate the patriarchal and heteronormative climate among the Japanese public. In postwar Japan, the former *Tenno-sei* was reconstructed as *Shocho Tenno-sei*, the Symbol Emperor System (Titus, 1980). Article 1, Chapter 1 of the Constitution of Japan states that the Emperor of Japan is codified as the symbol of the state and the unity of the people. This patriarchal system developed following the enactment of the Imperial House Law in 1889 in the Meiji Era (Germer et al., 2017; Wakakuwa et al., 2001). While Japan experienced rapid subsequent modernization, the system did not allow women to become Emperor of Japan. This masculinization of power facilitated the construction of hegemonic notions of masculinity and femininity in Japanese society, whereby the system bestows power and privilege exclusively to men over women. This gendered power relation has been perceived throughout Japanese society since then and has served either explicitly or implicitly as the legitimization of the patriarchal ruling structure.

The persistent patriarchy in contemporary Japan has been maintained, rather than dismantled, through the *koseki*, the Japanese family register system, which is determined by the Civil Code and the Koseki Law (Tanaka, 2012; White, 2018). What is surprising about this system is that not only are heterosexual couples required by law to choose a family surname from either partner, but that also in reality 96% of households in Japan adopt the male surname as the family name (Ministry of Health, Labour & Welfare, 2017). Although many people have begun to question this practice (Tanaka, 2012), a male-dominant structure still persists within Japanese homes. The hegemonic notions of masculinity and femininity form heteronormative underpinnings of such gendered practice. Masculinity in Japan is deeply associated with the gender role expectation that men are responsible for paid work as the breadwinner to nurture dependent family members so they can get by on a single income (Roberson & Suzuki, 2003). At the same time, women are expected to stay at home and take responsibility for domestic unpaid work (Nagase & Brinton, 2017; Tsutsui, 2016; Ueno, 2021). Although this persistent gender division of paid and unpaid work can be found in other parts of the world (Bittman, England, Sayer, Folbre, & Matheson, 2003; Legerski & Cornwall, 2010; Rao, 2020), Japan is unique in that such embedded gender division is enshrined within the law and rather than being dismantled is upheld by Japanese heterosexual families in everyday practice.

### ***Masculinity and homonegativity, femininity and solidarity***

Understanding the construction of hegemonic masculinity (Connell & Messerschmidt, 2005) is central to making sense of how gender shapes attitudes toward homosexuality. Masculinity is constructed through disapproval of homosexuality (Carrigan, Connell, & Lee, 1985; Connell, 1992; Embrick,

Walther, & Wickens, 2007; Plummer, 1999). As numerous studies have documented, men tend to show gender and sexual prejudice more than women (Herek, 2002; Kite & Whitley, 1996; Nagoshi et al., 2008; Norton & Herek, 2013), and much evidence, both qualitative and quantitative, has been provided to understand the relationship between masculinity and homophobia (Davies, 2004; Diefendorf & Bridges, 2020; Harbaugh & Lindsey, 2015; Pleck, Sonenstein, & Ku, 1994; Stark, 1991; Whitley, 2001). As such, male gender socialization can coincide with homonegativity because being a man in Japan means marrying and having full control over a financially dependent woman (i.e., wife) and children, all of whom are supported by his income. Men are expected to take full responsibility for the livelihood of their families as breadwinners, husbands, and fathers (Esping-Andersen, 1997; Gottfried, 2000; Lee, Tufiş, & Alwin, 2010; Schoppa, 2010). While such a hegemonic notion of masculinity has been dismantled even among men (Anderson, 2002, 2005, 2009; Anderson & McCormack, 2018), which is in the Japanese context evidenced by increased male engagement in unpaid domestic work, I argue that attitudinal change has been slow among men because some evidence also suggests that the traditional notion of manhood is still considered imperative among Japanese men (Hidaka, 2010; Roberson, 2005; Roberson & Suzuki, 2003). Within such a normative climate, gay men in Japan are considered both immature and inferior to heterosexual men (Carrigan et al., 1985), and are thus excluded from being considered men in the traditional sense because they do not marry and form and take responsibility for a family.

The association between femininity and attitudes toward homosexuality can be a little more complex. Being a woman in Japan means being expected to become a good wife who caters to her husband, their children, and the parents-in-law (Ezawa, 2016; Lee, 2010; Nemoto, 2008). Although the gender division between paid and unpaid work has been dismantled in Japan in recent decades (Long & Harris, 2000; Tsuya, Bumpass, Choe, & Rindfuss, 2006) and female labor force participation has increased (Brinton, 1989; Ueno, 1989), women are still expected to take on and are actually taking more responsibility for unpaid domestic work (Nagase & Brinton, 2017; Tsutsui, 2016; Ueno, 2021). Women who internalize such gender role expectations may hold negative attitudes toward homosexuality because both lesbians and gay men are deviant from this prescribed gender norm (Britton, 1990). However, I posit that the pace of attitudinal change has been faster among women because in Japan women and non-heterosexual people may experience a common socialization process as minority groups who have been pushed to the margins of the heterosexual, male-dominated society (McLelland, 1999; Tormos, 2017). In this regard, I speculate that a sense of femininity in Japan may be associated with a sense of solidarity with non-heterosexual women and men who suffer from the persistent patriarchy and heteronormative

assumptions underlying many facets of Japanese society. Such a sense of solidarity may be embodied as women's voices for gender equality and minority rights (Chun, Lipsitz, & Shin, 2013; Eto, 2005; Gelb & Estevez-Abe, 1998), which can act as a driver for social change.

## Data and methods

### Data

I use seven waves of the World Values Survey (WVS) (Inglehart et al., 2020), which includes substantive sample sizes and the earliest and latest Japanese national probability data. Stratified random probability sampling was used from Wave 1 (survey year 1981) to Wave 3 (1995). Quota sampling by age groups and gender was used in Waves 4 (2000) and 5 (2005), and a combination of random probability sampling and quota sampling was used in Waves 6 (2010) and 7 (2019). The realized sample sizes were as follows:  $n = 1,204$  (Wave 1),  $n = 1,011$  (Wave 2),  $n = 1,054$  (Wave 3),  $n = 1,362$  (Wave 4),  $n = 1,096$  (Wave 5),  $n = 2,443$  (Wave 6), and  $n = 1,353$  (Wave 7). This resulted in a total sample size of  $N = 9,523$ . The Japanese implementation bodies of the WVS were Doshisha University and the Dentsu Institute. For this study, a cumulative dataset of these seven waves was sourced from the official WVS website.

Using the latest data and documenting change between 2010 and 2019 is empirically and theoretically illuminating because doing so can shed light on the recent changes in many facets of Japanese society facing lesbians and gay men. Since 2015, an increasing number of Japanese municipalities have begun to issue same-sex partnership certificates to their residents locally, although this is not legally bounded. As I documented elsewhere (Naka, 2020), throughout the 2010s Japanese media framing of homosexuality has largely focused on legal rights; namely same-sex marriage, while during the 1980s and 1990s there was a more acute focus on HIV/AIDS. These tangible changes in Japanese politics and media might help transform Japanese public opinion on homosexuality. Although it is not the intention of this study to directly test the relationship between these changes and shifting public opinion about homosexuality, it is worthwhile examining this particular period to narrow the empirical gap in the literature on changing attitudes toward homosexuality (e.g., Naka, 2021) as well as to draw theoretical implications for wider social change pertaining to sexuality in contemporary Japan.

### Measures

A question on attitudes toward homosexuality is consistently included in the WVS, with a measure that has not been modified and is comparable across all surveys. This question requires that respondents state their opinions on

various moral issues, including the tolerance of homosexuality. The wording of the question is as follows: “What do you think about each of the following items? Do you think that it can be always justifiable, never justifiable, or something in between? Please select only one number from 1 to 10 that applies to you.” The respondents are given the word “homosexuality” and are required to pick one number from a 10-point scale (ranging from 1 = *Never justifiable* to 10 = *Always justifiable*). The measure for gender to be used for subgroup analysis is dichotomous: male or female. Keeping these survey items in a comparable format, the WVS has collected the data on Japanese men’s and women’s attitudes toward homosexuality for the period 1981–2019; therefore, it provides the best data for the aim of this study in documenting attitudinal change among men and women over time.

That said, it is necessary to highlight the two major limitations of the WVS in the context of this study. First, while scholars have pointed to the importance of differentiating between male and female homosexuality (e.g., Herek, 1984), this item does not differentiate. Although whose homosexuality matters should be considered when examining attitudes in the context of gender, questionnaire design without differentiation between male and female homosexuality is common among other large-scale social surveys. Second, the WVS uses the binary categorization of gender throughout the seven waves. In addition, the gender item does not differentiate between sex assigned at birth and respondents’ own gender identity at the time of the survey. There is no missing value for the gender item throughout the seven waves of the surveys, meaning that there might be a possibility that non-binary people are forced to be identified within this binary categorization. However, comparability in questionnaire design is crucial to performing reliable survey data analysis over time; moreover, even if the survey had used a nonbinary categorization of gender, I speculate that a very small sample size of these people would not generate ample statistical power to perform subgroup analysis. I offer my analysis and findings with these data constraints in mind.

## **Methods**

In this study, I employ the linear decomposition technique proposed by Firebaugh (1989, 1997) to estimate the relative contributions of cohort replacement and intracohort change effects on overall change. The linear decomposition technique is applied to repeated cross-sectional surveys using the unstandardized coefficients from multiple regression analysis by regressing attitudes toward homosexuality on year of birth and year of survey. This enables the decomposition of trends in attitudes between two time periods into changes due to cohort replacement and intracohort change. This is a commonly used method for examining the sources of



attitudinal change among various sociopolitical orientations (e.g., Danigelis, Hardy, & Cutler, 2007), as well as in previous studies on attitudes toward homosexuality (Baunach, 2011, 2012; Cheng et al., 2016; Kranjac & Wagmiller, 2021).

According to Firebaugh (1997), the linear decomposition technique consists of two steps. First, multiple regression analysis is used to estimate annual changes in  $Y$  within cohorts. Because linearity and parallelism are assumed in within-cohort slopes, annual within-cohort change can be estimated with the following regression equation:

$$Y = \alpha + \beta_1 Cohort + \beta_2 Year + \varepsilon \quad (1)$$

where  $Y$  is the dependent variable for attitudes toward homosexuality,  $\alpha$  is the estimated intercept,  $\beta_1$  is the estimated within-cohort slope,  $\beta_2$  is the estimated cross-cohort slope,  $Cohort$  is year of birth of the respondents, and  $Year$  is the survey year.

The second step uses the estimated slopes in Equation (1) to estimate the contributions of cohort replacement effects and intracohort change effects to aggregate change. Because  $\beta_1$  estimates intracohort change per time unit (i.e., survey year) to estimate the total contribution of intracohort change to aggregate change,  $\beta_2$  is multiplied by the number of years from the first to the latest survey:

$$CRE = \beta_1 \Delta \bar{c} \quad (2)$$

$$ICE = \beta_2 \Delta \bar{t} \quad (3)$$

where cohort replacement effects ( $CRE$ ) are calculated by multiplying  $\beta_1$  by  $\Delta \bar{c}$  or the difference between mean birth years in the first and last surveys (Equation 2). Similarly, to estimate the contribution of intracohort change effects ( $ICE$ ),  $\beta_2$  is multiplied by  $\Delta \bar{t}$  or the difference between the first and last survey years (Equation 3).

$$\Delta \bar{Y} = \beta_1 \Delta \bar{c} + \beta_2 \Delta \bar{t} + e \quad (4)$$

$$e = \Delta \bar{Y} - \beta_1 \Delta \bar{c} - \beta_2 \Delta \bar{t} \quad (5)$$

Finally, as shown in Equation (4),  $\Delta \bar{Y}$  (mean difference in attitude toward homosexuality between the two survey years) can be decomposed into  $CRE$ ,  $ICE$ , and  $e$  or the residuals. The residuals can be obtained from Equation (5). The two components of change do not usually sum exactly to aggregate change; however, the residuals should be small because the linear-parallel assumption of the method might not be met when residuals are large. I apply this method to the whole sample and subsamples of men and women separately to examine

whether attitudinal change is gendered. The period of analysis will be broken into time periods of approximately ten years to determine whether there are differences in patterns of attitudinal change between periods.

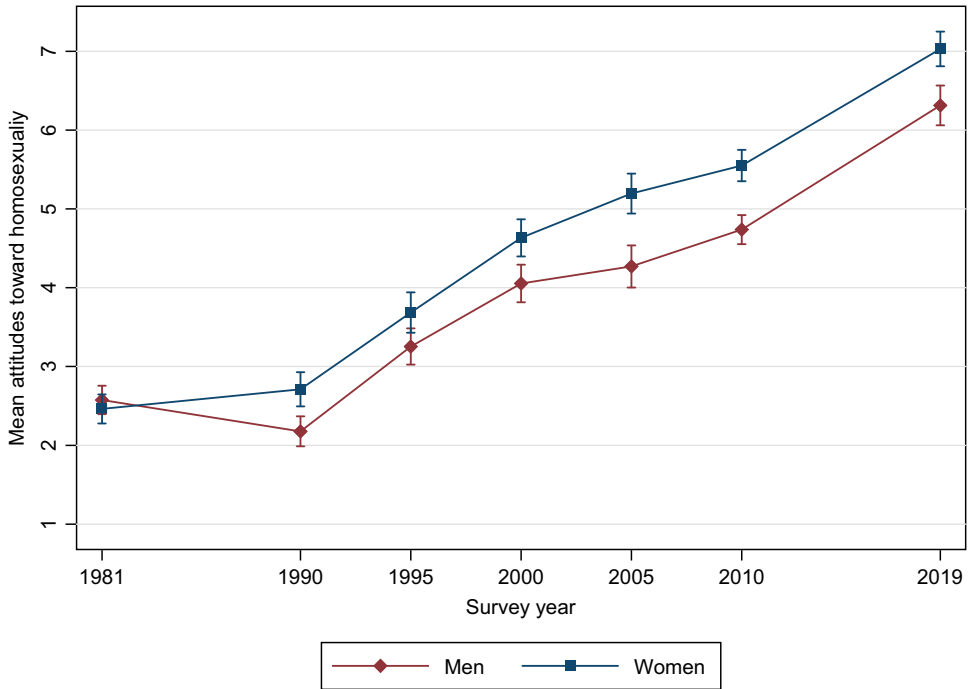
Nonetheless, it should be noted that the linear decomposition technique is used under the assumption that there is no age effect. While it might still be interesting to identify the relative contributions of age, period, and cohort effects—especially the individual-level change and continuity of attitudes toward homosexuality (e.g., Ekstam, 2021, 2022)—this is not within the scope of this study. The subsequent data analysis is intended to investigate the sources that contribute to societal-level changes in attitudes toward homosexuality and to demonstrate how attitudinal change has shown gendered patterns during the periods being surveyed.

## Results

### *Four decades of trajectories to tolerance*

Japanese attitudes toward homosexuality have become much more tolerant over the past four decades. At the beginning of the survey in 1981, the mean value was 2.52, which was at the very low end of the 10-point scale. This indicates that Japanese attitudes toward homosexuality were generally negative. Furthermore, there was a slight decline observed between 1981 and 1990, with the mean value falling to 2.45 in 1990. In the 2000s, while the pace of increase was slower than in the 1990s, the mean value had increased to 5.14 by 2010. Nevertheless, this value was only at about the midpoint on the scale. What is surprising is the change since 2010. Mean attitudes demonstrated a rapid increase from 5.14 in 2010 to 6.71 in 2019.

Figure 1 displays the trends of mean attitudes toward homosexuality by gender. Surprisingly, there was no significant gender difference in 1981. It was not until 1990 that gender differences in attitudes became evident, when women's attitudes toward homosexuality showed a slight increase (from 2.46 to 2.71), while men's attitudes declined (from 2.58 to 2.18) rather than increased. The gender gap in attitudes toward homosexuality from 1990 onward remained parallel until 2000. It was during the 2000s that the difference increased. In 2000, the mean attitude was 4.63 for women and 4.05 for men. However, the results suggest that by 2010 women became more tolerant (5.55) compared to men (4.74). It is further evident that since 2010, the gender gap in attitudes has started to narrow again. In 2019, the mean for women was 7.03 and 6.31 for men. These gendered trends clearly illustrate that attitudes toward homosexuality in Japan have changed at different rates between men and women. Yet this is only a general trend based on descriptive statistics. There would seem to be significant period effects (i.e., intracohort change) at



**Figure 1.** Trends in mean attitudes toward homosexuality by gender.  
*Note:* The means are weighted means. Error bars indicate 95% confidence intervals.

work in the changes in attitudes toward homosexuality over the past four decades. At the same time, there may also have been cohort replacement effects behind these changes.

Cohort replacement effects arise from older cohorts with more intolerant views being replaced by new cohorts with more tolerant views. Thus, it is crucial to identify which cohorts have been replaced and which cohorts have been added in each year of the survey used in this analysis to discuss any cohort replacement effects. [Table 1](#) displays the replaced and added cohorts in each survey and the mean attitudes toward homosexuality for these cohorts. Note that since some of the past Japanese waves of the WVS did not set

**Table 1.** Mean attitudes of replaced and added cohorts by survey year.

| Survey year | Oldest cohort | Newest cohort | Replaced cohorts | Added cohorts | Mean attitudes of replaced cohorts (n) | Mean attitudes of added cohorts (n) |
|-------------|---------------|---------------|------------------|---------------|--|-------------------------------------|
| 1981        | 1897          | 1963          | n.a              | n.a           | n.a                                    | n.a                                 |
| 1990        | 1900          | 1972          | 1897–1899        | 1964–1972     | 3.67 (3)                               | 3.18 (146)                          |
| 2000        | 1914          | 1982          | 1900–1913        | 1973–1982     | 1.69 (16)                              | 6.29 (176)                          |
| 2010        | 1930          | 1992          | 1914–1929        | 1983–1992     | 2.23 (69)                              | 7.05 (221)                          |
| 2019        | 1925          | 2001          | n.a              | 1993–2001     | n.a                                    | 8.64 (91)                           |

*Note:* The means are weighted means.

a maximum age as a condition for sampling, the intervals of the oldest cohorts do not match those of survey years. In the 1990 survey, the replaced cohorts were born between 1897 and 1899 and the added cohorts were born between 1964 and 1972. The mean for the replaced cohorts was 3.67 ( $n = 3$ ), and for the added cohorts 3.18 ( $n = 146$ ). In this particular case, the added cohorts demonstrate more negative attitudes than the replaced cohorts, which is possibly due to a strong negative period effect during the period. In addition, due to a significant gap in sample size between the added and replaced cohorts, it is difficult to determine in which direction the cohort replacement effects would be.

By contrast, it is easy to anticipate positive cohort replacement effects between 1990 and 2000. In the 2000 survey, the replaced cohorts were born between 1900 and 1913 ( $n = 16$ ) with mean attitudes of 1.69, while the added cohorts were those born between 1973 and 1982 ( $n = 176$ ) with mean attitudes of 6.29. Thus, there should have been a positive cohort replacement effect between 1990 and 2000 due to a large population influx with greater tolerance toward homosexuality. In the 2010 survey, the replaced cohorts were born between 1914 and 1929, and the added cohorts were born between 1983 and 1992. The mean for the replaced cohorts was 2.23 ( $n = 69$ ), and for the added cohorts it was 7.05 ( $n = 221$ ). Similarly, it is considered plausible to expect a positive cohort replacement effect between 2000 and 2010. In the 2019 survey, it was impossible to identify the replaced cohorts because the survey did not set a maximum age condition for the sampled population. In fact, the oldest cohort in the data from the 2019 survey was older than in the data from the 2010 survey. The added cohorts were identified as those who were born between 1993 and 2001 ( $n = 91$ ) with mean attitudes of 8.64. It is suggested that there was a positive cohort replacement effect due to a relatively large population influx showing greater tolerance in the latest survey. However, the two sources of change—*intracohort change* and *cohort replacement effects*—are still intertwined.

### ***Roles of cohort replacement and intracohort change***

Table 2 presents the results from the linear decomposition of change in attitudes toward homosexuality for the total sample according to each of the four study periods. It is evident that tolerance of homosexuality decreased between 1981 and 1990, primarily due to negative *intracohort change* effects (a substantive size of  $-0.25$ , which contributes 55.06% of overall effects relatively). This offsets the positive cohort replacement effects (substantive size of 0.21 contributing 44.94% of overall effects) and results in a negative overall change. Between 1990 and 2000, there was a dramatic liberalization of attitudes toward homosexuality. Of the overall change of 1.91 points in mean attitudes, *intracohort change* comprises 1.47, contributing as much as 78.96%

**Table 2.** Linear decomposition of change in attitudes toward homosexuality by period.

| Period    | Actual change in mean attitudes | Cohort replacement |                       | Intracohort change |                       | Residual |
|-----------|---------------------------------|--------------------|-----------------------|--------------------|-----------------------|----------|
|           |                                 | Substantive size   | Relative contribution | Substantive size   | Relative contribution |          |
| 1981–1990 | –0.07                           | 0.21               | 44.94%                | –0.25              | 55.06%                | –0.03    |
| 1990–2000 | 1.91                            | 0.39               | 21.04%                | 1.47               | 78.96%                | 0.04     |
| 2000–2010 | 0.78                            | 0.54               | 69.54%                | 0.24               | 30.46%                | 0.01     |
| 2010–2019 | 1.57                            | 0.40               | 25.73%                | 1.15               | 74.27%                | 0.01     |

Note: Residuals are calculated by the actual change in mean attitudes—(cohort replacement + intracohort change). Relative contribution is the relative proportion of cohort replacement and intracohort change when the sum of these two effects is 100%.

of overall change. Cohort replacement effects are larger (0.39) than those during the period 1981 to 1990, supposedly because the newly added cohorts in the 2000 survey (born between 1973 and 1982) were a large population ( $n = 176$ ) that demonstrated more tolerant attitudes toward homosexuality (mean value of 6.29) than older cohorts. However, the relative contribution to the overall change was limited to as little as 21.04% due to massive intracohort change effects during this period.

This dramatic, liberalizing trend did not last. The positive change in attitudes toward homosexuality stagnated between 2000 and 2010, showing as little as 0.78 of overall change in mean attitudes. The cohort replacement effects were positive with an even larger effect size (substantive size of 0.54). This is primarily because of the massive influx of the new cohorts (born between 1983 and 1992) who demonstrated more tolerant mean attitudes as high as 7.05 with a larger population ( $n = 221$ ). The relative contribution to overall change was as much as 69.54%; however, this was due to a significant decrease in size of intracohort change effects. Intracohort change was only 0.24 in its substantive size, and the relative contribution to overall change was as little as 30.46% during this period. This drastic decline in intracohort change undermined the overall liberalizing trend, offsetting the relatively large contribution of positive cohort replacement effects during the period.

Changes were again evident between 2010 and 2019. During this period, the mean change in attitudes toward homosexuality was as much as 1.57 points, culminating in an overall mean as high as 6.72 in the 2019 survey. This liberalization was primarily driven by intracohort change (substantive size of 1.15), contributing 74.27% of total change. Relatively, cohort replacement effects were mitigated to 0.4 in size and 25.73% in contribution to the overall change. This is partly because the older cohorts remained in the 2019 survey while the added cohorts (born between 1993 and 2001) were a relatively small population ( $n = 91$ ), although they demonstrated surprisingly tolerant mean attitudes toward homosexuality (8.64). While it was not possible to disentangle these effects because of data constraints, the negative attitudes of the older

cohorts had a more limiting effect on the overall trend of increased liberalization. These findings highlight the role of intracohort change in liberalizing attitudes toward homosexuality as being consistent with previous studies. Although cohort replacement also plays a role, the effects arise from natural demographic transition. Older cohorts will inevitably continue to be replaced by younger generations as new babies are born and old people die. The cohort replacement effects are thus likely to be positive, as long as the newer cohorts continue to demonstrate greater tolerance than older cohorts.

### ***Gendered trajectories to tolerance***

Table 3 reports the results from the linear decomposition of change in attitudes toward homosexuality for the four study periods by gender. Notably, between 1981 and 1990, the small negative intracohort change among women ( $-0.04$ ) was offset by the larger positive cohort replacement effects ( $0.31$ ), which resulted in an overall positive change in mean attitudes. By contrast, this offsetting was not evident among men. The cohort replacement effects among men during this period were as little as  $0.11$  in substantive size, suggesting that there was less difference in male attitudes toward homosexuality between the replaced cohorts and the added cohorts in the 1990 survey.

What is more interesting is the relatively large negative intracohort change effects ( $-0.49$ ) contributing as much as 67.84% of overall negative change during the period. This finding suggests that there have been period effects that negatively affect men more compared with women during the period 1981 to 1990. Between 1990 and 2000, the pattern of attitudinal change was demonstrated to be fairly consistent between men and women. The cohort replacement effects for women were  $0.42$  and those for men were  $0.34$ , demonstrating mostly equal substantive sizes. Similarly, the intracohort change effects for women were  $1.49$  and for men  $1.48$ . Although the sizes of the effects were

**Table 3.** Linear decomposition of attitudes toward homosexuality by period and gender.

| Period | Gender | Actual change in mean attitudes | Cohort replacement |                       | Intracohort change |                       | Residual |
|--------|--------|---------------------------------|--------------------|-----------------------|--------------------|-----------------------|----------|
|        |        |                                 | Substantive size   | Relative contribution | Substantive size   | Relative contribution |          |
| 1981–  | Women  | 0.25                            | 0.31               | 88.36%                | $-0.04$            | 11.64%                | $-0.02$  |
| 1990   | Men    | $-0.40$                         | 0.11               | 32.16%                | $-0.49$            | 67.84%                | $-0.02$  |
| 1990–  | Women  | 1.92                            | 0.42               | 22.05%                | 1.49               | 77.95%                | 0.01     |
| 2000   | Men    | 1.88                            | 0.34               | 18.53%                | 1.48               | 81.47%                | 0.06     |
| 2000–  | Women  | 0.92                            | 0.52               | 60.77%                | 0.33               | 39.23%                | 0.07     |
| 2010   | Men    | 0.68                            | 0.55               | 73.79%                | 0.19               | 26.12%                | $-0.06$  |
| 2010–  | Women  | 1.48                            | 0.49               | 33.41%                | 0.98               | 66.59%                | 0.01     |
| 2019   | Men    | 1.58                            | 0.30               | 19.00%                | 1.27               | 81.00%                | 0.01     |

Note: Residuals are calculated by the actual change in mean attitudes—(cohort replacement + intracohort change). Relative contribution is the relative proportion of cohort replacement and intracohort change when the sum of these two effects is 100%.

slightly larger among women than their male counterparts, there was almost no substantive difference in size and relative contribution of both effects on overall change during the period.

Between 2000 and 2010, gender differences in the patterns of attitudinal change became obvious. The cohort replacement effects for women and men were 0.52 and 0.55 respectively, and there was no difference in the substantive size, while the difference in intracohort change effects was more evident. The intracohort change effects were 0.33 for women and 0.19 for men, nearly half that of women in terms of size. Hence, the gender difference in overall change in mean attitudes between 2000 and 2010 was mostly due to the difference in intracohort change effects. Although the stagnating trend of liberalization was common between women and men during this period, the stagnation in attitudinal change was more evident among men compared with women. This finding suggests that there have been period effects that negatively affect the liberalization of attitudes toward homosexuality, affecting men more significantly compared with women for the period 2000 to 2010.

Attitudes toward homosexuality among the Japanese public have again shown a dramatic liberalization between 2010 and 2019. The cohort replacement effects were 0.49 among women and 0.3 among men. This is arguably because, among the added cohorts who were born between 1993 and 2001 in the 2019 survey, women are more tolerant of homosexuality than their male counterparts, suggesting that women who were born from 1993 onward in particular are at the forefront of social change, increasingly tolerant of homosexuality among young generations in Japan. One notable finding here in terms of gender difference is that the intracohort change effects among men (1.27) are larger than for women (0.98), contributing as much as 81% of overall change, limited to 66.59% among women. This appears similar but is actually different from the period 1990 to 2000, when the Japanese public experienced a massive liberalization of attitudes toward homosexuality and intracohort change effects were relatively larger among women than men. This result suggests that the period effects have had a more positive impact on male attitudes than those of women. Yet attitudes toward homosexuality may have reached a point of saturation among women, since women became significantly more liberal in their attitudes at a faster pace than men. The relatively larger individual change effects among men in recent years might simply reflect the fact that the liberalization of attitudes toward homosexuality among men has occurred later than for women.

## **Discussion and conclusions**

In this article, I demonstrate how changing attitudes toward homosexuality have developed in gendered patterns over the past four decades in Japan. In addition, I offer explanations for how these patterns are shaped by the context-

specific construction of gender, which is underpinned by the persistent patriarchy and deeply embedded everyday practices among heterosexual families and in society more generally.

Bringing the case of Japan with a gender perspective into the literature offers three insights into our knowledge of attitudes toward homosexuality. First, including the Japanese case in the literature sheds light on the usefulness of deeper, country-specific contextualization of gender as a construct to offer explanations for the mechanism operating behind numbers. Attitudes toward homosexuality in Japan have liberalized extensively over the past four decades. The results from linear decomposition show that intracohort change effects are the primary driver of the liberalization of attitudes toward homosexuality, while the cohort replacement effects consistently play a role in liberalizing attitudes throughout the periods under analysis. These results largely replicate the findings of previous studies conducted in Western contexts (Andersen & Fetner, 2008; Baunach, 2011, 2012; Hart-Brinson, 2018; Kranjac & Wagmiller, 2021; Treas, 2002). Uniting these findings with the wealth of scholarship illuminating the stickiness of gender norms across societies (e.g., Rao, 2020), the gendered patterns of attitudinal change that I call *gendered trajectories to tolerance* might transfer to other contexts beyond the Japanese case. In this article, I theoretically explain how gender is central to shaping the patterns of changing attitudes toward homosexuality beyond just empirically documenting the patterns of changing attitudes. Yet it should also be noted that the evidence from Japan suggests that the mechanisms to be explained might be different according to the country-specific context where research is situated, even though the overall patterns of changing attitudes might appear consistent across countries, rather than the external validity of the previous findings confirmed in the Japanese case.

Second, the evidence from Japan tells us that even though the status quo of gendered structures—the fundamental institutions, state norms, laws, and everyday family practices—remain largely unchanged, attitudes may be demonstrated as more tolerant by the findings of surveys. While some may argue that the observed tolerance on surveys is partly because of the nature of survey methodology that is often subject to social desirability bias, recent waves of the WVS take the form of a self-administered questionnaire, which is less likely to yield biased responses than interviewer-administered questionnaires (Kreuter, Presser, & Tourangeau, 2008). Theoretically rather than methodologically, I argue that the findings point to the importance of differentiating *de jure* and *de facto* tolerance to think about attitudes toward homosexuality. Although *de facto* tolerance—the popular lore and public opinion that apparently approve of homosexuality—might exist, Japan has lacked any form of *de jure* tolerance to date, such as anti-discrimination laws and legal rights for non-heterosexual couples to marry. In the Japanese context, particularly where the country is often contextualized as a “tolerant state” that has been criticized by scholars studying Japanese sexuality



(Kazama, 2020; Khor & Kamano, 2021), it is worthwhile for future research to investigate what the de facto tolerance on surveys really means and how it might offer explanations for the absence of de jure tolerance.

Third, and most importantly, studying attitudes toward homosexuality with a gender lens in the Japanese context reveals that men's attitudes are key in progressing *and* regressing social change related to sexuality, and the continuity of hegemonic masculinity may be downplaying the potential of women's attitudes as a catalyst for social change. The negative intracohort change effects between 1981 and 1990, which were more explicit among men than women, were most arguably due to the HIV/AIDS pandemic in the late 1980s and HIV/AIDS-related stigmatization of homosexuality during that period (Herek & Capitano, 1999). What led to this argument is the fact that there was no statistically significant gender difference in attitudes toward homosexuality at the time of the survey in 1981. This is consistent with what has been discussed in previous studies (Andersen & Fetner, 2008; Treas, 2002). Because the fear of HIV/AIDS was more strongly perceived by men (Waldner, Sikka, & Baig, 1999), the negative and larger intracohort change effects among men provide convincing, yet indirect, evidence to support my argument. Although there has been a fluctuation of relative contributions of cohort replacement and intracohort change between men and women as documented in this study, the overall change in attitudes toward homosexuality since 1990 has continued to demonstrate a parallel upward trend for both men and women arguably due to decoupling of HIV/AIDS and (male) homosexuality.

As such, the relatively larger positive intracohort change effects among men between 2010 and 2019 deserve particular attention. The increasing tolerance among men might be seen to be dismantling hegemonic masculinity in Japan. However, this positive outlook is inconclusive as the results also point to the fact that while women's attitudes have changed significantly, men's have not changed all that much, shining a light on the enduring hegemonic masculinity and associated homonegativity still at play, especially among older generations. One important piece of this puzzle might be the inclusive masculinity theory (Anderson, 2002, 2005, 2009; Anderson & McCormack, 2018) that points to the tension between heterosexual men's more gay-friendly behaviors and "homophobia" that is defined as the fear of being perceived as gay because this theory "connects men's gendered behaviors with the social trend of decreasing homophobia, explaining variance between cultures and generations" (Anderson & McCormack, 2018, p. 548).

In light of these theoretical arguments, I acknowledge the limitations of this study. First, while I keep my gender focus throughout the study, gender is only one aspect of the wider issue. The recent rapid liberalization of attitudes among men and women in Japan might be partly due to the changing political landscape pertaining to gay rights (Redman, 2018), or increasing media representation of homosexuality during this period (Ayoub & Garretson,

2016). Yet the findings from this study do not present ample evidence to support the arguments on the causes of attitudinal change. Here I keep my focus on drawing a gendered theory of attitudinal changes rather than listing speculations about what is behind these changes.

Second, this study draws solely on data from repeated cross-sectional surveys. Here I reiterate that the analysis in this study was intended to investigate the two sources that contribute to societal-level changes in attitudes toward homosexuality. There might be age and cohort effects entwined within cohort replacement effects as well as age and period effects entwined within intracohort change effects. In this regard, longitudinal data is useful to address this identification problem (Ekstam, 2021, 2022). Yet no such data on attitudes toward homosexuality in Japan is currently available. More importantly, it is worthwhile for future research to explore whether changing attitudes toward homosexuality will be a catalyst for social change or merely a vestige of hegemonic masculinity that legitimates more subtle homophobia in the contemporary era.

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## Research ethics

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## References

- Adamczyk, A., & Cheng, Y. A. (2015). Explaining attitudes about homosexuality in Confucian and non-Confucian nations: Is there a “cultural” influence? *Social Science Research*, 51, 276–289. doi:10.1016/j.ssresearch.2014.10.002
- Adamczyk, A., & Liao, Y. (2019). Examining public opinion about LGBTQ-related issues in the United States and across multiple nations. *Annual Review of Sociology*, 45(1), 401–423. doi:10.1146/annurev-soc-073018-022332
- Andersen, R., & Fetner, T. (2008). Cohort differences in tolerance of homosexuality: Attitudinal change in Canada and the United States, 1981–2000. *Public Opinion Quarterly*, 72(2), 311–330. doi:10.1093/poq/nfn017
- Anderson, E. (2002). Openly gay athletes: Contesting hegemonic masculinity in a homophobic environment. *Gender & Society*, 16(6), 860–877. doi:10.1177/089124302237892
- Anderson, E. (2005). Orthodox and inclusive masculinity: Competing masculinities among heterosexual men in a feminized terrain. *Sociological Perspectives*, 48(3), 337–355. doi:10.1525/sop.2005.48.3.337
- Anderson, E. (2009). *Inclusive masculinity: The changing nature of masculinities*. London: Routledge.
- Anderson, E., & McCormack, M. (2018). Inclusive masculinity theory: Overview, reflection and refinement. *Journal of Gender Studies*, 27(5), 547–561. doi:10.1080/09589236.2016.1245605
- Ayoub, P. M., & Garretson, J. (2016). Getting the message out: Media context and global changes in attitudes toward homosexuality. *Comparative Political Studies*, 50(8), 1055–1085. doi:10.1177/0010414016666836
- Baunach, D. M. (2011). Decomposing trends in attitudes toward gay marriage, 1988–2006. *Social Science Quarterly*, 92(2), 346–363. doi:10.1111/j.1540-6237.2011.00772.x
- Baunach, D. M. (2012). Changing same-sex marriage attitudes in America from 1988 through 2010. *Public Opinion Quarterly*, 76(2), 364–378. doi:10.1093/poq/nfs022
- Bittman, M., England, P., Sayer, L., Folbre, N., & Matheson, G. (2003). When does gender trump money? Bargaining and time in household work. *American Journal of Sociology*, 109(1), 186–214. doi:10.1086/378341
- Brinton, M. (1989). Gender stratification in contemporary urban Japan. *American Sociological Review*, 54(4), 549–564. doi:10.2307/2095878
- Britton, D. M. (1990). Homophobia and homosociality: An analysis of boundary maintenance. *The Sociological Quarterly*, 31(3), 423–439. doi:10.1111/j.1533-8525.1990.tb00337.x
- Carrigan, T., Connell, B., & Lee, J. (1985). Toward a new sociology of masculinity. *Theory and Society*, 14(5), 551–604. doi:10.1007/BF00160017
- Cheng, Y. A., Wu, F. F., & Adamczyk, A. (2016). Changing attitudes toward homosexuality in Taiwan, 1995–2012. *Chinese Sociological Review*, 48(4), 317–345. doi:10.1080/21620555.2016.1199257
- Chun, J. J., Lipsitz, F., & Shin, Y. (2013). Intersectionality as a social movement strategy: Asian immigrant women advocates. *Signs*, 38(4), 917–940. doi:10.1086/669575
- Connell, R. W. (1992). A very straight gay: Masculinity, homosexual experience, and the dynamics of gender. *American Sociological Review*, 57(6), 735–751. doi:10.2307/2096120
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & Society*, 19(6), 829–859. doi:10.1177/0891243205278639
- Danigelis, N. L., Hardy, M., & Cutler, S. J. (2007). Population aging, intracohort aging, and sociopolitical attitudes. *American Sociological Review*, 72(5), 812–830. doi:10.1177/000312240707200508

- Davies, M. (2004). Correlates of negative attitudes toward gay men: Sexism, male role norms, and male sexuality. *The Journal of Sex Research*, 41(3), 259–266. doi:10.1080/00224490409552233
- Diefendorf, S., & Bridges, T. (2020). On the enduring relationship between masculinity and homophobia. *Sexualities*, 23(7), 1264–1284. doi:10.1177/1363460719876843
- Ekstam, D. (2021). The liberalization of American attitudes to homosexuality and the impact of age, period, and cohort effects. *Social Forces*, 100(2), 905–929. doi:10.1093/sf/soaa131
- Ekstam, D. (2022). Change and continuity in attitudes toward homosexuality across the lifespan. *Journal of Homosexuality*, 1–25. doi:10.1080/00918369.2021.2004795
- Embrick, D. G., Walther, C. S., & Wickens, C. M. (2007). Working class masculinity: Keeping gay men and lesbians out of the workplace. *Sex Roles*, 56(11–12), 757–766. doi:10.1007/s11199-007-9234-0
- Esping-Andersen, G. (1997). Hybrid or unique? The Japanese welfare state between Europe and America. *Journal of European Social Policy*, 7(3), 179–189. doi:10.1177/095892879700700301
- Eto, M. (2005). Women’s movements in Japan: The intersection between everyday life and politics. *Japan Forum*, 17(3), 311–333. doi:10.1080/09555800500283810
- Ezawa, A. (2016). *Single mothers in contemporary Japan: Motherhood, class, and reproductive practice*. Lanham, MD: Lexington Books.
- Firebaugh, G. (1989). Methods for estimating cohort replacement effects. *Sociological Methodology*, 19, 243–262. doi:10.2307/270954
- Firebaugh, G. (1997). *Analyzing repeated surveys*. Thousand Oaks, CA: Sage.
- Gelb, J., & Estevez-Abe, M. (1998). Political women in Japan: A case study of the seikatsusha network movement. *Social Science Japan Journal*, 1(2), 263–279. doi:10.1093/ssjj/1.2.263
- Germer, A., Mackie, V., & Wöhr, U. (Eds.). (2017). *Gender, nation and state in modern Japan*. London: Routledge.
- Gottfried, H. (2000). Compromising positions: Emergent neo-fordisms and embedded gender contracts. *The British Journal of Sociology*, 51(2), 235–259. doi:10.1111/j.1468-4446.2000.00235.x
- Harbaugh, E., & Lindsey, E. W. (2015). Attitudes toward homosexuality among young adults: Connections to gender role identity, gender-typed activities, and religiosity. *Journal of Homosexuality*, 62(8), 1098–1125. doi:10.1080/00918369.2015.1021635
- Hart-Brinson, P. (2018). *The gay marriage generation: How the LGBTQ movement transformed American culture*. New York: New York University Press.
- Herek, G. M. (1984). Attitudes toward lesbians and gay men: A factor analytic study. *Journal of Homosexuality*, 10(1–2), 39–51. doi:10.1300/J082v10n01\_03
- Herek, G. M., & Capitano, J. P. (1999). AIDS stigma and sexual prejudice. *American Behavioral Scientist*, 42(7), 1130–1147. doi:10.1177/00027649921954804
- Herek, G. M. (2002). Gender gaps in public opinion about lesbians and gay men. *Public Opinion Quarterly*, 66(1), 40–66. doi:10.1086/338409
- Hidaka, T. (2010). *Salaryman masculinity: The continuity and change in the hegemonic masculinity in Japan*. Leiden: Brill.
- Hooghe, M., & Meeusen, C. (2013). Is same-sex marriage legislation related to attitudes toward homosexuality? *Sexuality Research and Social Policy*, 10(4), 258–268. doi:10.1007/s13178-013-0125-6
- Inglehart, R., Haerpfer, C., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., and Puranen, B. (Eds.), (2020). *World values survey: All rounds – Country-pooled datafile* (Dataset). Madrid & Vienna: JD Systems Institute & WWSA Secretariat. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>

- Kamano, S. (2017). Determinants of homo/biphobia and family/gender conservatism: Analysis of the 2015 national survey on attitudes toward sexual minorities in Japan. *Japanese Journal of Family Sociology*, 29(2), 200–215. doi:10.4234/jjoffamilysociology.29.200
- Kazama, T. (2020). Conditional inclusion: Sexual minorities, tolerance, and nationalism. *International Journal of Japanese Sociology*, 29(1), 39–51. doi:10.1111/ijjs.12110
- Khor, D., & Kamano, S. (2021). Negotiating same-sex partnership in a “tolerant” state. *Journal of Gender Studies*, 30(5), 512–524. doi:10.1080/09589236.2021.1929099
- Kite, M. E., & Whitley, B. (1996). Sex differences in attitudes toward homosexual persons, behaviors, and civil rights: A meta-analysis. *Personality & Social Psychology Bulletin*, 22(4), 336–353. doi:10.1177/0146167296224002
- Kranjac, A. W., & Wagmiller, R. L. (2021). Attitudinal change, cohort replacement, and the liberalization of attitudes about same-sex relationships, 1973–2018. *Sociological Perspective*, 65(2), 262–277. doi:10.1177/0731121421994858
- Kreuter, F., Presser, S., & Tourangeau, R. (2008). Social desirability bias in CATI, IVR, and web surveys: The effects of mode and question sensitivity. *Public Opinion Quarterly*, 72(5), 847–865. doi:10.1093/poq/nfn063
- Lee, K. S. (2010). Gender, care work, and the complexity of family membership in Japan. *Gender & Society*, 24(5), 647–671. doi:10.1177/0891243210382903
- Lee, K. S., Tufiş, P. A., & Alwin, D. F. (2010). Separate spheres or increasing equality? Changing gender beliefs in postwar Japan. *Journal of Marriage and Family*, 72(1), 184–201. doi:10.1111/j.1741-3737.2009.00691.x
- Legerski, E. M., & Cornwall, M. (2010). Working-class job loss, gender, and the negotiation of household labor. *Gender & Society*, 24(4), 447–474. doi:10.1177/0891243210374600
- Loftus, J. (2001). America’s liberalization in attitudes toward homosexuality, 1973 to 1998. *American Sociological Review*, 66(5), 762–782. doi:10.2307/3088957
- Long, S. O., & Harris, P. B. (2000). Gender and elder care: Social change and the role of the caregiver in Japan. *Social Science Japan Journal*, 3(1), 21–36. doi:10.1093/ssjj/3.1.21
- McLelland, M. (1999). Gay men as women’s ideal partners in Japanese popular culture: Are gay men really a girl’s best friends? *U.S.-Japan Women’s Journal*, 17, 77–110. Retrieved from <https://www.jstor.org/stable/42772149>
- Ministry of Health, Labour and Welfare. (2017). *Marriage statistics (Specified report of vital statistics in FY2016)*. [Statistics]. Retrieved from <https://www.mhlw.go.jp/toukei/saikin/hw/jinkou/tokusyuu/konin16/index.html>
- Nagase, N., & Brinton, B. C. (2017). The gender division of labor and second births: Labor market institutions and fertility in Japan. *Demographic Research*, 36, 339–370. doi:10.4054/DemRes.2017.36.11
- Nagoshi, J. L., Adams, K. A., Terrell, H. K., Hill, E. D., Brzuzny, S., & Nagoshi, C. T. (2008). Gender differences in correlates of homophobia and transphobia. *Sex Roles*, 59(7–8), 521–531. doi:10.1007/s11199-008-9458-7
- Naka, R. (2020). How media coverage of homosexuality has changed over time: A quantitative text analysis of Japanese newspaper articles, 1980–2019. *Sociological Papers*, 29, 15–28. Retrieved from <http://hdl.handle.net/2065/00078240>
- Naka, R. (2021). Changing attitudes toward homosexuality in Japan, 1981–2010: Estimating the effects of cohort replacement and individual change. *The Annals of Sociology*, 62, 95–109.
- Nemoto, K. (2008). Postponed marriage: Exploring women’s views of matrimony and work in Japan. *Gender & Society*, 22(2), 219–237. doi:10.1177/0891243208315868
- Norton, A. T., & Herek, G. M. (2013). Heterosexuals’ attitudes toward transgender people: Findings from a national probability sample of U.S. adults. *Sex Roles*, 68(11–12), 738–753. doi:10.1007/s11199-011-0110-6

- Pleck, J. H., Sonenstein, F. L., & Ku, L. C. (1994). Attitudes toward male roles among adolescent males: A discriminant validity analysis. *Sex Roles, 30*(7–8), 481–501. doi:10.1007/BF01420798
- Plummer, D. (1999). *One of the boys: Masculinity, homophobia, and modern manhood*. New York, NY: Harrington Park Press.
- Rao, A. H. (2020). *Crunch time: How married couples confront unemployment*. Oakland: University of California Press.
- Redman, S. M. (2018). Effects of same-sex legislation on attitudes toward homosexuality. *Political Research Quarterly, 71*(3), 628–641. doi:10.1177/1065912917753077
- Roberson, J. E., & Suzuki, N. (Eds.). (2003). *Men and masculinities in contemporary Japan*. London: Routledge.
- Roberson, J. (2005). Fight!! Ippatsu!! “Genki” energy drinks and the marketing of masculine ideology in Japan. *Men and Masculinities, 7*(4), 365–384. doi:10.1177/1097184X03261260
- Ryder, N. B. (1965). The cohort as a concept in the study of social change. *American Sociological Review, 30*(6), 843–861. doi:10.2307/2090964
- Schoppa, L. (2010). Exit, voice, and family policy in Japan: Limited changes despite broad recognition of the declining fertility problem. *Journal of European Social Policy, 20*(5), 422–432. doi:10.1177/0958928710380477
- Stark, L. P. (1991). Traditional gender role beliefs and individual outcomes: An exploratory analysis. *Sex Roles, 24*(9–10), 639–650. doi:10.1007/BF00288419
- Tanaka, K. (2012). Surnames and gender in Japan: Women’s challenges in seeking own identity. *Journal of Family History, 37*(2), 232–240. doi:10.1177/0363199011434684
- Titus, D. A. (1980). The making of the “symbol emperor system” in postwar Japan. *Modern Asian Studies, 14*(4), 529–578. doi:10.1017/S0026749X00006624
- Tormos, F. (2017). Intersectional solidarity. *Politics, Groups, and Identities, 5*(4), 707–720. doi:10.1080/21565503.2017.1385494
- Treas, J. (2002). How cohorts, education, and ideology shaped a new sexual revolution on American attitudes toward nonmarital sex, 1972–1998. *Sociological Perspectives, 45*(3), 267–283. doi:10.1525/sop.2002.45.3.267
- Tsutsui, J. (2016). Female labor participation and the sexual division of labor: A consideration on the persistent male-breadwinner model. *Japan Labor Review, 13*(3), 80–100. Retrieved from [https://www.jil.go.jp/english/JLR/documents/2016/JLR51\\_tsutsui.pdf](https://www.jil.go.jp/english/JLR/documents/2016/JLR51_tsutsui.pdf)
- Tsuya, N. O., Bumpass, L. L., Choe, M. K., & Rindfuss, R. R. (2006). Is the gender division of labour changing in Japan? *Asian Population Studies, 1*(1), 47–67. doi:10.1080/17441730500125805
- Twenge, J. M., Carter, N. T., & Campbell, W. K. (2015). Time period, generational, and age differences in tolerance for controversial beliefs and lifestyles in the United States, 1972–2012. *Social Forces, 94*(1), 379–399. doi:10.1093/sf/sov050
- Ueno, C. (1989). Women’s labor under patriarchal capitalism in the eighties. *Review of Japanese Culture and Society, 3*(1), 1–6. Retrieved from <https://www.jstor.org/stable/42800958>
- Ueno, C. (2021). Why do Japanese women suffer from the low status? The impact of neo-liberalist reform on gender. *The Japanese Political Economy, 47*(1), 9–26. doi:10.1080/2329194X.2021.1892496
- van den Akker, H., van der Ploeg, R., & Scheepers, P. (2013). Disapproval of homosexuality: Comparative research on individual and national determinants of disapproval of homosexuality in 20 European countries. *International Journal of Public Opinion Research, 25*(1), 64–86. doi:10.1093/ijpor/edr058

- Wakakuwa, M., Paskowitz, S., & Paskowitz, T. (2001). The gender system of the imperial state. *U.S.-Japan Women's Journal*, 20/21, 17–82. Retrieved from <https://www.jstor.org/stable/42772173>
- Waldner, L. K., Sikka, A., & Baig, S. (1999). Ethnicity and sex differences in university students' knowledge of AIDS, fear of AIDS, and homophobia. *Journal of Homosexuality*, 37(3), 117–133. doi:10.1300/J082v37n03\_07
- White, L. (2018). *Gender and the koseki in contemporary Japan: Surname, power, and privilege*. London: Routledge.
- Whitley, B. E. (2001). Gender-role variables and attitudes toward homosexuality. *Sex Roles*, 45 (11/12), 691–721. doi:10.1023/A:1015640318045