



Department of Statistical Sciences
University of Padua
Italy

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The outcomes of a couple partnership: the importance of sexuality in the transition from dating to cohabitation, marriage or disruption

Silvia Meggiolaro
Department of Statistical Sciences
University of Padua
Italy

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Keywords: relationships, sexuality, cohabitation, marriage, relationship disruption, event history analysis.

Contents

1. Introduction.....	1
2. Background.....	2
2.1. The social context of union formation in Italy.....	2
2.2. Union disruption in Italy.....	3
2.3. Orientations and attitudes about sexuality in Italy.....	3
3. Connections between sexuality and relationship development.....	4
4. Data.....	5
5. Methods.....	7
5.1. Event history models.....	7
5.2. Explanatory variables.....	7
6. Results.....	12
7. Discussion.....	14
References.....	15

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1. Introduction

First marriages in Italy have been characterized by a decline of the first marriage rate from 7.4 marriages per 1000 population in 1970 to 4.3 in 2003 (Council of Europe 2004). At the same time, the mean age at first marriage increases for both genders from 27.1 in 1980 to 30.4 in 2003 for men and from 23.9 in 1980 to 27.4 in 2003 for women (Council of Europe 2004). Such trends are even more significant when taking into account that the decrease and postponement of marriages are only recently compensated (with some decades of delays in comparison with other countries, Sabbadini 1997) by the diffusion of alternative forms of unions, such as cohabitation (Rosina 2002; Rosina et al. 2003, Rosina and Billari 2003). Consequently, the percentage of individuals aged 20-34 who have not yet entered their first union is among the highest in Europe (Castro-Martín et al. 2008). This does not necessarily imply an increase in unpartnered persons. In Italy, according to the 2003 Family and Social Subjects Survey, 39.4% of women aged 15-49 were neither married nor cohabiting, but approximately one-third of them (12.7%) maintained a stable relationship with a partner who had his own separate address. And the percentage increases (to 23.3%) if we consider women aged 20-34.

These particular union dynamics, which are increasing across generations, imply strong consequences on fertility and may be one of the main causes of the low fertility level in Italy, as child-bearing outside of a formal union is relatively rare in this country (Mazzuco et al. 2006). In line with this remark, table 1 (which lists some indicators related to the dynamics of life-course events) shows the increase in the sexual active period spent without birth and in the years of dating, across cohorts.

The present paper aims at shedding some light on the mechanisms underlying the late pattern of marriage and the relatively low diffusion of cohabitations, studying the transition from stable relationship to cohabitation or marriage, or disruption. As the more recent cohorts are the more involved by the new union dynamics (as table 1 shows), they are the focus of this paper.

Table 1. Mean and median (in parentheses) ages at the occurrence of some demographic events and other indicators among female population according to birth cohorts. Source: National Survey on Italian Sexuality.

Birth cohorts	Mean age at			Distance first sexual intercourse-first birth	Mean duration of dating before first marriage
	First sexual intercourse	First marriage	First birth		
1949 or before	21.58 (21)	23.41 (24)	24.63 (24)	3.05 (2)	3.20 (3)
1950-1959	20.22 (20)	23.33 (24)	24.87 (25)	4.65 (4)	3.64 (3)
1960-1969	19.49 (19)	24.36 (26)	26.21 (28)	6.72 (7)	4.03 (4)
1970 or after	18.34 (18)	24.59 (*)	25.34 (*)	7.00 (*)	4.54 (*)

* 50% of individuals in this cohort have not yet experienced the event by the interview.

The approach used here is quite innovative, as most studies on nuptiality patterns use a tripartite model of intimate relationships in which individuals are single, cohabiting or married: social researchers do tend to consider those who are not living with a partner as not coupled (see, for example, Berrington and Diamond 2000). The first study which considers also non-residential partnerships refers to Spain and has a cross-sectional approach: it may be considered the first attempt to go beyond the conventional classification of single/cohabiting/married (Castro-Martín et al. 2008).

In the present paper, retrospective data from a National Survey on Italian Sexuality, conducted in Italy in 2006, are used to study, within an event history approach, the disruption of a intimate couple relationship or its transition to a cohabitation or a marriage. In particular, two aspects of this survey allow us to analyze in depth partnership dynamics. From one hand, data have both an individual and a couple perspective; on the other hand, data give information on individuals and couple sexuality. In this way, the process from pre-cohabiting intimate relationships to subsequent co-residential union formation, its timing, and the union choice may be better studied. Sexual intimacy is, indeed, no longer reserved for marriage. Despite this change in courtship, relatively little is known about factors associated with the progression of sexual relationships. Our basic hypothesis is that individuals with permissive sexual values are more likely to dissolve their couple relationship. In line with this hypothesis, considering that partners have different expectations, histories and responsibilities in marital and non-marital unions (Giddens 1992), there is good reason to believe that sexuality within these unions may have different role (Yabiku and Gager 2008). In particular, “modern” sexuality is presumed to have a stronger positive effect in determining cohabitation rather than marriage. The present work is organized as follows. In section 2 I situate our paper in the social context of union formation and dissolution in Italy, considering also orientations and attitudes about sexuality. Section 3 refers to the connections between sexuality and relationship dynamics in the light of explanations, hypotheses and empirical results in the literature. In sections 4 and 5 data and methods are described. Section 6 is devoted to a discussion of the results. Lastly, some concluding remarks are presented in section 7.

2. Background

2.1. The social context of union formation in Italy

Italy is well-known to be one of the countries where the diffusion of new behaviours in terms of family formation has remained at relatively low levels if compared to other European countries. A key element in the Italian (and Mediterranean) model of family formation is the late transition to adulthood: in the last 30 years all biographical events that characterize the transition to adulthood have been postponed (Ongaro 2001) and Italian young people – similarly to others Mediterranean

countries, experienced a prolonged permanence in the parental home. This is rooted in the strength of intergenerational ties which characterized the Mediterranean model of family (Reher 1998). In this context of strong family ties, parents' traditional values have been hypothesized to account for the low diffusion of cohabitation (Di Giulio and Rosina 2007). In addition, also economic dependence on the family, the rigid structure of the housing market and the high youth unemployment rates hamper the formation of informal unions (Ferrera 1996, Rosina and Fraboni 2004).

This situation suggests that most non-residential partnerships may not be the case of relationships which are not yet "mature" enough for a couple to decide to live together, but they may be considered as a transitional state in the process of "going steady" rather than a permanent state or the outcome of a deliberate decision not to ever cohabit or marry.

2.2. Union disruption in Italy

In a context such as Italy, which is undergoing a transition from traditional to modern family behaviours, also union dissolution undergone some changes. Union instability in Italy is among the lowest in Europe, but in the recent past we observe an increasing trend of this phenomenon: the total separation rate, which was 129 (per 1000 population) in 1990, reached 257 in 2002. A similar increase may be observed for the total divorce rate, increasing from 78 (per 1000 population) to 131 (Istat 2004). In this context, presumably also non-residential partnerships have become increasingly less stable.

International literature is rich in studies on the determinants of marital dissolution (see, for example, Bumpass et al. 1991; Sayer and Bianchi 2000; De Graaf and Kalmijn 2006; Kalmijn et al. 2007). Due to the relatively recent history of marital instability in Italy, studies referred to Italy are few. After a pioneering study (De Rose 1992), only some recent studies contribute to the understanding of correlates of marital instability in Italy (Vignoli and Ferro 2009; Dourleijn and Liefbroer 2006). They showed that besides the expected positive correlation of marital disruption with women's birth cohort and socio-economic status, other correlates, more closely linked to Italian peculiarities (as the role of religious values and the complex legal procedure to obtain a divorce) may also be identified.

In fact, the context of non-residential relationships stability is completely different from that characterizing marital instability, and results cited above may not be extended to pre-cohabiting intimate partnerships. Studies on the instability of intimate relationships are not very common and they mainly refer to students and adolescents (Felmlee et al. 1990, Sprecher 2002, Klusmann 2002). Most of these studies examined how individual, dyadic, and social/environmental variables predict the stability of relationships (for a review, see Cate et al. 2002). In particular, the general quality of a relationship has been found to affect whether it remains intact. In addition, literature showed that also commitment is a significant predictor of relationship stability. Other effects will be discussed more in depth in section 3 (and in the analysis of explanatory variables). Studies referred to Italy lack.

2.3. Orientations and attitudes about sexuality in Italy

In the process of great social transformation that characterized Italy, as other industrialized western countries, a culture that pays more attention to satisfying individual preferences and needs has also developed and certain values linked to tradition have entered a state of crisis. In this context, a liberalization of sexual behaviours has been observed. In particular, sexuality, after having broken with reproduction, has also broken with the formation of married couples. Sexual relationships have become more and more an experience that forms part of the field of personal choices: even if the domain of sexuality is subject to norms, they are losing their power as absolute and immutable laws, based on religious or social rules.

In fact, the picture that emerges from the relative scarcity and the fragmentation of the available sources¹ shows a mixture of modernity and tradition.

A passage from regulative ethics based on prescribed and proscribed social norms to individualistic ethics leads to a greater diffusion and a greater social acceptance of behaviours which move away from traditional morals: passing from older birth cohorts to younger ones, there is an increase in the number of people who do not condemn pre-marital sex, masturbation, and homosexual experiences (Buzzi 1998). First sex, especially for women, has been progressively distanced from marriage and, in line with what has happened elsewhere, starting with the post war generations, age at the first intercourse has decreased (Caltabiano 2007).

Another aspect of transition to modernity regards the traditional asymmetry of the male/female relationship: it has been shown that, especially among the younger generations, there is a move away from the traditional gender models (male virility and female passivity) to sexuality as a form of intimacy (Garelli 2000). In line with this aspect, in Italy, as in other southern European countries, the marked difference between men and women regarding the age of the first experience of sexual intercourse decreased notably for those born in the 1940s and became much lower for those born in the 1970s (Barbagli, Castiglioni e Dalla Zuanna 2003).

Lastly, modernization can also be seen in other aspects of sexual behaviour. Although the frequency of sexual intercourse within the couple does not seem to have changed much (Castiglioni 2004), younger people declare to have more frequently experienced other sexual activities than vaginal intercourse, such as active and passive oral sex and for women, masturbation (Buzzi 1998).

In fact, even if the influences of the traditional educational institutions (family and Church) have been weakened and replaced by more individualized and horizontal pathways (Fabris 2001), also among young generations different orientations exist which do not exclude the persistence of traditional values (Buzzi 1998, Garelli 2000). Although the relative majority of the young seem to be strongly orientated towards sexual freedom (with a considerable permissiveness concerning virginity, pre-marital sex, sexual promiscuity, and homosexuality), one third still takes a moderate position (in which although some taboos are overcome, traditional orientations such as sexual faithfulness are kept) and a minority but consistent share of the young continue to refer to traditional values (Catholic morals, male supremacy, and condemnation of homosexuality).

3. Connections between sexuality and relationship development

As mentioned in section 2.2, international literature on the predictors of relationship progression and stability mainly focused on residential relationships and only some studies, referred to students and adolescents, have considered non-residential partnerships. However, a picture of the factors predicting relationship development may be drawn. Among others, also sexuality has been found to have some effects. Sexuality is, indeed, an integral part of romantic relationships. International literature and culture give emphasis to sexual expression in marriage. For example, sexual satisfaction is considered to be an indicator of the quality and stability of marriage (Edwards and Booth 1994; Yeh et al. 2006). Instead, less is known about the connection between sexuality and the progression of premarital relationship, despite the fact that most couples who eventually marry begin their sexual activity prior to marriage, as sexual intimacy is no longer reserved for marriage. However, some hy-

¹ Only just recently a precise and exact picture of values and sexual behaviour of Italians is available. Despite the important researches on the sexual behaviour in many Western countries (for example, as regards Russia, see Denissenko et al. 1999; for United States, Laumann et al. 1994; for Great Britain, Wellings et al. 1994; for France, Spira et al. 1993, Bajos and Bozon 2008; for Spain, Cardona et al. 2006), in Italy, only some surveys on selected groups of population and on specific aspects of sexuality have been carried (Garelli 2000; Barbagli and Colombo 2001; Castiglioni and Dalla Zuanna 1997; Dalla Zuanna and Crisafulli 2004; Buzzi 1998). A quantitative national survey dealing with sexuality in any great detail dates back to the 1970s (Fabris and Davis 1978) and it has been only recently updated by the National Survey on Italians Sexuality, conducted in Italy in 2006.

potheses may be made. In particular, two aspects of sexuality may be considered: individual sexual attitudes and sexual pattern of the couple relationship.

The first aspect refers to sexual attitudes and behaviours of individuals. Individual sexual attitudes refer to what people think and feel about sexuality, for example, whether they approve of certain sexual behaviours (e.g., premarital sex or engaging in casual sexual relations) for themselves or others. In addition, individuals' sexual biography may be considered. We expect that certain types of people are more likely than others to have short-lived relationships. For example, some researches hypothesize that individuals who adopt a "restricted" sexual attitudes (who probably have less permissive sexual values and orientations) may be involved in relationships less susceptible to dissolution (Simpson 1987).

The second aspect refers to the characteristics of sexual behaviour within the couple (in other words, these factors are specific to a particular relationship). Sexual involvement may have two somewhat opposing effects on dating couples. As suggested by Simpson (1987), sex is likely to intensify a person's commitment to the relationship: physical intimacy could bring partners closer to each other and this would imply less propensity for dissolving the relationship. However, sexual activity also may intensify conflict in the couple, as suggested in the research conducted by Christopher and Cate (1985). As a fact, it is found that there is a positive link between sexual satisfaction and relationship satisfaction both in married (e.g., Blumstein and Schwartz 1983, Edwards and Booth 1994) and in dating couples (Sprecher 2002). And in line with this, some other studies showed that a lower sexual satisfaction is associated to higher rates of union (both marriages and cohabitations) dissolution² (Yabiku and Gager 2008). In addition, sexual frequency may be considered. Comparing cohabitations and marriages, some studies showed cohabitators have intercourse more frequently than married couples (Laumann et al. 1994). This result may also stem from the nature of cohabitation itself: these relationships are more individualistic and may be more invested in sexuality while marriage may be more invested in general commitment (Clarkberg et al. 1996).

4. Data

The present analysis is based on retrospective data from a National Survey on Italians Sexuality ("*Indagine sulla Sessualità degli Italiani*" - ISI), conducted in Italy in 2006. It is a nationally representative sample of individuals aged between 18 and 69 (for details on the sampling method, see Barbagli et al. 2009). Almost 3,000 subjects were orally interviewed, and each interviewee personally filled in a part of the questionnaire which concerns the more personal and intimate questions³. The questionnaire collected information on respondents' sexual orientation (feelings, behaviour, identity), sexual morals (the social values and norms concerning sex⁴) and sexual behaviour (the age of first sexual intercourse, present and past frequency of sexual intercourse, autoeroticism, number of sexual partners over a fixed period of time, sexual satisfaction and orgasm). In addition, personal and parental background are considered.

In a self-administered section information were collected on the longest sexual relationship of each interviewee: it was defined as the longest relationship in which there were sexual intercourses. Retrospective information on it regarded both sexual characteristics of the relationship and partner's

² There are several explanation linking lower sexual satisfaction (or lower sexual frequency) to higher rates of union dissolution (Yabiku and Gager 2008). One explanation is selection: it may not be that reduced sexual activity causes union dissolution, but that as partners experience other non-sexual problems and difficulties in the relationship, their level of intimacy and sexual activity drops as well. A second explanation is a causal relationship: the sexual act promotes social attachment between participants.

³ The self-administered questionnaire is a good choice when dealing with delicate and intimate questions such as those concerning aspects of affective and sexual behaviour (Tourangeau and Smith 1996).

⁴ In particular, the importance given to sex throughout life, the emphasis put on sexual intercourse, the existence of gender stereotypes, the persistence of "double" morals, the idea of exclusivity vs. flexibility of the couple, attitudes to pre-marital sex and extra-marital sex, masturbation, homosexuality, divorce, etc.

characteristics. For each relationship, the year of the beginning of the couple relationship and whether it was still intact or not at the time of the interview are known. For dissolved relationships, the reason for dissolution (death of the partner or separation) and the year of break-up were collected. In addition, whether the relationship leads to a cohabitation or to a marriage is known. In this way, focusing on these relationships, the present paper studies the mechanisms underlying the transition from stable relationship to cohabitation or marriage, or disruption, considering both an individual and a couple perspective and analysing the importance of sexuality.

Individuals who has experienced their longest sexual relationships within a steady heterosexual couple are 2,533⁵. The definition of stable couple relies on two criteria: first, we consider only those couple relationships that have lasted for more than one year⁶, and second, those who have occurred across other couple relationships⁷ (casual affairs) have been excluded, in order to discard less committed relationships.

One problem was that, in some cases, the date of the beginning and/or the end of the longest sexual relationship and the information on whether it leads to cohabitation and/or to marriage were not available. Where only one of these information are unknown (291 observation), it was estimated with a probabilistic imputation⁸ method (Rubin 1987). Instead, the 52 observations for whom two or all of these information was not available were discarded.

The final number of individuals considered for our analyses is thus 2,481. Henceforth, we refer to their longest sexual relationships (in a steady couple and heterosexual relationships) simply as (couple) relationships.

In fact, as mentioned in the introduction, analyses of this paper focus only on younger cohorts. As table 1 shows, they are characterized by a stronger postponement of the first marriage, and by a longer duration of dating before marriage, in comparison with other cohorts. In particular, considering the female partner's age at the interview, we distinguished the relationships for couples in which women are under 35 at the interview (759 observations, which are the focus of this paper) from those in which women are 35 or over (1,722 observations) and attention concentrates on the former ones. It is interesting to note (table 2) that most of these relationships were spent without co-residence with the partner or led to dissolution (not for death of the partner⁹): thus the focus on the younger cohorts is again justified.

⁵ Individuals who have never experienced a sexual intercourse (200 observations), who have experienced the longest sexual relationship in a homosexual relationship (20 observations) and who have not experienced a couple relationship with the partner of the longest sexual relationship (190 observations) were discarded. The last ones are excluded since they cannot be considered couple relationships. We excluded sample members with a partner of the same sex because there were too few of them to separately examine processes in their relationships.

⁶ 82 couple relationships which lasted less than one year were discarded. Although this one-year cut-off is somewhat arbitrary, we wanted to focus on the most stable partnerships.

⁷ Individuals who have experienced the longest sexual relationship in a period where they had other couple relationships (casual affairs) are 33.

⁸ The imputation takes into account some demographic and social characteristics of individuals (gender, birth cohort, education, marital status at the interview, geographical area of residence, religiosity and employment status at the interview), some features of their couple biography (year of the first sexual intercourse, year of the beginning of the first and of the last couple relationship, whether they experienced marriage and/or cohabitation within the first and the last couple relationships, the total number of couple relationships they experienced in their life, children already had) and some characteristics of the longest sexual relationship itself (tie at the last sexual intercourse, whether it is still intact or not at the interview).

⁹ Relationships ended due to death of the partner are considered as neither marriage nor cohabitation: for them events (cohabitation or marriage or dissolution) are not observed.

Table 2. “First” outcomes of the longest sexual couple relationships (weighted percentages).

	<i>N</i>	%
Female partner aged under 35		
<i>Neither marriage nor cohabitation</i>	253	33.0
<i>Cohabitation</i>	138	17.4
Marriage	108	16.6
<i>Dissolution (not for death of the partner)</i>	260	33.0
Total	759	100
Female partner aged 35 or over		
<i>Neither marriage nor cohabitation</i>	199	11.1
<i>Cohabitation</i>	286	14.9
Marriage	1,048	64.5
<i>Dissolution (not for death of the partner)</i>	189	9.5
Total	1,722	100

5. Methods

5.1. Event history models

An event history analysis is performed to study partnership dynamics. In particular, the transition from stable relationship to cohabitation or marriage, or disruption is considered.

All individuals with a couple relationships are assumed to be exposed to the risk of cohabiting, marrying or dissolving their relationships. Our dependent variable is the hazard of the transition to a cohabitation, marriage or dissolution. Individuals who were still in an intact non-residential relationship were censored at the time of interview.

Piecewise constant exponential models for competing risks (Blossfeld and Rohwer 2002) were used to estimate the effects of the explanatory variables on the outcome of a couple relationship. The models are described as:

$$r_{jk}(t) = \exp\{\alpha_l^{(jk)} + \beta^{(jk)} X^{(jk)}\}, k = 1, 2, 3$$

where $r_{jk}(t)$ is the hazard of the transition rate from origin state j (in this case, being in a non-residential couple relationship) to destination state k^{10} (in this case, the entry into a cohabitation, marriage or disruption) in period t ; $X^{(jk)}$ is a (row) vector of covariates and $\beta^{(jk)}$ is an associated vector of coefficients for each k . $\alpha_l^{(jk)}$ is a constant coefficient associated with the l th time period ($l = 1, \dots, L$), where periods are based on $(L-1)$ split points on the time axis. Thus, for each transition into destination state k the model assumes that the hazard is constant not over the whole range of time, but within certain specified intervals of time. Conversely, the covariates are assumed to have the same effects in each period, so that the model is of proportional hazard type.

In our analyses, there were 5 time periods (up to 2 years; 2-3; 3-5; 6-10; 11 and more) and the covariates are those listed in table 3.

TDA software (Blossfeld and Rohwer 2002) was used to estimate the models.

5.2. Explanatory variables

Several independent variables were used to assess the factors influencing the outcomes of a couple relationship. Tables 3 lists the covariates and proportions of each variable for the national sample (couples in which female partners are under 35 at the interview). The explanatory variables used

¹⁰ $k = 1$ indicates the entry into cohabitation, $k = 2$ into marriage, $k = 3$ means the disruption of the couple relationship.

here are listed and grouped by the underlying determinant they are intended to represent. In particular, covariates were grouped into four categories: individual and family background; partner's socio-demographic characteristics; sexual behaviours and attitudes of interviewee; sexual characteristics of the couple relationship.

Table 3. *Individual and family background, partner's socio-demographic characteristics, sexual behaviours and attitudes and sexual characteristics of the couple relationship of individuals of the sample (couples in which female partners are under 35 at the interview).*

	%		%
Individual and family background		Partner's characteristics	
Gender		Difference in age	
Male	48.9	<i>Less than 3 years</i>	54.4
Female	51.1	3-5 years	27.4
Female partner's birth cohort		6 or more years	18.2
<i>Until 1980</i>	58.2	Differences in education	
<i>After 1980</i>	41.8	<i>No differences</i>	50.3
Female partner's education		<i>Difference of one category</i>	44.0
<i>High</i>	17.9	<i>Diff. of 2 or more categories</i>	5.7
<i>Middle</i>	54.3	Differences in religious attendance	
<i>Low</i>	27.8	<i>No differences</i>	64.8
Female partner's church attendance		<i>Difference of one category</i>	22.5
<i>Never</i>	54.6	<i>Diff. of 2 or more categories</i>	12.7
<i>Almost once a month</i>	34.2	Sexual behaviours and attitudes of interviewee	
<i>At least once a week</i>	11.2	Age at first intercourse	
Adolescence's geographical area of residence		<i>Under 16</i>	19.2
<i>North</i>	43.7	<i>16-17</i>	32.7
<i>Centre</i>	20.0	<i>18-19</i>	25.3
<i>South</i>	36.3	<i>20 or over</i>	22.8
% of individuals who left the parental home when they were before 25	24.5	Number of sexual relationships in their life	
Female partner's age at the beginning of the relationship		<i>3 at most</i>	39.0
<i>Under 20</i>	51.5	<i>4-5</i>	20.6
<i>20-24</i>	34.4	<i>6-10</i>	19.8
<i>25 or more</i>	14.1	<i>11 or more</i>	20.6
Higher educational level obtained by at least one parents		Index of modern sexual morality	
<i>High</i>	10.0	<i>Mean</i>	15.3
<i>Middle</i>	30.8	Sex is a secondary aspect in a relationship	
<i>Low</i>	59.2	<i>Agree</i>	21.2
Sexual characteristics of the couple relationship			
% whose partner is the same of the first sexual intercourse	39.9	% who happened to simulate orgasm	24.8
Sexual frequency		Modern sensuality	
<i>> 3 times per week</i>	37.9	<i>0</i>	7.9
<i>> 3 times per month</i>	42.6	<i>1</i>	29.9
<i>Once per month or less</i>	19.5	<i>2</i>	53.6
Reach orgasm		<i>3</i>	8.6
<i>He/she does not reach</i>	14.2		
Total		759	

Literature considered the effects of covariates only on some outcomes of a relationship. For other outcomes only some hypotheses may be made.

a) Individual background are described through some socio-demographic variables and some experiences of individuals' life course. In particular, as regards the former ones, gender, birth cohort, education, church attendance, and geographical area of residence during adolescence are considered. As regards experiences of individuals' life course, whether individuals have left the parental home when they were 24 or less and the age at the beginning of the longest sexual relationship are used in the models. Female partner's characteristics are considered in the analyses instead of respondents' ones, to avoid not completely interpretable results due to the systematic differences between men and women according to some factors. In fact, when female partner's data are not available, the male counterpart is considered (it is the case of geographical areas of residence during adolescence and of all experiences of life course, except for the age at the beginning of the longest sexual relationship).

Family background is measured through interviewees' parents educational level.

Gender and female partner's age at the beginning of the relationship (grouped into two categories: under and over 20) are used as controls.

As regards birth cohort, in the multivariate analysis, female partner's birth cohort is grouped into two categories (until and after 1980). It allows us to see the changes in behaviours passing from older birth cohort to younger ones.

Educational background is included to assess the effects of socio-economic status. It may be also a proxy for earnings potential, modern values and higher demands for gender equity within partnerships. Educational attainment was measured by female partner's highest educational level¹¹ (in preliminary analyses three categories were used: university [high], high school [middle] and junior school [low]; the final models distinguish only two categories - middle-high and low - as the medium and high levels had similar effects). In fact, the employment status should also be considered, but available data give information only on the employment status at the interview and time-varying variable cannot be used. According to economic theory (Becker 1991), we would expect that, for women, higher educational attainment would be associated with lower rates of formation of marriages. Since cohabitation generally requires less financial obligation and tends to have a lower opportunity costs than marriage (being less permanent and less likely to involve children), we might expect a weaker relationship between educational attainment and cohabitation (Liefbroer and De Jong Gierveld 1993; Thornton et al. 1995). As mentioned above, studies on the instability of non-residential partnerships are not very common and they mainly refer to students; however, we may expect that the factors that break up marriages would also lead to less stable romantic relationships. In line with this, women with higher educational attainment would be expected to be associated with higher rates of relationship disruptions.

Church attendance is measured by the female partner's attendance at religious services (with reference to the period of the last sexual intercourse): never, almost once a month and at least once a week. According to literature (Liefbroer and De Jong Gierveld 1993; Blom 1994), we hypothesize that individuals with low church attendance are less likely to marry and are more likely to cohabit compared with those with a high religious participation. Research has not focused on how religious practice influence relationship stability. We may assume that a high church attendance is associated with a high level of relationship dissolution, as a refusal to continuing a non residential partnership. In fact, given the potential for reverse causation between prior family formation behaviour and religiosity at the interview, results should be interpreted with caution (Caltabiano et al. 2006).

Evidence from cross-sectional data suggests that cohabitation is more common in the North of Italy than in the South (Gesano et al. 2007). In the multivariate analysis, we distinguished individuals

¹¹ In fact, partner's education may be not completely comparable with the interviewee's education, since the former refers to the period of the last sexual intercourse with this partner, whereas the latter was referred at the time of the interview. Similar remarks may be made as regards church attendance.

who spent their adolescence in the North, in the Centre, and in the South¹². We hypothesize that entry into cohabitation is more likely among those from North. North is considered, indeed, as a precursor of new family behaviours. As a consequence, we expected that here non-residential relationships may be more common: this would imply a negative effect of having spent the adolescence in the North in the likelihood of relationship dissolutions.

A dichotomous variable measured whether respondents have left the parental home when they were 24 or less. It has been argued that living outside a family, either alone or with unrelated adults, in early adulthood delays entry into marriage by providing young people with independence and autonomy which they are then loathe to relinquish (Goldscheider and Waite 1987). At the same time this may encourage cohabitation. The types of accommodation utilized by those already dwelling outside the parental home tend to provide more opportunities for forming informal partnerships. Young adults living within the parental home are more exposed to, and hence more likely to conform to, parental disapproval of cohabitation (Liefbroer and De Jong Gierveld 1993; Di Giulio and Rosina 2007; Schröder 2008). As a consequence, individuals who have left the parental home relatively soon are presumed to be less likely to marry and are more likely to cohabit. Literature does not give suggestions on how this may be associated with relationship instability.

Parents' education reflects parental resources; it was measured by the highest educational level obtained by at least one parents (in this case: university [high], high school [middle] and junior school [low]). Our final models distinguish only two categories of education (middle-high, low), as the medium and high levels showed similar effects on the dependent variable in preliminary analyses. Parental resources indirectly affect relationships outcomes by increasing the time spent in education and hence the career prospects of their offspring. We hypothesize that higher parental socio-economic status is negatively associated with rates of entry into marriage and cohabitation, but that this effect will be attenuated as we included in the analyses the respondent's own life course experiences, particularly education. Previous studies do not give suggestions on the connections between parental socio-economic status and romantic relationship stability.

b) Partner's socio demographic characteristics are her/his age, education and church attendance¹³. In particular, in the models, homogamy between personal characteristics of partner and interviewee were measured through variables with three or two categories. Age difference refers to the respondent's and the partner's age differences (less than 3 years, 3-5 years, 6 year or more); education and church attendance differences refer to the coding of the corresponding variables into four categories and consider the respondent's and the partner's differences (no differences, difference of at least one category).

Theoretical advancements in the area of homogamy have focused on marriages, often at the exclusion of non-residential partnerships. However, two key ideas help substantiate why similarities or differences are important. First, ties between individuals with similar characteristics are more likely to be closer and last for a longer duration than are ties between individuals who are dissimilar. Second, similarities reflect shared knowledge and experiences, which may make communication easier (McPherson et al. 2001). We hypothesise that more homogamous relationships are more likely to be more committed and, as a consequence, are more likely to become marriages or cohabitations. At the opposite, a larger discrepancy between partners' characteristics, such as in age, education, and religious background, is likely to raise the probability of relationship disruption.

c) Sexual behaviours of interviewee are measured considering the age at the first sexual intercourse and the number of persons with whom they experienced sexual relationships in their life. Sexual attitudes measures modern or traditional view of sexuality.

¹² Conforming to the standard classification, the North includes the regions of Piemonte, Valle d'Aosta, Lombardia, Trentino Alto Adige, Veneto, Friuli Venezia Giulia, Liguria, and Emilia Romagna; the Centre refers to Toscana, Umbria, Marche, and Lazio; Southern Italy includes Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria, and the two main islands (Sicilia and Sardegna).

¹³ As noted, partner's characteristics refer to the period of the last sexual intercourse with this partner, whereas the corresponding interviewee's variables were referred at time of interview.

The age at the first intercourse was grouped into four categories (under 16, 16-17, 18-19, 20 or over); early sexual experience was associated with permissive sexual values and orientations.

The number of persons with whom individuals experienced sexual relationships in their life course is described through a categorical variable with four categories (three persons at most, four or five persons, from six to ten ones and eleven or more persons). People with more couple relationships are presumed to be more prone to couple instability, having some types of difficulties in forming and/or maintaining relationships. Consequently they are expected to have a lower propensity for investing in relationships with high level of commitment as marriages and cohabitations¹⁴.

Sexual attitudes of respondents were measured to identify modern or traditional view of sexuality: in particular, sexual morality (Scott 1998) and the importance of sexuality are considered.

A continuous variable measuring the accordance with a modern sexual morality was obtained considering ten items which asked interviewee whether some behaviours are morally acceptable or not¹⁵. The importance of sex in a relationship was measured through a question which asked the level of agreement with a sentence expressing that sex is a secondary aspect in a relationship: responses could range from “agree” to “not agree at all”. A dichotomous variable distinguished those who considered sex a secondary aspect from those who did not consider it secondary¹⁶.

People who were more interested in sex and with permissive sexual values were more likely to have multiple and unstable relationships (Treas and Giesen 2000).

d) Two aspect of sexuality within the couple relationship are considered: sexual satisfaction and sensuality. In addition, a dichotomous variable indicating whether the partner was the same with whom the respondent had his/her first sexual intercourse was used as a control covariate.

As regards sexual satisfaction, a question in the ISI survey asked a measure of pleasantness of the relationship from sexual viewpoint. Similar question has been used in several other studies on sex (Sprecher 2002) with reference to longitudinal data. In fact, recall is one potential problem with these retrospective reports of sexual satisfaction, as reports are often biased. Since objective indicators may be less vitiated by this problem, our models include two objective indicators of sexual activity which may be considered as a proxy of sexual satisfaction (Edwards and Booth 1994; Haavio-Mannila and Kontula 1997): sexual frequency and frequency of orgasm for both partners¹⁷.

The ISI question on sexual frequency distinguished eight categories. In the multivariate analysis, coital frequency was grouped into three categories (more than three times per week, at least two or three times per month, once per month or less).

As regards orgasm, a question asked whether the respondent reached orgasm in sexual intercourse with his/her partner: responses to this question could range from “always” to “never”. A similar question was asked with reference to the partner. In the models we used a dichotomous variable, coded 1 for at least one of the two partners reaches orgasm never or only sometimes to identify potentially less satisfied couples. In addition, the survey allows us to consider whether the respondents had happened to simulate orgasm; a dichotomous covariate, indicating whether it happened or not, was inserted in the models. Orgasm simulation is not only an index of sexual satisfaction, but also an indicator of poor affectivity in a couple, even if it may be directed to protect partner’s feelings and expectations (Barbagli et al. 2009). According to discussions of section 3, sexual activity is presumed to promote relationship stability and we expect a stronger association

¹⁴ In fact, there may be a reverse causation relation.

¹⁵ Behaviours whose moral acceptability was asked were: having sexual intercourses with same sex individuals; having sex without being married; paying to have sex both having a partner and not; masturbating both having a partner and not; divorcing; doing a striptease for money; being sexually unfaithful to the partner; living with a partner without being married. Every item ranges from 1 = not acceptable at all, to 4 = completely acceptable. The index of sexual morality is calculated as the overall sum of the ten items and it is used as a continuous variable.

¹⁶ In fact, in preliminary analyses also some other questions were considered to measure the importance of sexuality in a relationship, but that here used turned out to be the more proper measure.

¹⁷ In fact, a sexual intercourse may be satisfactory even if one of the partners does not reach orgasm, particularly for women.

between high sexual frequency and the entry into cohabitation rather than into marriage.

As regards sensuality, three measures of sexual and sensual confidence are considered: whether individuals had preliminaries (hugs, kisses and caresses) before sexual intercourses, whether they had sex in the dark or in the light and whether they stripped completely or not during sexual activity. Each of these aspect is described through a dichotomous variable: the first one values 1 for individuals who had preliminaries before sexual intercourses, the second indicator is 1 for those who had sexual acts in the light and the third one values 1 for those who stripped completely during sex. Responses to these three dichotomous variables were summed for a total index of sensuality. The higher the number, the more the individuals had a more *modern* sensuality (characterized by great confidence of the partners in each other and by great physical and emotional involvement) in their couples. We expect that sensuality has an positive impact on the satisfaction of a couple relationships.

In fact, one problem was that sexual characteristics of the couple relationship were referred to the year before the last sexual intercourse, and an intimate relationship often changes over time. In particular, every continued relationships leaves a history of emotional and behavioural changes, including the history of sexuality within the couple (Klusmann 2002). For example, literature revealed a clear trend of reducing frequency of sexual intercourse with increasing duration of partnership, which was much stronger than the respective trend for age (Johnson et al., 1994, Klusmann, 2002). Here I assume that sexual characteristics are fixed.

Preliminary analyses also considered other individual sexual attitudes (in particular, on the multidimensional conception of sexuality) and experiences (trasgressive sexual behaviour) which may be important for the social construction of sexuality (BLA, 2009), but they had not significant effects.

6. Results

In comparing the statistical significance of covariate effects across various destinations in competing risks models, one must be careful because statistical significance tests of parameters are normally affected by a varying number of competing events (Blossfeld and Rohwer 2002). In the present study, these tests are based on 138 relationships followed by cohabitations, 108 observations followed by marriages, and 260 relationships which dissolved. Thus, it is more likely that the statistical test provides a significant result for relationships which dissolved than for those followed by cohabitations, and it is more likely there than for marriages.

To demonstrate the impact of the various number of events, we standardize the number of events across the three potential outcomes (as suggested by Blossfeld and Rohwer 2002). Because the number of marriages is smallest, we use this number as the baseline and standardize the number of events by drawing probability samples from the input data for cohabitations and relationships which dissolved.

Table 4 lists the parameter estimates of the regression models, describing the competing risks of entry into a cohabitation or a marriage or of dissolving the relationship with (model 2) and without (model 1) covariates on sexuality.

The effects of the main control and demographic background covariates (model 1) are in the expected direction (even if parameters estimates are not always completely significant). However, some remarks may be interesting.

Results show that more recent cohorts are characterized by less stable relationships and by lower risks of marrying their partners, in comparison with older cohorts. As found previously in other countries, religiosity has one of the largest effects on the type of first partnership: direct entry into marriage is more likely among those who regularly attend religious services. As regards homogamy of individuals, the effects of the differences in education and in religious attendance on the transition to marriage are in the expected direction, but they are not significant; differences in age

have an unclear impact on the outcomes of a couple relationship: partners with high differences are more likely to cohabit in comparison with partners of the same age and partners with 3-5 years age differences are less likely to break-up their relationship and more likely to marriage.

In fact, the interesting results refer to the effects of the covariates about sexuality.

First of all, the results of model 2 suggest that some of the effects of the demographic variables are completely absorbed by individual's sexuality. In particular, in contrasting the hazard of marriage versus being in non-residential partnership, the negative effect of middle-high educational level is not significant, as well as the negative effect of parents' education and the positive effect of church attendance "almost once a month". A similar remark may be referred to the effect of parents' education as regards the hazard of disruption versus being in non-residential partnership.

Individuals with more sexual relationships are more prone to couple instability and are less likely to marriage (even if the effects are not completely significant). People with modern sexual morality are less likely to marriage. In addition, associations between considering sex a secondary aspect and a late first sexual intercourse and the entry into marriage are observed. The effects of these covariates on the stability of relationships are not significant. No effects of individual sexuality are found in the transition to cohabitation.

Table 4. Factors influencing the outcomes of the couple relationships according to a competing risks piecewise constant exponential models.

	Model 1			Model 2		
	<i>Cohabitation vs. dating</i>	<i>Marriage vs. dating</i>	<i>Disruption vs. dating</i>	<i>Cohabitation vs. dating</i>	<i>Marriage vs. dating</i>	<i>Disruption vs. dating</i>
<i>Period 1: 0-2 year</i>	-5.08***	-5.80***	-5.41***	-4.18***	-3.84***	-6.07***
<i>Period 2: 2-3 years</i>	-4.52***	-4.01***	-3.82***	-3.53***	-1.89***	-4.33***
<i>Period 3: 4-5 years</i>	-4.76***	-3.47***	-3.37***	-3.66***	-1.17*	-3.77***
<i>Period 4: > 5 years</i>	-4.00***	-3.39***	-3.39***	-2.72***	-0.85	-3.72***
SOCIO-DEMOGRAPHIC CHARACTERISTICS						
Gender (ref: female)						
<i>Male</i>	0.08	-0.16	0.46**	-0.32	-0.16	0.31
Female partner's birth cohort (ref: until 1980)						
<i>After 1980</i>	-0.07	-0.85**	1.22***	-0.32	-0.76**	1.34***
Female partner's education (ref: low)						
<i>Middle-high</i>	-0.50**	-0.63***	-0.09	-0.64***	-0.29	-0.02
Female partner's church attendance (ref: never)						
<i>Almost once a month</i>	-0.46**	0.59***	-0.49*	-0.49**	0.36	-0.44
<i>At least once a week</i>	-0.31	1.14***	0.01	-0.19	0.96***	0.20
Adolescence's geographical area of residence (ref: South)						
<i>North</i>	0.50**	0.34	0.09	0.51**	0.62**	-0.04
<i>Centre</i>	0.22	0.13	0.17	0.28	0.47	0.04
Leaving parental home before 25 (ref: no)						
<i>Yes</i>	0.83***	0.68***	-0.06	0.79***	0.95***	-0.20
Female partner's age at the beginning of the relationship (ref: < 20)						
<i>20 or over</i>	1.15***	0.88***	1.38***	1.17***	0.57**	1.71***
Parents' education (ref: low)						
<i>Middle-high</i>	0.70***	-0.27	0.46**	0.79***	0.06	0.26
Partners difference in age (ref: less than 3 years)						
<i>3-5 years</i>	0.40	0.59**	-0.46*	0.34	0.79***	-0.54*
<i>6 years or more</i>	0.72***	0.14	-0.09	0.73**	0.10	-0.13
Partners difference in education (ref: no differences)						
<i>Differences</i>	0.12	-0.11	-0.07	-0.08	-0.94**	-0.11
Partners difference in religious attendance (ref: no differences)						
<i>Differences</i>	0.15	-0.17	0.22	0.23	-0.23	0.21

(to be continued)

Table 4. (continued)

	<i>Cohabitation vs. dating</i>	<i>Marriage vs. dating</i>	<i>Disruption vs. dating</i>
INDIVIDUAL SEXUALITY			
Age at first intercourse (ref: under 16)			
<i>16-17</i>	0.11	0.16	-0.17
<i>18-19</i>	-0.01	0.20	-0.18
<i>20 or over</i>	-0.28	1.27***	-0.56
Number of sexual relationships in their life (ref: 3 at most)			
<i>4 or 5</i>	-0.54	-0.81**	0.47
<i>From 6 to 10</i>	0.27	-0.37	0.72**
<i>11 or more</i>	0.11	-1.29**	0.88***
Modern sexual morality			
Sex is a secondary aspect in a relationship (ref: disagree)			
<i>Agree</i>	-0.11	0.48**	-0.19
COUPLE SEXUALITY			
Same partner of the first sexual intercourse (ref: no)			
<i>Yes</i>	-0.42	-1.03***	0.15
Sexual frequency (ref: low)			
<i>Middle</i>	0.02	-0.06	0.10
<i>High</i>	1.16***	0.38	0.28
Reach orgasm (ref: yes)			
<i>One of the partners had happened not to reach orgasm</i>	0.33	-0.05	0.88***
Simulate orgasm (ref: no)			
<i>One of the partners had happened to simulate orgasm</i>	-0.63**	-1.40***	-0.06
Modern sensuality (ref: no)			
<i>1</i>	-0.53	-1.26***	0.01
<i>2</i>	-0.65*	-1.29***	0.09
<i>3</i>	-0.91*	-1.66***	0.82

* = $p < .10$, ** = $p < .05$, *** = $p < .01$

As regards the effects of sexual characteristics of the relationship, results show a strong association between high sexual frequency and the entry into cohabitation, in line with the theoretical framework according to which sexual frequency is more important in cohabitation. Sexual satisfaction measured by the covariate on the reaching of orgasm is associated with relationship stability, in the expected direction. In line with this, the probability of cohabitation and of marriage is significantly lower among individuals who had happened to simulate orgasm. The association is stronger as regards marriage, confirming the orgasm simulation as indicator of poor affectivity in a relationship. Lastly, entry into marriage is associated negatively with modern sensuality; whereas a lower impact of this covariate is observed considering the hazard of cohabitation.

7. Discussion

This paper aims at studying in depth the union dynamics and the life trajectories of couples among recent cohorts in Italy. Tracking the various transitions help us to understand the continuing decline and postponement of marriages, and the quite low diffusion of alternative forms of unions, such as cohabitation, which characterized this country. This situation does not imply, indeed, the increase of unpartnered persons, but rather the diffusion of other forms of non-residential unions. This is particularly true among younger cohorts.

As these union dynamics imply strong consequences on fertility, studying the process underlying the mechanisms of disruption of a couple relationship and its transition to cohabitation, rather than

to marriage, is worthwhile. An interesting point of the paper is just the focus on non-residential partnerships and on their transitions. In addition, data on sexuality from the ISI survey provide a unique opportunity to examine the dynamics of relationship outcomes considering both an individual and a couple perspective and to verify the relevance of sexuality.

Our analyses suggest that besides attitudinal factors (associated with socio-demographic background), also some aspects connected with sexuality may be important in affecting the decision whether to marry or cohabit or to end a relationship. In particular, both sexual attitudes of individual and sexual characteristics of the relationship may have some effects in the outcome of a couple partnership. For example, from an individual point of view, a late first sexual intercourse, a low importance given to sex in a couple relationship and a traditional sexual morality may encourage the entry into marriage. At the opposite, the experience of more than five sexual relationships is an instability indicator. Considering couple perspective, a strong association between high sexual frequency and entry into cohabitation and between reaching of orgasm and relationship stability is observed. Moreover, simulation of orgasm lowers the probability of cohabitation and, particularly, of marriage. Lastly, a modern sensuality within the couple is negatively associated with the entry into marriage, and, even if less significantly, also with the hazard of cohabitation.

In fact, the impact of sexuality must be interpreted with cautions. First of all, a causal effect cannot be identified for some factors which may have a potential reverse causation with family behaviour. This is the case of the number of sexual partners. In addition, the fact that information on sexual attitudes were collected with individuals in different moments of their life course should be taken into account: it is inevitable their orientations are sensitive to their current conditions. However, some sexual dimensions, for example, sexual morality, are surely quite stable in time. In line with the previous remark, it should be noted that sexual characteristics of the couple relationship were referred to the year before the last sexual intercourse, thus they might be referred to a period following the event of interest (the marriage or the cohabitation). In other words, the causal effects of this type of covariates are based on the hypothesis that sexual characteristics are fixed. In fact, in some cases, it may be a quite strong assumption. For example, relationships ended in marriage usually lasted more than others: the sexual characteristics in the year before the last intercourse are probably different from those in the first years of the relationship. A similar remark holds also for some sexual attitudes, for example for the decreasing importance of sexuality usually observed during greater durations of the relationship.

Despite these limitations, the present study allows us to shed some light in the importance of sexuality for the outcome of a couple relationship. This first attempt considering couple dimension and couple sexuality would be followed by further studies using more proper data. In addition, future studies need also further information, for example, on the general quality of relationship (e.g., love) and on the partners' involvement (e.g., the amount of time the couple spends together).

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