The Spreading of Cohabitation as a Diffusion Process: Evidence from Italy

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Abstract Drawing on seminal work by Nazio and Blossfeld (Eur J Popul 19(1):47–82, 2003) and Di Giulio and Rosina (Demogr Res 16(14):441–468, 2007), this paper tests whether the recent spread of cohabitation in Italy has followed the typical pattern of diffusion of innovation processes. In doing so, we contribute to the debate on the determinants of the emergence of “new” family behaviour. Following previous literature, innovative behaviour should spread initially through direct social modelling, i.e. interpersonal communication among highly selected individuals (*peer effects*). At later stages, the diffusion should spread through knowledge awareness of the innovation, i.e. communication with previous generations (*pre-cohort effects*), so that also less selected individuals are prone to adopt the new behaviour. In the specific Italian context—a Catholic, “familistic” setting, with high normative pressure and importance of parental approval—we surmise the influence of previous generations to be dominant. We use data from the “Family and Social

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Subjects” survey carried out by Istat (2009) and apply Event History Analysis in the form of competing-risks exponential models to study Italian women’s transition to cohabitation as first partnership. Results suggest that the most important driver of the spreading of cohabitation in Italy is represented by the degree of its diffusion among older cohorts. However, we find a positive and significant interaction between women’s education and peer effects at the onset of the phenomenon, in line with the Second Demographic Transition (SDT) hypothesis. Cohabitation is also more likely if parents experienced separation/divorce and, more generally, if the environment of the family of origin can be described as “SDT-friendly”.

Keywords Cohabitation · Diffusion process · Peer effects · Event History Analysis · Italy · Second Demographic Transition

1 Introduction

Cohabitation started to spread in Europe in the late 1960s as part of a process of demographic change involving factors such as marital disruption and subreplacement fertility, and other “new” family behaviours. These changes have been conceptualised as a “Second Demographic Transition” (SDT, Lesthaeghe 1995; Van de Kaa 1987). European countries differ considerably in the adoption of new family forms, with “traditional” ones remaining dominant in Southern European countries (Billari and Kohler 2004). However, in recent years, increased cohabitation has also been observed in those countries (Lesthaeghe 2010; Castiglioni and Dalla Zuanna 2009; Billari 2008). This paper addresses this issue focusing on the Italian case. In analysing trends and patterns of adoption of cohabitation in Italy, the paper tests whether the recent growth in cohabitation has followed the typical pattern of diffusion of innovation processes (Di Giulio and Rosina 2007; Nazio and Blossfeld 2003). As theorised by Rogers (1983), diffusion processes proceed in stages, each characterised by different communication patterns: at early stages, innovation adoption is driven by a mechanism of direct social modelling, i.e. interpersonal communication among highly selected individuals (*peer effects*). Once the adoption becomes more common, knowledge awareness of the innovation spreads by means of communication with older generations (*pre-cohort effects*), so that less selected individuals are also prone to adopt the new behaviour. We test whether this general process holds for the increase in cohabitation in Italy. Given the importance of normative pressures and parental approval in a Catholic, “familistic” setting (Dalla Zuanna and Micheli 2004; Dalla Zuanna 2001), we hypothesise the dominance of pre-cohort effects, in contrast to Nazio and Blossfeld (2003) but consistent with Di Giulio and Rosina (2007).

Studying if and how cohabitation spreads in Southern Europe is important for several reasons. First, such evidence would strengthen the SDT as a general pattern of demographic change instead of a merely regional, Northern European, phenomenon (Lesthaeghe 2010; Coleman 2004). Second, the identification of diffusion-related mechanisms, and their interrelations with education and other SDT behaviours, such as separations and divorces, also contributes to an assessment of the role of social norms and family values in the spreading of cohabitation. In this

respect, our results support the hypotheses of the SDT rather than competing arguments, such as Perelli-Harris and Gerber's "Pattern of Disadvantage" (POD, 2011), which stress economic uncertainty as a determinant of the diffusion of cohabitation.

2 Theoretical Background

2.1 The Emergence of Cohabitation: The Second Demographic Transition and the Pattern of Disadvantage Hypotheses

The Second Demographic Transition (SDT) theory interprets the emergence of cohabitation as the consequence of a cultural reaction against traditional male-breadwinner marriages (Lesthaeghe 1995; Van de Kaa 1987). Since higher education is associated with a higher likelihood of embracing new family values, according to the SDT theory, the forerunners in cohabitation, as well as other new family behaviours, should be found among highly educated, *avant-garde* groups. However, empirical evidence is mixed, and competing arguments have recently appeared in the literature.

Esping-Andersen and Billari (2015) stress that while marital instability and subreplacement fertility used to be characteristic for individuals with high education, in recent years those behaviours have become associated with lower levels of education. The reversal of the educational gradient in the adoption of those behaviours is at odds with SDT theoretical claims and raises additional questions: can the same reversal trend also be found concerning cohabitation? And, most important, did highly educated and more venturesome individuals represent a selected group of forerunners driving the initial diffusion of cohabitation?

According to Perelli-Harris and Gerber (2011), nonmarital childbearing in Russia has always been prevalent among the least-educated women, thus being related to a "Pattern of Disadvantage" (POD). Similarly to the USA, in Russia a large number of nonmarital births are to young single mothers, who face particularly harsh socioeconomic conditions, although a large proportion are in cohabiting couples. Rather than being a lifestyle choice, in both countries, cohabitation often involves an unstable relationship stemming from economic uncertainty, which hinders long-term commitments (*ibid.*). Although nonmarital unions in Europe have always been characterised by a higher degree of stability, Perelli-Harris et al. (2010) found a negative educational gradient in nonmarital childbearing in several European countries, supporting the POD hypothesis. However, they also found that in Italy and France childbearing within cohabitation was more common among better educated women in the initial stages of its diffusion. Analysing municipality data from Norway, Vitali et al. (2015) make a strong case that female educational expansion has been the most important driver of childbearing within cohabitation. In fact, other studies focusing on the choice of cohabitation over marriage confirm this pattern. For instance, Ní Bhrolcháin and Beaujouan (2013) found that in Britain the growth in cohabitation was led by educated women up to the mid-1960s, followed by a reversal of the educational gradient.

All in all, evidence concerning the origins of the diffusion of cohabitation is mixed and it shows quite clearly the need to analyse the socioeconomic factors associated with cohabitation at different stages of its diffusion. We suggest that analysing whether the recent growth in cohabitation in Italy has followed the typical pattern of diffusion of innovation processes (Rogers 1983) constitutes a privileged standpoint to contribute to this literature.

2.2 Trends and Patterns in Cohabitation in Italy

When analysing current European family models, the distinction between “strong” and “weak” family systems (Reher 1998; Hajnal 1982) is still very useful. For instance, the “latest-late” age at leaving home of young children is a widespread feature of Italian and other Southern European societies (Aassve et al. 2013; Castiglioni and Dalla Zuanna 2009; Billari et al. 2001), which persists also after controlling for both parents’ and children’s socioeconomic characteristics (Hank 2007). The strength of family ties and their historical roots might help to explain why Italy and other Southern European countries are the ones with the lowest diffusion of separation and divorces, cohabitations, and extramarital births (Billari and Kohler 2004; Dalla Zuanna and Micheli 2004; Reher 1998). In the second half of the 1990s, cohabitation started to spread even in Southern Europe, concomitantly with rises in marital instability and (nonmarital) fertility rates (Castiglioni and Dalla Zuanna 2009; Billari 2008; Dalla Zuanna 2005). Still, by the end of the 2000s, less than 20 % of children were born outside marriage in Italy, while Bernhardt (2002) showed that cohabitation has become a social norm in Sweden already at the end of the 1990s, so that the majority of all births there are nowadays to non-married parents (Lesthaeghe 2010).

These findings suggest that, although the new family models recently went beyond the Alps and Pyrenees, the strength of family ties acted as a major force shaping the pace and the patterns of adoption of those new behaviours. It is instructive to look at the micro-level determinants of cohabitation in Italy. Some authors suggested that young Italians do not leave the parental home to start a cohabitation without parental approval (Castiglioni and Dalla Zuanna 2009; Rosina and Fraboni 2004), which is understandable also from a rational perspective. Remaining in the family of origin constitutes the prevalent form of intergenerational transfer, and the family is the most important provider of welfare in Italy (Saraceno and Keck 2010). Parental pressures are reinforced by the influence of the Catholic tradition (Vignoli and Salvini 2014), which should make the role of economic uncertainty, unstable unions and teenage childbirths less relevant for the onset of cohabitation, compared to countries like Russia or the USA. In the Italian setting, cohabitation could only spread when parental norms became more amenable to new family behaviours. For instance, Italian daughters of highly educated parents, a proxy for open mindedness and weaker conditioning of “traditional” social norms, have been found to be much more likely to enter into cohabitation, net of their own educational attainment (Di Giulio and Rosina 2007; Rosina and Fraboni 2004). These peculiarities of the “familistic way” towards the SDT are crucial in order to

develop a conceptualisation of the spreading of cohabitation in Italy as a diffusion process.

2.3 The Spreading of Cohabitation in Italy as a Diffusion Process

2.3.1 What is a Diffusion of Innovation Process and How Does it Apply to the Spreading of Cohabitation?

Following Rogers (1983), the term “diffusion” refers to a process by which an innovation—whether a physical tool, a practice, or an idea—is transmitted, by means of different communication channels, among people in a social system.

The success of a diffusion process, i.e. the adoption of the innovation in a social system over time, depends on several elements. First, the social system itself can be more or less favourable to the innovation: social norms, as well as other institutional characteristics, can affect the rate of adoption of the innovation in a population in various ways. Second, the rate of adoption depends on the communication patterns by which the innovation is spread. Several authors (Rogers 1983; Granovetter 1973) stress the difference between people embedded in relatively closed, self-referential circles and people living in broader, more heterogeneous ones. This difference is important for the identification of the chronological stages and underlying mechanisms driving the diffusion process (Rogers 1983).

In the early period of the diffusion, more cosmopolitan and educated individuals ignite the process of diffusion. This group of innovators, or “earlier adopters” (Nazio and Blossfeld 2003; Rogers 1983), represent a sort of micro-social system, partly detached from the rest of the society. It is possible to hypothesise a mechanism of *direct social modelling* (Nazio and Blossfeld 2003; Bandura 1977) acting among these people, with interpersonal communication among individuals who are placed in the same segment of the society and share several structural characteristics leading to a higher propensity of adoption.

A second phase of diffusion involves later adopters who are less innovative and have characteristics, like educational levels, that are generally comparable to non-adopters. At this stage, the type of mechanism influencing the adoption changes, in particular the ways in which people learn about the innovation. The *knowledge awareness* (Nazio and Blossfeld 2003; Rogers 1983) of the innovation depends, among other things, on the prevalence of adopters in the social system. As the prevalence rises, experience of adopters becomes more accessible by non-adopters so that broader segments of the social system are exposed to the innovation through exposure to the media or communication with older generations.

How then can we apply this general framework to the rise of new family behaviour such as cohabitation? First of all, the timing of the initial spread of cohabitation in Europe depended on the strength of social norms favouring traditional family models, such as religious beliefs, and changes in other sociostructural characteristics, such as educational expansion (Surkyn and Lesthaeghe 2004; Van de Kaa 2001). Once social conditions became favourable, the increase in the prevalence of cohabitation can be hypothesised to present the features of a diffusion process, i.e. the two phases of the process and the two ideal-

types of adopters presented above. Earlier adopters of cohabitation will be highly selected in terms of educational level. At this initial stage, the propensity to adopt the innovation, namely to enter cohabitation as first union, should be propelled by direct social modelling, i.e. direct contact with selected peers (Nazio 2008; Nazio and Blossfeld 2003). On the contrary, “at the beginning of the diffusion process, knowledge awareness about the experiences of previous cohorts should have a rather small or negligible impact on the spread of cohabitation” (Nazio and Blossfeld 2003: 52). The situation will be reversed as the diffusion spreads among the later adopters, who will be less selected and subjected more to the influence of previous cohorts.

2.3.2 *The Spreading of Cohabitation as a Diffusion Process: An Adaptation to the Italian Setting*

While the recent growth in cohabitation in Italy may have followed the typical pattern of a diffusion process, as described in the previous paragraph, the core hypothesis of this work is that the characteristics of the Italian family system have largely determined the diffusion of cohabitation. It can be hypothesised that in Italy the prevalence of adopters in previous cohorts played a greater role than the rate of adoption among peers (i.e. the knowledge awareness mechanism is much more relevant than the direct social modelling mechanism).¹ This could be due to the fact that, as mentioned in paragraph 2.2, children are strongly bound to their parents when taking important decisions such as leaving home and establishing a new family. It is useful to recall empirical evidence from the IARD surveys (Rosina and Fraboni 2004).² Figure 1 shows that a large proportion of young Italians have considered cohabitation admissible since the beginning of the 1980s, even if relatively few felt likely to cohabit themselves (and actual cohabitations were very few). This is not surprising if we consider that only about a third of the young interviewed in 1983 perceived cohabitation to be accepted by the society. Trends concerning young Italians’ perception of their likelihood to cohabit (and their actual behaviour) follow closely the degree of acceptance of cohabitation in the society. Results also point to a relatively minor influence of peers, since about 90 % of young Italians in 2000 and 2004 (the only years for which this information is available) perceived cohabitation as accepted by their friends, largely mirroring respondents’ figures.

Before presenting our hypotheses, it is important to recall two contributions in the literature that have dealt with the same topic. Nazio and Blossfeld (2003, from now on also mentioned as “NB”) first tested empirically whether the spreading of cohabitation in Italy, West Germany and East Germany could be interpreted as a

¹ From now on, “direct social modelling” and “peer effect” will be employed as synonyms, as well as “knowledge-awareness” and “pre-cohort effect”.

² IARD is a research institute which focuses on the condition of Italian “youth” and carried out surveys on representative samples of young people in Italy in 1983, 1987, 1992, 1996, 2000 and 2004 (see Buzzi et al. 2007 for full bibliographical references). The IARD definition of “youth” changed over time: the age-range is 15–24 in the first two waves, 15–29 in the third and fourth ones, and 15–34 in the last two waves. For the descriptive analyses presented in Fig. 1, we only considered individuals aged 15–24.

Fig. 1 Attitudes towards cohabitation among young Italians. *Note:* Young aged 15–24. *Source:* own elaboration on IARD data (1983–2004)

diffusion process. Their empirical results are straightforward: in all three cases, the increase in the incidence of cohabitation between 1954 and 1973 cohorts could be understood as a result of a diffusion process, and the core mechanism at work would have been direct social modelling. In other words, in Italy, as well as in West Germany and East Germany, peer effects would have been much more important than the influence of previous adopters in determining the diffusion process. Based on similar arguments to those we present, Di Giulio and Rosina (2007, from now on also mentioned as “DGR”) argued in response that it is unlikely that the mechanism of direct social modelling could have prevailed over knowledge awareness in Italy. Using the same data, DGR replicated NB’s results, but found pre-cohort effects to be more relevant when focusing only on central and northern regions. Although we agree with the arguments advanced by DGR, their work is not exempt from several criticisms.

3 The Contribution of This Study

3.1 Limitations of Previous Works on the Diffusion of Cohabitation in Italy

Both NB and DGR employ data of the Italian Second Fertility Survey (ISFS, De Sandre 2000), collected in Italy in 1995–1996. The data on which NB run their analyses actually stem from the Fertility and Family Survey (FFS), a cross-country harmonisation of the ISFS. The only difference between the two works at the data level is the higher number of variables at the disposal of DGR. Employing retrospective information and applying Event History Analysis (EHA), both studies

Table 1 Cohabiting couples as a share of total Italian couples

Years	Cohabiting couples
1993–1994	1.6
1995–1996	1.8
1997–1998	2.2
1999–2000	2.7
2001–2002	3.5
2003–2005	4.1
2006–2007	4.6
2008–2009	5.5

Source: Istat (2010)

are performed on a sample of women born between 1954 and 1973, during an observational window that goes from 15 to 39 years old.

A first problem relates to the small number of cohabitation events (about 200) in the selected sample of about 3000 women. When focusing on central and northern Italy only, DGR's results are based on about 150 events. This is not surprising given that a large expansion of the phenomenon can be recognised since the middle of the 1990s. Table 1 shows that the proportion of cohabiting couples more than tripled between 1993–1994 and 2008–2009.

Using retrospective data that focused on a pre-1995 period, previous works were only able to study the initial part of the diffusion process. This has important implications, given that the incidence of peer and pre-cohort effects is deemed to change according to the phase of the diffusion process. The fact that DGR found peer effects to be more relevant when analysing Italy as a whole, while pre-cohort effects were more important when focusing on central and north Italy, might be related to the different stages of the diffusion process across the two areas. A systematic, comparative investigation of northern and southern diffusion processes (dealing with the important issue of south-to-north migration, see Guetto and Panichella (2013)) would go beyond the scope of this work. However, we will partly address north–south differences in the empirical section. An additional data-related problem concerns the large number of right-censored cases. In fact, results of both papers are based on a significant share of women, especially belonging to those cohorts who started to experience cohabitation, observed before they turned 30 (all women born between 1966 and 1973).

Based on these criticisms, we argue that the data used by NB and DGR are not well suited to study the mechanisms underlying the spread of cohabitation in Italy. In fact, the two works could only focus on the very onset of the phenomenon, because few cohorts which experienced the expansion of cohabitation are considered, and, among these, a large number of events cannot be seen due to right-censoring. From a more theoretical standpoint, the authors did not take into account how the peer and pre-cohort effects develop across the different stages of the diffusion process, since they were mostly interested in the overall predominance of peer versus pre-cohort effects. However, disentangling how the different underlying mechanisms of social influence unfold over time constitutes a fundamental pillar of Rogers's conceptualisation of diffusion processes and, also,

gives us the opportunity to contribute to the SDT versus POD debate on the nature of the forerunners of new family behaviours.

3.2 The Spreading of Cohabitation as a Diffusion Process and Its Implications for the SDT Versus POD Debate

Following our previous arguments, the importance of normative pressures and parental approval in a Catholic, “familistic” setting, should make the experience of previous generations—a proxy for the degree of acceptance of cohabitation in the society—more relevant than the influence of peers. Thus, our first hypothesis is as follows:

H1 Knowledge awareness is the dominant mechanism driving the diffusion of cohabitation in Italy, and its effects become stronger as long as cohabitation spreads.

While H1 represents the core hypothesis of this paper, its empirical corroboration would not lead to an automatic acceptance of the whole theoretical structure presented above. So far, it has been stressed that the importance of knowledge awareness in Italy covers the role played by the family of origin, while direct social modelling would be the result of social interaction among peers. In order to test empirically the mechanisms posited to drive peer and pre-cohort effects, we will also test for interaction effects of the peer and pre-cohort variables with women’s characteristics.

To support our argument on the role of parental approval in determining the large impact of pre-cohort adoption on cohabitation chances, we differentiate between women who experienced their parents’ separation/divorce and those who did not. The rationale is that children who have experienced parental separation/divorce should develop a weaker relation with the noncustodial parent and feel less normatively bounded by parental expectations about their family choices (Amato 2000, 1993). After marital dissolution, children live, at least for a certain period, in a single-parent household, usually with their mother (Amato 2000). In societies characterised by traditional gender roles, as in Italy (Guetto et al. 2015), it is often the father who serves as the figure of authority, setting the child-rearing norms and ensuring compliance with them (Di Giulio and Rosina 2007; Booth and Amato 1994).

Pre-cohort adoption should then be much less relevant for women who had experienced disintegration of the family of origin, e.g. parental split-up following a separation/divorce, and parental disapproval and related social pressures should represent much less of a hindrance to cohabit. Thus, we expect the existence of an interaction between having experienced disintegration of the family of origin and pre-cohort adoption. Our second hypothesis is as follows:

H2 Women who experienced parental split-up following separation/divorce are less influenced by pre-cohort effects than women who did not experience such an event.

The consequences of parental separation/divorce on children’s likelihood of cohabitating could be particularly relevant in the Italian setting. Marital dissolution

remained very uncommon until the first half of the 1990s, when the total divorce rate was about 8 % (Istat 2014). Couples who divorce when the institutional and cultural barriers are high (like in Italy during the 1970s and 1980s) are more likely to be selected in terms of family values (Härkönen and Dronkers 2010), and to transmit non-traditional family values to their children (Amato 1988). This brings an important implication for the SDT vs. POD debate. Children whose parents adopted an SDT-related behaviour, in our case separation/divorce, might have been socialised in an “SDT-friendly” environment, which in turn might increase their own chances of experiencing SDT-related behaviours, in our case cohabitation. This process of intergenerational transmission of new family values reinforces the idea that ideational changes have driven the emergence of cohabitation and should be more relevant when the latter was particularly disruptive of traditional behaviours. Therefore, apart from mediating the impact of pre-cohort adoption, our second hypothesis concerning women’s experience of parental separation/divorce can be further specified as follows:³

H2b The experience of parental split-up following separation/divorce increases women’s likelihood to cohabit, but this effect decreases over cohorts.

Notwithstanding a general prevalence of pre-cohort effects, we expect that peer effects did play a role at the onset of the diffusion process. Consistent with Rogers’s theory, earlier adoptions should entail social interactions among highly selected individuals embedded in micro-social systems. Innovators should be part of a *milieu*, which fosters the spreading of favourable attitudes towards cohabitation. We hypothesise that the school system constitutes a crucial relational environment for the development and diffusion of new ideas and behaviours, stratifying between innovative and non-innovative people:

H3 In earlier stages of the diffusion process, more highly educated women have a higher propensity to cohabit as a result of direct social modelling.

Educational attainment itself can be expected to be associated with a higher likelihood of cohabiting. As the incidence of cohabitation in the social system increases and cohabitation loses its “exclusive” nature, less educated individuals also start to adopt it. Thus, our third hypothesis can be further specified as follows:

H3b More highly educated women have a higher propensity to cohabit, but educational differences decrease over cohorts.

If hypotheses H3 and H3b are confirmed, this would not only corroborate our argument concerning the emergence of cohabitation in Italy as a diffusion of innovation process, but would also contribute to the literature on the role of the highly educated as forerunners of new family behaviours.

³ The effect of parental separation/divorce on children’s cohabitation decisions is not necessarily related to the transmission of post-materialist values and lifestyle choices. It is not easy to disentangle empirically whether the latter mechanism prevails over the lack of parental control and anomie. We hypothesise both mechanisms to be at work. However, while our hypothesis H2 puts more emphasis on the second mechanism, our hypothesis H2b addresses the effect of parental separation/divorce as related to the cultural transmission of new family values.

4 Data and Methods

The data employed to test our hypotheses come from the “Family and Social Subjects” (FSS) survey carried out in 2009 by Istat. The data cover some 43,000 individuals residing in Italy. After data cleansing and consistency checks, our data include yearly partnership histories of 9616 women from the birth cohorts between 1954 and 1984. As in NB and DGR, we apply EHA models in the form of *competing risks* exponential models with time-constant and time-varying variables (Scherer 2013; Blossfeld et al. 2007) to study the transition to cohabitation as first partnership. Since this paper only focuses on the diffusion of cohabitation, results concerning the transition to marriage as first union are not discussed, but are presented in Table A2 in the supplementary online materials. In our analyses, the observational window starts at the age of 15 and ends with the cohabitation event, with the year of entry into a first marriage, with the date of interview, or at the age of 39, whichever is first.

Given that we are dealing with a process in which previous experience is important in order to estimate coefficients for current cohorts, a set of models that cumulatively add subsequent five-year birth cohorts into the analysis will be fitted. In this way, different models represent snapshots of the process at different stages of diffusion.

Following previous research, two time-varying covariates are included in every model to control for the non-monotonic age dependence of the rate of entry into first partnerships (Blossfeld and Huinink 1991). The variables can be depicted as follows: $\log(\text{current age} - 15)$, $\log(39 - \text{current age})$.

The two main independent variables are those capturing peer and pre-cohort effects. Following NB and DGR, direct social modelling is operationalised as the experience of the coeval women who had already adopted the innovation, that is, “the percentage of people [women] of the own generation that ha(ve) already experienced the cohabitation as first union until the year before the respondent has age x , for every age of the respondent” (Di Giulio and Rosina 2007: 466). For a respondent who belongs to a certain cohort in a certain year of observation, the variable can be formally expressed as:

$$P_{\text{peer}} = \frac{\sum_{i=c} \sum_{j < t} m_{ij}}{N_c} \times 100$$

where c is the cohort of the respondent, t is the year in which the respondent is observed, m_{ij} is the number of women who have adopted the innovative behaviour and N_c is the size of the cohort.

Knowledge awareness effect is operationalised as the result of behaviours that are enacted by older generations, with respect to the reference period of time. In other words, the knowledge awareness variable is given by “the percentage of people [women] belonging to the older generations that experienced the cohabitation as first union until the year before the respondent’s age x , for every age of the respondent” (Di Giulio and Rosina 2007: 466). The measure can be formalised as:

$$P_{\text{pre}} = \frac{\sum_{i < c} \sum_{j < t} n_{ij}}{N_p(t-1)} \times 100$$

where n_{ij} is the number of adopters in the previous cohort and $N_p(t-1)$ is the number of people belonging to older cohorts until the year previous to t .

Panel a of Fig. 2 plots the peer variable: at every birth cohort, the variable is reset to 0. Then, the cumulative proportion for every cohort accelerates rapidly with the increase in age and stabilises at a later age. Panel b of Fig. 2 presents the pre-cohort variable. In this case, women are (potentially) exposed to previous adoptions since they are 15. “In other words, across birth cohorts there seems to be an increasing

Fig. 2 Distributions of cumulative peer and pre-cohort adoption in Italy. *Note:* 1954–1984 cohorts—lighter lines represent younger cohorts. *Source:* own elaboration on FSS data (2009)

level of social acceptance of cohabitation for each younger birth cohort so that cohabitation can progressively be considered as a less deviant form of partnership” (Nazio and Blossfeld 2003: 65).

Several other variables are employed as control or substantive regressors to predict the risk of adoption of cohabitation as first partnership. For reasons of comparability, the choice of the independent variables included in the models follows as much as possible DGR and NB. Father’s education (elementary, lower secondary, upper secondary, tertiary and do not know), father’s condition when the respondent was 14 (dead or alive) and region of residence (recoded in southern and central-northern Italy) will be inserted in our models as time-constant variables. Educational level and enrolment (up to lower secondary completed, attending upper secondary school, upper secondary completed, attending university, tertiary completed), a dummy indicating parental split-up following separation/divorce, year of birth, and a dummy variable that establishes whether respondents have ever been employed are included in all models as time-varying variables. Religiosity could not be included in the empirical analyses due to lack of information in the FSS dataset. Descriptive statistics of these predictors are shown in table A1 in the supplementary online materials.

5 Results

5.1 The Spreading of Cohabitation in Italy: Peer Versus Pre-cohort Effects

Table 2 presents a first comparison of the relative contribution of peer and pre-cohort adoption to the diffusion of cohabitation in Italy. These models allow us to directly compare our results to those of DGR and NB, since they did not adopt a cumulative-cohort strategy.

Model 1 of Table 2 shows descriptively how the diffusion process unfolds along every birth cohort. NB do not show any clear, significant pattern across cohorts, which the development of a diffusion process would imply. If the pattern of NB had been confirmed by coefficients in Table 2, we would have concluded that there is no diffusion process whatsoever, given that the observed spread of cohabitation would be the result of a mere compositional effect, i.e. the structural changes that characterised Italy in recent decades (such as educational expansion and women’s labour market inclusion), rather than the result of social influences enacted through different types of communication channels. Results presented in Model 1, on the contrary, show a clear rise in the risk to adopt cohabitation, especially starting from the 1973 cohort.

Model 2 (Table 2) shows, in contrast to NB’s results but consistent with DGR’s results, that pre-cohort effects seem much stronger than peer effects, which are virtually zero. As a first test of whether the effects of peer and pre-cohort adoption change based on the stage of the diffusion process, Model 3 adds quadratic terms to peer and pre-cohort coefficients. Nonlinear effects are significant both for pre-cohort and for peer effects, even though the magnitude of pre-cohort coefficients remains

stronger, meaning that the size of the effects does change at different rates of diffusion of cohabitation.

According to our results, the main mechanism driving the diffusion of cohabitation in Italy is represented by knowledge awareness, thus confirming our first hypothesis. This first conclusion is inconsistent with NB, who have assigned a primary role to peer effects. DGR found only pre-cohort effects to be statistically significant when focusing on central and northern regions, while we also find some evidence of peer influences. The apparent inconsistency between our findings and previous results can be explained by the richer, more recent information provided by FSS data. Moreover, DGR only estimated linear effects and, also due to the data limitations, could not take into consideration the different stages of the diffusion. If our first hypothesis is correct, knowledge awareness should be dominant in the second phase of the diffusion process, while direct social modelling provides the ignition of the chain reaction. Coefficients of Model 2 in Table 2 would be the result of a simple weighted average in which the second, quantitatively bigger, mechanism—knowledge awareness—overwhelms the quantitatively smaller mechanism that ignited the diffusion—direct social modelling.

While in the next paragraph we will obtain a more refined idea of these dynamics, we now turn to the effects of women's characteristics. Consistent with previous research (Di Giulio and Rosina 2007; Rosina and Fraboni 2004), the risk to experience cohabitation as first union is increased by having a highly educated father. Women who do not know their father's educational level or whose father died before they turned 15 have higher risks of experiencing cohabitation, in line with our argument that the absence of the father—or a loose connection with him—influences women's attitudes towards non-traditional family options and might reflect weaker normative constraints. In this respect, women who lived in single-parent households as a consequence of parental separation/divorce are much more likely to adopt cohabitation, a first hint that our hypothesis H2b is correct.

As far as educational enrolment is concerned, being in the educational system leads to lower propensities to enter into cohabitation. Considering this first set of models, no clear pattern emerges as far as educational level is concerned. According to Table 2, an employed woman has a higher propensity of adopting cohabitation. Working women are more economically independent and, thus, should be more inclined to adopt less committing forms of union, such as cohabitation.⁴

Differences between southern and central-northern Italy are quite pronounced, and increasingly so (see Table 3). Interactions between peer and pre-cohort variables and the area of residence (Models 4 and 5 in Table 2) help to understand the roots of the different spreading of cohabitation across the two areas. Results suggest that while weak peer effects can be observed in both regions of Italy

⁴ For the same reason, it might be argued that employed women need to agree less on a compromise with their parents' expectations, for instance to be financially supported in the purchase of first home, when deciding to marry versus starting a nonmarital union. If this argument holds, a negative interaction between father's education and women's employment condition could be expected. On the contrary, additional analyses revealed that the positive effect of being employed is actually enhanced by having a high educated father. This suggests that non-employed women's chances to cohabit are rather small and parental approval becomes salient when women enter the labour market.

Table 2 Exponential models for the study of transitions to cohabitation as first union

Independent variables	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Log (age – 15)	0.74***	(0.09)	0.50***	(0.10)	0.08	(0.11)	0.51***	(0.10)	0.10	(0.11)
Log (39 – age)	0.19**	(0.09)	0.28***	(0.10)	0.30***	(0.10)	0.28***	(0.10)	0.31***	(0.10)
Father's education: lower sec. (ref. elem.)	0.05	(0.07)	0.08	(0.07)	0.05	(0.07)	0.08	(0.08)	0.05	(0.07)
Father's education: upper secondary	0.13	(0.08)	0.15*	(0.08)	0.14*	(0.08)	0.15*	(0.08)	0.13	(0.08)
Father's education: tertiary	0.37***	(0.12)	0.33***	(0.13)	0.33***	(0.13)	0.34***	(0.13)	0.34***	(0.13)
Father's education: do not know	0.69***	(0.14)	0.73***	(0.14)	0.75***	(0.14)	0.73***	(0.14)	0.75***	(0.14)
Father is dead (ref. no)	0.47***	(0.15)	0.48***	(0.15)	0.48***	(0.15)	0.48***	(0.15)	0.49***	(0.15)
Parents separated/divorced (ref. never)	0.69***	(0.09)	0.66***	(0.09)	0.65***	(0.09)	0.66***	(0.09)	0.65***	(0.09)
Resp. education: attending upp.sec. (ref. low.sec.)	-1.00***	(0.16)	-0.93***	(0.16)	-1.01***	(0.16)	-0.93***	(0.16)	-0.99***	(0.16)
Resp. education: upp. sec. completed	-0.11	(0.07)	-0.09	(0.07)	-0.09	(0.07)	-0.08	(0.07)	-0.09	(0.07)
Resp. education: attending tertiary	-0.36***	(0.12)	-0.33***	(0.12)	-0.38***	(0.12)	-0.33***	(0.12)	-0.38***	(0.12)
Resp. education: tertiary completed	0.05	(0.11)	0.03	(0.11)	0.06	(0.11)	0.02	(0.11)	0.05	(0.11)
Resp. is employed (ref. no)	0.68***	(0.07)	0.68***	(0.07)	0.70***	(0.07)	0.69***	(0.08)	0.71***	(0.08)
Region: south (ref. centre north)	-0.99***	(0.08)	-1.01***	(0.08)	-1.00***	(0.08)	-0.39***	(0.19)	0.20	(0.38)
Year birth: 1955 (ref. 1954)	-0.21	(0.33)								
1956	-0.15	(0.33)								
1957	0.23	(0.30)								
1958	-0.06	(0.33)								
1959	-0.14	(0.31)								
1960	-0.01	(0.31)								
1961	0.11	(0.28)								
1962	-0.53	(0.34)								
1963	0.07	(0.28)								

Table 2 continued

Independent variables	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
1964	-0.07	(0.29)								
1965	-0.10	(0.28)								
1966	0.22	(0.28)								
1967	0.08	(0.28)								
1968	0.44*	(0.26)								
1969	0.56**	(0.25)								
1970	0.46*	(0.27)								
1971	0.35	(0.26)								
1972	0.49*	(0.26)								
1973	0.76***	(0.25)								
1974	0.57**	(0.26)								
1975	0.75***	(0.26)								
1976	0.78***	(0.26)								
1977	0.87***	(0.26)								
1978	0.96***	(0.26)								
1979	0.92***	(0.26)								
1980	0.75***	(0.27)								
1981	1.17***	(0.26)								
1982	0.74**	(0.29)								
1983	0.89***	(0.28)								
1984	0.65**	(0.31)								
Peer group adoption			0.00	(0.01)	0.13***	(0.03)	0.00	(0.01)	0.13***	(0.03)
Pre-cohort adoption			0.11***	(0.01)	0.35***	(0.05)	0.12***	(0.02)	0.39***	(0.06)

Table 2 continued

Independent variables	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
(Peer group adoption) ²					-0.00***	(0.00)			-0.00***	(0.00)
(Pre-cohort adoption) ²					-0.02***	(0.00)			-0.02***	(0.00)
Region: south * peer adpt.							-0.01	(0.02)	-0.04	(0.06)
Region: south * pre-cohort adpt.							-0.07*	(0.04)	-0.22*	(0.12)
Region: south * peer adpt. ²									0.00	(0.00)
Region: south * pre-cohort adpt. ²									0.01	(0.01)
Constant	-6.86***	(0.45)	-6.92***	(0.40)	-7.30***	(0.43)	-7.07***	(0.40)	-7.61***	(0.44)
Individuals	9616		9287		9287		9287		9287	
Events	1274		1254		1254		1254		1254	
Observations	101,150		98,394		98,394		98,394		98,394	

Source: own elaboration on FSS data (2009)

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

(interactions with peer effects are far from reaching statistical significance in both Models 4 and 5), the “engine” underlying the spreading of cohabitation in Italy, i.e. the degree of its diffusion among older cohorts, was also at work in Southern regions, but to a much less extent (the pre-cohort effect found in the North is more than twice as large as in the South). The interpretation of this result can be twofold: either Southern Italy is still experiencing the early stages of the diffusion of cohabitation (Gabrielli and Hoem 2010), a phase in which peer effects should be stronger, or the spread of the new behaviour beyond a small group of selected women has met more obstacles in Southern regions.⁵

5.2 Diffusion Process Dynamics

Model 1 in Table 3 shows results for Model 2 of Table 2, but only selecting women born between 1954 and 1964. As can be seen, cohabitation among those women was so rare that we do not see any significant effect of either peer or pre-cohort variables. In Models from 2 to 5, five-year birth cohorts are cumulatively added, so that we can appreciate the unfolding of peer and pre-cohort effects (Model 5 corresponds then to Model 2 in Table 2). Adding women born between 1965 and 1969 produces a marginally significant peer effect, while the coefficient associated with the pre-cohort variable turns positive, but is still not significant. These results suggest that direct social modelling, although globally weaker than knowledge awareness, exerts its effect at early stages of the diffusion. When adding subsequent birth cohorts, we see pre-cohort effects growing in size and statistical significance. In contrast, coefficients for peer effects reduce in size and statistical significance, thus reproducing the nonlinear pattern shown in Model 3 in Table 2.⁶

When it comes to women’s education, regardless of the small number of events, Model 1 indicates that tertiary educated women were the most likely to cohabit when this represented a strongly “deviant” behaviour. However, education effects reduce in size and statistical significance when adding younger cohorts, consistent with our hypothesis H3b. Coefficients for women who completed upper secondary education and those attending university even turn negative in Models 4 and 5. While results could indicate a genuine reversal of the educational gradient in cohabitation, as already found in the literature (Ní Bhrolcháin and Beaujouan 2013),

⁵ The latter interpretation is supported by descriptive evidence showing that the proportion of marriages preceded by cohabitation increased in the same period in both Northern and Southern Italy (Castiglioni and Dalla Zuanna 2009). Differences between the two areas could be understood as a matter of intensity, rather than of timing, and religiosity might have played an important role in this respect. The regional distribution of marital separations and cohabitations, and its change over time, is indeed strongly associated with regional differences in the pace and extent of the secularisation process (*ibid.*).

⁶ Actually, in Model 4 peer effects become negative and significant. This could be due to the fact that the two diffusion-related variables are highly correlated and, in such a case, it is possible that highly positive correlation leads to negative correlation with the dependent variable for one of the two predictors, while the correlation between the other variable and the dependent one is inflated. In these cases, it is better not to attach undue weight to any specific coefficient, but rather evaluate the general pattern of the results. In fact, Model 4 does not substantially change the general interpretation of the unfolding of the diffusion process, given that the coefficient for peer effects becomes not significant in the subsequent model and that pre-cohort effects are systematically higher.

Table 3 Cumulative cohort exponential models for the study of transitions to cohabitation as first union

Independent variables	Model 1 (54–64)		Model 2 (54–69)		Model 3 (54–74)		Model 4 (54–79)		Model 5 (54–84)	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Log (age – 15)	0.66**	(0.26)	0.33**	(0.16)	0.48***	(0.12)	0.44***	(0.11)	0.50***	(0.10)
Log (39 – age)	0.12	(0.18)	0.26**	(0.13)	0.35***	(0.11)	0.25**	(0.10)	0.28***	(0.10)
Father's education: lower secondary (ref. elem.)	–0.09	(0.20)	–0.02	(0.13)	0.03	(0.10)	0.09	(0.08)	0.08	(0.07)
Father's education: upper secondary	0.40**	(0.20)	0.28**	(0.14)	0.20*	(0.11)	0.25***	(0.09)	0.15*	(0.08)
Father's education: tertiary	0.31	(0.30)	0.11	(0.22)	0.34**	(0.16)	0.38***	(0.14)	0.33***	(0.13)
Father's education: do not know	0.67**	(0.29)	0.89***	(0.21)	0.76***	(0.18)	0.77***	(0.16)	0.73***	(0.14)
Father is dead (ref. no)	0.30	(0.34)	0.26	(0.24)	0.41**	(0.18)	0.39**	(0.16)	0.48***	(0.15)
Parents separated/divorced (ref. never)	1.12***	(0.25)	0.88***	(0.17)	0.80***	(0.12)	0.67***	(0.10)	0.66***	(0.09)
Region: south (ref. centre north)	–0.63***	(0.16)	–0.74***	(0.12)	–0.95***	(0.10)	–0.99***	(0.08)	–1.01***	(0.08)
Resp. education: attending upp. sec. (ref. low. sec.)	–0.46	(0.33)	–0.91***	(0.29)	–0.82***	(0.22)	–0.99***	(0.19)	–0.93***	(0.16)
Resp. education: upp. sec. completed	0.25	(0.16)	0.18	(0.12)	0.07	(0.09)	–0.05	(0.08)	–0.09	(0.07)
Resp. education: attending tertiary	0.41	(0.27)	0.25	(0.19)	–0.20	(0.16)	–0.27**	(0.13)	–0.33***	(0.12)
Resp. education: tertiary completed	0.55**	(0.27)	0.36**	(0.18)	0.31**	(0.13)	0.19	(0.11)	0.03	(0.11)
Resp. is employed (ref. no)	0.40**	(0.17)	0.49***	(0.12)	0.49***	(0.10)	0.67***	(0.08)	0.68***	(0.07)
Peer group adoption	0.05	(0.06)	0.06*	(0.03)	0.01	(0.02)	–0.03**	(0.01)	0.00	(0.01)
Pre-cohort adoption	–0.06	(0.11)	0.11	(0.07)	0.15***	(0.04)	0.19***	(0.03)	0.11***	(0.01)
Constant	–6.67***	(0.75)	–6.93***	(0.54)	–7.36***	(0.47)	–7.09***	(0.42)	–6.92***	(0.40)
Individuals	3296		5052		6680		8056		9287	
Events	232		463		758		1059		1254	
Observations	30,504		50,522		70,126		86,070		98,394	

Source: own elaboration on FSS data (2009)

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

we note the possible role of right-censored cases. In this respect, the decline of pre-cohort effects in Model 5 might indicate that the diffusion process has already reached its climax among women born at the end of the 1970s. But even this result is likely to be affected by the inclusion of women observed before turning 30.

The effect of parental split-ups following separation/divorce remains significant in all the 5 models, although decreasing in magnitude. This is likely related to the decreasing degree of selectivity of parents' separation/divorce and children's cohabitation decisions, confirming our hypothesis H2b.

All in all, results of Tables 2 and 3 confirm our first hypothesis and hypotheses H2b and H3b on the positive, declining effect of women's experience of parental separation/divorce and education. Table 4 presents results of the same models of Table 3 with the addition of two interaction terms, the first between pre-cohort adoption and parental split-up variables and the second between peer adoption and the education variable. The expected result concerning the first interaction is that pre-cohort effects will be not relevant in shaping the likelihood of cohabitation among those women whose parents experienced separation/divorce. Results reassure us about this point and corroborate our hypothesis H2. The interaction coefficient completely counterbalances the main effect of pre-cohort adoption in Models 3–5, so that previous generations do not affect the likelihood to cohabit among women who experienced family disintegration. Additional analyses revealed a similar negative and significant interaction between not knowing one's father's education level as a proxy for weak relationship with the family of origin, and the pre-cohort variable. In other words, women who were exposed to a lower degree of parental normative constraints and were socialised to non-traditional family values tend to be less driven by pre-cohort effects in their likelihood of cohabiting. This result supports our argument that the pre-cohort adoption variable represents a good proxy for the normative constraints that the family of origin exerts on women's family choices, as well as the importance of parental positive attitudes towards their children's cohabitation decisions.

If our hypothesis H3 is correct, the interaction between peer effects and higher education for the earlier cohorts should be positive and significant. In other words, the effect corresponding to the direct social modelling mechanism should affect highly selected women more strongly at the early stages of the diffusion process.

Interaction coefficients are indeed positive and significant in Models 1–3, i.e. for women born between 1954 and 1974.⁷ It suggests that this corresponds to the time span observed by NB and DGR, thus confirming that their analysis focused on the very early stages of the diffusion of cohabitation in Italy. When adding subsequent birth cohorts to the model, the interaction starts to be non-significant and the magnitude of the effect lowers, as expected. In Model 1, the interaction is only significant among women who completed upper secondary education. It should be kept in mind that among those Italian cohorts, less than 10 % of women achieved tertiary education by the age of 39, while almost 60 % did not obtain upper

⁷ A significant, positive interaction is found also in the last two models among women attending upper secondary school. However, a limited number of cohabitation events occur while women attend upper secondary school (54 in the total observed time span). In addition, among the youngest cohorts events occurring in the early stages of women's life cycle are overrepresented due to right-censoring.

Table 4 Cumulative cohort exponential models for the study of transitions to cohabitation as first union (with education * peer adoption and parents separated/divorced * pre-cohort adoption interactions)

Independent variables	Model 1 (54–64)		Model 2 (54–69)		Model 3 (54–74)		Model 4 (54–79)		Model 5 (54–84)	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Log (age – 15)	0.79***	(0.27)	0.45***	(0.17)	0.54***	(0.13)	0.44***	(0.11)	0.49***	(0.10)
Log (39 – age)	0.24	(0.19)	0.28**	(0.13)	0.36***	(0.11)	0.24**	(0.10)	0.27***	(0.10)
Father's education: lower secondary (ref. elem.)	–0.11	(0.20)	–0.02	(0.13)	0.03	(0.10)	0.09	(0.08)	0.08	(0.07)
Father's education: upper secondary	0.36*	(0.20)	0.27**	(0.14)	0.21**	(0.11)	0.26***	(0.09)	0.15*	(0.08)
Father's education: tertiary	0.27	(0.30)	0.13	(0.22)	0.32**	(0.16)	0.35**	(0.14)	0.31**	(0.13)
Father's education: do not know	0.65**	(0.30)	0.85***	(0.22)	0.68***	(0.19)	0.73***	(0.16)	0.70***	(0.14)
Father is dead (ref. no)	0.32	(0.34)	0.27	(0.24)	0.40**	(0.18)	0.39**	(0.16)	0.47***	(0.15)
Region: south (ref. centre north)	–0.65***	(0.16)	–0.75***	(0.12)	–0.96***	(0.10)	–1.00***	(0.08)	–1.02***	(0.08)
Resp. is employed (ref. no)	0.40**	(0.17)	0.47***	(0.12)	0.49***	(0.10)	0.66***	(0.08)	0.67***	(0.07)
Peer group adoption	–0.06	(0.08)	–0.01	(0.04)	–0.01	(0.02)	–0.04**	(0.02)	–0.01	(0.01)
Resp. education: attending upp.sec. (ref. low.sec.)	–0.80*	(0.43)	–1.06***	(0.35)	–0.92***	(0.26)	–1.19***	(0.22)	–1.17***	(0.19)
Resp. education: upp. sec. completed	–0.59*	(0.31)	–0.20	(0.19)	–0.14	(0.15)	–0.15	(0.12)	–0.18	(0.12)
Resp. education: attending tertiary	0.59	(0.48)	–0.30	(0.34)	–0.32	(0.26)	–0.38*	(0.21)	–0.44**	(0.20)
Resp. education: tertiary completed	0.86	(0.70)	0.09	(0.39)	0.19	(0.26)	0.25	(0.23)	0.08	(0.22)
Peer group adoption * attending upp. sec.	0.24	(0.27)	0.04	(0.22)	0.03	(0.11)	0.11*	(0.06)	0.12**	(0.05)
Peer group adoption * upp. sec. completed	0.23***	(0.07)	0.08**	(0.03)	0.04*	(0.02)	0.02	(0.01)	0.01	(0.01)
Peer group adoption * attending tertiary	–0.07	(0.15)	0.13**	(0.06)	0.02	(0.04)	0.02	(0.03)	0.02	(0.02)
Peer group adoption * tertiary completed	–0.02	(0.14)	0.06	(0.05)	0.02	(0.02)	–0.00	(0.02)	0.00	(0.02)
Pre-cohort adoption	–0.03	(0.11)	0.13*	(0.07)	0.17***	(0.04)	0.21***	(0.03)	0.12***	(0.02)
Parents separated/divorced (ref. never)	2.19***	(0.52)	1.93***	(0.43)	2.06***	(0.32)	1.94***	(0.26)	1.62***	(0.23)
Pre-cohort adoption * parents separated/divorced	–0.28**	(0.13)	–0.21**	(0.08)	–0.20***	(0.05)	–0.17***	(0.04)	–0.11***	(0.03)
Constant	–7.01***	(0.79)	–7.07***	(0.56)	–7.51***	(0.48)	–7.14***	(0.42)	–6.91***	(0.40)
Individuals	3296		5052		6680		8056		9287	

Table 4 continued

Independent variables	Model 1 (54–64)		Model 2 (54–69)		Model 3 (54–74)		Model 4 (54–79)		Model 5 (54–84)	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Events	232		463		758		1059		1254	
Observations	30,504		50,522		70,126		86,070		98,394	

Source: own elaboration on FSS data (2009)

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

secondary education (Ballarino and Scherer 2013). In Model 2, i.e. for those cohorts where an overall significant peer effect was found in Table 3, the interaction becomes particularly strong among women attending university, consistent with the idea that innovations fall on fertile ground among close social circles of selected individuals.

6 Conclusions and Discussion

The spreading of cohabitation in Italy over recent decades can be described as a process of social change which has followed the typical pattern of diffusion of innovations (Rogers 1983). However, we show that the relative importance of the mechanisms driving the process, i.e. direct social modelling (*peer effects*) and knowledge awareness (*pre-cohort effects*), has been influenced by the specific features of the Italian sociocultural environment. More than in other countries, Italians are bounded in their family formation decisions by social pressures, and especially by parental orientation and approval (Castiglioni and Dalla Zuanna 2009; Rosina and Fraboni 2004; Dalla Zuanna 2001). This suggests a higher importance of the influence of previous generations over the influence of peers. In contrast to Nazio and Blossfeld (2003) and consistent with Di Giulio and Rosina (2007), our results confirm that the effect of cumulative pre-cohort adoption has been generally stronger than that of peer adoption.

Furthermore, our results show that during an initial phase the process is ignited by a small group of venturesome, highly selected women who do not need high levels of acceptance of the “deviant” behaviour in the society to choose cohabitation. Once a critical mass of adopters is reached, the diffusion spreads over other, less selected social groups who are more dependent on approval by their social environment, and especially their family of origin. The delayed but rapid growth in cohabitation in Italy can be traced back to a generational substitution. Figure 1 suggests that young Italians born in the 1960s were, in the majority, already favourable towards cohabitation, similarly to their Northern European counterparts. However, they needed their (highly educated) parents to hold favourable attitudes as well before actually starting to cohabit (Rosina and Fraboni 2004).

Apart from shedding light on how the spreading of cohabitation has proceeded in Italy, our results are interesting for the debate on the Second Demographic Transition (SDT) and its diffusion among Eastern and Southern European “late-comers”. It is impossible, of course, to say anything about the applicability of the above-mentioned account of the Italian delayed adoption of new family behaviours to other countries. It would be interesting to compare the pattern of diffusion of cohabitation in other “strong-family” countries with a similar sociocultural setting, such as Spain, Greece, or Eastern European countries such as Bulgaria and Poland. If our intuition is correct, it should be possible to recognise patterns similar to those that have been found in Italy.

Our results also entail important implications for the debate on the determinants of the emergence of cohabitation. We mentioned the existence of two theoretical

perspectives which find the roots of the diffusion of cohabitation either in economic uncertainty (POD hypothesis) or in cultural changes in favour of new family models (SDT hypothesis). Based on the first hypothesis, the forerunners of cohabitation are to be found among the less well-educated, while according to the second one, highly educated, selected individuals would constitute the *avant-garde* of social change. All in all, our results are in line with the SDT hypothesis. First, we found a positive and significant interaction between women's education and peer effects among the oldest cohorts. Second, we found cohabitation to be more likely if parents experienced separation/divorce and, more generally, if the environment of the family of origin can be described as "SDT-friendly"—e.g. if the father is highly educated. However, we do find that the educational gradient in cohabitation is inverting. It is a matter of time to understand whether cohabitation in Italy will also become more prevalent among less well-educated women (Esping-Andersen and Billari 2015; Ní Bhrolcháin and Beaujouan 2013).

An important limitation of this study concerns our measurement strategy that, although already employed in previous studies (see also Nazio 2008), does not enable us to identify direct evidence concerning the influence of relatives, friends or acquaintances (as in Balbo and Barban 2014). Our variables represent only proxies for the posited underlying mechanisms. While, based on our results, it can be argued that peers played a relatively minor role in the spreading of cohabitation in Italy, we cannot disentangle the impact of the family of origin from the "gross" effect of the pre-cohort adoption rate. The latter constitutes a black box whose effects possibly include the action of mass media and other forms of social influence. However, results concerning the effects of father's condition and education, and especially the moderating role of parental split-ups in the relation between pre-cohort adoption and women's decision to cohabit, point more directly towards the importance of the family of origin as the crucial mechanism driving the pre-cohort effect.

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