



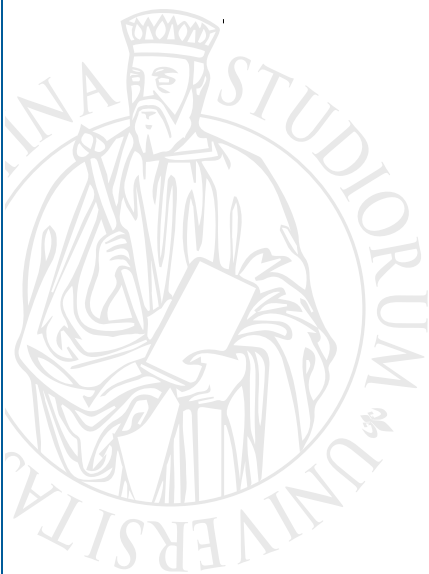
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**Sexual debut and dating of
university students in low fertility societies:
Italy and Japan**

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Sexual debut and dating of university students in low fertility societies: Italy and Japan

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Abstract

The sexual debut and dating behaviour of the youth are vital to the process of personal and social transition from adolescence to adulthood and can have both direct and indirect influences on later union formation processes. Nonetheless, little attention has been paid to the sexual and dating behaviour of young people in Southern Europe and East Asia—both of which are categorized as societies with strong family ties and lowest-low fertility. The present study steps back to the initial events of the transition to adulthood and examines the sexual and dating behaviours of university students in Italy and Japan. Our results suggest that the world record-low fertility levels in Italy and Japan originate from very different processes in the transition to adult sexuality. In Japan, the sexual and affective behaviour of students in life's early stages seems to be an important reason in explaining low fertility. In Italy, however, the reasons behind low fertility do not seem to stem from a problematic path of transition to adult sexuality and finding a partner, at least among higher educated individuals. We conclude that a focus on sexual and dating histories can provide an important perspective on the foundations of low fertility societies.

Keywords: Sexual debut; Transition to adulthood; Partnership dynamics; Italy; Japan

1 Introduction

From the mid-20th century, Southern European and East Asian countries have faced a rapid decline in fertility rates and have come to be known as ‘lowest-low’ fertility countries (Kohler et al. 2002). In these societies, the increase in the level of childless women is the most impactful component of fertility contraction (Zeman et al. 2018). To understand the low fertility phenomenon especially before entering parenthood in these countries, this study steps back to the initial events of family-formation, namely vaginal sexual intercourse and dating behaviours in youths.

Demographers have so far paid little attention to the sexual behaviour of young people in Southern Europe and East Asia. Steady relationships and the sexual debut are critical events which characterise the transition to adulthood (Corijn and Klijzing 2001; Rosina 2004). These formative events remain embedded in the minds and lives of teenagers (Brown 1999; Giordano et al. 2006) and can have profound direct and indirect influences on later union formation processes (Manning et al. 2008). For instance, teens who have never dated have been shown to have lower expectations to marry and to cohabit than their counterparts with dating experience (Manning et al. 2006).

These two regions are relatively similar in terms of family practices and welfare system orientations, or ‘strong family ties’ (Reher 1998). Such a strong family milieu and the strict control of children by their parents affect the timing of their transitions into adulthood (Billari and Rosina 2004; Raymo et al. 2010). In stark contrast to the US or North and West Europe, where value orientations and lifestyles tend to push young adults towards an earlier departure from the parental home (and thus a greater sense of autonomy), Italian and Japanese young adults tend to emancipate themselves at a relatively older age (Dalla Zuanna et al. 2019; Reher 1998; Yamamoto 2006; Sato

2007). We consider, therefore, that these factors play a key role in the process of affective and sexual maturation of young adults. Aside from the aforementioned similarities, there is a key difference in family formation practices between South Europe and East Asia. Childbirth is strongly tied with marriage, and the prevalence of cohabitation is low in East Asia (OECD 2018), whilst rates of childbearing outside of marriage have seen a remarkable increase in South Europe in recent years (Eurostat 2018). These differences may well be intimately related to people's sexual debut and dating behaviour.

The present study relies on university students in Italy and Japan as representative examples of Southern Europe and East Asia to examine sexual and partnering behaviours. The onset of tertiary education represents a life-changing phase for young people. With a wealth of opportunities to date and form sexual relationships, it seems particularly interesting to better understand their dating and sexual behaviours. How many young Italian and Japanese students—of the most recent cohorts—have experienced sexual intercourse or have a partner? What are the profiles of non-partnered adolescents and those with no sexual experience? What are the similarities and differences in the process of transition to adult sexuality between Italy and Japan? To address these questions, two surveys were employed: the 2017 Sexual and Emotional Life of Youth survey (SELY) for Italy and the 2011 National Survey of Sexual Activity among Adolescents (NSSAA) for Japan. These surveys can shed light on the events experienced during adolescence, which are key stepping-stones towards building one's own adult social identity.

2 Background

2.1 First sexual intercourse and dating experiences

Previous studies have reported on the association and patterns between retaining one's virginity and certain characteristics: living arrangements, including the number of siblings (Billari and Ongaro 2004; Landor and Simons 2019; Miller et al. 2001); religiosity (Sheeran et al. 1993; Trapnell et al. 1994; Vazsonyi and Jenking 2010); employment arrangements (Kim et al. 2017); social life and friendships (Billari and Ongaro 2004; Collins 2000; Landor and Simons 2019), and body image and self-esteem (Rhodes et al. 2005; Trapnell et al. 1994). Notwithstanding the liberalisation of sexual mores, sexual trajectories remain strictly intertwined with partnership histories—which is to say that the probability of one experiencing their first sexual intercourse rises radically when one is in a steady relationship (Thornton 1990). Furthermore, the level of sexual intimacy also increases as the relationship formalises (Manning et al. 2006; Tang and Zuo 2000). Similarly, among young adults, dating is associated with personal and physical characteristics (DiMauro 2008; Leek 2006), living arrangements (Caltabiano 2006; Iwakami 1999; Iwasawa 1999), employment status and characteristics (Bozick 2006; Sasaki 2012), and education (Blossfeld and Drobnic 2001; Kalmijn 2011; Wiik 2009). Many prior studies on the correlates of sexual debut and dating behaviours have used university students as samples. University students tend to live in environments conducive to developing interpersonal relationships with peers (Prisbell 1986, 1989).

There is a wealth of literature in the US pertaining to first sexual intercourse and relationship experience (Manning 2019; Manning et al. 2006; see Manning et al. 2008 for a review). However, in Southern European and East-Asian literature—and to a greater extent within Italy and Japan—there seems to be a disregard for the fact that the

transition to adulthood is intimately rooted in dating and sexual behaviours. Likewise, it has been relatively unmentioned that union formation is the outcome of a partnering process, in which an informal partnership is often first formed followed by the formation of a socially recognised partnership.

2.2 Italy and Japan: The background

2.2.1 Italy

The manifest contextual factors linked to patterns of sexual behaviours in Italy are the influence of the Catholic Church and the strength of intergenerational bonds. The Catholic Church has maintained a strong presence in the socialisation of young people in Italy, more than elsewhere (Caltabiano et al. 2006). Secondly, the strength of intergenerational ties can serve to explain the latest-late transition to adulthood in Italy (Billari and Rosina 2004). In 2009, 60% of Italian 25-29-year-olds lived with their parents (Regnier-Loilier and Vignoli 2018). The Italian latest-late transition to adulthood cannot solely be explained away by the labour-market and housing difficulties (Vignoli et al. 2013, 2020), but culturally-rooted behaviour—the so-called ‘delay syndrome’ (Livi-Bacci 2001)—must also be factored into the equation. The presence of strong intergenerational ties, such as considerable psychological and material solidarity (Dalla Zuanna and Micheli 2004; Reher 1998), contributes to the reinforcement of Italy’s latest-late transition to adulthood. Therefore, parents tend to discourage non-normative behaviour in their offspring, leading even their adult children to feel under great familial pressure when making their own choices (Dalla Zuanna and Micheli 2004; Rosina and Fraboni 2007; Vignoli and Salvini 2014). Dalla Zuanna and Mancin (2004) observed a strong connection between age at first intercourse and social

control. That is to say, when the pressure from family, school, and religion eases, sexual initiation proceeds at a much faster rate.

Although social pressures from religion and family continue to exist, several changes have occurred in Italy. A qualitative exploration of family formation practices in Italy revealed that while the familial and social pressures to marry remain strong (Vignoli and Salvini 2014), remarkable changes in attitudes and behaviour towards cohabitation, non-marital childbearing, and divorce have been observed in recent decades (Caltabiano et al. 2019; Pirani and Vignoli 2016). In 1993, 2 out of 100 couples were living in non-marital relationships, whilst in 2015 almost 20% of Italians cohabited for at least a part of their relationship. The percentage of non-marital childbirths has tripled in the last fifteen years, with one third of children currently born to non-married women (Istat 2019). Nonetheless, the sexual revolution has taken place in Italy—especially in the north of the country (Billari et al. 2007; Billari and Ongaro 2004; Caltabiano 2006; Dalla Zuanna et al. 2019)—and sexuality has become increasingly disconnected from reproduction (Barbagli et al. 2010). In addition, public discourse around sexuality has profoundly liberalised and legislation has become less rigid (for example, civil unions between same-sex partners were legalised in 2016).

2.2.2 Japan

In Japan, due to the low non-marital childbirth rate and infrequency of cohabitation (National Institute of Population and Social Security Research 2019; Raymo et al. 2009), the problem of sexual debuts and dating behaviour has directly led to an increase in never-married people. Moreover, this increase in never-married individuals has had a

direct influence on the decline in fertility in Japan (Iwasawa 2002). Therefore, Japanese research in this field has paid significant attention to low fertility.

One of the principal national fertility surveys seeks to establish the reasons for people remaining never married. Detailed results from the 2010 Japanese National Fertility Survey (JNFS) for never-married men and women aged 18-34 report that 45% of men aged 25-34 and 51% of women answered that remaining never-married was due to not having met the right partner, and approximately 15% of people stated that they 'cannot communicate well with people of the opposite sex' (National Institute of Population and Social Security Research 2017). These responses show that the majority of never-married people in Japan face difficulties in finding the right partner or even communicating with them once found.

This problem of mate searching is referred to as an 'immature dating culture' (Atoh 1998), or that young men and women have a tendency to be insufficiently active to find partners. This reasoning has been primarily explained by the widespread of individualism and the love-marriage ideology (Kato 2011). Iwasawa and Mita (2005) analysed the decline in marriage rates from 1970 and found that approximately 50% of the changes could be explained by the decrease in arranged marriages, and 40% of them by the decline in semi-arranged marriages (which is defined as a way of meeting a partner introduced by one's boss or senior colleagues). This suggests that arranged and semi-arranged marriages were the principal way of meeting a partner and compensated the mate search in Japan. However, new ideologies discouraged the traditional way of searching for a mate, leading to an increase in never-married young people without a partner (Kato 2018).

3 Data and method

3.1 Data

For Italy, we examined data from the 2017 Sexual and Emotional Life of Youth (SELFY) survey, which provides information on the sexual and affective behaviour of young Italian university students in the fields of economics and statistics. Students used a self-completed questionnaire, which was answered in the classroom during a lecture (Billari et al. 2007). 6,406 cases were available for the analysis of sexual intercourse experience and 6,033 cases on partnering. So as to obtain representative results at a national level, the data was post-stratified at the macro-region level. For Japan, the seventh round of the National Survey of Sexual Activity among Adolescents (NSSAA) conducted in 2011 by the Japanese Association for Sex Education (JASE) was used. The JASE survey was conducted to investigate sexual behaviour, attitudes, and values among junior high school, high school, and university students every 6 years since 1974. The seventh survey targeted approximately 5,000 high school and university students from nine areas in Japan. This study had 2,424 cases as its disposal for sexual experience analysis and 2,452 cases for partnership status analysis after removing the missing cases for the variables used.

These surveys provided us with the unique opportunity for scrutinising sexual experience and dating during adolescence in Italy and Japan. A sample of university students has many advantages—chief among them a high number of respondents willing to fill in a relatively long, though not complex, questionnaire. In addition, the events sought after are still relatively fresh in the respondent's memory. However, this could also be a limitation as it does not allow for an evaluation of the long-term consequences of adolescent experiences in the development of adult identity. Clearly,

the sample used is not representative of the whole population. Within this group, however, there exists great heterogeneity concerning both sexuality and affective behaviour, making university students appropriate and valuable subjects for research (see, e.g., Billari et al. 2007; Hines 2007; Pitts and Rahman 2001; Stinson 2010; Weeden and Sabini 2007).

3.2 Measures

3.2.1 Dependent variables

In line with most literature in the field, we focused on heterosexual first sexual intercourse as vaginal-penile intercourse (e.g., Humphreys 2013; Landor and Simons 2019). For the analysis of dating behaviour, relationship status at the time of the survey was used. Note that the dates of these events are not collected in the Japanese data, meaning that it could only be ascertained whether the respondents had experienced their first sexual intercourse prior to the survey date and had a partner at the time of the survey.

3.2.2 Independent variables

We examined the profiles of university students in Italy and Japan with the primary focus on their sexual debut and dating status. In addition to controlling for age (a continuous variable that ranged from 17 to 26), various other characteristics of university students were considered.

Siblings' gender. This was categorised as: 1) 'I do not have any siblings'; 2) 'I have both brothers and sisters'; 3) 'I have only brothers', and 4) 'I have only sisters'.

Living arrangement. Three categories of union status were considered: 1) living alone or with friends; 2) living in a campus dorm, and 3) living with family. The Japanese survey contained options to live with a partner and live with others, but these were removed (54 cases) to make the survey more comparable to its Italian counterpart.

Part-time job. As Italy and Japan have different working cultures and systems among adolescents, the available options for this question differed. The response options of the Italian survey were ‘Not working’, ‘Occasionally’, ‘Regularly (less than 15 hours per week)’, and ‘Regularly (more than 15 hours per week)’. The Japanese survey had five options: ‘Less than 8 hours’, ‘More than 8 hours but less than 16 hours’, ‘More than 16 hours but less than 24 hours’, ‘More than 24 hours’, and ‘Not at all’. To be able to compare both countries, a four-category composite measure of part-time status was constructed: 1) Not at all; 2) Occasionally (‘Occasionally’ for Italy and ‘Less than 16 hours’ for Japan); 3) Often (‘Regularly [less than 15 hours per week]’ for Italy and ‘More than 16 hours but less than 24 hours’ for Japan), and 4) Very often (‘Regularly [more than 15 hours per week]’ for Italy and ‘More than 24 hours’ for Japan).

Self-satisfaction. The question relating to self-satisfaction was: ‘Are you satisfied with yourself?’. The responses were: ‘Yes’, ‘Somehow yes’, ‘A bit’, and ‘No’.

Friends’ gender. We made six groups to categorise the gender status of the participants’ friends: 1) ‘No friends’; 2) ‘All opposite sex friends’; 3) ‘Mainly opposite sex friends’; 4) ‘Equal number’; 5) ‘Mainly same-sex friends’, and 6) ‘All same-sex friends’.

Frequency of talking about sex with friends. The options given on the frequency of talking about sex with friends were: 1) ‘Not at all’; 2) ‘Occasionally’, and 3) ‘Often’.

Religion. For Italy, as in many Catholic-dominated countries, religion plays a significant role in sexual and partnership behaviours (Caltabiano et al. 2006). However,

religion in Japan is a more singular issue as the majority of the Japanese population do not belong to any one religion (Nakamura et al. 2015). Due to this, the Japanese survey we used does not contain a question on religion. Therefore, religion was not included as a control variable in the main analysis so as to maintain comparability between the two countries. Nonetheless, a sensitivity analysis including information on religion only for Italy did not modify the model outcomes (Appendix).

3.3 Method

Using logistic regression, we described the profiles of sexual intercourse experience and partnership status at the time of the survey for both Italian and Japanese young adults.

The results were presented in the form of average marginal effects (AMEs) so as to better quantify the associations under study (Mood 2010). AME expresses the effect on $P(Y = 1)$ as a categorical covariate changes from one category to another or as a continuous covariate increases by one unit, averaged across the values of the other covariates introduced in the model. The analysis was segmented by gender.

4 Results

4.1 Descriptive findings

Table 1 describes the proportion of sexual intercourse experience and dating behaviours at the time of the survey among university students in Italy and Japan. Approximately 80% of Italian university students had experienced sexual intercourse (77.5% of females and 80.7% of males). This number was much lower for Japanese university students, with approximately half of males (51.7%) and less than half of females (43.9%) having

experienced intercourse. Similarly, in terms of relationship status, more Italian than Japanese students were dating at the time of the survey. 16% more Italian females (52.5% vs. 36.0%) and 6% more Italian males (40.1% vs. 33.9%) were dating compared to their Japanese counterparts.

[Table 1]

Table 2 and Table 3 show the distribution of our analytical samples by sexual intercourse and by relationship status in Italy and Japan, respectively. Firstly, our descriptive findings suggest that students who have experienced intercourse (or, ever-sexed) or have a relationship shared a similar profile in between the two countries. Secondly, there are interesting differences for both sexual debut and partnership status between Italy and Japan. For example, about half of Italian university students have no siblings, whilst this number is only 10% for Japanese university students. In both countries, those who live with their family are the majority, but this is a much higher occurrence in Italy (more than 70% of Italian students live with their family of origin). Fewer Japanese students who have experienced intercourse or have a partner live with family than their Italian counterparts (this is especially true of males). Although the number of students in Italy working part-time is smaller than in Japan, those who work part-time in both countries have a higher proportion of sexual debut and partnering. In Italy, more students reported higher levels of self-satisfaction as compared to Japan. Moreover, self-satisfied individuals were found to have a higher proportion of sexual debut and having a partner. Most university students tend to have an equal number of male and female friends across both countries. However, the proportion of having only same-sex friends is higher in Japan, especially among virgin and non-partnering students (e.g., about 30% of virgin students have only same-sex friends). In both countries, students talk about sex more often if they have experienced it or have a

partner, but Italian students generally talk more about sex with friends than Japanese students.

[Table 2]

[Table 3]

4.2 Regression results

Table 4 presents the correlates of sexual debut among university students by gender and country, estimated by a logistic regression model. Results are presented in terms of AMEs. Generally speaking, the profiles of university students' sexual debut are similar between both genders and countries. Regarding the students' living arrangements, living alone or with friends is positively associated with sexual experience compared to those living with their family. Japanese male students who have left their parental home have a stronger likelihood to have a sexual experience. Working part-time also positively correlates with sexual debut; working for several hours a week seems to be especially related with a sexual debut for students in Japan. University students across both countries who either have all or mainly same-sex friends, or do not have any friends at all, are less likely to have had a sexual experience compared to those with an equal number of friends of the same and opposite sex. While true of both, this finding is more notable for Japan, particularly among male students. For female students, having friends of the opposite sex has a positive relationship on sexual experience. Lastly, talking about sex with friends positively correlates with the sexual debut.

Italy and Japan display different findings. In Italy, siblings (or lack thereof) do not significantly correlate with a sexual debut. However, in Japan, we note a sizable and significant negative association between being an only child and sexual experience.

Additionally, self-satisfaction affects Italy and Japan differently. Both male and female Italian students who are satisfied with themselves are more likely to have had a sexual experience, whilst self-satisfaction does not generally offer statistically precise estimates in Japan.

Table 5 displays the demographic and socio-economic profiles of Italian and Japanese students who were dating at the time of the survey. As with sexual debut, those working part-time and who often talk about sex with friends were more likely to have a relationship at the time of the interview. However, sibling status was not shown to have a statistically significant relationship with dating. Living alone or with friends, as compared to living with family, only related with having a partner for Japanese male students. Unlike sexual debut, self-satisfaction was shown to have a very strong association with dating behaviours in Japan as well as Italy. Friendship status had a similar trend with sexual debut only in Japan.

[Table 4]

[Table 5]

5 Discussion

The aim of this study was to investigate the sexual and dating behaviours among Italian and Japanese students. A study of sexual debut and relationship status is important in understanding not only sexual and affective behaviour after the liberalization of sexual mores, but also the transition to adulthood and the ensuing course of family-life (Carpenter 2001; Manning et al. 2006, 2008). Italy and Japan have been characterised by a relatively slow and delayed transition to adulthood compared to other high-income, developed countries (Billari and Rosina 2004; Reher 1998; Yamamoto 2006; Sato

2007). Therefore, the early twenties are important years in one's life due to their proximity to the starting point of an individual's sexual and reproductive life.

The results of the study show a crucial difference in the transition process to adult sexuality. A remarkably higher percentage of Italian students had lost their virginity or had a partner at the time of the survey than their Japanese counterparts. Approximately 80% of Italian students were found to have had sex, whilst less than half of Japanese students had had their sexual debut. Italian and Japanese students live in similar contexts in terms of traditional family arrangements and low fertility, but here we point out a relevant distinction in their sexual and affective behaviours.

Despite such important differences in the incidence of sexual experiences and partnering of young adults in Italy and Japan, the demographic and socio-economic profiles of those who had undergone such events is relatively similar. For example, in both countries, the exit from the parental home, employment status, and the frequency of talking about sex with friends positively relate with a sexual debut, whilst having no friends or only same-sex friends has a converse relation. Despite these similarities, the compositional differences of each profile (as shown in Table 2 and 3) may play a key role in explaining the gap of the sexual debut and partnership status between the two countries. For instance, approximately 30% of virgin Japanese students have only same-sex friends, while this number is only 5% for Italian students. Although having only same-sex friends negatively associates with a sexual debut in both countries, the composition of that population is very different.

While this study's findings represent a significant step in advancing the importance of the sexual and affecting behaviours of Southern Europe and East Asia, it is not without its limitations. First, our cross-sectional analysis can only provide limited information on causal relationships. Second, the Japanese and Italian surveys do not

always offer the same information, thereby hampering a complete comparison between the countries (e.g., no information is given on the dates of events in Japan). Third, researchers often do not include the experiences of lesbian, gay, bisexual, and transgender (LGBT) respondents (Averett et al. 2014). Our analysis could be extended by including LGBT individuals so as to examine any potential differences relating to sexual orientation in patterns of virginity and dating behaviours. Finally, the surveys consulted for both countries are not wholly representative of all young adults residing in them. Importantly, it has been noted that the sexuality of university students seems to be delayed and less intense than that of their less-educated peers (Dalla Zuanna et al. 2019). Therefore, the results should be interpreted cautiously and should not be generalised.

The present study gives additional insight in understanding family formation practices in low fertility societies. Adolescent experiences have both important direct and indirect influences on later family-life course events (Manning et al. 2008). Our findings cannot be reconciled with any notion of a simple, uniform, and unidirectional view of sexual and affective behaviours in low fertility societies. In 2017, total fertility rates stagnated at 1.3 and 1.4 in Italy and Japan, respectively—the lowest-low fertility levels in the world. This difference seems to stem from two radically different models of transition to adult sexuality. In Japan, the sexual and affective behaviour of students in life's early stages seems to be an important reason in explaining low fertility. In particular, students with no siblings, who do not work, and have only same-sex friends face a high risk of remaining sexless and non-partnered. These people may well be suffering from an inability to communicate with the opposite-sex. This finding resonates with prior authors who discussed the malfunction of mate searching in Japan (Iwasawa and Mita 2005; Kato 2011, 2018), adding that the low fertility of more highly

educated individuals originates from the very early stages of their sexual and affective behaviours. In Italy, however, the reasons behind low fertility do not seem to stem from a problematic path of transition to adult sexuality and finding a partner—at least among the more educated part of the population (Tocchioni 2018). Italian young adults have been increasingly confronted with adverse employment and housing situations in recent years (Barbieri et al. 2015; Vignoli et al. 2016, 2020)—all factors that are primarily responsible for a delayed exit from the parental home and a postponed family formation process. Based on our comparative study, we conclude a focus on sexual and dating histories can provide an important perspective on the foundations of low fertility societies.

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References

- Atoh, M. (1998). Social and economic background of very low fertility and policy responses to it. *Journal of Population Problem*, 54(1), 1-6 [in Japanese].
- Averett, P., Moore, A., & Price, P. (2014). Virginitly definitions and meaning among the LGBT community. *Journal of Gay & Lesbian Social Services*, 26(3), 259-278.
- Barbagli, M., Dalla Zuanna, G., & Garelli, F. (2010). *La sessualità degli italiani*. Bologna: Il Mulino [in Italian].
- Barbieri, P., Bozzon, R., Scherer, S., Grotti, R., & Lugo, M. (2015). The Rise of a Latin Model? Family and fertility consequences of employment instability in Italy and Spain. *European Societies*, 17(4), 423-446.
- Billari, F.C., Caltabiano, M., & Dalla Zuanna, G. (2007). The Heirs of the Sexual Revolution. In F.C. Billari, M. Caltabiano, & G. Dalla Zuanna (Eds.), *Sexual and affective behaviour of students. An international comparison* (pp. 1-46). Padova: Cleup.
- Billari, F.C., & Ongaro, F. (2004). First stages in partnership history and in sexual experiences. In G. Dalla Zuanna & C. Crisafulli (Eds.), *Sexual behaviour of Italian Students. An international comparison* (pp. 107-124). Messina: Department of Statistics, University of Messina.
- Billari, F.C., & Rosina, A. (2004). Italian “latest-late” transition to adulthood: An exploration of its consequences on fertility. *Genus*, 60(1), 71-87.
- Blossfeld, H.P., & Drobnic, S. (2001). *Careers of couples in contemporary society: From male breadwinner to dual-earner families*. Oxford: Oxford University Press.

- Bozick, R. (2006). Precocious behaviors in early adolescence employment and the transition to first sexual intercourse. *Journal of Early Adolescence*, 26(1), 60-86.
- Brown, B.B. (1999). "You're going out with who?": Peer group influences on adolescent romantic relationships. In W. Furman, B.B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 291-329). New York: Cambridge University Press.
- Caltabiano, M. (2006). The first romantic relationship of adolescents: A comparative analysis. *Genus*, 61(2), 141-160.
- Caltabiano, M., Dalla Zuanna, G., & Rosina, A. (2006). Interdependence between sexual debut and church attendance in Italy. *Demographic Research*, 14(19), 453-484.
- Caltabiano, M., Dreassi, E., Rocco, E., & Vignoli, D. (2019). A subregional analysis of family change: The spatial diffusion of one-parent families across Italian municipalities, 1991-2011. *Population Space and Place*, 25(4), 1-16.
- Carpenter, L.M. (2001). The ambiguity of "having sex": The subjective experience of virginity loss in the United States. *The Journal of Sex Research*, 38(2), 127-139.
- Collins, A. (2000). Surrender value of capital assets: The economics of strategic virginity loss. *Journal of Bioeconomics*, 2(3), 193-201.
- Corijn, M., & Klijzing, E. (2001). *Transitions to Adulthood in Europe*. Springer.
- Dalla Zuanna, G., Caltabiano, M.C., Minello, A., & Vignoli, D. (2019). Catching up! The sexual opinions and behaviour of Italian students (2000-2017). DiSIA Working Paper 2019/02.
- Dalla Zuanna, G., & Mancin, M. (2004). Determinants of age at first sexual intercourse. In G. Dalla Zuanna & C. Crisafulli (Eds.), *Sexual behaviour of Italian Students. An*

- international comparison* (pp. 126-134). Messina: Department of Statistics, University of Messina.
- Dalla Zuanna, G., & Micheli, G.A. (2004). *Strong family and low fertility: A paradox?* Springer Netherlands.
- DiMauro, D. (2008). Reluctant virginity: The relationship between sexual status and self-esteem. *Theses and Dissertations*, 717.
- Eurostat (2018). Eurostat Database. [electric resource].
<https://ec.europa.eu/eurostat/web/population-demography-migration-projections/births-fertility-data/main-tables>. Accessed on 23rd of November, 2018.
- Giordano, P.C., Longmore, M.A., & Manning, W.D. (2006). Gender and the meanings of adolescent romantic relationships: A focus on boys. *American Sociological Review*, 71(2), 260-287.
- Hines, D.A. (2007). Predictors of sexual coercion against women and men: A multilevel, multinational study of university students. *Archives of Sexual Behavior*, 36(3), 403-422.
- Humphreys, T. (2013). Cognitive frameworks of virginity and first intercourse. *Journal of Sex Research*, 50(7), 664-675.
- Istat (2019). www.istat.it.
- Iwakami, M. (1999). The research about unmarried people in their twenties and thirties coresiding with own parents in Japan. *Journal of Population Problems*, 55(4), 1-15 [in Japanese].

- Iwasawa, M. (1999). The transformation of partnerships of Japanese women in the 1990s: Increased reluctance towards traditional marriages and the prevalence of non-cohabiting couples. *Journal of Population Problems*, 55(2), 19-38 [in Japanese].
- Iwasawa, M. (2002). On the contribution of the changes in first marriage behavior and couples' reproductive behavior to the recent change in total fertility rates of Japan. *Journal of Population Problems*, 58(3), 15-44 [in Japanese].
- Iwasawa, M., & Mita, F. (2005). Boom and bust in marriages at work and the marriage decline in Japan. *The Japanese Journal of Labour Studies*, 47(1), 16-28 [in Japanese].
- Kalmijn, M. (2011). The influence of men's income and employment on marriage and cohabitation: Testing Oppenheimer's theory in Europe. *European Journal of Population*, 27(3), 269-293.
- Kato, A. (2011). Two major factors behind the marriage decline in Japan: the deterioration in macroeconomic performance and the diffusion of individualism ideology. *Journal of Population Problems*, 67(2), 3-39 [in Japanese].
- Kato, A. (2018). Decline marriage and accelerate childlessness. National Institute of Population and Social Security Research. Tokyo [in Japanese].
- Kim, J., Tam, W., & Muennig, P. (2017). Sociodemographic correlates of sexlessness among American adults and associations with self-reported happiness levels: Evidence from the U.S. general social survey. *Archives of Sexual Behavior*, 46(8), 2403-2415.
- Kohler, H.P., Billari, F.C., & Ortega, J.A. (2002). The emergence of lowest-low fertility in Europe during the 1990s. *Population and Development Review*, 28(4), 641-680.

- Landor, A.M., & Simons, L.G. (2019). Correlates and predictors of virginity among heterosexual African American young adults. *Sexuality and Culture*, 23(3), 943-961.
- Leck, K. (2006). Correlates of minimal dating. *The Journal of Social Psychology*, 146(5), 549-567.
- Livi-Bacci, M. (2001). Too few children and too much family. *Daedalus*, 130(3), 139-155.
- Manning, W.D. (2019). Young adult relationship in an era of uncertainty: A case for cohabitation. Plenary session keynote speaker at the biennial meeting of the Italian Association for Population Studies, January, Milan, Italy.
- Manning, W.D., Giordano, P.C., & Longmore, M.A. (2006). Hooking up: The relationship contexts of “Nonrelationship” sex. *Journal of Adolescent Research*, 21(5), 459-483.
- Manning, W.D., Giordano, P.C., & Longmore, M.A. (2008). Adolescent dating relationships: Implications for understanding adult intimate unions. Working Paper Series, 8, Bowling Green State University.
- Miller, B.C., Benson, B., & Galbraith, K.A. (2001). Family relationships and adolescent pregnancy risk: A research synthesis. *Developmental Review*, 21(1), 1-38.
- Mood, C. (2010). Logistic regression: Why we cannot do what we think we can do and what we can do about it. *European Sociological Review*, 26(1), 67-82.
- Nakamura, T., Tsuchiya, T., & Maeda, T. (2015). The 13th national survey research on nationality conducted in 2013. Research report series of the Institute of Statistical Mathematics No. 116.

- National Institute of Population and Social Security Research (2017). Marriage and childbirth in Japan today: The fifteenth Japanese National Fertility Survey, 2015 (Results of Singles and Married Couples Survey). National Institute of Population and Social Security Research. Tokyo [in Japanese].
- National Institute of Population and Social Security Research (2019). Recent demographic statistics. Tokyo [in Japanese]. National Institute of Population and Social Security Research.
- OECD. (2018). OECD Family Database [electric resource]. <http://www.oecd.org/els/family/database.htm>. Accessed on 18th of January, 2019.
- Pirani, E., & Vignoli, D. (2016). Changes in the satisfaction of cohabitators relative to spouses over time. *Journal of Marriage and Family*, 78(3), 598-609.
- Pitts M., & Rahman, Q. (2001). Which behaviors constitute “having sex” among university students in the UK? *Archives of Sexual Behavior*, 30(2), 169-176.
- Raymo, J., & Iwasawa, M. (2005). Marriage market mismatches in Japan: An alternative view of the relationship between women’s education and marriage. *American Sociological Review*, 70(5), 801-822.
- Raymo, J. M., Iwasawa, M., & Bumpass, L. (2009). Cohabitation and family formation in Japan. *Demography*, 46 (4), 785-803.
- Raymo, J., Mencarini, L., Iwasawa, M., & Moriizumi, R. (2010). Intergenerational proximity and the fertility intentions of married women. *Asian Population Studies*, 6(2), 193-214.
- Reher, D. (1998). Family ties in Western Europe: Persistent contrasts. *Population and Development Review*, 24(2), 203-234.

- Regniér-Loilier, A., & Vignoli, D. (2018). The diverse nature of living apart together relationships: An Italy-France comparison. *Journal of Population Research*, 35(1), 1-22.
- Rhodes, G., Simmons, L.W., & Peters, M. (2005). Attractiveness and sexual behavior: Does attractiveness enhance mating success? *Evolution and Human Behavior*, 26(2), 186-201.
- Rosina, A. (2004). First sexual approaches. In G. Dalla Zuanna & C. Crisafulli (Eds.), *Sexual behaviour of Italian Students. An international comparison* (pp. 105-106). Messina: Department of Statistics, University of Messina.
- Rosina, A., & Fraboni, R. (2007). Is marriage losing its centrality in Italy? *Demographic Research*, 11(6), 149-172.
- Sasaki, S. (2012). An empirical analysis on inequality issues in the marriage market: The effects of non-regular employment on dating and singleness among males. *The Japanese Journal of Labour Studies*, 620, 93-106.
- Sato, R. (2007). Japan. In F.C. Billari, M. Caltabiano, & G. Dalla Zuanna (Eds.), *Sexual and affective behaviour of students. An international comparison* (pp. 133-151). Padova: Cleup.
- Sheeran, P, Abrams, D., Abraham, C., & Spears, R. (1993). Religiosity and adolescents premarital sexual attitudes and behavior: An empirical study of conceptual issues. *European Journal of Social Psychology*, 23(1), 39-52.
- Stinson, R. (2010). Hooking up in young adulthood: A review of factors influencing the sexual behavior of college students. *Journal of College Student Psychotherapy*, 24(2), 98-115.

- Tang, S., & Zuo, J. (2000). Dating attitudes and behaviors of American and Chinese College Students. *The Social Science Journal*, 37(1), 67-78.
- Thornton, A. (1990). The courtship process and adolescent sexuality. *Journal of Family Issues*, 11(3), 239-273.
- Tocchioni, V. (2018). Exploring the childless universe: Profiles of women and men without children in Italy. *Demographic Research*, 38(19), 451-470.
- Trapnell, P., Meston, C., & Gorzalka, B. (1994). Gender differences in predictors of virginity status - social dominance, self-rated attractiveness, and religiosity. *Canadian Psychology-Psychologie Canadienne*, 35(2A), 149.
- Vazsonyi, A., & Jenkins, D. (2010). Religiosity, self-control, and virginity status in college students from the "Bible Belt": A research note. *Journal for the Scientific Study of Religion*, 49(3), 561-568.
- Vignoli, D., Drefahl, S., & De Santis, G. (2012). Whose job instability affects the likelihood of becoming a parent in Italy? A tale of two partners. *Demographic Research*, 26(2), 41-62.
- Vignoli, D., Rinesi, F., & Mussino, E. (2013). A home to plan the first child? Fertility intentions and housing conditions in Italy. *Population Space and Place*, 19(1), 60-71.
- Vignoli, D., & Salvini, S. (2014). Religion and union formation in Italy: Catholic precepts, social pressure, and tradition. *Demographic Research*, 31(35), 1079-1196.
- Vignoli, D., Tocchioni, V., & Mattei, A. (2020). The impact of job uncertainty on first birth postponement. *Advances in Life Course Research*, 45, 100308.

- Vignoli, D., Tocchioni, V., & Salvini, S. (2016). Uncertain lives: Insights into the role of job precariousness in union formation in Italy. *Demographic Research*, 35(10), 253-282.
- Wiik, K.A. (2009). You'd better wait: Socioeconomic background and timing of first marriage versus first cohabitation. *European Sociological Review*, 25(2), 139-153.
- Weeden J., & Sabini, J. (2007). Subjective and objective measures of attractiveness and their relation to sexual behavior and sexual attitudes in university students. *Archives of Sexual Behavior*, 36(1), 79-88.
- Yamamoto, K. (2006). Cross-sectional study on attitudes toward sex and sexual behavior among Japanese college students. *Journal of Physiological Anthropology*, 25(3), 221-227.
- Zeman, K., Beaujouan, E., Brzozowska, Z., & Sobotka, T. (2018). Cohort fertility decline in low fertility countries: Decomposition using parity progression ratios. *Demographic Research*, 38(25), 651-690.

Table 1. Proportion of sexual experience and partnership status at the time of the survey by gender in Italy and Japan

	Italy		Japan	
	Female	Male	Female	Male
Ever had a sexual intercourse	77.5	80.7	43.9	51.7
Have a partner at the time of the survey	52.5	40.1	36.0	33.9

Source: Authors' calculations using SELFY for Italy and NSSAA for Japan.

Table 2. University students' profile by sexual experience (never sexed and ever sexed; never had a sexual intercourse) and gender in Italy and Japan

		Italy				Japan			
		Female		Male		Female		Male	
		Never sexed	Ever sexed	Never sexed	Ever sexed	Never sexed	Ever sexed	Never sexed	Ever sexed
Age									
	Mean	20.0	20.4	20.1	20.6	19.8	20.4	19.9	20.4
	Standard deviation	1.2	1.4	1.2	1.5	1.2	1.3	1.3	1.4
Siblings' gender									
	Do not have	47.6	47.8	52.8	50.2	13.1	12.4	12.2	9.0
	Both	7.7	6.9	4.7	5.9	15.7	19.0	14.9	18.7
	Only brothers	21.8	23.4	21.8	22.5	37.7	34.3	35.8	35.5
	Only sisters	23.0	22.0	20.6	21.4	33.5	34.3	37.1	36.9
Living arrangement									
	Alone or friends	20.2	23.3	18.6	21.5	30.7	37.0	36.9	50.4
	Campus dorm	8.0	6.1	3.5	4.1	5.8	4.9	4.1	5.8
	With family	71.9	70.6	77.9	74.4	63.6	58.2	59.1	43.8
Part-time jobs									
	Not at all	69.1	52.2	68.9	46.4	32.4	19.1	45.0	28.3
	Occasionally	24.3	31.9	24.1	37.4	50.6	50.9	39.4	40.2
	Often	4.1	10.3	4.7	10.8	13.7	21.8	12.6	23.1
	Very often	2.5	5.6	2.3	5.4	3.3	8.2	3.0	8.4
Self-satisfaction									
	No	15.6	11.0	7.2	3.8	24.0	16.5	25.4	18.5
	A bit	25.8	22.2	20.2	12.9	38.9	34.3	33.7	30.1
	Somehow yes	39.8	42.5	49.6	48.2	29.6	39.0	29.9	35.1
	Yes	18.9	24.3	23.1	35.2	7.5	10.2	11.1	16.3
Friends									
	Nobody	0.9	0.5	1.2	0.3	2.7	0.8	5.1	2.0
	All opposite	0.1	0.6	0.2	0.3	0.7	1.3	0.2	0.8
	Mainly opposite	7.4	13.0	5.2	4.5	0.5	2.2	0.4	1.6
	Equal	61.3	62.9	54.0	60.5	41.5	55.2	40.1	57.4
	Mainly same	27.8	21.2	35.9	32.5	24.2	29.2	24.5	28.1
	All same	2.5	1.8	3.5	1.9	30.4	11.4	29.6	10.2
Talk sex with your friends									
	Not at all	10.8	4.5	7.0	2.1	46.1	19.4	35.0	15.7
	Occasionally	53.3	39.2	47.9	28.9	48.6	59.1	55.2	55.8
	Often	35.9	56.3	45.0	69.1	5.3	21.5	9.8	28.5

Source: Authors' calculations using SELFY for Italy and NSSAA for Japan.

Note: The value is the percentage among gender and sexual experience.

Table 3. University students' profile by relationship status and gender in Italy and Japan

	Italy				Japan			
	Female		Male		Female		Male	
	No partner	Partner	No partner	Partner	No partner	Partner	No partner	Partner
Age								
Mean	20.4	20.3	20.4	20.6	19.9	20.3	20.1	20.3
Standard deviation	1.4	1.3	1.5	1.5	1.3	1.3	1.4	1.3
Siblings' gender								
Do not have	48.1	47.9	49.4	51.5	12.5	12.9	11.1	9.0
Both	7.1	7.0	6.0	5.4	17.8	15.9	16.5	18.0
Only brothers	21.9	23.6	22.5	22.3	37.4	34.2	36.7	33.3
Only sisters	22.9	21.4	22.1	20.7	32.3	37.1	35.6	39.6
Living arrangement								
Alone or friends	23.3	21.5	21.7	19.8	32.0	35.7	41.7	48.9
Campus dorm	7.0	5.7	4.1	3.6	5.3	5.5	5.1	4.5
With family	69.7	72.8	74.2	76.6	62.7	58.8	53.2	46.5
Part-time jobs								
Not at all	57.6	54.0	53.5	47.1	30.3	19.8	42.4	24.3
Occasionally	29.7	31.0	33.2	36.3	49.3	53.3	37.5	44.1
Often	7.4	10.2	8.8	11.1	16.1	19.7	16.5	21.0
Very often	5.3	4.8	4.5	5.4	4.4	7.2	3.5	10.5
Self-satisfaction								
No	14.3	9.8	5.3	3.4	24.0	15.1	26.1	13.8
A bit	23.9	22.5	15.3	13.1	38.2	34.8	32.6	30.0
Somehow yes	41.2	43.1	49.7	47.1	30.9	38.6	30.1	37.8
Yes	20.6	24.6	29.7	36.4	6.9	11.5	11.3	18.3
Friends								
Nobody	0.7	0.5	0.6	0.3	2.2	1.1	5.1	0.6
All opposite	0.3	0.7	0.3	0.2	0.4	1.9	0.3	0.9
Mainly opposite	11.4	12.3	4.7	4.9	0.7	2.1	0.8	1.5
Equal	61.7	62.9	58.7	59.6	43.3	55.0	44.3	59.2
Mainly same	24.2	21.7	33.9	32.3	24.1	30.2	23.9	30.6
All same	1.7	2.0	1.9	2.7	29.2	9.6	25.6	7.2
Talk sex with your friends								
Not at all	6.8	5.3	3.6	2.1	40.0	24.2	28.2	19.2
Occasionally	42.3	42.1	34.1	29.8	50.5	58.4	55.9	54.7
Often	50.9	52.6	62.3	68.2	9.4	17.4	15.9	26.1

Source: Authors' calculations using SELFY for Italy and NSSAA for Japan.

Note: The value is the percentage among gender and partnership status.

Table 4. The characteristics of having a sexual intercourse experience in Italy and Japan estimated by logistic regression

	Italy				Japan			
	Female		Male		Female		Male	
Age	0.005	***	0.004	***	0.013	***	0.009	***
Siblings' gender (ref: Both)								
Do not have	0.004		-0.004		-0.018	*	-0.026	*
Only brother	0.006		-0.003		-0.015	*	-0.009	
Only sister	0.004		-0.003		-0.010		-0.009	
Living arrangement (ref: With family)								
Alone or friends	0.006	*	0.005	*	0.012	*	0.028	***
Campus dorm	-0.003		0.007		0.009		0.043	**
Part-time jobs (ref: Not at all)								
Occasionally	0.012	***	0.015	***	0.014	*	0.012	+
Often	0.023	***	0.020	***	0.026	***	0.041	***
Very often	0.020	***	0.018	***	0.039	***	0.045	***
Self-satisfaction (ref: No)								
A bit	0.007	+	0.005		0.005		0.004	
Somehow yes	0.011	**	0.015	**	0.018	**	0.009	
Yes	0.016	***	0.021	***	0.010		0.013	
Friends (ref: Equal)								
Nobody	0.007		-0.017		-0.043	*	-0.028	+
All opposite	0.024		0.016		0.001		0.041	
Mainly opposite	0.011	**	-0.003		0.057	**	0.028	
Mainly same	-0.007	*	-0.002		-0.004		-0.006	
All same	-0.002		-0.014	*	-0.040	***	-0.053	***
Talk about sex with your friends (ref: Not at all)								
Occasionally	0.020	***	0.018	**	0.033	***	0.029	***
Often	0.039	***	0.037	***	0.083	***	0.066	***
Observations	3,020		3,386		1,453		971	

Source: Authors' calculations using SELFY for Italy and NSSAA for Japan.

Note: +p<0.1; *p<0.05; **p<0.01; ***p<0.001. The values are average marginal effects.

Table 5. The characteristics of having a partner at the time of the survey in Italy and Japan estimated by logistic regression

	Italy		Japan	
	Female	Male	Female	Male
Age	-0.002	0.003 *	0.007 ***	0.004 +
Siblings' gender (ref: Both)				
Do not have	-0.003	0.009	0.006	-0.012
Only brother	0.003	0.005	0.002	-0.008
Only sister	-0.005	0.002	0.013 +	0.001
Living arrangement (ref: With family)				
Alone or friends	-0.006	-0.006	0.008	0.014 *
Campus dorm	-0.013	-0.006	0.017	0.011
Part-time jobs (ref: Not at all)				
Occasionally	0.005	0.009 *	0.013 *	0.020 **
Often	0.023 **	0.016 *	0.013 +	0.022 **
Very often	-0.002	0.013	0.027 *	0.061 ***
Self-satisfaction (ref: No)				
A bit	0.020 *	0.016	0.010	0.018 *
Somehow yes	0.026 ***	0.021 *	0.022 **	0.026 **
Yes	0.035 ***	0.034 ***	0.031 **	0.038 ***
Friends (ref: Equal)				
Nobody	-0.010	-0.011	-0.026	-0.048 **
All opposite	0.048	-0.017	0.062 *	0.052
Mainly opposite	0.002	0.004	0.042 +	0.013
Mainly same	-0.006	-0.002	-0.001	0.003
All same	0.017	0.024 +	-0.044 ***	-0.042 ***
Talk about sex with your friends (ref: Not at all)				
Occasionally	0.014	0.017	0.017 **	0.003
Often	0.016	0.029 *	0.038 ***	0.018 *
Observations	2,918	3,115	1,471	981

Source: Authors' calculations using SELFY for Italy and NASS for Japan.

Note: +p<0.1; *p<0.05; **p<0.01; ***p<0.001. The values are average marginal effects.

Appendix

Table A1: The characteristics of having a sexual intercourse experience and a partner at the time of the survey in Italy estimated by logistic regression

	Sexual experience				Partnership status			
	Female		Male		Female		Male	
Age	0.004	***	0.004	***	-0.003		0.003	*
Siblings' gender (ref: Both)								
Do not have	0.002		-0.006		-0.004		0.008	
Only brother	0.005		-0.005		0.002		0.004	
Only sister	0.002		-0.005		-0.007		0.001	
Living arrangement (ref: With family)								
Alone or friends	0.006	*	0.004	+	-0.006		-0.006	
Campus dorm	-0.003		0.007		-0.013		-0.006	
Part-time jobs (ref: Not at all)								
Occasionally	0.012	***	0.014	***	0.006		0.009	+
Often	0.024	***	0.019	***	0.023	**	0.016	*
Very often	0.019	***	0.017	***	-0.001		0.013	
Self-satisfaction (ref: No)								
A bit	0.007	+	0.006		0.019	*	0.016	
Somehow yes	0.011	**	0.014	**	0.026	***	0.020	*
Yes	0.016	***	0.021	***	0.034	***	0.034	***
Friends (ref: Equal)								
Nobody	0.004		-0.015		-0.010		-0.006	
All opposite	0.021		0.017		0.044		-0.017	
Mainly opposite	0.011	**	-0.003		0.002		0.005	
Mainly same	-0.007	*	-0.003		-0.006		-0.002	
All same	-0.003		-0.014	*	0.019		0.024	+
Talk about sex with your friends (ref: Not at all)								
Occasionally	0.019	***	0.016	**	0.014		0.016	
Often	0.036	***	0.034	***	0.015		0.028	*
Mass attendance (ref: Never)								
Few times a year	-0.001		-0.006	**	0.013	*	0.007	
Sometimes a month	-0.008	*	-0.012	***	0.008		0.001	
Sometimes a week	-0.028	***	-0.029	***	-0.010		-0.003	
Observation	3,014		3,377		2,908		3,106	

Source: Authors' calculations using SELFY for Italy.

Note: +p<0.1; *p<0.05; **p<0.01; ***p<0.001. The values are average marginal effects.

