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INTENTIONS AND CHILDBEARING IN A CROSS-DOMAIN LIFE COURSE APPROACH: THE CASE OF AUSTRALIA

MARIA RITA TESTA AND DANILO BOLANO



Abstract

In Australia and other affluent societies people tend to report a number of desired children which is clearly higher than the number of children they eventually bear. In the effort to explain such an inconsistency, demographers have studied the correlates of the link between pregnancy intentions and births. Drawing on data from the "Household Income and Labour Dynamics in Australia" (HILDA) survey, we situate, for the first time, intentions and events in a unified and multidimensional life course framework. We examine the intention-outcome fertility link across a plurality of life course domains and in a genuine couple approach. Education, work, and residence are selected as domains closely related to the family formation process. Results show that pregnancy intentions are often part of a multidimensional life course plan and that the cross-domain effects are gendered and parity specific. Moreover, cross-domain events have stronger influence than cross-domain intentions. A change of residence is directly correlated with a childbirth if it is the outcome of a previous plan and the couple has already made the transition to parenthood. Resumption of studies is inversely correlated with the birth of a child irrespective of whether the event was planned or not by either one of the partners. Finally, a change of job decreases the chance of having a first child but only if experienced by the female partner while it decreases the chance of an additional child only if previously planned or experienced by both partners. Such results confirm the relevance of work-family conflict as one of the drivers of low fertility and outline the usefulness of a holistic life course approach in the analysis of reproductive decision-making.

Keywords

Intentions, fertility, life course, family formation, Australia, couple-level analysis.

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Intentions and Childbearing in a Cross-Domain Life Course Approach: The Case of Australia

Maria Rita Testa and Danilo Bolano

1. Introduction

In Australia and other affluent societies people tend to have fewer children than they tell researchers they would like to have. In the effort to explain such an inconsistency a large body of studies have investigated birth intentions and birth outcomes as well as the transition process from the former to the latter. However, with few exceptions (e.g., Barber 2001; Philipov 2009; Vidal et a; 2017), the link between intended and realised fertility has been assessed in isolation from the realisation of other life course intentions. Moreover, none of these previous studies has used a couple level approach. We examine the intention-outcome fertility link in a broad multidimensional framework in which we take into account the plurality of decision-making processes and related outcomes. We argue that the interplay between different individual life paths may be the missing link in our understanding of why couples often do not achieve their childbearing goals and why countries differ in the degree to which individuals have the number of children that they want (aggregate fertility).

It is well recognized that the incompatibilities or conflicts between the different roles in life as parent, student, and worker have contributed considerably to the decline and postponement of fertility observed in all developed countries (Gauthier 2007). At the same time, the traditional sequence of family events has been replaced by a de-standardisation of the life course, which means that patterns of family formation in many countries have become more and more heterogeneous and do not follow anymore a well pre-defined sequence. In the de-standardisation process, biographies become open and more dependent upon decision-making, and are removed from the traditional precepts and certainties, as well as from external controls and general moral laws (Beck & Beck-Gernsheim 1995). The process goes hand in hand with the increased number of options that individuals are entitled and expected to make decisions about. All these changes make the sequencing of the family life course increasingly complex and requires the use of new analytical tools and methodological perspectives (Berrington, Perelli-Harris & Trevena 2015).

We address this challenge by investigating the intention-behaviour fertility link in the dynamic process of a plurality of an adult's life goals. Our research questions are: Do individuals in the adult life stage have a multidimensional life course plan? And if yes, how does it impact on the translation of birth intentions into birth outcomes? Is a birth easier to be realized if it comes from a unidimensional life goal than from a multidimensional one? Which of the alternative life course intentions other than childbearing ease or hinder the

realisation of birth intentions? Is the influence exerted by intentions and events experienced in other life course domains responsive to gender, i.e., does it depend on whether intentions and events are experienced by the female or the male partner? Does the agreement in the couple in terms of family planning matter? In order to answer these issues we concentrate on a set of life course domains that are mutually interrelated to childbearing and all closely related to the family formation process: education, work and residence. We describe them in detail in the data section after having illustrated the theoretical framework in which they are embedded. Next, we present the statistical results both in a descriptive and multivariate fashion and conclude by discussing strengths and limits of the analysis performed as well as the implications stemming from the research findings.

2. Theoretical Framework

In the life course theoretical framework individual biographies are sequences of biographical transitions¹ in various life domains which are interdependent. Individuals decide on activities to perform in different domains on the basis of their goal-related aspirations and expectations. Raising children, being employed, getting an education, and owning a house are interrelated lifetime goals that contribute to the improvement of the subjective well-being. In this range of options fertility is considered as a goal-seeking behavior over the life course while parenthood is seen either as an ultimate goal or an intermediate goal aimed at improving social well-being through affection and social approval arising from parent-child relationship (Huinink & Kohli 2014). In the life course the principle of agency refers to individuals constructing their life courses and biographies as self-monitored actors within the particular opportunities and constraints they face, for example individuals sharing the same socio-economic background may show different paths of residential moves and occupational careers (Elder et al.2003; Shanahan and Macmillan 2008).

Social scientists usually refer to the concept of agency as the intrinsic human capacity to make choices and act (Giddens 1984) or as individual's resources which are brought to matter when taking action. In this latter definition agency is prone to empirical measurement and operationalized by psychological concepts like self-efficacy (Bandura 1997). The concept of agency is crucial in life course research because the process of individualization, accelerated social change, and the uncertainty of modern "risk society" (Beck 1992) have made status passages increasingly conditional and thus impose agentic behaviour upon the individual. Individuals do not merely follow institutionally pre-

¹ The crucial analytical concepts for translating the sociological life course approach into empirical research are "transitions" and "trajectories". Transitions are changes in state, for example from being employed to unemployed or from being childless to being with one child; trajectories are marked by a sequence of life events and transitions for example the entire occupation career or reproductive history (Elder 1985). Here the emphasis is on life course transitions because the study of trajectories would require long-term longitudinal data that are not available.

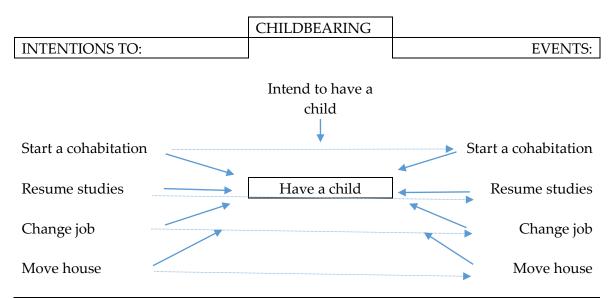
scheduled pathways but actively participate in societal fields like education, labour market, and family. They construct their life course as self-monitored actors within historical socioeconomic circumstances. As in the view of Heinz (1996), individuals are biographical actors as opposed to actors who just follow social norms or the rational actor model of subjective utility maximizing behaviour. In this interpretation, individuals pursue their own goals and biographical plans evaluating structural opportunities and institutional constraints. In principle, to put the principle of agency to work in empirical research the rational choice theory or any other theory of action may be applied. In the study of reproductive intentions, Morgan and Bachrach for example propose a theoretical framework in which they postulate that individuals act by following mental maps or schemas (Morgan & Bachrach 2011). One theory commonly used in the study of reproductive decision-making is the theory of planned behaviour which predict intentions as outcome of attitudes, subjective norms and perceived behavioural control (Billari, Philipov & Testa 2009; Ajzen & Klobas 2013; Dommermuth, Klobas & Lappergård 2011; Mencarini, Vignoli & Gottard 2014). Some demographers have extended it to encompass characteristics that compete with childbearing such as: educational attainment, professional career development, and consumer spending (Barber 2001; Barber, Axinn & Thornton 2002; Barber & Axinn 2005). Using US longitudinal data, Barber (2001) provided evidence that attitudes towards behaviours other than childbearing are background factors that influence the three blocks of determinants of childbearing intentions in the Theory of Planned Behaviour. In a similar vein, Philipov (2009) showed that in Bulgaria the intention to pursue higher education competes with childbearing, whereas the intention to enter employment, or the status of actually being employed, facilitates the realisation of childbearing intentions. Barber (2001) and Philipov (2009) predict that competing life domains will influence the paths through which childbearing intentions are translated into actual behaviour. The first scholar (Barber 2001) assumes, however, that the mechanism of influence works mainly through the formation of new characteristics affecting childbearing intentions while the second scholar (Philipov 2009) supposes a direct influence of competing intentions on both birth intentions and realisation of them. As suggested by this latter approach we expect that life course intentions other than related to childbearing influence reproductive outcomes directly. A similar approach has been proposed by Vidal et at (2017) who documented the direct correlation between realization of intended births and change of residence (whether intended or not) in Germany and Hanappi et al (2017) who found a positive link between childbirth and decreasing uncertainty on labour markets in Switzerland.

When two events in different life domains compete each other and cannot be realised at the same time, the individual may decide to either give up definitively on one of them, or establish a temporal order between them through the life course. The conflict between events resolves sometimes spontaneously over the course of life. For example, being enrolled in education is conflicting with the formation and the realization of pregnancy intentions at the early reproductive ages but later on, once the transition to parenthood has already been made, the intention to resume studies can be complementary with birth intentions and birth outcomes. In the life course theory, the different domains of life and the decision-making processes that govern transitions to different life states are assumed to

be interrelated. Education, childbearing, work, and residence are examples of different 'careers' that are simultaneously present in a person's life. Each of these careers translate into a number of transitions, or changes of state, and the durations (length of time) between these transitions will vary (Elder 1985; Elder, Johnson & Crosnoe 2003). Events in one career can hinder, enable, delay, or anticipate events in others, a phenomenon known as 'interdependencies of parallel careers' (Dykstra & van Wissen 1999). The organization of one's own life course implies the existence of a complex decision-making process (Blossfeld et al 2005) in which intentions are a main component. Hence, while looking at the intersection of individuals' life spheres we consider the events happening in each of them as an outcome of previously made decisions. The innovative standpoint in our research is that we do not consider life course intentions just once they are manifest in events (retrospectively) but as the starting point of a decision-making which is analysed prospectively thanks to the use of longitudinal data and repeated information on the same individuals who are interviewed in different points in time in a follow-up survey fashion.

An additional source of innovation lies in the couple level approach. The dyadic nature of reproduction calls for couple-level analysis based on linked intersections of the two partners. Past research has shown that transition paths from birth intention to birth outcome are gendered and more specifically that the influence of cross-domain intentions and events on childbearing is responsive to gender (Testa & Bolano 2018; Testa & Rampazzo 2018): events happening in the field of work and education are conflicting with fertility only if they are experienced by women but not by men; events concerning the move of house are complementary with childbearing but only if experienced by men and not by women.

Scheme 1. Life course intentions and events and their joint influence on childbirth



Note: The effects of cross-domains intentions on childbearing are direct (continuous lines from intentions to the birth event) and indirect (dotted horizontal lines for the transition from the intention to the corresponding event and continuous lines from the life course events to the birth event).

3. Research Hypotheses

The multiple roles individuals have at the same time constitute a challenge for the fulfilment of reproductive intentions. In the effort to reconcile multiple life goals individuals often postpone the time of starting a family. The delay is reinforced by the huge variety of options and alternatives available to individuals which makes the sequences of them in the adult life of men and women more and more varied and diversified. Lifestyles associated with globalisation introduces a greater number of competing life goals (Blossfeld et al 2005). The broad range of available choices makes the decision-making processes complex and the paths of realization highly heterogeneous. Changes in education, work and residence are all contributing to the reproductive history of adult individuals. Usually residence is a field complementary with childbearing because creates the (pre-)conditions for the birth of a(nother) child while education and work are life domains competitive with childbearing because they respond to needs and meet aspirations pertaining to life careers which are often in conflict with childbearing and childrearing duties.

Prioritization of education over childbearing responds to a dominant age norm which postulates that educational career should be completed before the start of childrearing (Blossfeld & Huinink 1991; Billari & Philipov 2004). In this paper, we focus on those individuals who have already made the transition to adulthood and are susceptible to start a family; hence, we do not consider completion of studies - which is usually located at earlier stages of adulthood - but just re-entering the education system after first completion of studies which might interest all adults. Since women are the main responsible person for childrearing we hypothesise a conflict between studying and childbearing tasks and expect the intention to resume studies being negatively correlated with the birth of a child for women but not for men (Hypothesis 1).

Work competes with childbearing because of opportunity costs, which are normally higher for women than for men, as in most couples and societies mothers carry out most of the household and childcare duties (Thomson & Brandreth 1995). However, work earnings constitute an essential component of financial support for the family and, as such, being in employment or starting work could facilitate childbearing (Pailhé 2009). Similarly, a change of job might be associated with individual aspirations for career advancement which negatively influences childbearing (Philipov 2009), but it could also mean a change towards a more accommodating and less demanding job that creates more favourable conditions to childbearing (e.g. a switch from a full-time to a part-time job). Our assumption is that intentions related to the work life course domain are aimed at reaching a better balance between work and family life if formulated in conjunction with birth intentions, and are more driven by career ambitions (thus competing with childbearing) if formulated in the absence of birth intentions. Hence, we anticipate that the intention to start working (or change job) facilitate the realisation of birth intentions (Hypothesis 2a) if it co-exists with a plan to have a child but have a negative effect on childbearing if they do not co-exist with a plan to have a child (Hypothesis 2b).

A move to another municipality, or a change of dwelling in the same municipality, is often associated with an attempt to improve one's socio-economic status and well-being. The change of a dwelling often occurs with the intention of residing in a bigger flat or house, which is in turn likely to create suitable conditions for childbearing or, it was planned already with the idea to expand the family, i.e., anticipatory relocation to adapt to growing household size (Vidal et al 2017). Hence, we expect the intention to change residence being positively associated with childbearing for both the male and the female partner (Hypothesis 3).

Finally, since reproductive decision-making responds to a dyadic dynamic we hypothesise that childbearing does not occur until an agreement about having a child has been reached within the couple. However, as previous literature has shown (Testa et al. 2014), the outcome of a disagreement is highly sensitive to the parity differences: it is shifted towards a birth as long as the two-child family has not been achieved, while it is moved towards the persistence of the status quo if the couple is planning to go beyond the normative level of two children. As such, we hypothesise that *couple disagreement is closer to agreement on having a child at parity zero and one* (Hypothesis 4).

4 Data, Measures and Models

The analyses are performed using longitudinal data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. HILDA is a nationally representative household-based panel study. The study collects information yearly on different aspects of life from each person aged 15 and older living in the household at the time of the interview. The identical set of questions were addressed to both partners, which allows us to conduct a fully comparative analysis of the responses within the couple. Following the dyadic nature of reproductive decision-making we used couple-level data. At baseline (2001), 13,969 persons from 7,682 households have been interviewed. In 2011, a top-up sample of 2,153 households have been added.² Information on fertility intentions and other life course plans has been asked in 2005 (wave 5), 2008 (wave 8), 2011 (wave 11) and 2015 (wave 15). At the time of writing this paper Wave 15 is the last available wave. We focused on the realization of the fertility intention i.e., having a baby within three years from the interview at which the birth intention has been expressed; hence, data collected in the wave 2015 – which lack information on birth outcomes in the following three years -- were excluded. Besides fertility intentions, HILDA gathers information on intentions in other life-course domains including work, residence, and study. One clear strength of the survey is that such life course intentions are addressed using a similar question wording. In the following, we detail the phrasing of the respective questionnaire items and report it in Table 1.

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² For further details on HILDA survey, please refer to Watson, N., and Wooden, M., (2002) The Household, Income and Labour Dynamics in Australia (HILDA) Survey. *HILDA Project Technical Paper Series. No, 1/02, May 2002*

<u>Childbearing</u>. Information on fertility intention has been drawn from two survey items in HILDA questionnaire. If the respondent declared to intend to have at least one (more) child (*How many (more) children do you intend to have?*), the timing of next intended childbearing was asked (*When do you intend to have next child?*) with four possible response options: *i*) within the next 3 years; *ii*) within the next four/five years; *iii*) Within the next 6-10 years; *iv*) unable to answer. Alternatively, the respondent could declare the exact year when he/she intends to have the next child. We recoded the answer in a variable indicating if the respondent intends to have a child within three years from the date of the interview.

<u>Work</u>. According to the labor force status of the respondent, the survey asked two different questions. If the respondent was employed, the question is about the intention of changing job in three years (Do you intend to change your employer or become self-employed in the next three years?). If instead the respondent was not in paid work, the question is around starting a paid job in three years (Previously you indicated that you are currently not in paid work. Do you intend to start (or return to) paid work sometime in the next three years?). For the sake of simplicity, we aggregated the two above mentioned intentions in one single variable indicating a change in employment status.

<u>Residence</u>. The survey question about the intention to move house in next three years was addressed as follows: "Do you think you will move house in the next three years?"

Study. Both the intention to complete studies and to resume studies were asked in HILDA. Since our target group is adult couples we focused just on the transition from 'not enrolled' (because studies are completed) to 'enrolled'. If the respondent was not enrolled in education, a question on the intention of resuming studies was asked: "Do you think you will begin a course of study within the next three years?"

Table 1 Wording of the survey items on life course intentions in the HILDA questionnaire

	1
INTENTION	SURVEY ITEMS
LIFE DOMAIN	
Birth	How many (more) children do you intend to have?
	When do you intend to have the next child?
Study	Do you think you will begin a course of study within the next three years?
Work	Do you intend to change your employer or become self-employed in the next three years?
	Previously you indicated that you are currently not in paid work. Do you intend to
	start (or return to) paid work sometime in the next three years?
Residence	Do you think you will move house in the next three years?

Note. The questions on birth intentions are asked in this format only at the surveys conducted in 2005, 2008 and 2011

4.1. Target Sample

To select the suitable sample we pooled together the HILDA data from the waves

conducted in 2005, 2008 and 2011, ending up with 6,981 heterosexual couples; i.e., people married or in a de facto relationship living together at the time of the interview. Out of several waves we decided to select for the study only these three because only in these three waves individuals were asked about their intentions on childbearing and other life domains within the following three years, which is the focus of this research. Although the HILDA survey was administered to every member of the household aged 15 and older, the questions on fertility intentions were restricted to male respondent aged less than 55 and female respondent aged less than 45. Moreover, if for medical reason, the respondent or the partner reported difficulties in having a child, the question was not asked. Since we focus on couples, we retain only those couples in which both partners reported valid information on fertility intentions and who were not pregnant at the time of the interview. The final target sample was cut down to 1,329 couples for a total number of 1,845 observations.3 Among these 1,845 observations, 108 (5.85%) lacked information on the fertility history of the couple in the next three years, 97 (5.26%) referred to couples experiencing a partnership disruption during the time span considered, and 18 (0.97%) referred to couples reporting inconsistent information about childbearing and partnership disruption. We excluded all three these categories. As such, the final analytical sample consists of 1,598 observations; i.e., 1274 couples, of which 754 (59%) are childless and 520 (41%) with at least one child.

Table 2. Distribution of observations per couple

	N of respondent	%
One observation	908	68.32
Two observations	326	24.53
Three observations	95	7.15
Total	1,329	100.00

Note. Only couples who were under observation for the whole period of observation are listed under 'three'

4.2 Measures

We describe in this section the variables considered in the statistical analysis by focusing especially on the description of life course intentions and events.

³ Questions on fertility intention and other life course intentions have been only asked in 2005, 2008 and 2011. Being in a panel study, it is possible that the same couple has been interviewed multiple times. In particular over 1,329 couples, 908 (68.32%) have been interviewed once, 326 (24.53%) twice. The remaining 95 couples (7.15%) has been interviewed three times (Table 2).

⁴ Among these couples, 73 did not experienced any childbirth in the observation period and 24 had a childbearing experience i.e., one of the partners had a child with a new partner.

Life course intentions. HILDA provides genuine couple-level data, which means information on the survey questions is reported independently by both partners of each couple. We combined partners' intentions in a four-categorical variable as follows: i) both partner agree on having a child (positive agreement), ii) only male partner intends to have a child (disagreement), iii) only female partner intends to have a child (disagreement), iv) both partners agree on not having a child (negative agreement). Similarly, we created a four-categorical variable for each life course partners' combined intention. For the intentions of resuming studies and changing work, we added an additional category indicating whether one of the partners was not at risk of experiencing the event (e.g., an individual enrolled in education is obviously not at risk to express the intention of resuming studies) or whether the answer was missing.

Life course events. All events considered in the analysis are measured by a dummy variable indicating the occurrence of the event. The birth of a child is the outcome variable; hence, the other life course events can be included in the set of the explanatory variables only if they occurred before the birth of a child otherwise we would incur in reverse causality. Thanks to the longitudinal nature of the data, we can verify whether changes in partnership, study, work, or residence occurred before the birth of a child. However, due to the HILDA survey design, we cannot retrieve the exact date of occurrence of events but only the time elapsed since the last interview until the event. This timing is categorized as follows: i) last 3 months; ii) 3-6 months; iii) 6-9 months; iv) 9-12 months before the interview. Using this information we created a set of dummy variables indicating whether the changes in partnership, education, work and residence happened within three years. Besides changes in partnership, education, work and residence we included in the set of explanatory variables other changes which are related to the well-being of the partners: i) improvement in financial condition, ii) serious illness or injury of (at least) one of the partners, iii) getting unemployed. As for the other life course events, we consider these events only if they occurred within three years.

Inequality within the couple. We included in the analysis several variables on gender inequality within the couple. First, a categorical variable measuring the economic bargain power of each partner within the couple and indicating whether i) both partners contribute equally to the total household income (dual earner couples); ii) the female partner contributes at least 60% to the total household income (female breadwinner couples); iii) the female partner contributes less than 60% to the total household income (male breadwinner couples). Second, a variable based on gender role attitudes towards parenting and work. This variable is based on the responses given by the partners to the following statement included in the survey questionnaire "It is better for everyone involved if the man earns the money and the woman takes care of the home and children." The possible answers ranged over a 7-point scale from: strongly disagree (1) to strongly agree (7). Lower values might be interpreted as having more liberal gender role attitudes. On the other hand, higher values suggest a more conservative view (Foster and Stratton, 2017)⁵. We used the middle

⁵ Foster G. Stratton LS. "Do significant labor market events change who does the chores? Paid work,

point (3) as cut off point to define if a person is conservative (above 3) or liberal (below 3). This might explain the different gender effect of work related intentions on the probability of having a child. Third, for couples with at least one child, we included a dummy indicating whether the partners were satisfied with the gender division of childcare tasks. Since childcare is traditionally gendered, we included two separate dummies, one for each partner. We assume that mother's satisfaction in gender division of childcare tasks has a relevant effect on the chance to have a(nother) child while father's satisfaction in gender division of childcare tasks is not significant.

Socio-demographic characteristics. We controlled for several socio-demographic characteristics including age, level of education, employment status, household income, number of siblings, self-rated health, living in urban area. In addition, we included the state of residence and year of interview, both as fixed effects in the models. The descriptive statistics of all variables are reported in the Appendix.

4.3 Model

We applied logistic regression models to the couple-level sample using parity status as a variable to stratify the models. The strategy was to include gradually different sets of explanatory variables, first the intentions variable and next the (transition to) events variables. We ran four model specifications: In model I we included just the fertility intentions variable. Next, we added intentions in all the other life course domains (model II). In model III rather than intentions we included all the other life course events (provided that they were experienced before childbearing). Finally, in model IV we looked at both intentions and corresponding behaviour for each life course domain. We did this by including a variable combining these two dimensions of the life course together. In such a way, we are able to disentangle the effects of those events that were planned (preceded temporally by the expression of a corresponding intention) from those that were unplanned (they happened unexpectedly, i.e., they were not preceded by a corresponding intention). Though, we could not embrace all possible combinations of couple (dis)agreement in intentions and realisations (or not) for each life course domain because of the limited sample size available. Socio-demographic characteristics were retained in all four models. Results are shown in table 3 and table 4. They also report estimates of a model including only the socio-demographic characteristics.

4. Results

We analyzed the likelihood of having a child using a logit model and clustering standard errors by couples to account for potential multiple observations over time. We stratified the

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models by parity.

Parity zero. Birth intentions predict the transition to parenthood. Couples in which both partners agreed on having a child experienced a chance of a childbirth 12 times higher than those agreed on not having a child (Table 3). The odds ratio of couples intending a child ranges between 12.77 and 10.62 depending on the model specification and is always highly statistically significant. Couple disagreement is shifted towards agreement on not having a child if only the male partner intends to have a child (the odds ratio of this disagreement variable is never statistically significant which means that this group is not statistically different from the couples agreeing on not having another child), while it is shifted towards agreement on having a child if the woman but not the man intends to get a child (the odds ratio of this disagreement variable is more than 3 times higher than that of the agreement on not having a child).

Cross-domain intentions do not significantly influence the birth of the first child, apart from two exceptions: if both partners intend to change jobs or the male partner intends to change residence. Couples are less likely to become parent if both want to change jobs and more likely to become one if they plan to change residence. Cross-domain events pertaining to the education or to the work sphere of life are a statistically significant predictor of childbirth. Partners who changed jobs or couples in which at least the female partner did so, experience a lower chance to have a child in the observation period regardless on whether the change of job was intended or not. Couples in which at least one of the partners resumed studies (no matter whether the female or the male one) had lower chance to get a baby regardless on whether the resumption of studies was intended or not. All coefficients related to the change of residence were not statistically significant but all of them were positive suggesting a direct correlation between change of residence and childbearing. Finally, getting a serious illness does also influence negatively the chance to get a child. The estimates of the regression models show that intentions are more likely to be realized if women are younger, the female partner has high level of education, or she is a female breadwinner, and if couples live in Queensland or Western Australia. Couples in which only the female partner is employed are less likely to have a child. Moreover, there is a negative temporal trend in the chance to experience a childbirth: in 2011 couples experienced a lower chance to realize their birth intention (Table 3).

Table 3 - Propensity of having child. Odds ratio. Parity 0. Couple level data

			MODELS		
	1)	(2)	(3)	(4)	(5)
CHILBEARING (Ref. Neither partner intends)					
Man intends, woman does not		1.658	1.589	1.573	1.685
		(0.530)	(0.512)	(0.526)	(0.559)
Woman intends, man does not		3.742***	3.601***	3.523***	3.557***
		(1.108)	(1.081)	(1.049)	(1.059)
Both partners intend		12.77***	12.45***	10.62***	11.14***
DECIDENTE AND ACCOUNTS OF A STATE	. 1)	(2.915)	(2.890)	(2.490)	(2.620)
RESIDENTIAL MOBILITY (Ref. Neither partner in	itends)		0 =4044		
Man intends, woman does not			0.519**		
XA7			(0.166)		
Woman intends, man does not			0.799		
Dath marks are in ton J			(0.292)		
Both partners intend			0.975 (0.168)		
RESIDENTIAL MOBILITY (Ref. no event)			(0.100)		
				1.162	
Change residence, all events				(0.181)	
Change residence, but it was not intended				(0.161)	1.049
Change residence, but it was not interided					(0.303)
Change residence, it was intended					1.173
change residence, it was interface					(0.194)
CHANGE JOB (Ref. Neither partner intends)					(0.13.1)
Man intends, woman does not			0.816		
			(0.190)		
Woman intends, man does not			0.728		
,			(0.179)		
Both partners intend			0.595**		
			(0.151)		
Not at risk (at least one of the partners)			0.786		
-			(0.191)		
CHANGE JOB (Ref. no event)					
Change job, only male partner				0.883	
				(0.188)	
Change job, only female partner				0.495***	
				(0.104)	
Change job, both partners				0.498***	
				(0.116)	
Change job, it was not intended					0.686*
					(0.138)
Change job, it was intended					0.528***
					(0.0978)
RESUMPTION STUDIES (Ref. Neither partner into	ends)				
Man intends, woman does not			1.235		
			(0.309)		
Woman intends, man does not			1.071		
P. d			(0.290)		
Both partners intend			0.710		
NI () () () ()			(0.289)		
Not at risk (At least one of the partners)			0.989		

			MODELS		
VARIABLES	(1)	(2)	(3)	(4)	(5)
			(0.187)		
RESUMPTION STUDIES (Ref. No event)					
Resumption of studies, male partner				0.518***	
				(0.132)	
Resumption of studies, female partner				0.411***	
				(0.0919)	
Resumption of studies, both partners				0.278***	
				(0.0965)	
Resumption of studies, but it was not					0.398***
planned					
					(0.0755)
Resumption of studies, it was planned					0.410***
					(0.123)
OTHER LIFE-COURSE CHANGES					
Improve of finances (Ref. No improve)				1.102	1.185
Code of House (Def. No. 11)				(0.300)	(0.326)
Serious illness (Ref. No Illness)				0.670*	0.626**
Catting fined (Def Not action of the d)				(0.143)	(0.133)
Getting fired (Ref. Not getting fired)				0.996	0.803
DEMOCD ADDITION				(0.308)	(0.247)
DEMOGRAPHICS Age (woman)	1.058***	0.962**	0.956**	0.951**	0.949**
Age (woman)	(0.0195)	(0.0188)	(0.0194)	(0.0197)	(0.0194)
Age (both partners)	(0.0193)	(0.0100)	(0.0194)	(0.0197)	(0.0194)
Male partner is younger	1.083	1.277	1.262	1.243	1.334
Male partiter is younger	(0.437)	(0.585)	(0.573)	(0.518)	(0.579)
Male partner older (more than 3 years)	1.092	0.967	0.966	0.922	0.920
wate partier order (more than 5 years)	(0.177)	(0.169)	(0.172)	(0.171)	(0.169)
Education of woman (Ref. Compulsory)	(0.177)	(0.10)	(0.172)	(0.171)	(0.10)
Certificate or Diploma	0.961	0.927	0.957	0.983	1.015
Certificate of Diploma	(0.197)	(0.208)	(0.219)	(0.234)	(0.242)
Bachelor and above	1.274	1.467	1.547*	1.407	1.501
buchelof and above	(0.295)	(0.372)	(0.404)	(0.374)	(0.399)
Education of both partners (Ref. same level)	(0.2/0)	(0.07 =)	(0.101)	(0.07 1)	(0.055)
Man more educated than woman	1.032	0.932	0.970	0.908	0.955
	(0.209)	(0.210)	(0.226)	(0.221)	(0.231)
Man less educated than woman	0.946	0.998	0.964	0.998	0.954
	(0.168)	(0.198)	(0.193)	(0.201)	(0.193)
Employment status (Ref. Both employed)	, ,	, ,	, ,	, ,	, ,
Both partners not employed	0.846	0.723	0.964	0.753	0.791
• •	(0.435)	(0.381)	(0.554)	(0.448)	(0.453)
Only man employed	0.790	0.652	0.799	0.645	0.672
	(0.234)	(0.213)	(0.276)	(0.220)	(0.232)
Only woman employed	0.620	0.388*	0.424*	0.390*	0.408*
	(0.241)	(0.191)	(0.219)	(0.204)	(0.210)
Household disposable income (logarithm)	1.208	1.249	1.219	1.224	1.239
	(0.287)	(0.248)	(0.226)	(0.205)	(0.213)
Couple inequality (Ref. Dual earner couple)	·				
Female breadwinner	1.632**	2.137***	2.256***	2.226***	2.233***
	(0.391)	(0.538)	(0.586)	(0.578)	(0.582)
Male breadwinner	1.025	1.057	1.082	1.114	1.069

			MODELS		
VARIABLES	(1)	(2)	(3)	(4)	(5)
	(0.153)	(0.180)	(0.186)	(0.204)	(0.191)
Siblings (Ref. 2 or more siblings)					
Both partners have no siblings	0.838	0.818	0.831	0.855	0.850
	(0.192)	(0.206)	(0.210)	(0.211)	(0.210)
At least one partner with one sibling	0.831	0.761	0.750	0.796	0.793
	(0.130)	(0.133)	(0.133)	(0.143)	(0.141)
Liberal (Ref. Both partners conservative)					
Man conservative, woman liberal	0.748	0.873	0.854	0.922	0.916
	(0.151)	(0.196)	(0.191)	(0.217)	(0.215)
Man liberal, woman conservative	0.999	1.040	1.075	1.123	1.135
	(0.251)	(0.305)	(0.315)	(0.338)	(0.335)
Both partners liberal	0.680**	0.762	0.780	0.844	0.832
	(0.130)	(0.165)	(0.170)	(0.192)	(0.187)
Both partners are in good health (Ref. At	0.812	0.778	0.805	0.810	0.812
least one partner in fair or poor self-rated					
health)					
	(0.177)	(0.183)	(0.194)	(0.190)	(0.191)
Living in a major city (Ref. Living in inner,	1.117	0.994	0.986	0.918	0.926
outer or remote area)					
	(0.223)	(0.239)	(0.238)	(0.227)	(0.229)
Year of interview (Ref. 2005)	, ,	,	,	, ,	,
Survey wave 2008	0.919	0.852	0.817	0.843	0.832
	(0.158)	(0.157)	(0.154)	(0.161)	(0.159)
Survey wave 2011	0.735	0.648**	0.626**	0.833	0.788
,	(0.150)	(0.131)	(0.129)	(0.176)	(0.167)
State of residence (Ref. New South Wales NS	` ,		, ,	, ,	,
VIC – Victoria	1.127	1.002	0.993	1.000	0.952
	(0.214)	(0.209)	(0.210)	(0.215)	(0.202)
QLD – Queensland	1.639**	1.632**	1.663**	1.674**	1.646**
	(0.325)	(0.363)	(0.378)	(0.393)	(0.383)
SA – South Australia	0.899	0.888	0.891	0.829	0.800
	(0.240)	(0.269)	(0.272)	(0.263)	(0.251)
WA – Western Australia	1.888**	1.881**	1.909**	1.548	1.715*
	(0.509)	(0.591)	(0.590)	(0.495)	(0.552)
TAS – Tasmania	0.758	0.639	0.591	0.616	0.612
	(0.345)	(0.301)	(0.280)	(0.294)	(0.290)
NT – Norther Territory	1.806	1.111	1.308	1.179	1.112
,	(1.045)	(0.613)	(0.802)	(0.810)	(0.750)
ACT – Australian Capital Territory	1.477	1.394	1.330	1.182	1.178
1	(0.701)	(0.656)	(0.668)	(0.620)	(0.599)
	(/	,	, ,	/ /	/ /
Constant	0.158	0.0192*	0.0319*	0.0405*	0.0439*
	(0.413)	(0.0419)	(0.0658)	(0.0748)	(0.0829)
	(0.110)	(0.011)	(0.0000)	(0.07 10)	(0.002)
Observations	984	984	984	984	984
Number of couples	754	754	754	754	754
Pseudo R2	0.0447	0.188	0.197	0.229	0.224
*** p<0.01. ** p<0.05. * p<0.1	0.011/	0.100	0.177	0.227	0.221

*** p<0.01, ** p<0.05, * p<0.1 Robust clustered standard errors in parentheses.

Parity one or above. Birth intentions predict childbirths also at parity higher than zero (Table 4). Couples whose partners agreed on having an additional child are more likely to experience a childbirth than those agreeing on not having a child. The former have a chance of a childbirth more than twice as high as the latter. The odds ratio of couples agreeing on having an additional child, which ranges between 2.44 and 2.59 depending on the model specification, is statistically significantly different from that of 'partners agreed on not having a child'. Disagreement, no matter whether only the female or the male partner intended to have a child, was not statistically significantly different from 'agreement on not having another child' (Table 4). Cross-domain intentions pertaining to education and residence significantly influence the likelihood to have another child: couples in which only the woman intends to change residence are more likely to have a child while couples in which only woman intends to resume studies are less likely to have another child. Crossdomain events in education, work and residence are all relevant for the occurrence of a childbirth. Change of residence is positively associated with the chance to have another child, but when we disentangle the variable residential mobility by intentionality (whether it was preceded by an intention or not) we found that the effect is statistically significant only if this change was previously planned. If both partners experienced a change of job and the change was intended, they are also less like to have a child. Finally, resumption of studies is negatively correlated to childbearing no matter whether the event was planned or not and if then whether it was planned only by the female or the male partner.

Focusing on socio-demographic characteristics, childbirths are less likely if women are older, or the male partner is more than three years older than the female partner or the couple has already reached the normative level of a family with two children. Couples in which the female partner is highly educated or she is satisfied with the gender division of childcare tasks within the couple are more likely to have a child. Moreover, the likelihood of a childbirth varies significantly across the states: it is higher in the Norther Territory and lower in the Australian Capital Territory (Table 4). This results are in line with the data on fertility rates (TFR) in Australia with Northern Territory (and Tasmania) recording highest TFR in the country (around 1.9) and Australian Capital Territory the lowest (TFR = 1.55).

Table 4 - Propensity of having child. Odds ratio. Parity 1+. Couple level data

		MODELS		
(1)	(2)	(3)	(4)	(5)
	0.622	0.637	0.669	0.629
	(0.377)	(0.404)	(0.437)	(0.405)
	1.551	1.651	1.667	1.694
	(0.804)	(0.884)	(0.980)	(0.969)
	2.446**	2.541**	2.654**	2.592**
	(0.906)	(0.980)	(1.137)	(1.090)
er intends	s)			
		1.110		_
		(0.452)		
		2.695**		
		(1.231)		
	()	0.622 (0.377) 1.551 (0.804) 2.446**	(1) (2) (3) 0.622 0.637 (0.377) (0.404) 1.551 1.651 (0.804) (0.884) 2.446** 2.541** (0.906) (0.980) er intends) 1.110 (0.452) 2.695**	(1) (2) (3) (4) 0.622 0.637 0.669 (0.377) (0.404) (0.437) 1.551 1.651 1.667 (0.804) (0.884) (0.980) 2.446** 2.541** 2.654** (0.906) (0.980) (1.137) er intends) 1.110 (0.452) 2.695**

			MODELS		
VARIABLES	(1)	(2)	(3)	(4)	(5)
Both partners intend to move house			1.380		
DECIDENTIAL MODILITY (D. C.			(0.318)		
Change residence all exemts				1 700**	
Change residence, all events				1.702** (0.407)	
Change residence, but it was not intended				(0.407)	1.286
change residence, each was not intertack					(0.478)
Change residence, it was intended					1.892**
					(0.504)
CHANGE JOB (Ref. Neither partner intends)					
Man intends, woman does not			1.613		
			(0.803)		
Woman intends, man does not			0.686		
Path martiners intend to shange ich			(0.251) 0.769		
Both partners intend to change job			(0.300)		
Not at risk (at least one of the partners)			1.524		
Two at now (at least one of the partiters)			(0.534)		
CHANGE JOB (Ref. no event)			(2.2.2.)		
Change job, only male partner				0.952	
				(0.298)	
Change job, only female partner				0.683	
				(0.247)	
Change job, both partners				0.366**	
				(0.157)	1.055
Change job, event was not intended					1.057 (0.369)
Change job, event was intended					0.535**
Change job, event was intended					(0.145)
RESUMPTION STUDIES (Ref. Neither partner in	ntends)				(01220)
Man intends, woman does not	·		1.045		
			(0.324)		
Woman intends, man does not			0.603*		
			(0.184)		
Both partners intend to resume study			0.644		
N			(0.300)		
Not at risk (at least one of the partners)			0.878		
RESUMPTION STUDIES (Ref. No event)			(0.252)		
Resumption of studies, male partner				0.310***	
recumpuon or ordunes, mare parater				(0.108)	
Resumption of studies, female partner				0.133***	
•				(0.043)	
Resumption of studies, both partners				0.066***	
				(0.039)	
Resumption of studies, but event not planned					0.177***
Decomption of dealing at 1					(0.050)
Resumption of studies, planned					0.177***
OTHER LIFE-COURSE CHANGES					(0.063)
Improve of finances (Ref. No improve)				0.728	0.896
improve of infances (i.e., ivo improve)				0.720	0.070

			MODELS		
VARIABLES	(1)	(2)	(3)	(4)	(5)
				(0.347)	(0.416)
Serious illness (Ref. No Illness)				0.960	0.922
				(0.274)	(0.263)
Getting fired (Ref. Not getting fired)				1.175	1.282
				(0.512)	(0.543)
DEMOGRAPHICS					
Age (woman)	0.887***	0.880***	0.872***	0.862***	0.863***
. (1	(0.0202)	(0.0204)	(0.0216)	(0.0213)	(0.0207)
Age (both partners)	0.602	0.650	0.505	0.700	0.700
Male partner is younger	0.693	0.652	0.727	0.732	0.698
Mala made and Hard (many than 2 man)	(0.431)	(0.408)	(0.459)	(0.435)	(0.393)
Male partner older (more than 3 years)	0.639**	0.637*	0.606**	0.591**	0.581**
Parity (Parkington add)	(0.144)	(0.148)	(0.146)	(0.146)	(0.142)
Parity (Ref. just one child) Couple with at least two children	0.402***	0.444***	0.422***	0.395***	0.402***
Couple with at least two children				(0.0960)	(0.0957)
Education of vyaman (Rof Compulsory)	(0.0866)	(0.0958)	(0.0959)	(0.0960)	(0.0937)
Education of woman (Ref. Compulsory) Certificate or Diploma	1.289	1.308	1.363	1.484	1.362
Certificate of Dipionia	(0.403)	(0.419)	(0.440)	(0.496)	(0.453)
Bachelor and above	1.593	1.574	1.632	2.006*	1.906
bachelol and above	(0.558)	(0.556)	(0.601)	(0.816)	(0.754)
Education of both partners (Ref. same level)	(0.550)	(0.550)	(0.001)	(0.010)	(0.701)
Man more educated than woman	0.910	0.936	0.967	1.145	1.060
The state of the s	(0.264)	(0.275)	(0.295)	(0.370)	(0.339)
Man less educated than woman	0.685	0.704	0.726	0.629	0.623
	(0.188)	(0.193)	(0.202)	(0.197)	(0.188)
Employment status (Ref. Both employed)	· /	,	, ,		
Both partners not employed	0.582	0.661	0.775	0.500	0.549
1 ,	(0.273)	(0.307)	(0.396)	(0.259)	(0.287)
Only man employed	1.058	1.068	1.233	0.980	1.076
, , ,	(0.251)	(0.258)	(0.344)	(0.259)	(0.284)
Only woman employed	2.755	2.502	1.911	2.662	2.655
	(2.373)	(2.211)	(1.615)	(2.113)	(1.941)
Household disposable income (logarithm)	1.172	1.184	1.214	1.069	1.090
	(0.247)	(0.258)	(0.283)	(0.266)	(0.263)
Couple inequality (Ref. Dual earner couple)					
Male breadwinner	0.971	0.958	0.980	0.975	0.967
	(0.217)	(0.219)	(0.227)	(0.237)	(0.234)
Female breadwinner	0.726	0.713	0.682	0.665	0.697
	(0.287)	(0.277)	(0.269)	(0.292)	(0.300)
Gender division of childcare tasks (Ref. not sa		0.0==		0.05:	0.000
Male partner is satisfied	0.863	0.873	0.841	0.834	0.808
T 1	(0.327)	(0.337)	(0.335)	(0.323)	(0.316)
Female partner is satisfied	1.635*	1.608*	1.538	1.839**	1.934**
CHI (D. (D. (D.)	(0.420)	(0.416)	(0.407)	(0.522)	(0.550)
Siblings (Ref. 2 or more siblings)	4.022	1.061	4 04 =	2.02	201=
Both partners have no siblings	1.033	1.061	1.215	0.987	0.947
At least an amount of the control of the	(0.471)	(0.473)	(0.546)	(0.479)	(0.436)
At least one partner has one sibling	0.962	1.028	1.006	1.001	0.944
	(0.237)	(0.258)	(0.260)	(0.268)	(0.248)

Liberal (Ref. Both partners conservative)

			MODELS						
VARIABLES	(1)	(2)	(3)	(4)	(5)				
Man conservative, woman liberal	1.533	1.450	1.547	1.544	1.554				
	(0.482)	(0.473)	(0.525)	(0.527)	(0.529)				
Man liberal, woman conservative	1.412	1.305	1.504	1.614	1.511				
	(0.444)	(0.424)	(0.505)	(0.589)	(0.522)				
Both partners liberal	1.172	1.195	1.238	1.355	1.356				
	(0.334)	(0.343)	(0.370)	(0.408)	(0.416)				
Both partners in good health (Ref. at least or	e in fair/poo	r health)							
	1.200	1.201	1.225	1.177	1.279				
	(0.404)	(0.395)	(0.397)	(0.416)	(0.446)				
Living in a major city (Ref. inner, outer or remote area)									
	0.861	0.862	0.891	1.157	1.115				
	(0.226)	(0.231)	(0.255)	(0.342)	(0.333)				
Year of interview (Ref. 2005)									
Survey wave 2008	0.945	0.904	0.998	0.873	0.844				
	(0.235)	(0.224)	(0.251)	(0.240)	(0.224)				
Survey wave 2011	0.994	0.899	0.976	1.017	0.938				
	(0.274)	(0.248)	(0.282)	(0.318)	(0.284)				
State of residence (Ref. New South Wales N									
VIC – Victoria	1.100	1.025	0.991	1.014	1.030				
	(0.328)	(0.309)	(0.302)	(0.327)	(0.340)				
QLD – Queensland	1.302	1.252	1.330	1.419	1.435				
	(0.369)	(0.365)	(0.404)	(0.438)	(0.439)				
SA – South Australia	0.837	0.868	0.737	0.891	0.967				
	(0.355)	(0.393)	(0.329)	(0.442)	(0.457)				
WA – Western Australia	1.224	1.114	1.163	1.340	1.386				
	(0.474)	(0.425)	(0.462)	(0.604)	(0.638)				
TAS – Tasmania	0.790	1.140	1.484	1.294	1.384				
	(0.423)	(0.575)	(0.815)	(0.760)	(0.777)				
NT – Norther Territory	3.051	2.695	2.938	4.637**	3.759**				
	(2.409)	(2.033)	(2.217)	(2.894)	(2.341)				
ACT – Australian Capital Territory	0.277**	0.257**	0.249**	0.188**	0.186**				
	(0.171)	(0.170)	(0.166)	(0.139)	(0.132)				
Constant	0.575	0.258	0.156	0.817	0.655				
	(1.336)	(0.633)	(0.410)	(2.330)	(1.818)				
Observations	614	614	614	614	614				
Number of couples	520	520	520	520	520				
Pseudo R2	0.129	0.147	0.170	0.247	0.238				
	· · · · · · · · · · · · · · · · · · ·	·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	<u></u>				

^{***} p<0.01, ** p<0.05, * p<0.1. Robust clustered standard errors in parentheses.

5. Discussion

The aim of this paper was to study the family formation process as the result of a multidimensional planning resulting from the interplay between events and intentions in different life course domains. We focused on education, work and residence because these are domains closely related to childbearing and they strongly influence the family formation process. Thanks to the identical wording of the intention items asked in the different life domains in HILDA survey rounds, we are able to conduct a cross-domain

comparative analysis of life course intentions and childbearing and uncover the influence between them. Results show that couples do often have a plurality of life goals at time and that the realization of birth intentions depends on the type of event and often also on whether the event was experienced only by the man or the woman or by both members of the couple. In the efforts to explain gender differences in the cross-domains effects on birth outcomes as revealed in an earlier study (Testa & Bolano 2018), we adopted a genuine couple-level approach. Looking at females and males within the couple, we found that partners' disagreement about having a child prevents childbearing only if the transition to parenthood has already been made. Among childless couples partners' disagreement is often followed by a birth with a frequency that lies between that of agreement on yes and that of agreement on not. Furthermore, the effect of partners' disagreement is gendered: only couples in which the woman intends but the man does not are more likely to have a child than those in which partners agreed on not having a child.

Complementarity is detected between the intention to change residence and the intention to have a first or an additional child in line with the findings of previous research conducted in other countries (Vidal et al 2017). The effect is statistically significant if the couple had already made the transition to parenthood at the time of the first survey and especially if the move of house was planned within the couple at the first survey. However, if we concentrate exclusively on the intentional level (i.e. intention irrespective of whether has become true in the subsequent years), a negative effect of change residence on childbearing prevails, provided that the couple is still childless and that only the man but not the woman intended to have a child. This result, which is in contrast with previous studies (Ermisch & Steele 2017), has to be doubled checked before conclusion might be drawn on it.

Education is a life domain competing with childbearing not only among young adult but also in a later stage of life when the partners have usually completed their educational career and might be subject only to re-entering the educational system. Resumption of studies is inversely correlated with childbearing. The result holds at parity zero and parities one and above and it is statistically significant across all four model specifications in both cases; moreover, it is not gendered. However, if intentions but not events are considered, resuming studies has a negative effect only if the intention has been expressed by the female partner. To the best of our knowledge there are no studies investigating systematically the interconnection between resumption of enrolment in education and childbearing; hence, it is hard to get confirmation for our findings and place them in a broader literature context. We could speculate that the conflict between education and fertility is not only due to the predominant age norms but also to a concrete incompatibility between studying and childrearing which is extended to a later stage of the life course (adulthood).

The traditional conflict between work and childbearing is confirmed in this analysis. The evidence based on the regression models outlines a negative effect of the former on the latter. Changing job is detrimental for the birth of an additional child if the event is

experienced by both partners within the couple and if such a change was previously planned by at least one of the partners. The inhibiting effects of a job change on childbirth are stronger among childless than among parents. As for education, is not the intention to change work but rather the change itself (event) that impact on childbearing. Among childless couples the effects are gendered i.e., statistically significant only if the event was experienced by the female partner; and responsive to the intentionality i.e., statistically significant only if the event was previously planned. A bunch of studies has addressed the conflict between work and fertility and the challenge of setting up the conditions for a good work-family balance. Our results just add a further piece of evidence to this existent literature suggesting that it is not just the status of being employed or unemployed that predicts childbearing rather the change in employment status in a period close to that of childbirth occurrence.

6. Concluding Remarks

This study has implications for the analysis of the discrepancy between birth intentions and birth outcomes. First, the regression results outline that cross-domain intentions and events have a relevant and significant impact on childbearing in addition to the impact of birth intentions. The inclusion of these fields of life increases the overall fitting of the models and leaves almost unchanged the predictive power of birth intentions on birth outcomes in the regression models. Second, the empirical results emphasize that it is not the status of being employed or unemployed that matters for successful childbearing rather a change in the employment status which occurs close to the reproductive period. More in depth research should distinguish between those birth events that are not observed because simply postponed and those that are definitively given up and would not be observed anyway (longer follow-ups). Only a longer span longitudinal observation would allow us to make further advancements along this direction. A second improvement in our research would consist in the use of models that control for unobserved heterogeneity and handle the simultaneity of events in the different life course domains (multi-process). Only the availability of a longer observation period would allow us to make such a step ahead. Hence, it is to be hoped that longitudinal surveys retrieving information on birth and other life course intentions will be conducted/continued in the future. We believe that this analysis has provided an additional and important piece of evidence in the understanding of the so called fertility gap, i.e., the discrepancy between intended and actual fertility insofar it has investigated the contribution of other intentions and events - or status changes – to such a discrepancy. Results might be inspiring for policy makers willing to design measures able to remove the obstacles to the realization of birth intentions and other intentions in couple's life.

References

- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179–211.
- Ajzen, I., and Klobas (2013). Fertility intentions: an approach based on the theory of planned behavior. *Demographic Research*, 29(8), 203–232.
- Barber, J. (2001). Ideational influences on the transition to parenthood: attitudes toward childbearing and competing alternatives. *Social Psychology Quarterly* 64(2), 101-127.
- Barber, J., Axinn W., & Thornton, A. (2002). The influence of attitudes on family formation processes. In R. Lesthaeghe (ed.), *Meaning and Choice: Value Orientations and Life Course Decisions*, NIDI CBGS Publications.
- Barber, J., & Axinn, W. (2005). How do attitudes shape childbearing in the United States? In A. Booth &
 - A. Crouter (Eds.), The new population problem (why families in developed countries are sinking and what it means). Mahwah, New Jersey, London: Lawrence Erlbaum Associates Publishers.
- Beck, U., & Beck-Gernsheim, E. (1995). The Normal Chaos of Love. London: Polity Press.
- Berrington, A., Perelli-Harris, B., & Trevena, P. (2015). Commitment and the changing sequence of cohabitation, childbearing, and marriage: insights from qualitative research in the UK. *Demographic Research*, 33(12), 327-362.
- Billari, F. C., Philipov, D., & Testa, M. R. (2009). Attitudes, norms, and perceived behavioural control: explaining fertility intentions in Bulgaria. *European Journal of Population*. 25(4), 439–465.
- Billari, F.C., and D. Philipov (2004). Education and transition to motherhood: a comparative analysis of Western Europe. *European Demographic Research Papers*, No.3, Vienna. Vienna Institute of Demography, Austrian Academy of Sciences.
- Blossfeld, H.P., Klijzing, E., Mills, M., & Kurz, M. (2005) (eds.). Globalization, uncertainty and youth in society. London: Routledge.
- Blossfeld, H.-P., and J. Huinink. 1991. Human capital investments or norms of role transition? How women's schooling and career affect the process of family formation. *American Journal of Sociology* 97: 143-168.
- Buber-Ennser, Isabella, N. Neuwirth & M.R. Testa (eds) (2014), Families in Austria: 2009-2013. Descriptive findings on partnerships, fertility intentions, childbearing and child-rearing. GGS Report. Vienna Institute of Demography of the Austrian Academy of Science.
- Dommermuth, L., Klobas, J. & Lappergård, T. 2011. Now or later? The Theory of Planned Behaviour and timing of fertility intentions. *Advances in Life Course Research* 16, 42-53.
- Dykstra, P. A., & van Wissen, L. (1999). Introduction: the life course approach as an interdisciplinary framework for population studies. In L. van Wissen & P. A. Dykstra (Eds.). *Population issues: an interdisciplinary focus* (pp. 1-22). New York: Kluwer Academic.
- Elder, G.H. (1985). Perspectives on the life course. In: G.H. Elder (Ed.). *Life course dynamics: trajectories and transitions, 1968-1980* (pp. 23-49). Ithaca and London: Cornell

- University Press,
- Elder, G.H., Johnson, M., & Crosnoe, R. (2003). The emergence and development of life course theory. In: J. Mortimer & M. Shanahan (Eds.). *Handbook of the life course* (pp. 3-19). New York: Kluwer Academic.
- Ermisch, J., F. Steele (2016). Fertility expectations and residential mobility in Britain. *Demographic Research* 35(54): 1561-1584.
- Gauthier, A. H., Emery, T., & Bartova, A. (2016). The labour market intentions and behaviour of stay-at home mothers in Western and Eastern Europe. *Advances in Life Course Research*.
- Gauthier, A. (2007). The impact of family policies on fertility in industrialized countries: a review of the literature. *Population Research and Policy Review* 26.3: 323-346.
- Giddens, A. (1984). The constitution of society. Outline of the theory of structuration. University of California Press.
- Harknett, K. & Hartnett, C.S. (2014) The gap between births intended and births achieved in 22 European countries, 2004–07, *Population Studies*, 68(3), 265-282.
- Heinz, W. R. (1996). Status passages as micro-macro linkages in life course research. In A. Weymann & W. Heinz (Eds.). *Society and Biography: Interrelationships between Social Structure, Institutions and the Life Course,* 51–65.
- Hiekel, N., & Castro-Martin, T. (2014). Grasping the Diversity of Cohabitation: Fertility Intentions Among Cohabiters Across Europe. *Journal of Marriage and Family, 76, 489-505.*
- Huinink, J. and M. Kohli (2014). A life-course approach to fertility. *Demographic Research* 30(45): 1293-1326.
- Kapitány, B., & Spéder, Z. (2013). Realization, Postponement or Abandonment of Childbearing Intentions in Four European Countries. *Population*, 599-629.
- Mayer, K. U. (2004). Whose lives? How history, societies, and institutions define and shape life courses. *Research in Human Development*, 1, 161–187.
- Mencarini, L. Vignoli D., & Gottard, A. 2014. Fertility intentions and outcomes: Implementing the Theory of Planned Behaviour with graphical models. *Advances in Life Course Research*, 23, 14-28.
- Morgan, S. P., & Bachrach, C. A. (2011). Is the Theory of Planned Behaviour an appropriate model for human fertility? *Vienna Yearbook of Population Research*, Special issue on "Reproductive decision-making", 9, 11-18.
- Pailhé, A. (2009). Work-family balance and childbearing intentions in France, Germany and the Russian Federation. In: *How Generations and gender shape demographic change. Towards policies based on better knowledge.* Conference Proceedings. Geneva 14-16 May 2008. United Nations Economic Commission for Europe (UNECE): 57-82.
- Philipov, D. (2009). The effect of competing intentions and behaviour on short-term childbearing intentions and subsequent childbearing. *European Journal of Population*, 25(4), 525-548.
- Schoen, R., N.M. Astone, Y.J. Kim, and C.A. Nathanson (1999). Do fertility intentions affect fertility behaviour? *Journal of Marriage and the Family*, 61(3):790-799.
- Shanahan, M. J., & Macmillan, R. (2008). Biography and the sociological imagination.

- Contexts and contingencies. New York: Norton.
- Spéder, Z., & Kapitány, B. (2014). Failure to Realize Fertility Intentions: A Key Aspect of the Postcommunist Fertility Transition. *Population Research and Policy Review*, 393-418.
- Testa, M.R. & F. Rampazzo (2018). From intentions to births: paths of realization in a multidimensional life course. *Vienna Yearbook for Population Research* Vol.16:1-22.
- Testa, M.R. & D. Bolano (2018). From intentions to births: gendered transition paths in a multi-dimensional life course perspective. In: O. Kapella, N. Schneider, H. Rost (eds.): Familie Bildung Migration. Familienforschung im Spannungsfeld zwischen Wissenschaft, Politik und Praxis. Tagungsband zum 5. Europäischen Fachkongress Familienforschung. Opladen: Barbara Budrich, pp.105-123.
- Testa, M.R., L. Cavalli and A. Rosina. (2014). The effects of couple disagreement about child-timing intentions: a parity-specific approach. *Population and Development Review*. 40(1): 31-53.
- Thomson, E, & Brandreth, Y. (1995). Measuring fertility demand. *Demography*. 32(1), 81-96. Vidal, S., J. Huinink and M. Feldhaus (2017). Fertility intentions and residential relocations. *Demography* 54:1305-1330.
- Vikat, A., Spéder, Z., Beets, G., Billari, F. C., Bühler, C., Désesquelles, A., Solaz, A. (2007). Generations and Gender Survey (GGS): Towards a better understanding of relationships and processes in the life course. *Demographic Research*, 389-440.

Appendix

Table A1 Descriptive Statistics of the variables used in the regression analysis

	Parity	7 0	Parity 1+		
Variable	N	Percent	N	Percen	
# Couples	754		520		
# Observations	984		614		
Having a child	505	51.32	436	71.0	
Childbearing – intention					
Neither partner intends	247	25.10	38	6.19	
Man intends, woman not	77	7.83	28	4.50	
Woman intends, man not	86	8.74	37	6.03	
Both partners intend	574	58.33	511	83.2	
Childbearing – event					
No childbirth	479	48.68	178	28.9	
Birth, but not intended	48	4.88	22	3.5	
Birth, but only man intended	21	2.13	12	1.9	
Birth, but only woman intended	38	3.86	23	3.7	
Birth intended by both partners	398	40.45	379	61.7	
Residence - intention					
Neither partner intends	392	39.84	334	54.4	
Man intends, woman not	67	6.81	42	6.8	
Woman intends, man not	55	5.59	41	6.6	
Both partners intend	470	47.76	197	32.0	
Residence – events (all)	496	50.41	235	38.2	
No event	488	49.59	379	61.7	
Residence – events by intention					
Change residence, but not intended	92	9.35	66	10.7	
Change residence, intended	404	41.15	169	27.5	
Work – intention					
Neither partner intends	326	33.13	143	23.2	
Man intends, woman not	172	17.48	48	7.8	
Woman intends, man not	161	16.36	131	21.3	
Both partners intend	169	17.17	103	16.7	
Not at risk (one or both partners)	156	15.85	189	30.7	
Work – events (all)	558	56.71	238	38.7	
No event	426	43.29	376	61.2	
Work – events by gender					
Change job, only male partner	191	19.41	121	19.7	
Change job, only female partner	212	21.54	71	11.5	
Change job, both partners	155	15.75	46	7.4	
Work – events by intention					
Change job, but not intended	227	23.07	107	17.4	
Change job, intended	331	33.64	131	21.3	
Education - intention					
Neither partner intends	379	38.52	297	48.3	
Man intends, woman not	127	12.91	79	12.8	
Woman intends, man not	105	10.67	75	12.2	
Both partners intend	49	4.98	33	5.3	
Not at risk (at least one partner)	324	32.93	130	21.1	

	Parity	0	Parity 1+		
Variable	N	Percent	N	Percent	
Education – event (all)	560	33.03	243		
No event	659	66.97	468	76.22	
Education – event by gender					
Resumption of studies, only man	83	8.43	58	9.45	
Resumption of studies, only woman	168	17.07	<i>7</i> 5	12.21	
Resumption of studies, both partners	74	7.52	13	2.12	
Education – event by intention					
Resumption of studies not planned	235	23.88	97	15.80	
Resumption of studies planned	90	9.15	49	7.98	
Event – Improvement of finance (yes)	98	9.96	45	7.33	
Event - Get fired (yes)	139	14.13	67	10.91	
Event – Start of serious illness (yes)	157	15.96	97	15.79	
DEMOGRAPHICS					
Age					
Man is younger than woman	40	4.07	22	3.58	
Man and woman with same age	676	68.70	382	62.21	
Man older than woman	268	27.24	210	34.20	
Level of education (woman)					
Compulsory education (up to Year 12)	331	33.64	255	41.53	
Certificate or Diploma	244	24.80	145	23.62	
Bachelor or higher level	409	41.57	214	34.85	
Level of education					
Partners with same level of education	501	50.91	329	53.58	
Man more educated than woman	210	21.34	141	22.96	
Man less educated than woman	273	27.74	144	23.45	
Working status					
Neither partner employed	24	2.44	32	5.21	
Only man employed	64	6.50	230	37.46	
Only woman employed	32	3.25	9	1.47	
Both partners employed	864	87.81	343	55.86	
Parity					
Childless	984	100.0	-	-	
One child	-	-	393	64.01	
Two or more children	-	-	221	35.99	
Living in a major city	151	15.35	119	19.38	
(Ref. Living in Inner, Outer or Remote					
areas)					
Siblings					
Both partners have no siblings	105	10.67	36	5.86	
At least one partner has 1 sibling	303	30.79	187	30.46	
At least one partner has 2 or more siblings	576	58.54	391	63.68	
Liberal view					
Both partners conservative	197	20.02	150	24.43	
1					

	Parity	7 0	Parity 1+		
Variable	N	Percent	N	Percent	
Man conservative, woman liberal	260	26.42	146	23.78	
Man liberal, woman conservative	116	11.79	95	15.47	
Both partners liberal	411	41.77	223	36.32	
Self-rated health					
Both partners in good health	870	88.41	525	85.50	
One of the partners not in good health	114	11.59	89	14.50	
Couple economic inequality					
Dual-earner couple	542	55.08	190	30.94	
Female breadwinner	106	10.77	46	7.49	
Male breadwinner	336	34.15	378	61.56	
HH disposable income		78,720.11		72,153.06	
(mean in AUD)					
State of residence					
NSW – New South Wales	265	26.93	181	29.48	
VIC – Victoria	271	27.54	135	21.99	
QLD – Queensland	207	21.04	165	26.87	
SA – South Australia	94	9.55	44	7.17	
WA – Western Australia	84	8.54	53	8.63	
TAS – Tasmania	30	3.05	15	2.44	
NT – Northern Territory	10	1.02	8	1.30	
ACT – Australian Capital Territory	23	2.34	13	2.12	
Year of interview					
2005	316	32.11	183	29.80	
2008	328	33.33	199	32.41	
2011	340	34.55	232	37.79	

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