

First sexual intercourse in Italy: a shift towards an ever more personal experience?

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Abstract

This study examines circumstances and predictors of the timing of first sexual intercourse for a sample of men and women representing Italians born between 1946 and 1975. Results show that the pattern of men and especially of women has evolved through the cohorts: synchronisation between first sexual intercourse and first marriage has progressively decreased; median age at the event, after a phase of decreasing, has increased again and the most recent generations display an age at first intercourse close to that of the oldest generations but much more spread out along the age axis. Event history analysis indicates that individual characteristics (age, states occupied by the individual in the parallel social and family careers, religiousness) are important predictors of first sexual intercourse in Italy. Gender differences still remain: women's behaviour is also influenced by geographical and family context where that of men is not. The study also found that the age increase at first sexual intercourse for the youngest women is not attributable to structural changes along the cohorts. The paper suggests the appearance of new patterns that respect the individual's preferences and personal timing as explanations of the phenomenon.

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1. Introduction

As in other industrialized western countries, the last 30-40 years in Italy has been a period of great social transformation with important cultural changes. Within the framework of a general improvement in the population's living conditions and an increase in personal resources (in particular health and education) female emancipation has increased; a culture that pays more attention to satisfying individual preferences and needs has developed; the phase of transition towards assuming adult roles has lengthened for young people; certain values linked to tradition have entered a state of crisis.

This process of modernization has also brought about a liberalization of sexual behaviours. Sexuality, after having broken with reproduction, has also broken with the formation of married couples and sexual relationships have become more and more an experience that forms part of the field of personal choices. These changes have above all concerned women: female virginity has stopped being an important value and premarital relationships are no longer sanctioned; female infidelity is considered the same as male infidelity; generally the asymmetry of behaviours between males and females has been reduced. The model of entry into adult sexuality has also felt these changes: first sex is no longer regulated by outdated norms and is instead guided by individual ethics that leave the responsibility of when, with whom and in what circumstances to experience it to the individual.

However, in this field, as in other areas of relationships and family life, Italy seems to follow an autonomous evolutionary model that differentiates it from other European countries (De Sandre, 2000). Despite the relative scarcity and the fragmentation of the available sources¹, the picture that emerges shows a mixture of modernity and tradition that is not yet well defined around the edges. It is true that first sex – especially for women – has been progressively distanced from marriage and that in line with what has happened elsewhere, starting with the post war generations, age at the event has decreased (Fabris and Davis, 1978; De Sandre et al., 2000). It is also true however that in Italy: a) age at first sex has never reached particularly low levels; b) with the most recent generations, contrary to what has happened in other countries where age has continued to decrease or has stabilized at rather low values (Bozon & Kontula, 1997; Wellings et al., 1994; Laumann et al., 1994)², age at first sex has risen (De Sandre et al., 2000 e 1997; Cazzola, 1999; Buzzi, 1998).

What evolutionary model is Italy following in its transition towards more individualized forms of experiencing the event? More particularly: What factors bring forward or delay the experience of first sexual intercourse? How have such factors changed over the generations? Has their number decreased, highlighting the presence of a process of individualization of entry into adult sexuality? Are the determinants of first sex gender differentiated? Are they gender differentiated for the most recent generations too? Is the rise in age at first sex observed for the most recent cohorts only a result of changes in the composition of the population or is it also the result of an evolution of behaviours? This work shall try to answer these questions analysing data from a survey carried out in 1995-96 on a sample of men and women aged 20-49 representative of the Italian population.

The paper is organized as follows. Section 2 reviews the relevant literature. Section 3 describes the sample and the data and examines some descriptive results concerning the phenomenon of interest. Section 4 presents the analytical approach (models and independent variables) adopted in order to

¹ Apart from numerous surveys with divulging aims, in practice only two quantitative national surveys deal with sexuality in any great detail: one in 1976-77 on individuals born mainly in the first half of the century (Fabris and Davis, 1978) and one in 1996 on young people aged 18-30 (Buzzi, 1998). Other surveys on selected groups of the population or at a local level are cited in Castiglioni and Dalla Zuanna (1997). Among qualitative surveys it has to be mentioned the one carried out in 1997 in three major Italian cities on 150 young people aged 20-24 (Garelli, 2000).

² Remember that in The Netherlands, Portugal and Germany signs of a rise in age at first sex have been observed (Bozon & Kontula, 1997; Garelli, 2000).

know what the predictors of first sexual intercourse are. Section 5 analyses the results of the modelling. Section 6 contains some concluding remarks.

2. Background

There is ample empirical literature on the predictors of first sexual intercourse although a little selective. The lowering in the age at first sex, in countries in which the phenomenon has been felt the most, has been associated to an increase in nonmarital early pregnancies and in sexually transmitted diseases. This has created concern about health and, more generally, about the maturing process of a still vulnerable population such as that of adolescents. Researchers and politicians have therefore started to take an interest in adolescent sexual behaviour hoping to identify groups at risk and organize prevention services³. It is not surprising therefore that many studies on the subject have concentrated on teenagers; that the most commonly studied realities are those of the USA and the United Kingdom where very low ages at first sex are recorded (AGI, 1994; Wellings et al., 1994); that analyses on the start of sexual activity are frequently intertwined with the matter of contraception (Wilder, 2000; Cooksey et al., 1996).

Numerous factors have been found to be linked with the transition to nonvirginity.

There is evidence to show that the characteristics of context play an important role in influencing individual sexual behaviour.

Values and norms of the community to which individuals belong regulate entry into adult sexual life (Billy et al., 1994); the local opportunity structure (social disintegration, socio-economic status and availability of employment opportunities) and the normative environment have emerged as particularly important in shaping the sexual behaviour of girls (Brewster et al., 1993). Characteristics of the network of friends and peer groups have also been associated with the teenager's sexuality (Billy & Udry, 1985; Giordano 1995; Miller et al. 1997).

Parental characteristics, family relationships, and attitudes, values and norms of the family of origin have also been associated with sexual behaviour. The family is the primary place of socialization for children and adolescents. The values and norms of the family members provide a specific perspective on the meaning of sexuality (Gray & Stainberg, 1999). Moreover, since first sexual intercourse is becoming more and more a young person's event, the family, with its (material and nonmaterial) resources, contributes to the creation of opportunities that young people have to spend on the "market" of meetings with the other sex.

Multivariate studies have not however always found concordant results on the effect of the family. The interpretation is complicated also because most of the variables that are significantly related to timing of first sex are gender specific and because the effect of some factors in some populations seems to change over time.

Mixed results have been found to show that family education style influences behaviour. In some studies rates of teenage sexual intercourse are lower in families with higher levels of family attachment, involvement and supervision (Feldman & Brown, 1993; Howell et al., 1994; Miller et al., 1986; Small & Luster, 1994; Dornbush et al., 1985). However, other studies found that parental control had little impact among younger adolescents (Udry & Billy 1987). Longmore et al. (1988), on the other hand, found that the effect becomes evident if, instead of considering the family education style during the child's adolescence, the style adopted during the preadolescence is examined.

³ This may be an explanation for the limited development of empirical surveys in Italy on sexual behaviour. In fact, in Italy, teenage pregnancies are a relatively rare phenomenon.

Family socio-economic status also seems to affect the transition to sexual activity. In general the literature agrees that living in poverty is associated with early sexual activity (Hogan & Kitagawa 1985; Miller & Moore, 1990). Less conclusive results have been observed for the effects of household income: some studies found that it is significantly associated with sexual activity for girls (Bingham et al., 1990); others found it absolutely irrelevant as a predictor of early sexual intercourse for both girls and boys (Miller et al., 1997).

Another family characteristic that has often been studied is the parental level of education. It is supposed that parents with more education tend to set more goals for their children and put a higher value on achievement and work. The majority of studies seem to confirm this hypothesis: the more years of education completed by the parents or by one of them (usually the mother), the less likely it is that their teenage years will be sexually active (Miller & Sneesby, 1988; Forste & Heaton 1988; Longmore et al., 1988; Cooksey et al., 1996). In other cases however this is true for girls but not for boys (Miller et al., 1997).

Finally, family structure seems to have an effect on the timing of transition to nonvirginity. Adolescents -daughters in particular- from single parent or reconstituted families are more likely to begin sexual intercourse at younger ages than their peers from two-parent families (Hogan & Kitagawa, 1985; Stephan & Stephan, 1989; Forste & Heaton, 1988; Miller & Bingham, 1989; Smith, 1997; Sucoff & Levy-Storrs, 1999; Cooksey et al., 1996). However, Miller et al., (1997) found that a parent's instability increases the risk of first sexual intercourse for men but not for women. Older siblings are powerful role models for younger brothers and sisters. Thus, adolescents with older sexually active siblings are also more likely to begin sexual activity at an earlier age (East & Felice, 1992; Hogan & Kitagawa, 1985).

Individual characteristics constitute another group of factors of which the literature has analysed the effects. Values, the phases of the biography that the individual is living or has already lived, and his or her projects for the future are considered to have a significant influence on the timing of entry into adult sexual activity (Lagrange, 1997).

Although there are differences, low levels of education in Europe are linked to earlier sexual activity (Bozon, 1997). In the U.S.A., low educational goals and poor educational achievements are associated with greater sexual activity among both adolescent boys and girls (Miller & Sneesby, 1988). Higher expectations were associated with later sexual initiation (Jessor et al., 1983). The effect does not however appear to be universal: a more recent longitudinal study on white American teenagers suggested that educational variables are better predictors of early sexual activity for girls than for boys (Ohannessian & Crockett, 1993).

Religion has been found to be strongly related to sexual intercourse. Individuals who consider religion to be important or are regularly attending religious services are more likely to delay first sexual intercourse (Forste & Heaton, 1988; Cooksey et al., 1996). At times this effect is present only for females (Miller et al., 1997). It should however be remembered that for adolescents the effect operates in both directions: the more religious ones are less likely to engage in sexual intercourse and those who become sexually active at young ages have a tendency to become less religious (Thornton & Camburn 1989).

For Italy in-depth studies on the determinants of first sex do not exist and the few available results suffer from the generality and fragmentation of the existing sources.

If selected groups of population are not considered, the literature agrees on identifying gender and geographic area of residence as two important differentiation factors of sexual behaviour. Females have their first sexual intercourse later than men (Fabris & Davis, 1978; De Sandre et al., 1997; Buzzi, 1998); in the centre-north of the country entry into adult sexuality occurs earlier than in the south (De Sandre et al., 1997; Cazzola, 1999; D'Arcangelo et al., 1990; Buzzi, 1998). Another

factor on which the literature agrees is the relevance of religiousness: church attendance does in fact delay entry into adult sexual life (Fabris & Davis, 1978; Cazzola, 1999; Dalla Zuanna & Guerra, 1998).

Evidence for the effects of other characteristics on the timing of first intercourse has been less conclusive. The individual's level of education, for example, does not always have the same level of importance: in some works a low qualification significantly brings forward first intercourse (Dalla Zuanna & Guerra, 1998; D'Arcangelo et al., 1990); in other cases this variable is only a weak predictor (Cazzola, 1999); in yet more cases, it shows a gender specific effect and thus only for women does a negative association exist between level of education and age at first sex (Caletti et al., 1976). Analogous results emerge in reference to the role played by the individual's employment condition: students generally delay entry into adult sexuality with respect to those already in employment (D'Arcangelo et al., 1990; Cazzola, 1999) but there is disagreement as to whether this condition is a significant or weak predictor. From the low number of analyses that examine the effect of family background only a few indications emerge: a) the socio-economic condition does not seem to significantly influence behaviour (Fabris & Davis, 1978) but the father's qualification, although only slightly, is positively associated to the risk of first sex (Cazzola, 1999); b) events such as separation of parents and a premarital conception in the family favour the bringing forward of first sexual intercourse in the children, in the first case only slightly (Cazzola, 1999), in the second significantly (Dalla Zuanna & Guerra, 1998).

3. Analysing the characteristics of first sexual intercourse with the Italian FFS data

3.1 The data-set

Data for this study were drawn from the Italian 1995-96 Family and Fertility Survey (FFS), conducted from November 1995 to February 1996 as part of a larger international project promoted by the UN-ECE (UN-ECE, 1992). The Italian FFS was based on a national representative sample of 4,824 women and 1,206 men aged 20-49. In addition 602 male partners (married or in consensual union) were also interviewed but were not considered for this work. The survey gathered a great quantity of information about the interviewees (De Sandre et al., 1997 and 2000): a) objective data on socio-demographic states and events experienced by people during their lives; b) future projects for work, fertility and family; c) opinions, preferences and values at the time of the interview

Data expressly referable to first sex are not widely available. All units of the sample were asked if they had had sex and, in affirmative cases, at what age⁴. In addition, those who had experienced the event were also asked if some form of contraception was used⁵. However, considering this is one of the few national surveys and the results are retrospective, the source proves to be very interesting. In fact it gives us a picture of the sequence of the phenomenon that extends over almost thirty generations of men and women born between 1946 and 1975.

The other reason why this source proves to be interesting is that it gathered biographic information on numerous domains of people's lives. To differing degrees the survey gathered retrospective data on: the family of origin (father's qualification, mother's job, number of siblings, separation of parents, place of residence); residential autonomy (first departure from parental home); cohabitation and marriages (characteristics and start and end dates); pregnancies (characteristics and term dates); children (characteristics, dates of birth and dates of exit from the interviewee's family); education career (last qualification, date of end of full-time education); employment career (characteristics,

⁴ The questions were thus formulated: "Have you ever had sexual intercourse?" If "yes": "At what age did you have your first sexual intercourse?". In the sample: 32 males and 83 females did not answer the first question; 32 males and 70 females did not answer the second question.

⁵ This information was not used in the present study but an analysis of the variable can be found in De Sandre et al., 2000.

start and end dates of various employment conditions). The possibility of connecting such information to age at first sex allows us to further expand the context in which entry into adult sexuality took place and to study the determinants of the event with a life course approach.

The registration of the date of an (eventual) first marriage, in particular, has allowed us to build an additional variable that distinguishes between marital and non marital first intercourse. Since the taking place of first sex and first marriage were reported using different criteria (the first with age in completed years; the second with month and calendar year of the marriage) choices had to be made to decide how to identify cases of synchronization of the two events. It was decided that all dates should be changed into years of age and that first marital intercourse would be considered present in cases in which the two events occurred at the same age with no premarital conception⁶. Such approximations could obviously lead to a slight overestimation of cases of connection between the two events but the results obtained – coherent with those from other sources (Buzzi, 1998) – seem to show there are no great disturbances⁷. Some initial results on age and the context in which first sexual intercourse took place for the generations interviewed are presented in the following section.

3.2 First sexual intercourse in Italy: a preliminary description

Fig.1⁸ displays the survival functions at first sexual intercourse for men and women born between 1946 and 1975. At a first glance it is possible to make two observations. The first is that over the generations the greatest changes in the pattern of the events has affected women. The second observation concerns the evolutionary dynamism of the phenomenon. For both genders the survival curve can be subdivided into two parts: in the first – corresponding to the youngest ages (up to 20-24 years of age) – age at first intercourse initially decreases (those born around 1960) and then (those born around 1970) increases stopping just below the levels of the oldest generation; in the second part on the other hand – corresponding to the more advanced age groups – age at first sexual intercourse grows from the oldest to the youngest cohorts.

A summary of the models of entry into adult sex life of Italians born between the second half of the 1940s and the first half of the 1970s⁹ is shown in Tables 1 and 2. They present respectively: a) some synthetic measures of the pattern presented by the curves in Fig.1, and b) percentages of individuals with marital first sex by age at the event and birth cohort.

What is striking is the substantial stability of behaviour among males over the generations. Those born around 1950 have their first sexual relationship concentrated into a relatively short period of time (three and a half years) at the age of around 18 and a half. Moreover, for these men this event is clearly distinct from marriage with only 8% of them having their first sexual intercourse at the same time as marriage. It is therefore substantially an experience for young people and, based on the values of the interquartile differences, the age at the event is relatively normed. Over the generations this model does not undergo great change. Those born in the next generation register a slightly lower average age (18), a slightly reduced variability of the phenomenon (interquartile difference equal to 3.3) and a reduction to 5% of individuals with a synchronization between first sex and first marriage. Those born around 1970 return to a certain extent to the behaviour of the oldest generations: the average age rises (18.4) and so does the interquartile difference (3.5). The

⁶ The following were all therefore considered cases of nonmarital sexual intercourse: a) first sex and no marriage; b) first sex and first marriage at an age greater than that at first sex; c) first sex and first marriage at the same age but with a premarital conception.

⁷ In carrying out this operation 17 males and 360 females were also found to have an age (in years) at first sex greater than the age at first marriage. Attributing greater reliability to the date of marriage, it was decided to keep the cases with a difference equal to one year in the survey (bringing the age into line with the age at marriage) and to eliminate those with an age difference greater than one unit from the data set. For this reason 46 women and 4 men were excluded from the analyses.

⁸ The survival curves and the synthetic measures in table 1 are calculated using the life table method (Blossfeld and Rohwer, 1995).

⁹ For a comparison with other countries of these results see Bozon, 1997.

process of separation of first sex from marriage does however continue (perhaps also due to the contemporary increase in age at first marriage) and the cases of synchronism between the two events fall sharply to less than 1%¹⁰.

Women show greater dynamism in their behaviour over the generations. Those born between 1946 and 1955 show traditional behaviour typical of southern Europe: first intercourse occurs two years later (20.6) than for males born in the same period and with greater variability (four and a half years). Such characteristics are largely determined by the marriage model: in fact almost half (42%) of first sexual intercourses coincide with marriage. The next generation seems to be located in the wake of a process of modernization similar to other countries: average age decreases by over a year (19.4), the variability of the phenomenon decreases (interquartile difference equal to 4.1), and the cases of connection between first sex and marriage considerably decrease (23%). But for those born around 1970 this tendency is interrupted and a new scenario presents itself that seems to mix – with a certain degree of “liberty” – innovation and tradition. Facing another reduction in cases of synchronization between first sex and marriage (11%), the age at the event unexpectedly rises again¹¹ and its dispersion along the age axis increases considerably (interquartile difference equal to 6.1). It is as if women of this generation refuse norms concerning age at first sexual intercourse outside marriage and in the name of a greater discretion are prepared to have sex even at relatively higher ages than in the past. As a result of all this, behaviour of males and females, that in the intermediate generations had drawn nearer, in the youngest generations differ once again.

4. Modelling the determinants of first sexual intercourse

4.1 The models

Sexual intercourse - when the age at its experience was reported in completed years - may be interpreted as a discrete-time nonrepeatable event. In this case logistic regression - in particular dichotomous logistic regression - is the best model for estimating the predictors of first sexual intercourse (Yamaguchi, 1991; Agresti, 1990). This approach has several attractive features: firstly, it allows us to include right censored cases, not yet reporting intercourse experience in the analysis¹²; secondly, several antecedent variables may be constructed as time-varying covariates allowing a more precise test of their relationship to the timing of the first sexual intercourse.

In the model with a dichotomous dependent variable (see Tabs. 4 and 6), the dependent variable has only two categories: having had or having not had first sexual intercourse. In logistic regression the dependent variable is transformed into the natural logarithm of the odds of being in one category versus the other and the model provides maximum likelihood estimates that fit independent variables to the logistic response function. In this model the coefficients represent reductions or increases in the log odds of the conditional probability of being in one category (having had first intercourse) of the dependent variable as against the other (not having had intercourse). The coefficients are interpreted relative to the omitted reference category of the predictor variable. The exp of the coefficient shows the effect of independent variables on the odds of having had first intercourse. For example the value 1.64 of Mod. 1 in Tab. 4 corresponding to the category "yes" of the covariate "Left parental home when single" means that having experienced residential

¹⁰ The fact that this measure has been calculated only on cases with first sexual intercourse and on generations censored at 20-24 or 25-29 years of age should not result in too great an overestimation of such a percentage, due to the fact that only 13% of the individuals of these cohorts have not had the first intercourse.

¹¹ Previous elaboration of the same data with five-year classes of birth cohorts (De Sandre et al., 2000) indicates that the average age falls progressively from those born in 46-50 to those born in 61-65; for women born in 66-70 the median age rises and the trend also continues with those born in the next five-year group (71-75).

¹² The event history data set which was created included an observation for each year from age 10 to the final interview age or age at first intercourse whichever came first. The dependent variable was coded dichotomously with 0 representing each age through the year prior to first intercourse and 1 representing that age.

autonomy increases the "risk"¹³ of men having had their first intercourse by 64% with respect to those who have not had this experience. For continuous variables the exp parameters reflect the impact of a one-unit increase in that variable.

A polytomous logistic regression model was also run for women only (see Tab. 6).

The women of the sample still present a relatively high proportion of cases of connection between first intercourse and first marriage; furthermore, this proportion changes through the birth-cohorts. The goal is to analyse the determinants of first sexual intercourse distinguishing between marital and non marital intercourse. In the polytomous logistic model the dependent variable was broken down into three categories: a) no first intercourse, b) having had a non marital first intercourse, c) having had a marital first intercourse. The coefficients in this model represent the log odds of having had a specific sexual intercourse (non marital or marital) relative to not having sexual intercourse (basic category of the dependent variable). Thus the beta coefficients may be interpreted as the amount of change in the log odds associated either with a unit change in the predictor variable (if continuous), or with being in one category versus another of the predictor variable (if categorical).

4.2 The independent variables

Table 3 lists the independent variables used in the multivariate analyses (dichotomous or polytomous models). Ideally they represent conditions at the time of first intercourse and can be grouped into three ample categories: a) individual characteristics (age, gender, stage of scholastic career, employment state, stage reached in process of residential autonomy from family of origin, religiousness); b) characteristics of the family of origin (father's level of education, mother's participation in the labour market, number of siblings); c) other contextual factors (place of residence during adolescence, birth cohort).

Most individual characteristics are time-varying variables. Age, according to the literature, is one of the variables that best predicts first sexual intercourse. Since it is assumed its effect on the risk of experiencing the event is not monotonous, the variable has been grouped into five classes that identify a behaviour that varies from very early (before 18 years of age) to very late (24 and above) entry into adult sexuality. To test the presence of monotonous type interactions between age and other explanatory variables, some models also contain an added term to express age in terms of quantity.

Gender is another variable that is assumed to have a high discriminating capacity in terms of sexual behaviour, especially if we consider that Italy belongs to southern Europe. Since it is considered that the effect of some covariates can vary according to the individual's gender, the variable has been used as a stratification factor and distinct models have been elaborated for males and females.

The stage reached in the scholastic career is analysed with two time-varying covariates: being or no longer being in education and educational attainment. The first registers when a person stops being a student¹⁴; the second shows the qualifications attained at every age up to the highest qualification attained¹⁵.

¹³ The odds ratio is a good estimate of the relative risk (the relationship between two absolute risks) when the absolute probability of an event $E - P(E)$, is low. The estimate gets worse as the level of $P(E)$ increases. For further details see Agresti, 1990.

¹⁴ Information was available on the date (month and calendar year) of the definitive exit from the basic education system (if it had occurred), so those interviewed were considered to be students until the age at which they left the system or, if censored with respect to this variable, until the age at interview.

¹⁵ The variable was constructed using two original variables (the highest qualification obtained by the interviewee and the date on which it was obtained) and by attributing possible intermediate changes in qualifications to ages defined by the standard Italian education system. The choice to use a time-varying covariate for this individual dimension rather than level of education reached by the interviewee at the time of the survey avoids the problem of endogenous factors. However, considering that first sexual intercourse is concentrated into a restricted age range (17-23) it is worth

The variables on state of employment and residential autonomy are the last two time-varying covariates. The first reveals the presence of employment experience during individuals' lives¹⁶; the second registers whether or not the individuals have ever lived away from the parental home while single¹⁷.

Religiousness – shown by adhesion to a religion and regular attendance at religious services – is the only individual characteristic observed at the time of the interview. In a life course logic the use of such data would not actually be correct but because this is the only information available on the subject of religion and considering its role recognised in the literature in influencing sexual behaviour, it was considered opportune to add it to the model¹⁸.

Not many variables describe family context but there are enough to identify some socio-cultural aspects of the family of origin. These are: father's qualification; presence of extra-familial employment of the mother during the child's adolescence; number of siblings. Although available, a variable that shows the dissolution of the parental union and that the literature considers to be a strong predictor of early first sexual intercourse was not included in the model. The low number of divorces and separations shown in the survey is the reason for this choice¹⁹.

Only two variables indicative of geographical and historical contexts belong to the third group of variables: the birth cohort and the geographic region of residence at the time of adolescence of the interviewee. The first variable identifies three ten-year cohorts centred around 1950, 1960 and 1970; the second distinguishes between the two great divisions of the Italian territory, the Centre-north and the South.

It is not easy to put forward hypotheses on the determinants of first sex for the generations considered by the survey for essentially two reasons: a) age at entry into adult sexuality registered in Italy is relatively high and the factors that can differentiate between behaviours in such a context can be very different from those identified in the literature for countries with a consolidated model of low age at the event, in which precocity may indicate social problems²⁰; b) Italy is going through its own transition towards less traditional family behaviours (De Sandre et al., 1997; Billari & Ongaro, 1999) and it is possible that the mixture of traditional and innovative behaviours hide basic tendencies.

Nevertheless, the following hypotheses on the effect of the above mentioned variables can be put forward.

1. Age and religiousness are two important predictors of first sex. The first variable should have a non monotonous impact with greater risks in the 18-21 age band. The second variable should be negatively associated with the experiencing of the event. Less sure is the fact that over the

highlighting the fact that this variable can also create some problems (association with age and the condition of student). To overcome these, two categories of education have been identified: medium-low (primary and middle school) and medium-high (short-cycle secondary school, long-cycle secondary school and university).

¹⁶ In order to construct this variable the starting date of first job was used.

¹⁷ In Italy most cases of first parental home autonomy coincide with the start of first union. Therefore, to identify the cases of first residential autonomy when single, it was necessary to construct an *ad hoc* variable comparing the date of first exit from the family of origin with the starting date of first union. The change in state of this time-varying covariate was therefore only observed in cases where first housing autonomy occurred before first union.

¹⁸ The (strong) hypothesis is that the current answers reflect behaviours that were also present in the period in which the individual risked experiencing the event in question. It is known that the use of this variable – for those who have already experienced first sex – could overestimate the importance of religiousness and at its origin this could result in a selection of the more religious people that becomes stronger as the age of the interviewee increases.

¹⁹ Remember that the parents of those interviewed were born in the first half of the 20th century and that the law in Italy allowing divorce dates back to 1970.

²⁰ Here precocity may indicate for example only a propensity for innovative behaviour.

generations the role of religiousness eases although it is true that, despite secularization, catholic ethical values are not ignored by young people in the most recent generations²¹.

2. Variables of the individual biography should have an impact on the start of adult sexuality. Having experienced events of the process of transition into adulthood such as exit from the school system, having had work experience, or having lived away from the parental family should accelerate entry into adult sexuality. It is however possible that some of these events (leaving school or parental home autonomy) lose their importance as predictors as age increases.

3. It is less certain, on the other hand, the effect of qualifications. It is probably negatively associated with experiencing first sex and particularly for women who – in a southern European society such as the Italian one – are pushed more than men into choosing between investing in themselves or starting a relationship. Nevertheless, it is also possible that the level of education reached has little influence on sexual behaviour and that at these ages most variability is absorbed by the condition of being or not being a student²².

4. The characteristics of the family of origin should be important in shaping sexual behaviour of young Italians, especially for women. Some uncertainty surrounds the impact of the father's qualification due to the multiplicity of dimensions it expresses. As a proxy of economic and cultural status, in a situation of evolution of behaviours such as is the case in Italy, the variable could be positively associated with the experiencing of the event; as an expression of greater resources for the care and control of children²³ the relationship between the two variables could however also be negative. A mother in employment and with a numerous family, indicating less control over the children, should favour earlier first sexual intercourse at least for women.

5. As concerns the effect of the geographical variable, different behaviours are expected to persist between the north and south of the country. In the South lower opportunities for personal achievement and the presence of more traditional norms should slow down, above all for women, entry into adult sexual life.

6. Less certain hypotheses concern the role of the variable that expresses the birth cohort after the differences of the family of origin and above all the individual biography have been kept under control. It is in fact possible that the increase in average age at first intercourse of those (women) born around 1970 results only from an evolution of the composition of the young population over the generations and in particular from an increase in the percentage of those who extend their education career and length of stay in the family (Ongaro, 2001). It is however possible that, even after excluding the weight of structural factors, the most recent generations have in fact inverted the trend of behaviour with respect to those who preceded them.

7. In the hypothesis that Italy is also moving towards a greater individualization of behaviours it is assumed finally that over the generations: a) the differences between men and women diminish; b) the set of individual and familial factors that influence the age at first sex is reduced.

5. The results

5.1. Determinants of first sexual intercourse for men and women.

Table 4 provides the determinants of the first sexual intercourse for men and women, independently of whether or not the first sex took place before or at the same time as first marriage. Model 1 presents only the main effects of the covariates. Model 2 is different from model 1 in that it also tests the presence of an interaction between age and educational status of the individual. For this reason another covariate that estimates the linear effect of age is added into the model.

²¹ In 1996 a sample representing young people born between 1965 and 1977 showed that 26% of those who had not yet had sexual intercourse stated that this was (also) due to their religious beliefs (Buzzi, 1998, p.75).

²² Remember in fact that, given the ages at which first sex most frequently occurs, the time-varying covariate does not quite cover – if not for those who have already left the school system – plans to invest in educating oneself.

²³ Mother's education should also be positively correlated to this variable.

The results reveal that different factors influence the probability of experiencing first sexual intercourse.

For males individual conditions are particularly telling (mod.1). Age remains the variable with the strongest effect, even after controlling the other characteristics, and its effect is not linear. The 18-19 year-olds are those most at risk of having sex. Before this age the probability of the event taking place is at its lowest level; after this age probability gradually decreases as age increases. Other individual conditions are however relevant. As was suggested, experiencing events that mark stages in the process of transition towards maturity is important in order to accelerate entry into adult sexual life: having left the school system; having had some sort of work experience; having had an independent home bring forward the first sexual intercourse. Level of education on the other hand seems to be relatively unimportant: the odds ratio of those with a medium-high qualification is inferior to the unit but it is not significant. The effect of school career variables is better understood examining the results of model 2. This in fact shows that the greatest risks connected to having left the school system decrease as age increases. After age, religion is the second most important variable in foreseeing the event. As detachment from religious practices grows the risk of experiencing first sex progressively increases. The male model of entry into adult sexual life is therefore also strongly conditioned by value references expressed by religious ethics.

Context influences sexual behaviour of young males less than individual characteristics. The family of origin is important in relation to its size and socio-economic level. From the combined analysis of results it would seem that those most at risk of early sexual intercourse are children of middle class families. Having siblings is important for socializing with other young people and entering into adult sexual life sooner but if there is only one sibling the risk is greater (single children enter latest into adult sexual life). Children whose father has a medium-low qualification or, better, a medium-high qualification equally have a higher probability of having first sex than those whose father has very low or very high qualifications²⁴. The social role of the mother is instead entirely insignificant. The rest of the context (geographic area in which the young person has lived as a teenager and generation to which he/she belongs) is of no importance in determining the moment in which males have their first sexual experience.

For women as well the individual biography is important in foreseeing the probability of having first sex. For them, all time-varying variables are significant. Age is the most important factor and as with males its effect curves downwards: different from males however is the fact that the highest risks are in the 20-23 age group. The experiences which bring forward the moment of first sex are in order: having finished studying (this is more important than for males but as with males such an effect decreases as age increases); having had the possibility to leave the parental home; having had some sort of work experience. Differently from males, having a medium-high qualification delays first sexual intercourse. This would seem to confirm the fact that women give more importance to first sexual intercourse than men. As with men, religion has a great influence on sexual behaviour and churchgoers experience the event later.

Context affects women with different intensity and modalities than for men. Firstly, the characteristics of both parents are important. In general first sexual intercourse occurs sooner if the young person lives in a more "open" family on a social and cultural level. This is suggested by the fact that the risks of first sex increase when the mother has had work experience²⁵ and as the father's qualifications increase. Curiously though, having siblings does not seem to be important in determining the moment of first sexual intercourse. Secondly, the extra-familial context is important in determining behaviour of females. In the South women have sexual intercourse later than in the North (the "risk" drops by 45%) where women are less subject to traditional social

²⁴ For further considerations on the effect of this variable see section 5.3.

²⁵ Another explanation of the importance of a mother's job could be that working mothers exercise less control over their daughters. Moreover, the effect of the father's qualification could be explained in economic terms: in this case young people from economically advantaged families would have more opportunities for social contact.

norms. The birth cohort is also important: women belonging to the intermediate generations have a 40% greater "risk" of having first sex than those born in the previous decade or the following one. Such a result allows us to state that the generation trend of the median age at first intercourse observed in tab.1 for women does not depend solely on structural changes that have taken place over the last 30 years in the young population or their families. The increase in schooling, the delay in entry onto the labour market, and the socio-economic growth of families in particular are not therefore the only factors responsible for the rise in the average age at first sexual intercourse observed in the generations of women born around 1970. Other cultural and structural factors add to this result.

5.2 A closer look at the behaviour of women: determinants of first non-marital intercourse

Tab.5 presents the results of a polytomous logistic model applied only to the sample of women: the dependent variable distinguishes the case in which first sex is non marital from the case in which the event is marital; the covariates used are the same as those used in mod.1 of Tab. 4. With this model the intention is to keep an important source of heterogeneity linked to the way in which first sex takes place among women under control (see Tab.2) and to more clearly identify the determinants of first sex when it is experienced separately from marriage.

The factors that influence the probability of experiencing first sex out with marriage are the same as those already identified in mod.1 of Tab. 4. All the individual variables are important: age still has a curved effect but the "risks" are spread over a slightly wider age span (18-21); having experienced events of transition into adulthood make the event more probable; a medium-low education level and a weak or non existent adherence to religious practices produce the same effect. The role of context is also the same: children of fathers with a high level of education and mothers working outside the domestic environment have a higher "risk" of experiencing first non marital sex; at the same time living in the centre-north of the country or being born between 1956 and 1965 increase the "risk" of experiencing the event.

Col.2 of Tab.5 shows the determinants of first sex when it coincides with marriage (vs. no intercourse). It is immediately clear that this event is regulated by different factors from those that effect the experiencing of first sex out with marriage. Here the telling variables are above all the individual ones. The birth cohorts also play an important role: the "risk" of first marital intercourse decreases over the generations and with those born around 1970 it falls to very low levels. This result, together with the result concerning cases of first non marital sex, allows us to conclude that in fact the most recent generations generally show a lesser propensity towards sexual intercourse than the women before them, and this after taking into consideration structural changes that have affected the female population over the last 20 years.

Finally col.3 of Tab. 5 better defines the role of covariates in directing the behaviour of women towards intercourse away from marriage or alternatively coinciding with marriage²⁶. From this, the most important factors for intercourse out with marriage are: being born around 1970 and being children of fathers with a high level of education. On the other hand, the characteristics that move more towards a traditional first sexual experience are: being over 20; having left basic schooling; living in the South.

²⁶ This column expresses the "risks" of having first non marital intercourse versus the "risks" of having a marital one. As an example the value 0.63 corresponding to the geographic area South indicates that for a woman of the South, the probability of having first sex as a single woman rather than when married is 37% lower than in the North.

5.3 Does an evolution of the determinants exist over the birth cohorts?

The determinants of first non marital sex for women undergo some changes over the generations (Tab. 6). Firstly, as with other conditions, the modal age at the event decreases (from 20-21 to 18-19)²⁷. Secondly, possession of a medium-low qualification loses its accelerating effect with the youngest generations²⁸. Thirdly, the role of the family of origin's characteristics evolves. The father's level of education from irrelevant (those born 1946-55), firstly (cohorts 1956-65) becomes positively associated to the "risk" of first sex, then (1966-75) registers higher "risks" only for daughters of parents with a high level of education. The presence of a mother employed in extra-domestic activities begins to be of importance only with the most recent generations. On the other hand, family size loses its importance over time. In short, the experiencing of first sexual intercourse by single women born in the most recent years: a) is still strongly conditioned by the biography and individual values; b) can not yet be totally separated from the family environment (it is noted that among other things the – positive – effect of housing autonomy becomes clearly more noticeable over the generations); c) is more likely to be experienced among young people belonging to the upper-middle class²⁹.

An analogous elaboration for the male sample – which is not presented here for reasons of space – shows that among males the role of the family also changes over the generations. The father's qualifications, that are not initially (those born 1946-55) relevant³⁰, begin to be of importance for those born in 1956-65 (with probability of first sex higher among children of fathers with an intermediate education) and for those born around 1970 show a positive connection to the probability of first sex. On the contrary, over time, family size and parental home independence become less and less useful in predicting behaviour. Finally it should be highlighted that, although no coefficient is statistically significant, over the generations a high qualification changes from being a delaying factor to being an accelerating factor for the event. Male entry into adult sexual life for the most recent cohorts is less controlled by the family of origin than for females but not entirely independent. How can the increasing chances of experiencing first sexual intercourse as the family of origin's socio-economic level grows be interpreted? Considering the results obtained for women, firstly it is possible that a matching mechanism operates among young people belonging to the most privileged classes. One can not however exclude the possibility that another mechanism connected to the growing decisional autonomy of women in sexual matters operates. It can therefore be suggested that choice of partner for entry into adult sexual life is also regulated by a selection process that takes the young male's heritage into account. When the length of stay in the family is extended and numerous events of transition into adulthood are delayed, the heritage expands beyond the individual sphere and encompasses the characteristics of the family of origin as well.

²⁷ Nevertheless the impact of the age decreases through the cohorts.

²⁸ The positive value – statistically insignificant – of the coefficient seems to indicate if anything that the highest risks of experiencing the event belong to those with a higher education.

²⁹ This was also true for past generations but now a dichotomy exists between this group and the others.

³⁰ The coefficients are not statistically significant but it should be noted that the values indicate the lowest "risks" of first sex concern children of fathers with a high level of education.

6. Concluding remarks

Despite the weakening of certain traditional ethical principles that regulated the experience of first sexual intercourse, the model of entry into adult sexuality in Italy is still different from those of other continental and southern European countries. If it is in fact true that (for women) sexual initiation is separating itself from marriage, it is also true that such an event: a) is certainly not the first of the events of transition into adulthood in order of time and the experience occurs at relatively high ages; b) is not subject to simple age norms or to forms of emphasized individualization of behaviours since its occurrence is influenced by biographic and contextual factors; c) still assumes different meanings for the two genders.

The mix of innovation and gender also continues among the most recent generations. Moreover, from a dynamic point of view, the behaviour of those born in the 1966-75 period may even seem contradictory if compared to those of the preceding generations. With this cohort the break between first sex and marriage is completed. In these same cohorts however: a) men are less conditioned by the context variable than women; b) the set of factors that influence behaviour, although different from the past, are no less numerous; c) age at first sex increases for women. How can we interpret such a scenario in light of the evolutionary process that has taken place over the last 20-30 years? Some explanations will now be put forward.

The analyses carried out in this work have shown that the increase in age at first sex of the birth cohorts around 1970 do not depend exclusively on some of the changes in composition of the young population (increase in schooling, delay in entry onto labour market, lengthening of stay in family of origin) or of the family of origin of the young person (higher education level of parents, increase in number of working mothers) that have taken place over recent decades. The fear of sexually transmitted diseases and in particular HIV also seem to be a weak deterrent for delaying first sex: among these generations the percentage of those who have used contraception at first sex is rather high³¹ and the fear of diseases does not seem to be one of the principal reasons for delaying the event (Buzzi, 1998; Garelli, 2000).

It is more likely on the other hand that these generations manifest second thoughts about behaviour that “breaks” with tradition as expressed in the previous generations. A new and more relaxed attitude towards sex – perhaps because over time sex has lost its strong transgressive connotations, perhaps as a reaction to the sexual revolution of the late 60s and 70s – has already been suggested also for other European populations that show signs of a rise in age at first sex (Lagrange & Lhomond, 1997; Garelli, 2000). For Italy however this rethink could have a peculiar value given the strong traditional background in which the new behaviours are inserted.

The generation that best interpreted the need to “break” with the past seems to be those born around 1960. It did not however greatly affect the culture of the society. The generation born a decade later repairs the break with the past and places the new behaviours over those that have always characterized Italian society. With this generation first sex has lost its ideological connotations and is treated as a personal experience to have “when the time is right”, “when you are ready”, in the framework of slackened but not disregarded traditional norms. It is not therefore surprising (Buzzi, 1998; Garelli, 2000) that among those born between 1966 and 1975: a) a different motivational involvement still persists for men and women (strong emotional involvement for the latter in choosing the partner)³²; b) the loss in value of female virginity is recognised more often by women than by men; c) values and ethics are still the most frequent reasons for delaying first sex. Again, it

³¹ A percentage varying from 62% (66-70 cohorts) to 75% (71-75 cohorts) of women used a method of contraception (De Sandre et al., 1997).

³² On this subject we cannot exclude the possibility that, following growing female autonomy, the starting model for women has in some way conditioned the male model as well, slowing down the adoption of behaviours that are too innovative.

is not surprising that among the same cohorts the idea of premarital sex is accepted but that (for women) the age interval in which it is distributed widens and on average increases. Finally, it is not surprising that among these generations young people who more than anyone else experience first sex earlier are children of fathers with a high qualification: experiencing first sex at a relatively low age is still innovative behaviour that can initially be sustained without too many social costs above all by the most privileged classes.

Finally we cannot rule out the possibility that the phenomenon of the growing postponement by young Italians (Ongaro, 2001) in taking on adult roles has further slowed down and autonomously contributed to slowing down the spread of innovative behaviours in the sexual field. Here we do not wish to recall the relationship – already documented in the work – between increase in age at certain events and delay in first sex. What is instead suggested is that: a) the lengthening of transition into adulthood may express a more general propensity to refuse personal obligations and responsibility that could have repercussions on the emotional-sexual relationship; b) persistence, at least for women, of emotional involvement in the choice of partner for first sex, maintains a certain link between age at sexual initiation and (delayed) start of first union.

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Table 1: Timing of the first sexual intercourse by gender and birth-cohort. Quartiles and survivors at different ages

Quartiles:	MEN				WOMEN			
	1946-'55	1956-'65	1966-'75	TOTAL	1946-'55	1956-'65	1966-'75	TOTAL
Q₁	17.18	16.82	17.06	17.02	18.77	17.90	18.26	18.26
Q₂=Median age	18.55	18.02	18.38	18.32	20.63	19.40	20.34	20.16
Q₃	20.67	20.08	20.55	20.45	23.30	21.96	24.38	23.12
Q₃-Q₁	3.49	3.26	3.49	3.43	4.54	4.06	6.12	4.87
Survivors at exact ages:								
S₁₅	0.9541	0.9377	0.9525	0.9482	0.9900	0.9838	0.9881	0.9872
S₁₇	0.7768	0.7263	0.7602	0.7540	0.9230	0.8638	0.8935	0.8925
S₁₉	0.3976	0.3008	0.3643	0.3533	0.7185	0.5376	0.6351	0.6279
S₂₁	0.2080	0.1653	0.2102	0.1947	0.4469	0.3126	0.4327	0.3965
S₂₃	0.1346	0.1138	0.1284	0.1261	0.2687	0.1978	0.3055	0.2559

N.B.: There were 64 men and 153 women with missing response to question on first intercourse or age at first intercourse.

Table 2: Individuals whose first sexual intercourse occurred in the year they married. Percentages by gender, birth-cohort and age at the intercourse

	MEN								WOMEN							
	1946-'55		1956-'65		1966-'75		TOTAL		1946-'55		1956-'65		1966-'75		TOTAL	
Age at first intercourse	%	Total cases	%	Total cases	%	Total cases	%	Total cases	%	Total cases	%	Total cases	%	Total cases	%	Total cases
≤ 17	0.00	119	0.00	183	0.00	184	0.00	486	22.93	205	8.21	402	1.71	351	8.98	958
18-19	2.13	94	0.00	91	0.00	124	0.65	309	28.34	367	18.75	448	4.63	432	16.68	1247
20-21	0.00	51	6.67	45	1.96	51	2.72	147	41.67	324	30.20	298	15.87	252	30.32	874
22-23	31.82	22	25.00	12	0.00	20	18.52	54	61.35	207	35.61	132	30.51	118	45.95	457
≥ 24	53.33	30	40.00	25	50.00	2	47.37	57	60.64	249	46.77	186	46.15	65	53.60	500
TOTAL	7.91	316	4.49	356	0.52	381	4.08	1,053	41.72	1,352	23.26	1,466	10.84	1,218	25.69	4,036
% with sexual intercourse	99.08	327	96.75	369	86.65	442	93.50	1,138	97.22	1,403	95.98	1,542	72.56	1,680	87.85	4,625

N.B.: There were 11 men and 27 women with missing response to question on marriage or age at marriage

Table 3: Independent variables used in the multivariate regression analysis: percentages*.

	Total cases and percentages	
	MEN	WOMEN
Age at first sexual intercourse (individuals with intercourse)	1,064	4,063
≤ 17	45.96	23.68
18-19	29.32	30.91
20-21	13.91	21.76
22-23	5.17	11.30
24 and more	5.64	12.36
Frequency of church attendance	1,126	4,586
Often	18.12	32.44
Few	15.90	18.41
Hardly ever	38.81	32.33
Never	27.18	16.82
Completion of education**	1,138	4,624
No	14.30	13.06
Yes	84.71	86.84
Educational level**	1,138	4,624
None/Primary/Junior high school	14.30	45.24
Senior high school/University degree	57.65	54.76
Employment experiences**	1,138	4,624
No	13.71	27.14
Yes	86.29	72.86
Left parental home when single**	1,123	4,559
No	77.29	85.70
Yes	22.71	14.30
Father's educational level	1,115	4,426
None/Primary	60.90	63.26
Junior high school	21.52	17.74
Senior high school	12.83	14.01
University degree	4.75	4.99
Mother's working experiences	1,121	4,567
Never	56.38	53.21
Yes, occasionally	16.86	15.65
Yes	26.76	31.14
Number of siblings	1,137	4,615
0	8.87	7.84
1	34.39	32.37
2 or more	56.64	59.78
Birth cohort	1,138	4,625
1946-'55	28.73	30.34
1956-'65	32.43	33.34
1966-'75	38.84	36.32
Geographical area of origin	1,107	4,471
North/Center	62.69	61.87
South/Islands	37.31	38.13

* Individuals with missing response to question on first intercourse or age at first intercourse are excluded.

** Time-varying covariate: frequencies at the time of interview.

Table 4: Determinants of the first sexual intercourse for men and women. Logistic (dichotomous) model, odds ratio estimates,

Covariates	MEN		WOMEN	
	Mod. 1	Mod. 2	Mod. 1	Mod. 2
Age (reference: ≤ 17)				
	***	***	***	***
	***	**	***	***
	***	***	***	***
	***	***	***	***
Age (linear effect)	-	1.55	-	***
Frequency of church attendance (reference: Often)				
Few	1.69	***	1.87	***
Hardly ever	2.02	***	2.17	***
Never	2.21	***	2.38	***
Completion of education (reference: No)				
Yes	1.49	***	1.73	***
Educational level (reference: None/Primary/Junior high school)				
Senior high school/University degree	0.87		0.71	***
Employment experiences (reference: No)				
Yes	1.80	***	1.29	***
Left parental home when single (reference: No)				
Yes	1.64	***	1.33	**
Father's educational level (reference: None/Primary)				
Junior high school	1.25	**	1.27	***
Senior high school	1.42	***	1.32	**
University degree	1.24		0.97	***
Mother's working experiences (reference: Never)				
Yes, occasionally	1.10		1.17	**
Yes	1.09		1.14	***
Number of siblings (reference: 0)				
1	1.31	**	1.46	***
2 or more	1.24	*	1.46	***
Birth cohort (reference: 1946-'55)				
1956-'65	1.01		1.05	***
1966-'75	1.01		1.06	***
Geographical area of origin (reference: North/Center)				
South/Islands	0.91		0.89	***
(Age-16) × Education completed	-	0.82	***	-
				0.88
-2 Log-likelihood	850.13	1251.92	4843.99	5195.29
Degrees of freedom	21	23	21	23

*p<0.10; **p<0.05; ***p<0.01

Tab. 5: Determinants of first sexual intercourse for women. Polytomous logistic model (nonmarital and marital intercourse), odds ratio estimates

Covariates	Nonmarital first intercourse Vs No intercourse (1)	Marital first intercourse Vs No intercourse (2)	Nonmarital first intercourse Vs Marital first intercourse (3)
	Age (reference: ≤ 17)		
18-19	7.63 ***	9.74 ***	0.78
	7.70 ***	16.69 ***	0.46
	5.53 ***	20.77 ***	0.27
	2.35 ***	11.79 ***	0.20
Frequency of church attendance (reference: Often)			
Few	1.44 ***	1.37 ***	1.05
Hardly ever	1.84 ***	1.46 ***	1.26
Never	2.26 ***	1.55 ***	1.46
Completion of education (reference: No)			
Yes	1.91 ***	3.20 ***	0.60
Educational level (reference: None/Primary/Junior high school)			
Senior high school/University	0.90 *	0.71 ***	1.27
Employment experiences (reference: No)			
Yes	1.48 ***	1.10	1.34
Left parental home when single (reference: No)			
Yes	1.93 ***	1.34 **	1.44
Father's educational level (reference: None/Primary)			
Junior high school	1.15 **	0.99	1.16
Senior high school	1.17 **	0.83	1.41
University degree	1.40 ***	0.81	1.72
Mother's working experiences (reference: Never)			
Yes, occasionally	1.09	1.07	1.02
Yes	1.18 ***	1.00	1.18
Number of siblings (reference: 0)			
1	1.10	1.65 ***	0.67
2 or more	1.06	1.45 **	0.73
Birth cohort (reference: 1946-'55)			
1956-'65	1.39 ***	0.95	1.46
1966-'75	0.96	0.28 ***	3.43
Geographical area of origin (reference: North/Center)			
South/Islands	0.51 ***	0.81 **	0.63
-2Log-likelihood	3586.80	1770.40	
Degrees of freedom	21	21	

*p<0.10; **p<0.05; ***p<0.01

Tab. 6: Determinants of first non marital intercourse for women of different cohorts. Dichotomous logistic model, odds ratio estimates

Covariates	1946-'55	1956-'65	1966-'75
Age (reference: ≤ 17)			
18-19	10.09 ***	6.84 ***	6.71 ***
	14.93 ***	7.44 ***	5.01 ***
	11.48 ***	4.76 ***	3.73 ***
	3.62 ***	1.95 ***	2.02 ***
Frequency of church attendance (reference: Often)			
Few	1.44 ***	1.24 **	1.73 ***
Hardly ever	1.76 ***	1.43 ***	2.47 ***
Never	2.22 ***	2.09 ***	2.53 ***
Completion of education (reference: No)			
Yes	1.68 ***	2.66 ***	1.61 ***
Educational level (reference: None/Primary/Junior high school)			
Senior high school/University	0.73 ***	0.89	1.14
Employment experiences (reference: No)			
Yes	1.62 ***	1.33 ***	1.62 ***
Left parental home when single (reference: No)			
Yes	1.60 ***	1.95 ***	2.41 ***
Father's educational level (reference category: None/Primary)			
Junior high school	0.98	1.24 **	1.13
Senior high school	1.05	1.37 ***	1.11
University degree	1.24	1.57 ***	1.34 **
Mother's working experiences (reference: Never)			
Yes, occasionally	1.23 *	0.97	1.19 *
Yes	1.05	1.10	1.31 ***
Number of siblings (reference: 0)			
1	1.38 **	0.99	1.03
2 or more	1.32 *	0.88	1.07
Geographical area of origin (reference: North/Center)			
South/Islands	0.57 ***	0.54 ***	0.47 ***
-2Log-likelihood	1083.62	1274.94	1293.21
Degrees of freedom	19	19	19

*p<0.10; **p<0.05; ***p<0.01

Fig. 1: First sexual intercourse: survivor functions (life table estimation) by gender and birth cohort

