

Collegio Carlo Alberto



Adjustment to parenthood and partners' satisfaction
with their relationship after the first child in
Australia

Francesca Luppi

No. 389

December 2014

Carlo Alberto Notebooks

www.carloalberto.org/research/working-papers



Adjustment to parenthood and partners' satisfaction with their relationship after the first child in Australia

Francesca Luppi

Universitat Pompeu Fabra & Collegio Carlo Alberto

Adjustment to parenthood and partners' satisfaction with their relationship after the first child in Australia.

Francesca Luppi

Universitat Pompeu Fabra & Collegio Carlo Alberto

Abstract

This study addresses open questions about the short-term declining trajectories of partners' satisfaction with their relationship following the birth of the first child. In particular, it focuses on the effect of reconciling family and work on the partners' relationship. Using the Household, Income and Labour Dynamics in Australia (HILDA) panel survey waves from 2001 to 2009, it analyses a representative sample of couples, followed for three years from the year of the first pregnancy. I model changes in partners' relationship satisfaction for both women and men with piecewise linear growth models. Looking at the interaction between the adjustment of the couple along the family and work dimensions, and at the difficulties caused by parenthood to women's work trajectories, I find gendered paths towards the change in relationship satisfaction: while adopting a traditional division of gender roles works in favour of fathers' maintenance of a satisfactory relationship with the partner, the same path reduces the mother's relationship satisfaction. At the same time, the couple's ability to share experiences, tasks and attitudes seems to compensate for the great differences in women's and men's chances of enjoying parenthood, a loving relationship and the labour market. In a context that especially generates gender inequality in the transition to parenthood, as the Australian pro-natalist policy system seemed to do before its 2009 reform, these results raise questions for policy makers.

Keywords: partner satisfaction, work adjustment, family adjustment, parenthood, unexpected difficulties

1. Introduction

This study aims to contribute to the literature on the functioning of relationships over the transition to parenthood, and in particular on the effect of the first childbirth on parents' satisfaction with their couple relationship in the short run. More specifically, the chapter aims to address the question of whether the short-term effect of the arrival of the first child on marital relationship satisfaction mirrors reconciliation in family and work adjustment to parenthood. Satisfaction with the partner relationship is an important indicator of the relationship quality and, as a consequence, is highly related to general marital satisfaction. In fact, satisfaction with the partner relationship is particularly derived from a cognitive dynamic evaluation of the quality of a couple's relationship (Campbell, Converse, and Rogers 1976).

The literature suggests that the path of marital satisfaction across the transition to parenthood is not unique: while, on average, marital satisfaction tends to decline after the arrival of the child, for some couples marital satisfaction increases or remains stable (Belsky and Rovine, 1990; Saphiro et al, 2000). Some mechanisms that might lead to changing the level of marital satisfaction seem to be related to a matching of the preferred and actual allocation and share of energies in activities such as housework, childcare, leisure time and working in the labour market (Gallie and Russel, 2008; Wiki, 1999; Rode et al. 2007). Other mechanisms are linked to the expectations that the expecting parents have about their life with the child: the joyful wait for the child's arrival might sometimes make parents over-optimistic in their expectations about their future life with the child. After the arrival of the child, parents have to adjust their – sometimes unexpected – commitments to work and family tasks and this may produce difficulties, increase conflicts in the couple, and reduce marital satisfaction (Twenge *et al.* 2003; Doss *et al.* 2009; Keizer, 2013). This study specifically addresses the question of which factors decrease relationship satisfaction after the arrival of the first child by assessing the role of several psychological mechanisms (e.g. adjustment to parenthood in the family and in work, anticipation of enjoyment of parenthood) and traits (e.g. personality).

The analyses are conducted on a sample of Australian couples, followed for three years from the year of the first pregnancy, using data from the Household, Income and Labour Dynamics in Australia panel survey (waves from 2001 to 2009). During this time span, Australia was characterized by a policy system that aimed to sustain fertility by promoting the traditional division of gender roles after the transition to parenthood: as a consequence, it has been accused of having induced gender inequality (Summers, 2003; Apps, 2006). Even though in Australia we cannot speak of “low fertility”¹ in recent female cohorts (Myrskylä et al., 2013), with the absence of policy support for a simultaneous commitment to family and work, the arrival of a first child might reduce mothers' and fathers' possibilities of enjoying their preferred involvement in both the family and the labour market. For this reason, I expect to find that the transition to parenthood in this period would negatively affect relationship satisfaction, especially in dual-earner couples, in which the work-family adjustment process might involve more gender inequity, unbalanced renunciations and marital conflicts. I also control for the fact that some characteristics of the couple may mitigate against marital dissatisfaction, overcoming the frustration caused by unequal and perceived-as-unfair gender opportunities offered by the context; in particular, high educational homogamy in the couple, which has sometimes been found to be associated with less specialization by the partners and a more probable share of gender-egalitarian attitudes (Esping-Andersen and Bonke, 2011), and some intrapersonal characteristics – i.e. personality traits – which may be responsible for the partners' ability to adjust to new situations (Vollrath et al. 2004; Heller, Watson and Iles, 2004; White et al. 2004).

¹ Over the last 40 years, the time-adjusted TFR has been more than 1.9.

The paper is structured as follows: first, I examine the broad existent literature with its main findings and limitations; then I describe the sample and define the indicators. Finally, I present and discuss my longitudinal analysis of changes in partner satisfaction, for both women and men. Using longitudinal analysis, I find evidence for the existence of a relationship between the processes of adjustment to parenthood in the work and family dimensions and changes in marital adjustment in the short run after the arrival of the first child.

2. Theoretical background

2.1 The Dynamic Equilibrium Theory in the context of demographic analysis

One of the main theories that deal with changes in subjective wellbeing and life events is the Dynamic Equilibrium theory (DE). Its first formulation was made by Headey and Wearing in an article entitled “Personality, life events and subjective well-being: Toward a dynamic equilibrium model” (Headey and Wearing, 1989). The aim of this work was to find and theorize a link between personality, life events and subjective wellbeing. Most of the authors’ work was based on the psychological theory of Adaptation (Brickman and Campbell, 1971): using an Australian panel, the authors found that some individuals always tend to be happier than others, and that the same life events tend to happen to the same people. Their conclusion was that there is a set-point level of happiness to which people tend to return, and that some links must exist between stable individual characteristics (personality traits), subjective wellbeing and the probability of experiencing certain life events.

According to the DE theory, subjective wellbeing is stable in the long term, fluctuating around a base-line level of wellbeing that is defined by the stable characteristics of the individual – i.e. his personality. Most of the studies challenging DE theory have found that even if subjective wellbeing changes across life events, these changes are temporary and the individual tends to recover the previous equilibrium level, adjusting to the new life situation (Clark et al, 2004; Lucas et al. 2003). Nevertheless, the DE theory has been recently revised, thanks to some studies showing that if subjective wellbeing changes after life events sometimes people do not perfectly adjust – i.e. individuals do not recover their previous equilibrium level of subjective wellbeing. The time people need to adjust and the level to which people return might depend on the kind of life events and on individuals’ personalities (Loewenstein and Frederick, 1999; Heady, 2006).

The existence of an adjustment process to life events has been found not only for the general indicators of subjective wellbeing (e.g. life satisfaction; happiness; etc.) but also for their specific dimensions. Referring in particular to life satisfaction and the transition to parenthood, some studies have revealed that new parents’ satisfaction with some specific life domains decreases after the transition to parenthood, and this is particularly true for marital satisfaction and partner relationship satisfaction (Twenge et al. 2003; Lawrence et al. 2008; Evanson and Simon, 2005; Doss et al. 2009; Keizer et al. 2013).

2.2 The changes in partners’ relationship satisfaction

Becoming a parent for the first time is an emotionally intensive event which is not without difficulties: the steep learning curve in caring for an infant, the continuous demand for such care, sleepless nights, and a simultaneous abrupt reorganization of daily routines both in the family and work spheres can stress a couple’s relationship. Overall, what is the net effect of having a first child on a couple’s relationship? The literature documents that parenthood appears to have negative effects on the relationship between partners, at least during the first year of life of the child.

It is necessary to clarify the variety of terms traditionally used to measure and define the qualities of a partnership. The first group of concepts are one-dimensional and refer to the individual evaluation of satisfaction with or the happiness of the relationship. Two common indicators are “marital

happiness” and “marital satisfaction”: even if both refer to an idea of an enjoyable couple relationship, marital happiness is more emotionally driven, while marital satisfaction is derived from a cognitive evaluation of couple’s conditions (Campbell, Converse, and Rodgers 1976). Other indicators are free from the connotation that the couple is formally married, and include “partner satisfaction” and “satisfaction with the partner relationship”. The former refers to a positive evaluation of the partner’s qualities, while the latter considers the dynamic of the quality of the couple relationship. Usually, the “satisfaction” and “happiness” variables associated with the evaluation of couple’s relationships have been used as indicators of multidimensional concepts such as “marital quality” and “marital adjustment”. “Marital quality” accounts for different indicators of conflict and satisfaction (Lewis and Spanier, 1979). “Marital adjustment” represents the presence of conflict, the couple’s problem-solving ability, the quality of communication, and sharing of activities, usually associated with a feeling of satisfaction with the relationship (Locke and Wallace, 1959). Finally, other concepts refer to the couples’ life trajectory: “marital stability” or “couple stability” can be broadly defined as the absence of negative changes in the marital/couple status (such as separation and couple dissolution) and uses co-residence of partners as the defining criteria (Bernard, 1966).

Most studies on marital satisfaction that focus on the negative consequences of becoming parents for the couple’s relationship highlight the short-term relevance of the effect. The early literature on the topic insists that the arrival of the first child mainly represents a partially unexpected break in a couple’s equilibrium. Some scholars (Dyer, 1963; Hill, 1949) refer to this first period as a “crisis”, generating academic debate. Recent studies do not find strong empirical support for the crisis hypothesis, and most researchers now prefer the terms “stressful experience” or “loss of partner satisfaction” (Belsky and Rovine, 1990; Cowan et al., 1985; Evanson and Simon, 2005; Hobbs and Cole, 1976; Kalmuss et al., 1992; Russell, 1974). Nevertheless, other studies reveal positive long-term effects of childbearing: in particular, they find that in the early years of the life of the child, some conflict may be useful in facilitating adjustment to parenthood and allowing partners to negotiate a long-term balance and develop a newly satisfying relationship (Cox et al., 1999; Katz, Wilson and Gottman, 1999), while other couples never recover their equilibrium after childbirth (Moss *et al.*, 1986).

Focusing on the short-term effect – i.e. during the first year of life of the child – some find a negative association between childbearing and the couple’s relationship, decreasing satisfaction with the relationship (Belsky et al., 1998, Cowan et al., 1985; Feldman et al., 1984; Moss et al., 1986; Shapiro et al., 2000; Twenge et al. 2003; Doss et al. 2009; Keizer et al. 2013) and increasing conflict (Nomaguchi and Milkie, 2003). These changes in relationship satisfaction also seem to depend on gender (O’Brien and Peyton, 2002): mothers usually experience a sudden decrease compared to fathers, who tend to show a more gradual loss of satisfaction with the relationship (Belsky and Hsieh, 1998; Grote and Clark, 2001; Doss, 2009).

2.3 Couples’ adjustment in work and family.

The reason why mothers more than fathers seem to reduce their partner satisfaction after the transition to parenthood differently might be linked to the expected and actual share of domestic tasks with the partner, representing a loss of time for work and couple leisure. When parenting is more difficult than expected, women’s overall evaluation of their marriage decreases: feelings of love and partner satisfaction decrease, while the perception and experience of conflict increase (Belsky, 1988; Belsky *et al.*, 1990). The effects of unmet expectations on postpartum life are strongest during the first year of the child’s life (Belsky, 1985) because of the combination of recent optimistic prenatal expectations with the intensity of parenting an infant. This might happen especially to women because they are more exposed to the stressful consequences of becoming parents: during the first months they are traditionally more in charge of caring for the child, and the

tiredness combined with a feeling of being overwhelmed by this task might increase their feelings of not receiving enough support from the partner. However, the absence of findings on fathers might also be due to the lower level of attention that researchers in the field have traditionally reserved for men. There can be at least two reasons why unmet expectations might produce a decrease in marital satisfaction for both the partners: self-fulfilling prophecies and unrealistic expectations. In the first case, it has been found that individuals who have negative expectations during the pregnancy also experience negative postnatal attitudes (Snyder, 1984). In the second case, having over-positive pre-partum expectations might lead to experiencing a larger discrepancy with the post-partum reality (Kach and McGhee, 1982).

Studies of couples provide a broader perspective: couples perceive the transition to parenthood to be easy when the expectations of the partners match the actual experience well. Unmet expectations regarding the gender division of domestic labour and childcare are among the primary sources of conflict in couples in their transition to parenthood (MacDermid *et al.*, 1990; Mencarini and Sironi 2012; Ruble *et al.*, 1998). How these unmet expectations of partners' shares of tasks are related to partner satisfaction depends on the type of expectations (Lawrence, 2007). As an example, for women, unmet expectations about the partner's share of childcare and the level of family support for the woman's career make the period of parental adjustment more difficult (Kalmuss *et al.*, 1992). Thus, it seems that violated expectations about partners' shares of tasks can be somehow linked to the gender equity (here intended as perceived gender equality: Mencarini, 2014) in the couple. At least in the US, women's reduction of partner relationship satisfaction after the transition to parenthood has been found to be linked to women's perception of doing more than their fair share of housework (Dew and Wilcox, 2011).

Of course, adopting the traditional gender roles after the arrival of the child is not directly related to the corruption of a satisfactory couple relationship. This is because partners' judgements about the gender equity in the couple are always ruled by preferences. Nevertheless, balancing work and family commitments after the transition to parenthood is one of the biggest issues for new parents, and especially for new mothers. In fact, for the first months of life of the child, mothers more than fathers are in charge of taking care of the baby because of some tasks that are not transferable from women to men (e.g. breastfeeding): in a traditional gender culture, the result might be that while women specialize in domestic tasks simply because they spend more time at home – and not because of a preferred allocation of tasks – men might focus more on their commitments in the labour market (Baxter, Hewitt, and Haynes, 2008). For this reason, how partners decide to share the increased load of domestic work is relevant for understanding changes in marital relationship satisfaction.

Nevertheless, most of the studies that deal with the perception of the fair share of household tasks and marital relationship satisfaction do not take into consideration disconfirmed expectations. Some of these studies show that perceiving one's share of childcare, housework and leisure time to be unfair compared with the partner's appears to be a source of marital dissatisfaction (Kalmuss *et al.* 1992; Ruble *et al.* 1988; Wiki, 1999). Some of the causes of a decline in relationship satisfaction after the first childbirth are more difficulty in reconciling work and life (Gallie and Russel, 2008), less time for the spouse (Claxton and Perry-Jenkins, 2008; Dew and Wilcox, 2011) and higher levels of pressure due to time constraints (Mattingly and Sayer, 2006).

The other side of the coin is represented by work-related adjustment to parenthood. Job satisfaction and employment conditions impact on satisfaction with the partner (Ridley 1973 and Rode *et al.* 2007). In particular, Benin and Nienstedt (1985) find that for dual-earner couples in the US job satisfaction and positive working conditions can increase marital quality. In these couples, where women have double commitments to both the family and the labour market, adapting work and family situations is necessary to achieve a satisfactory quality of life for both partners. We can also interpret in a similar vein results from other studies where authors find that couples that adjust their work situations to their family roles suffer less work-associated stress (Haddock *et al.*, 2006;

Rogers, 1996) and gain higher levels of marital satisfaction (Benin and Nienstedt, 1985; Roger and May, 2003).

As a result, because men tend to participate less in childcare, there is no doubt that women often have more difficulty than men in reconciling after childbirth. This might be particularly true in countries that lack policies that help working parents to balance family and work: working mothers experience a disadvantage since traditional gendered roles give them a disproportionate burden of parental tasks and responsibilities. Comparing mothers staying in or leaving the labour market during the transition to motherhood, Callan (1985) and Hoffenaar *et al.* (2010) find that women leaving the labour market on the arrival of a child experience less marital satisfaction both in Australia and the Netherlands. Studies focusing on outcomes for men find that fathers whose wives are employed experience more worries and conflict than fathers whose wives are not. This suggests that employment of the mother may negatively influence men's marital adjustment (Campione, 2008; Wiki, 1999). Similar results are also found by Keizer *et al.* (2010) studying a representative sample of women and men using data from the Netherlands Kinship Panel Study.

2.4. The role of personality in adjusting to parenthood.

A number of studies take into consideration the association between personality traits and relationship quality or satisfaction. Personality traits “are defined as the relatively enduring patterns of thoughts, feelings, and behaviours that distinguish individuals from one another” (Roberts and Mroczek, 2008). As a consequence, personality represents the baseline of an individual's behaviours, cognition and emotional reactions: most of the way in which individuals perceive and adjust to life events is determined by some traits of their personality (Soons and Liefbroer, 2009; Headey, 2006; Magee *et al.*, 2013).

Recently psychologists have questioned the meaning of “relatively enduring” referred to the stability of personality traits. While in the past most researchers supported the idea that personality traits are fixed (Roberts, Walton and Viechtbauer, 2006), in the recent literature there is evidence that they can change over the life course (e.g. Roberts and Mroczek, 2008; Boyce *et al.*, 2013). According to the “transactional perspective” (Roberts *et al.*, 2008), there are at least two processes at work behind changes in personality traits: the maturation process (*genetic factors*), and interaction with the environment (*environmental factors*). While maturation changes personality traits only in the long run, the experience of certain life events can also modify personality traits in the short term. Whether personality traits can change or not as a consequence of experiencing the first pregnancy is important if we want to disentangle the relationship between the two. In order to do this, we need a model of personality that allows personality traits to be measured as independent factors.

The Big Five Factors Model is one of the models of personality structure most widely used by psychologists: it is particularly appreciated because of its robustness when tested with factor analysis. The Five factors (Conscientiousness, Agreeableness, Neuroticism, Extraversion and Openness) have been identified more in order to compare subpopulation characteristics than to portray the personality of individuals, and the personality traits are empirical concepts, not derived from a theoretical model. At the moment, the main tools for measuring Big Five personality traits can comprise up to 240 items² from which the Five Factors can be extracted. There are no precise definitions of the five factors, but a summary of the main features is presented in Table 1, based on Bouchard and colleagues (1999) and McCrae (1991).

Table 1. Description of the Big Five traits of personality

² The main tools for measuring the Big Five are Goldberg's TDA – Trait Descriptive Adjectives (1992); the BFI – Big Five Inventory – by John and Benet-Martinez (1998); the NEO-PI-R and NEO-FFI Personality Inventory by Costa and McCrae (1992); and the TIPI – Ten Items Personality Inventory – by Gosling *et al.* (2003).

Personality Trait	Opposite trait	Description
<i>Conscientiousness</i>	<i>Undirectedness</i>	Encompasses a sense of competence, self discipline, a sense of duty, a need for achievement, and organization. It implies an easy social control of the individual's behaviour, thanks to her/his predisposition to follow rules and norms.
<i>Agreeableness</i>	<i>Antagonism</i>	Measures trust, sympathy, and cooperation. She/he adopts altruistic behaviours, and she/he is tender-minded and modest.
<i>Neuroticism</i>	<i>Emotional Stability</i>	Underlies the chronic experience of distressing emotions. The individual often feels anxious, nervous and sad.
<i>Extraversion</i>	<i>Introversion</i>	Measures energy and sociability. It implies an enthusiastic approach to social life, and includes characteristics such as assertiveness and positive emotionality.
<i>Openness to experience</i>	<i>Closed-mindedness</i>	Implies imagination, curiosity, divergent thinking and liberal attitudes. The individual prefers a variety of activities to routine.

Regarding their association with the relationship satisfaction of partners, high levels of Neuroticism have been found to be associated with low relationship satisfaction, both in cross-sectional analyses and longitudinal analyses (e.g. Heller, Watson and Iles, 2004; White et al. 2004). The same studies find that the other traits (Agreeableness, Conscientiousness, Openness and Extraversion), on the contrary, are positively associated with relationship satisfaction. Karney and Bradbury (1997), in a longitudinal study, find that individuals that are more predisposed to feel anxiety, anger and frustration (low emotional stability) and are less agreeable (low Agreeableness) are more exposed to relationship dissatisfaction.

Another interesting research field regards the association between relationship satisfaction and the personality of the partner: some studies find that this connection exists, and is particularly strong with Neuroticism (Barelds, 2005; Donnellan et al. 2004; Gattis et al. 2004; Watson et al. 2000). Malouff and colleagues (2010) provide an interesting meta-analysis of the topic: they basically confirm the existence of a negative relationship between high Neuroticism and a low relationship satisfaction of the partner. Their explanation is that Neuroticism predicts a tendency to be more critical and defensive, and, as a consequence, this behaviour negatively affects the relationship with the partner. The study also shows how all the other traits are positively related with the partner's relationship satisfaction, and how these results do not vary between women and men. Finally, from the couple perspective, other studies take into account the possibility that personality similarity might positively affect partner's relationship satisfaction (Gonzaga et al. 2007; Robins et al. 2000; Malouff et al. 2010). Results in this field are quite mixed, with some claiming that convergence in personality might benefit relationship satisfaction (Gonzaga et al., 2007), while others do not find significant results (Robins et al. 2000; Malouff et al., 2010).

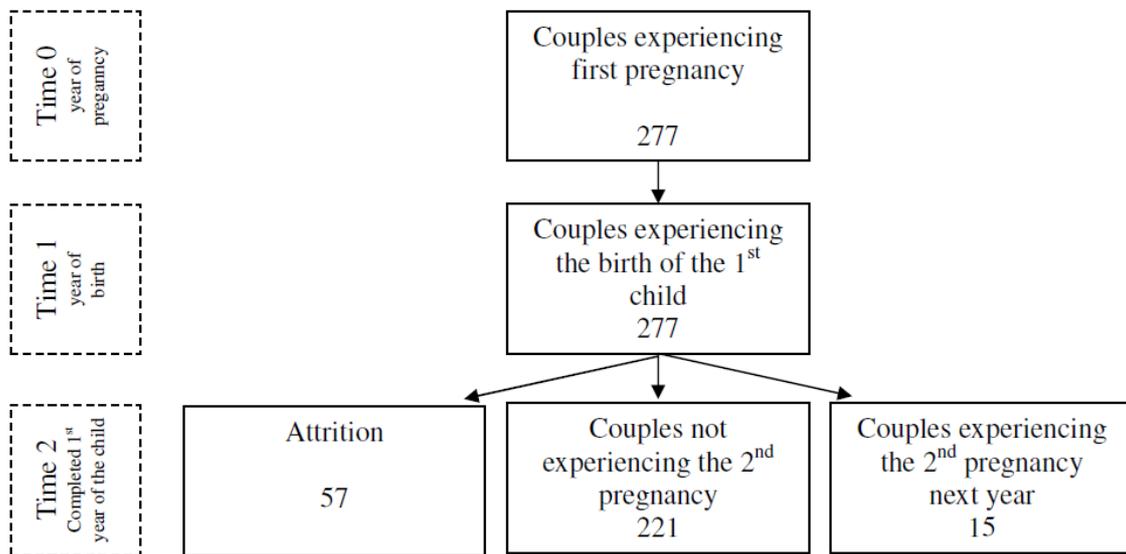
In what way might individual's and partner's personality traits affect relationship quality in the transition to the first parenthood? It is well known that the transition to parenthood is a period of stress for both the partners and especially for mothers, sometimes also related to depression or depressive moods. Depression might badly affect the quality of the couple's relationship, increasing feelings of frustration, incomprehension, sadness and anxiety. The personality trait that correlates more with depression is Neuroticism (Matthey et al. 1999). Even if neither of the parents suffer from frequent depressive moods, Neuroticism seems to be related to a decline in relationship satisfaction in the transition to parenthood. In a sample of lesbian couples, Goldberg and Sayer (2006) find that a higher level of Neuroticism is related to a decline in relationship satisfaction for both the partners in the transition to parenthood. Nevertheless, this relationship has not been extensively addressed, as more interest has traditionally been reserved for the other direction of the connection: whether low relationship satisfaction can be a precondition for one of the main outcomes of a high score in Neuroticism: post-partum depression (Simpson et al. 2003).

3. Data and sample.

3.1 Sample

I use the first 9 waves of the Household, Income and Labour Dynamics in Australia (HILDA) panel survey, which cover the years from 2001 to 2009. I select this time frame in order to avoid the effects of family policy reforms (2009) and the global economic crisis. I only include the couples (married or cohabitating) of first-time parents for which there is complete information about partner satisfaction for the years prior to and of the birth of their first child, and about personality traits (surveyed only in waves 5 and 9). Couples are eliminated once the woman turns 46 years old and she still did not experience the first pregnancy. Couples where either one or both parents or the baby suffers from serious health problems are excluded from the sample. Couples enter the sample in the year of the pregnancy of the first child (277 couples). Couples are right-censored for three reasons: a second pregnancy; attrition; and the end of the study. For each couple, a time variable counts the number of years from the year of the first pregnancy ($time=0$). In Figure 1 we can see how at $time=1$ (year of the birth), all 277 couples already have their first child but less than a year has passed since childbirth. 221 couples who experience their child's first birthday are present at $time=2$. At this time, 57 couples exit the analysis due to study attrition (20% of the total original sample), and 15 due to a second pregnancy (6%)³. For each couple, I consider only the year of first childbirth, the year before, and the year after for two reasons: (a) my focus is on the short-term effects of childbirth on marital adjustment (how couples adjust to the “shock”); (b) during the second year after the first childbirth, the criteria of a second pregnancy and sample attrition would lead to the loss of an additional 109 couples, 61 and 48 respectively, substantially reducing the sample size and adding possible bias into the overall sample⁴.

Figure 1. Couples experiencing pregnancy leading to the birth of the first child



³ I test whether the sample at the last time period and the people exiting the sample are on average different for the controls and the main covariates (t-test for difference in means). I do not find significant differences between the two groups. Therefore I do not make a difference between individuals exiting because of the experience of the second child and the others, as in the first case I only have 12 censored cases.

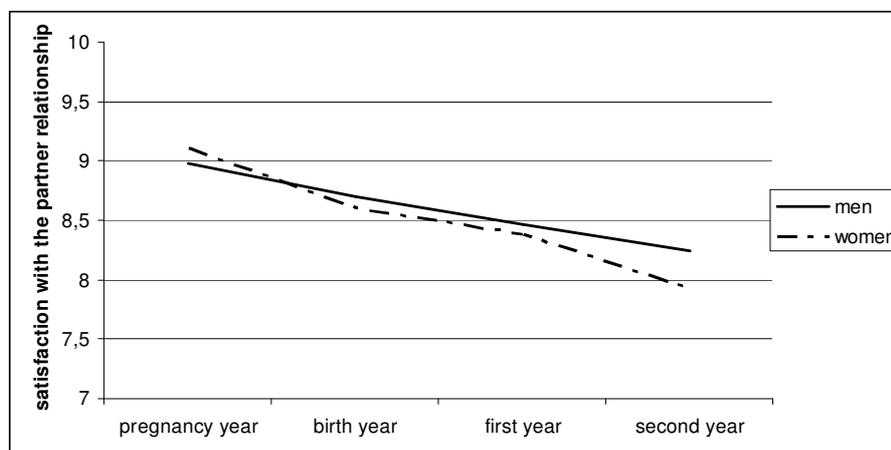
⁴ In particular, for the kind of model I use, with this dependent variable it is impossible to control for selection based on the dependent variable (no missing at random assumption).

3.2 Dependent variable and main covariates

Satisfaction with the relationship with the partner: the dependent variable

HILDA offers continuous information on satisfaction with the relationship with the partner. An individual's position on the HILDA indicator for satisfaction with the relationship with the partner is collected annually by means of the question "How satisfied are you with your relationship with your partner?", where responses range from 0 (*completely unsatisfied*) to 10 (*completely satisfied*). As Figure 2 shows, the relationship with the partner is less and less satisfying on average for both women and men starting from the birth of the first child. The decreasing trend in partner satisfaction is similar for women and men, but it is more accentuated for women, who start from a higher level of satisfaction and end up with a lower level compared to men. In particular, the year of the birth of the child is the most "shocking" for the partners, even though part of this loss can be a compensation for the increase in partner satisfaction during the pregnancy year (anticipation effect).

Figure 2. Satisfaction with relationship with the partner before and after the first child (couples with a first child born between 2001 and 2009).



Data: HILDA waves 2001-2009.

The decision to not include the baseline of relationship satisfaction in the year previous to the pregnancy comes from two considerations. The first, which is more practical, is the fact that it would reduce the sample size even more (some individuals were not yet in the survey). This is the same reason why I do not consider the level of satisfaction in the year of marriage (start of cohabitation) as considered in other studies. The second is difficulty in defining "the baseline of the relationship satisfaction": the level of relationship satisfaction, as previously discussed, is much more sensitive to changes in situational factors than the level of life satisfaction in general (for which it might be easier to define a baseline). To assess the net effect of the arrival of the first child on parents' relationship satisfaction, one would have to consider a longer period of time, controlling for many life events.

Unexpected difficulties in parenthood.

The indicator I use for unmatched expectations is one of the general indicators of disconfirmed expectations regarding parenthood (Kalmuss et al., 1992). Specifically, in the HILDA questionnaire it corresponds to the degree of agreement with the sentence "Being a parent is harder than I thought". The answers are on a scale from 1 (*completely disagree*) to 7 (*completely agree*). Values for this variable are collected annually for both parents from the birth of the child. In the year of the birth of the first child, 50% of the women in the sample declare they are experiencing unexpected

difficulties in parenthood, compared to 36% of the men. Considering the entire period of analysis, the mean value for women is 4.2, while for men it is 3.8: on average, in the sample women experience more unexpected difficulties than men (the differences are significant at $\alpha = 0.01$).

To see whether the effect passes through the couple's experience, I also include four categories of combinations of unexpected difficulties for the two partners: both parents experience unexpected difficulties; only she/he experiences unexpected difficulties; neither partner experiences unexpected difficulties. In the year of the birth of the child, in most of the couples both parents are experiencing unexpected difficulties (41%). Because the relationship is made of two individuals, not only the perception of the individual but also the perception of the partner are both responsible for a possible temporary deterioration of the relationship quality.

Family and work reconciliation.

HILDA includes several indicators of work-family balance after the transition to parenthood: among these I select two indicators for work adjustment and two for family adjustment (see Appendix A.2). HILDA provides specific questions to collect information each year about the consequences of having children in both the family and work dimensions. In Table 2.2, I report the sentences with which individuals have to declare their level of agreement.

Table 2. Variables for adjustment to parenthood in the work and family spheres.

Variable	Scale
Time at work is less enjoyable	(1 = <i>strongly disagree</i> ; 7 = <i>strongly agree</i>)
I have to turn down some work opportunities	(1 = <i>strongly disagree</i> ; 7 = <i>strongly agree</i>)
I do more than my fair share of childcare	(1 = <i>I do much more than my fair share</i> ; 5 = <i>I do far less than my fair share</i>)
I do more than my fair share of housework	(1 = <i>I do much more than my fair share</i> ; 5 = <i>I do far less than my fair share</i>)

I also include *satisfaction with flexibility to balance work and non-work commitments*. Especially for working mothers, this might be an important indicator of an easy reconciliation of work and family commitments. The variable is scaled from 0 (totally dissatisfied) to 10 (totally satisfied). In order to cover the adjustment in work and leisure time dimensions, *satisfaction with the job in general* and *satisfaction with the amount of leisure time* is also included in the models (both scaled 0 – totally dissatisfied – to 10 – totally satisfied).

The relationship between the family-work adjustment and the relationship satisfaction is affected by endogeneity problems: it is difficult to be sure about the direction of the causal relationship between adjustment in family, work and the partner relationship. It would be easy to think that living an unsatisfactory relationship might exacerbate dissatisfaction with the way the couple share family commitments and intensify the perception of the difficulties in reconciling family and work after the transition to parenthood. On the same time, I argue that, also according to the literature, most of the relationship goes accordingly to the direction of my hypotheses.

The personality traits.

Including intrapersonal characteristics is possible because HILDA uses a 36-item questionnaire in waves 5 and 9 based on the Big Five Factors Model. The Big Five Factors Model is a very popular personality model and allows researchers to measure different personality traits without overlaps among the measures (McCrae, 1991; McCrae and Costa, 1999; Montag and Levine, 1994). The HILDA approach to measuring Big Five personality traits is through trait-descriptive adjectives (Saucier, 1994; Goldberg, 1992). Factor analysis supports the five-factor structure of the items, and each scale shows “an adequate degree of internal consistency, good variance and discriminating properties, and normal distributions” (Losoncz, 2009). For this reason, I decide to work with the

derived indexes for each factor already provided by the official dataset. Each factor scores on a continuum from 1 to 7, where a higher score means the trait is more relevant in describing the individual's personality.

The relationship between childbearing and personality traits is necessarily endogenous. On the one hand, personality traits seem to predict the probability of experiencing childbearing, also introducing a selection issue into the relationship, where some personalities (or combinations of partners' personalities) are more associated with the transition to parenthood (Jokela *et al.*, 2011; Dijkstra and Barelds, 2009; Jokela *et al.*, 2009). On the other hand, experiencing childbearing affect personality traits, which can change as a consequence of the transition to parenthood (Jokela *et al.* 2009). Nevertheless, results do not always support the view that personality traits change in the short term (Cobb-Clark and Schurer, 2012).

In order to test whether personality traits should be interpreted as fixed or changing covariates, I test if changes in them are significant between HILDA wave 5 and wave 9. I use a Wilcoxon rank-test, which tests the equality of matched pairs of observations, where the null-hypothesis is that the distributions are the same. The results do not support a decision to reject the null-hypothesis. For this reason, I decide to include personality traits as time-invariant, taking the means between the values in the two waves (in the cases for which I have the information for both the two periods)⁵.

In addition to the covariates of main interest, a set of controls are included. Apart from *age*, included as a continuous predictor, I consider other control variables.

Education. I consider couples' educational homogamy by including dummy variables for whether both partners had tertiary education, both had secondary/primary education, she had a higher education level than him, and he had a higher education level than her. As seen in the literature review, educational homogamy has sometimes been found to be associated with a more cooperative attitude among partners, which leads the couple being less exposed to stressful situations. In couples highly homogamous in education, it might be more common to find shared gender egalitarian attitudes: this might help couples to adjust to parenthood and, as a consequence, to maintain a satisfactory relationship. Obviously, it is not just a matter of shared egalitarian gender attitudes: a highly homogamous couple might have more resources (including financial ones) to afford outsourced childcare or housework, when compared to low homogamy couples.

Employment. To capture important couple characteristics, other control variables are included at both the individual and couple levels. All these variables are considered time-dependent. Starting with *employment situation*, I consider unemployment and inactivity together, due to the favourable condition of the Australian labour market during the period under study, where the unemployment rate was very low (in 2005 the total unemployment rate in Australia was around 5% for both men and women. Source: Australian Bureau of Statistics). For women, I construct a variable describing the *employment/inactive trajectory* from pregnancy onwards (See Appendix A.2). The variable is constructed by combining their occupational status in the year of pregnancy and in the year of the birth with their occupational status in the year of the pregnancy and in the year of the child's first birthday. The idea is to see whether the changed occupational status at time 1 is temporary or not. In the year of the pregnancy, I simply consider the woman's actual occupational status. Other characteristics of the mothers' employment are also considered, such as whether she is employed *part-time or full-time*.

⁵ The absence of significant results for the test might be due to the small sample size. For this reason, I test the differences by enlarging the sample and considering all the individuals with the same age distribution in the original HILDA dataset. I obtain significant results (Agreeableness $p=0.001$; Extraversion $p=0.01$; Emotional Stability $p=0.05$; Openness $p=0.001$). See note 15 for the inclusion of time-variant personality traits in the analyses.

Income. I include a control for the total household relative disposable income, which is the amount of income that the household has available to spend or save, after accounting for allowances and taxes, and the number of members of the household. In particular, I consider a transformation of this into quartiles.

Availability of support. A control for support (“I received help when I needed it”) is useful to isolate feelings of being alone in facing difficulties – which might be especially relevant for women. The main limit of this variable is that it is impossible to distinguish whether the support comes from the partner, relatives or others.

Outsourced Childcare. HILDA provides information on the number of hours of outsourced childcare used by the couple (both formal and informal childcare). I consider whether an intense use of childcare (above the median number of hours of outsourced childcare) can be a facilitator for couple’s relationship adjustment in the transition to parenthood.

Other possible interesting controls not included in the analyses:

Outsourced Housework. As with outsourced childcare, this might reduce the load of domestic tasks that parents have to share/bargain over, and as a consequence reduce the reasons for conflict. Nevertheless, information on this is only available in HILDA waves 5 and 8.

Parental leave. Whether parents (and especially mothers) have some parental leave might be an interesting control: in fact, it might relax the costs-benefits trade-off of having children in dual-earner couples, at least during the first months of life of the child. Moreover, it might reduce the stress of the tiring double commitment of the parents to childcare and work. Unfortunately, variables providing information on parental leave are only available from HILDA wave 5.

4. Longitudinal analysis: piecewise growth models.

I model marital adjustment separately for women and men by using piecewise linear growth models⁶ (Ragosa and Willett, 1985; Singer and Willett, 2003). Growth models are multilevel models for change that allow a description of how a specific dependent variable changes over time for a person (Level 1) and they relate differences among individuals to changes in certain predictors (Level 2). The Level 1 model allows research questions on within-person changes to be answered, and contains the individual predictors; Level 2 contains the random parameters (slope and intercept) and it describes how changes differ across the population (between-person change). This means that Level 1 contains the repeated measure for each individual, while Level 2 is the “group-level” that represents the individual-effect over time.

From the Level 1 sub-model I can describe changes in the dependent variable using two parameters (intercept and slope: structural part) that are derived from the individual’s change trajectory. The stochastic part of the Level 1 sub-model represents the random error associated with measurement of the individual.

The outcomes of the Level 2 sub-model are the parameters of the Level 1 sub-model (slope and intercept), which are interpreted through four regression parameters:

1. the average intercept in the population;
2. the difference in the individuals’ intercepts in the population;
3. the average slope in the population;
4. the difference in the individuals’ slope in the population,

which might be associated with some predictors. These structural components of the Level 2 model interpret the inter-individual differences in their trajectories of change. The residuals from Level 2

⁶ Implemented with Stata package xtmixed.

allow for the possibility that the Level 1 parameters may differ stochastically across individuals. In this sense, Level 2 allows considerations on the individual's population of origin to be made, assuming that the growth trajectories of the individual are derived from a population model that gives rise to these patterns.

In order to decide the shape of the function, I test both linear and quadratic functions. While I find consistent results supporting a piecewise linear relation, there is no support for a quadratic function. Accordingly, I have reason to believe that the change function (Level 1) is not continuous, and that the slope of partner satisfaction might change with time. In particular, I need the flexibility to model each time period using possibly different explanatory variables (time-variant or time-invariant). With growth models, it is possible to divide the time predictor into multiple phases: a "regression discontinuity" design is possible, including – at Level 1 – dummies for each phase. As a result, I introduce dummy variables for the three time periods that specify points of discontinuity in the model: the year of pregnancy with the first child (*preg*), the year of the first birth (*birth*), and the year of the child's first birthday (*first*). Including random slopes for time periods allow the function for individuals to differ from the average of the population change trajectory. The unconditional growth model is shaped accordingly:

$$\text{SRP}_{ij} = \pi_{0i} \text{preg}_{ij} + \pi_{1i} \text{birth}_{ij} + \pi_{2i} \text{first}_{ij} + \varepsilon_{ij}$$

$$\text{with } \pi_{ni} = \gamma_{n0} + \xi_{ni},$$

where γ_{n0} is the intercept and ξ_{ni} is the random slope, under the condition of a normal distribution of residuals (ε_{ij}). The subscript i refers to the individual at Level 1, while the subscript j refers to the individual at Level 2. Other variables are gradually included in the model at Level 1. To accommodate the fact that some factors play roles in determining satisfaction with the partner relationship at certain time points and not at others, I operationalize these variables into different variables which are distinguished by the time in which they appear. This is a common practice when one wants to allow for the piecewise Level 1 individual growth model to include discontinuity in slope but not in elevation. The time-varying predictor(s) should clock the passage from each phase, taking value 0 before the passage and then changing in accordance with the temporary predictor. In other words, the interaction of the individual predictors with the dummy variables for the time spans (*preg*, *first* and *second*) works like including a dummy variable for the missing values. When the covariates do not influence the dependent variable (e.g. the covariate for adjustment to parenthood in the work sphere does not affect satisfaction with the partner relationship in the year of pregnancy), they take the constant value 0, and the predicted value of the dependent variable is equal to the intercept at that time⁷.

The final model is shaped as:

$$\text{SRP}_{ij} = X_{ij}\beta + \pi_{0i} \text{preg}_{ij} + \pi_{1i} \text{birth}_{ij} + \pi_{2i} \text{first}_{ij} + Z_{it_i}\lambda + \varepsilon_{ij},$$

where Z_{it_i} is the vector of time-dependent covariates, t_i is the time variable, with values from 0 to 2 according to the time period, and X_{ij} are time-independent covariates. Nested models are run separately for women and men, and I gradually include the main covariates. A separate model for working women and men is also run.

Because of the endogeneity problems in this study, my analyses cannot support causal implications of the results, and the interpretation of the link can be discussed in terms of association and only by referring to the existing literature.

⁷ In a model where no one covariate or controller is included.

5. Results

The growth models at least partially confirm the hypotheses, with some gender differences. Unexpected difficulties in parenthood and difficult work-family reconciliation have a negative impact on the quality of the partners' relationship, while discrepancies in the couple about the unexpected hardness of parenthood decrease women's satisfaction with the partner relationship. Moreover, in accordance with the literature, I find that women's employment trajectories affect mothers and fathers differently: in particular, exiting the labour market after the arrival of the child increases men's relationship satisfaction while it decreases women's marital adjustment. Finally, some couple and partner characteristics – e.g. personality traits – also determine the way individuals experience the transition to parenthood in terms of marital adjustment.

We can start by considering that, for both women and men, satisfaction with the relationship with the partner appears to decrease over time (Table 3): the effect of time also remains negative and significant when including the control variables. Nevertheless, this trend can be explained by different relevant adjustment processes by year and by gender.

Table 3. Piecewise linear growth models for relationship satisfaction with only time variables, for women and men (couples with the first child born between 2001 and 2009).

	<i>Women</i>	<i>Men</i>
Birth year	-0.51***	-0.30***
First year	-0.76***	-0.56***
cons.	9.13***	9.01***

Note: * = $p \leq .05$; ** = $p \leq .01$; *** = $p \leq .001$

Note: N=763

Starting with the control variables, it is interesting to see whether different work transitions for mothers around the arrival of the first child might be associated with specific trends in marital adjustment (see Table 4). It is interesting to note that, for both women and men, the mother's trajectory from being employed (or inactive) during the pregnancy to being inactive in the year of the birth of the child is positively and significantly (almost significantly for women: p -value=0.09) related to marital adjustment. This could mean that during the birth year women keeping more time to dedicate to the household is something that reduces stress in the couple. Nonetheless, in the first year of life of the child we find different results for mothers and fathers. In fact, only men's satisfaction with the partner increases when the woman stays/becomes inactive in the first year of life of the child. For women, the same path shows a negative (although not fully significant) association with relationship satisfaction. This discrepancy might be the first source of conflict and dissatisfaction in the couple's relationship. Moreover, the result suggests that a traditional division of gender roles after the transition to parenthood reduces the reasons for dissatisfaction with the partner for men and women (even if in this last case the coefficient is not significant). Nevertheless, the effect of women's trajectories on men's relationship satisfaction is small: the predicted value of relationship satisfaction for men when the woman also stays inactive at the end of the first year of life of the child is 8.6 compared to 8.5 if the woman stays/becomes employed during the same period.

In further developments of the model, I gradually include the variables related to personality (Table 4), the experience of unexpected difficulties in parenthood (Table 5: Unexpected difficulties) and the family-related adjustment covariates (Table 5: Family adjustment).⁸ In the last model, the effect of work and family-related adjustment is tested for dual-earner couples (Table 5: Work adjustment).

⁸ These models are also run without controlling for the unexpected difficulties covariates: the coefficients and their significance does not change enough for them to be considered to have interesting effects.

When the main independent variables are included, the effect of time on marital adjustment become positive, but in most cases non-significant.

Inclusion of personality traits in the model with all the controls reveals that the results for the control variables are more or less stable. Regarding personality, we have different results for women and men (the differences are always significant at $p=0.01$)⁹: women gain relationship satisfaction if they score higher on Extraversion and Emotional Stability; highly agreeable men tend to increase their relationship satisfaction after the transition to parenthood, while men who score higher on Openness tend to decrease their relationship satisfaction.

Table 4. Piecewise linear growth models for relationship satisfaction including personality traits and control variables (couples with a first child born in 2001-2009).

	Control variables		Personality Traits	
	Women	Men	Women	Men
Birth year of the child	-0.58***	-0.39***	-0.58***	-0.43***
First (completed) year of life of the child	-0.79***	-0.65***	-0.78***	-0.69***
<i>Personality traits</i>				
Extraversion			0.17**	0.09
Agreeableness			0.06	0.25***
Emotional Stability			0.16**	0.09
Conscientiousness			0.01	-0.02
Openness			-0.09	-0.12
<i>Control variables</i>				
Age	-0.02	-0.01	-0.01	-0.01
High educational homogamy	0.30	0.04	0.25	0.05
She higher education	-0.15	-0.01	-0.15	-0.16
He higher education	-0.46**	-0.37*	-0.39*	-0.40*
He employed	-0.02	0.24	-0.09	0.26
Total disposable income (quartiles)	0.07	-0.08	0.07	-0.07
<i>Women's employment trajectories</i>				
Inactive (pregnancy year)	-0.07	-0.05	-0.01	-0.05
Employed (pregnancy year) – inactive (birth year)	0.22	0.24*	0.22	0.26*
Inactive (pregnancy year) – employed (birth year)	-0.29	-0.39	-0.23	-0.39
Inactive (pregnancy year) – inactive (birth year)	0.08	0.30	-0.02	0.31
Employed (pregnancy year) – inactive (first year)	-0.11	0.52**	-0.09	0.56***
Inactive (pregnancy year) – employed (first year)	0.46	0.28	0.51	0.28
Inactive (pregnancy year) – inactive (first year)	0.11	0.31	0.15	0.32
cons.	9.43***	9.35***	7.88***	7.62***

Note: * = $p \leq .05$; ** = $p \leq .01$; *** = $p \leq .001$ Note: N=763

The effect of personality traits is only partially absorbed by the inclusion of the adjustment and anticipation variables (Table 5). Looking at the results for personality traits¹⁰ in all the models, two traits in particular are always positively related to marital adjustment: Agreeableness for men and Emotional Stability for women. Emotional Stability for women significantly increases their predicted level of relationship satisfaction from 7.9 – when women score less on this trait – to 9.1 –

⁹ The differences are tested by running the model in the sample where both women and men are simultaneously present, including an interaction between gender and the personality traits.

¹⁰ By running the piecewise linear growth models for relationship satisfaction twice, considering personality traits once as fixed and once allowing them to change between the two waves, I obtain very similar results. For this reason and according to the results of the test (see section 2.4.2) in the final model I decide to include personality traits as fixed, taking their mean values between the two waves.

highest scores. For men, the predicted level of relationship satisfaction goes from 7.7 to 9.2 with an increased score on Agreeableness. The reason for this might be that Agreeableness is related to the propensity to be cooperative and altruistic, while Emotional Stability is related to self confidence and the tendency to experience pleasant emotions (Bouchard et al., 1999; McCrae, 1991). In this sense, the first trait might be associated with a propensity on the part of the man to participate in care and domestic work and to be supportive of his partner. This is particularly helpful in a context where a traditional division of gender roles is institutionalized. On the women's side, Emotional Stability can help new mothers to face the difficult and sometimes stressful period of the early care of the child.

In line with the findings in the main literature, Extraversion also has a strong influence on women's evaluation of the relationship quality, increasing women's relationship satisfaction from 7.7 to 9 as scores on Extraversion increase.

Because the relationship satisfaction of the partners tends to show high correlation, we might expect that the same personality traits increasing the individual's relationship satisfaction also affect the relationship satisfaction of the partner. When testing this hypothesis I do not find significant results except for men's relationship satisfaction that is positively affected by partner's high score on Extraversion (see Appendix). Still, even if results are not significant, women's low Emotional Stability decreases men's relationship satisfaction, while high Agreeableness for men is positively linked to women's relationship satisfaction.

In the "Unexpected difficulties" model (Table 4), having poorly anticipated the difficulties of parenthood decreases partner satisfaction, but the effect is significant only for men. For fathers, in fact, the effect is quite strong: the predicted level of relationship satisfaction for those not facing unexpected difficulties is around 8.7, but it systematically decreases to 7.7 for those that declare that parenthood is harder than they imagined. Nevertheless, when testing for gender differences I do not find significant differences in the gender effect of the covariate on relationship satisfaction¹¹.

For women, the loss of satisfaction is significantly related to a lack of balance between how partners perceive unexpected difficulties, where the male partner in particular finds unexpected difficulties. Here, marital adjustment declines, perhaps due to increased conflict or misunderstanding. On the contrary, men increase their relationship satisfaction if both the partners face unexpected difficulties and also if he is the only one to do so. Nevertheless, if we include in the model only the couple-variable for unexpected difficulties, in both cases the effects also become negative for men (even though not significantly). This might mean that while for women the couple-combined effect is the strongest predictor of their evaluation of the relationship, this is not the case for men, for whom it is the individual experience that affects their relationship with the partner.

The experiences of women and men are different when I consider family adjustment¹² (see again Table 5). As expected, women who judge that they do an unfair share of childcare experience significant strong reductions in relationship satisfaction from the year of childbirth onwards. Unexpectedly, the negative effect for men of difficult family adjustment comes in the year after childbirth, and only when they judge they do more than their fair share of housework. The effect is

¹¹ Differences are tested by running the model in the sample where both women and men are simultaneously present. I include all the controls, gender, the unexpected difficulties variable and an interaction between gender and unexpected difficulties. While the interaction with gender is not significant, the unexpected difficulties covariate is still negatively and significantly related to relationship satisfaction.

¹² This is tested by running separate models for fair share of housework and of childcare. In both the cases, gender differences are significant at $p=0.01$.

also quite strong in this last case: fathers doing more than their fair share of housework show a predicted level of relationship satisfaction around 7.9, while for fathers doing less than their fair share of housework the relationship satisfaction is around 8.7. The delay in the effect for men is likely to be due to mothers taking primary responsibility for childcare (e.g. for feeding) during the first year; this probably releases fathers from most parenthood-related stress. If I exclude the unexpected difficulties indicators, the coefficients for family adjustment do not change. This means that the family adjustment effect is not confounded by the fact that the difficulties were unexpected.

The last model (Table 5 “Work Adjustment”), considering only dual-earner couples,¹³ introduces a variety of work adjustment controls, plus the “availability of support” indicator and that of satisfaction with flexibility in the work-family balance, which helps to account for how easily working parents adjust their multiple commitments after the arrival of the child. It should be noted that as this model covers a different sample the results cannot be compared with the coefficients from the previous models. Women employed during the transition to parenthood might have different characteristics (i.e. be more “career oriented”, have low household income or high individual income, etc.) to those abandoning the labour market in the year of the birth of the child, and/or staying inactive in the year of the first birthday. In dual-earner couples, the woman’s relationship satisfaction only seems to be affected by whether time spent at work is less enjoyable since the arrival of the child. For the man, foregoing career opportunities as a consequence of new parental responsibilities seems to be the primary factor reducing satisfaction with the relationship with the partner. In both cases, the availability of support in the household strongly helps working parents to maintain a good trend in marital satisfaction¹⁴ (increasing the predicted relationship satisfaction from 7.4 – no support – to 9 – supported when needed). It is interesting to note that satisfaction with flexibility to balance family and work commitments is not significant. This may be due to the fact that in our sample (and in Australia in general) part-time employment is widespread among working mothers, giving more flexibility in family-work reconciliation.

Even more interesting is the reciprocal influence of the processes of adjustment to parenthood of the two partners. As previously found in Table 4, the relevant role of the mother’s employment trajectory is also confirmed in Table 5: if the mother becomes inactive the year after the arrival of the child, it seems to increase the father’s and mother’s probability of gaining in terms of marital satisfaction. The persistence of the finding suggests an interesting result: marital adjustment is easier in couples adopting the traditional division of gender roles. Some of this effect is derived from needs of the partners to specialize, while another part remains when controlling for adjustment to parenthood. This might suggest that the relation between traditional gender roles and the couple’s wellbeing (especially for men) is, at least in part, culturally driven. In terms of the couple’s wellbeing, these results are particularly strong for women who stay out of the labour market for more than one year. In fact, this path is associated with an increase in men’s relationship satisfaction and a (albeit not statistically significant) decrease in women’s relationship satisfaction. The fact that the path is not significant could depend on the presence of a mixed group of women in this work trajectory. We might find both extremely family-oriented women enjoying being totally dedicated to household tasks, and women staying at home because, e.g., they cannot afford childcare costs losing the satisfaction they would derive from self-realization in their job.

¹³ I develop models for “Unexpected difficulties” and “Family Adjustment” for dual-earner couples too, but the results in terms of coefficients and significance are the same. One exception is in the model “Family Adjustment”: for mothers in dual-earner couples there are not significant coefficients on the family adjustment variables, while only high education homogamy variables come out positive and significant for women’s marital adjustment. This might underline how gender egalitarian attitudes in dual-earner couples allow conflicts in sharing household chores to be overcome.

¹⁴ Regarding outsourcing childcare, when I control for an intense use of childcare (more than the median of the distribution of hours of outsourced childcare), I only obtain significant results for mothers for the first completed year of life of the child, and this is associated with a reduction in satisfaction with the partner relationship. At the same time, the covariate for unexpected difficulties becomes non-significant.

Additional results come from educational homogamy. The results show a positive effect of high educational homogamy on marital adjustment in all the models and especially in the sample of dual-earner couples (see Table 5) and for women. Previous studies have found that highly educationally homogamous couples are better able to establish a satisfactory gender balance due to more gender egalitarian attitudes and less partner specialization (Esping Andersen and Bonke, 2011). Obviously, this might be only part of the explanation: in highly homogamous dual-earner couples, the woman might also have more economic power, or partners can afford more outsourcing (e.g. of housework, childcare).

Table 5. Piecewise linear growth models of relationship satisfaction, for women and men (couples with a first child born in 2001-2009).

	Unexpected Difficulties ^a		Family Adjustment ^a		Work Adjustment ^b	
	Women	Men	Women	Men	Women	Men
Birth year	-0.42	0.44	0.77	0.59	0.01	0.16
First year	-0.32	0.37	0.67**	1.16**	0.84	0.91
<i>Unexpected difficulties:</i>						
Poor anticip.(birth year)	-0.03	-0.19***	-0.01	-0.19***	0.02	-0.20***
Poor anticip.(first year)	-0.10	-0.23***	-0.07	-0.24***	-0.05	-0.23***
Both poor anticip.	-0.23	0.37*	-0.28	0.41**	-0.23	0.71**
She poor anticip.	-0.39*	-0.14	-0.41	-0.14	-0.15	0.07
He poor anticip.	-0.48***	0.35	-0.49***	0.40*	-0.35	0.52
<i>Family Adjustment:</i>						
More than fair share of childcare (birth year)			-0.25***	0.05	-0.10	0.17
More than fair share of childcare (first year)			-0.16	0.01	-0.13	0.14
More than fair share of housework (birth year)			-0.05	-0.03	-0.02	0.08
More than fair share of housework (first year)			-0.19	-0.24**	-0.12	-0.31*
<i>Work Adjustment:</i>						
Work less enjoyable (birth year)					-0.03	0.04
Work less enjoyable (first year)					-0.14**	0.15*
Turn down work opportunities (birth y.)					-0.06	-0.10
Turn down work opportunities (first y.)					-0.01	-0.12*
Satisfaction with flexibility work family balance					0.04	0.01
Satisfaction with work					-0.05	0.03
Satisfaction with free time					0.01	0.05**
Help when needed					0.13***	0.16***
<i>Personality Traits:</i>						
Extraversion	0.15*	0.09	0.14*	0.08	0.11	0.11
Agreeableness	0.04	0.24***	0.03	0.23***	0.11	0.18**
Emotional stability	0.15**	0.09	0.13**	0.08	0.15**	-0.01
Conscientiousness	0.01	-0.04	0.03	-0.03	0.09	-0.04
Openness	-0.10	-0.12*	-0.08	-0.11*	-0.02	-0.15*
<i>Control variables:</i>						
Age	-0.01	-0.02	-0.11	0.01	-0.02	0.01
High educational homogamy	0.32	0.03	0.31	0.02	0.45***	0.13
She higher education	-0.20	-0.12	-0.21	-0.11	-0.37*	-0.15
He higher education	-0.45**	-0.34	-0.46***	-0.34	-0.61***	-0.57**
He employed	-0.07	0.25	-0.16	0.32		
Total disposable income (quartiles)	0.08	0.10	0.08	-0.08	-0.08	-0.09
<i>Women employment trajectory</i>						
Inac (preg y.)	-0.07	-0.08	-0.13	-0.06		
Empl (preg y.) – inac (birth y.)	0.24	0.32***	0.11	0.30**		
Inac (preg y.) – empl (birth y.)	-0.26	-0.35	-0.07	-0.30		
Inac (preg y.) – inac (birth y.)	0.12	0.21	-0.31	0.18		
Empl (preg y.) – inac (first y.)	-0.10	0.46**	-0.38	0.39		
Inac (preg y.) – empl (first y.)	0.44	0.34	0.50	0.25		
Inac (preg y.) – inac (first y.)	-0.07	0.32	-0.27	0.29		
cons.	8.29***	7.40***	8.43***	7.34***	7.51***	7.11***

Note: * = $p \leq .5$; ** = $p \leq .01$; *** = $p \leq .001$ Note: ^a N = 763; ^b N=455

6. Conclusion

Evidence from Australian panel data between 2001 and 2009 suggests that the declining trend in marital adjustment after the transition to first parenthood in the short run is related to the presence of unmet expectations of parenting and difficulties in work-family adjustment. On the one hand, the marital adjustment of fathers seems to mirror the difficulties after the transition to parenthood more than that of mothers, which might contrast with the idea that the difficult reconciliation between family and work for mothers decreases women's relationship satisfaction more.

At the same time, sharing the way partners' live the transition to parenthood maintains a high quality in the relationship, at least for men. These results offer an interesting perspective on the consequences of the institutional reproduction of traditional gender roles in the Australian context. The positive effect of "sharing experiences" – maybe also in their emotional component – for fathers (both parents experience unexpected difficulties; high level of agreeableness) and the negative effect of an unbalanced share of tasks can be understood as the result of the institutionalized differences in the chances women and men have of enjoying self-realization in parenthood, a loving relationship and the labour market. Compensation at the couple level in realizing individuals' preferences overcomes a lack of support at the macro level, and this represents an important precondition for maintaining satisfactory functioning of the relationship. Similarly, the decline in men's marital adjustment associated with a perception of doing more for their family and less for their job after the transition to parenthood might suggest a significant persistence of the cultural dominance of traditional institutionalized gender roles.

Under this perspective, these results highlight the potentially relevant role of family policies in supporting family formation and maintenance. It seems that more effort should be put into reducing the divergent effects that employment of the mother has on the parents' wellbeing. At least for a group of women, self-investment in the labour market and the family are not mutually exclusive and enable the couple to experience greater satisfaction. On the contrary, the persistence of institutionalized support for the traditional division of gender roles makes the two careers unsustainable in terms of the couple's relationship satisfaction. As the literature shows, this might have serious consequences in terms of the couple's ability to solve conflicts and to realize intentions of higher fertility. Along with Esping-Andersen (2009) and McDonald (2013), I expect that the persistent negative effect of adjustment to parenthood on the functioning of the relationship after the arrival of a child might be considered micro evidence of a possible macro phenomenon that leads the majority of women to perceive a high level of gender inequity in the institutional structure of Australian society. On the same lines, the significant positive effect of only some intrapersonal characteristics, which I have described as "protective" of fertility realization – such as being agreeable for fathers and emotionally stable for mothers – might mean that the chances of experiencing an easy transition to the second child are not equally spread among individuals. The effect might be relative to the cultural and policy context: a liberal approach to family policies – that favours partner specialization in gender roles – might exacerbate the conflict among first time parents in bargaining over their shares of domestic and care tasks. Nevertheless, if fathers have a higher predisposition to be cooperative and mothers to react positively to stressful situations, this might help couples to overcome (unexpected) childbearing difficulties.

References

- Apps P. (2006), Family Taxation. An Unfair Inefficient, System. http://www.law.usyd.edu.au/about/staff/PatriciaApps/Apps_familyTaxation.pdf.
- Baxter J. (2000), The joys and justice of housework, *Sociology*, Vol. 34: 609-631.
- Belsky J. (1985), Exploring Individual Differences in Marital Change across the Transition to Parenthood: The Role of Violated Expectations, *Journal of Marriage and Family*, Vol. 47, No. 4: 1037-1044.
- Belsky J. and Hsieh K. (1998), Patterns of marital change during the early childhood years: Parent personality, co-parenting and division-of-labor correlates, *Journal of Family Psychology*, Vol.12: 511–528.
- Benin M. H. and Nienstedt B.C. (1985), Happiness in Single and Dual Earner Families: the Effect of Marital Happiness, Job Satisfaction and Life Cycle, *Journal of Marriage and Family*, Vol.47, N.4: 975-984.
- Bouchard G., Lussier Y. and Sabourin S. (1999), Personality and Marital Adjustment: Utility of the Five-Factor Model of Personality, *Journal of Marriage and Family*, Vol. 61, No. 3: 651-660.
- Boyce C.J., Wood A.M. and Powdthavee N. (2013). Is personality Fixed? Personality changes as much as variable economic factors and more strongly predicts changes to life satisfaction, *Social Indicators Research*, Vol.111, N,1: 287-305.
- Callan V.J. (1985), Comparisons of Mothers of One Child by Choice with Mothers Wanting a Second Birth, *Journal of Marriage and Family*, Vol. 47, N.1: 155-164.
- Campbell A., Converse P. E. and Rodgers W. L. (1976), “The quality of American life: Perceptions, evaluations, and satisfactions”. New York: Russell Sage Foundation.
- Campione W. (2008), Employed Women’s Well-Being: The Global and Daily Impact of Work, *Journal of Family and Economic Issues*, Vol.29, N.3: 346-361.
- Caspi A. and Roberts B.W.(2001), Personality Development Across the Life Course: The Argument for Change and Continuity, *Psychological Inquiry*, Vol. 12, No. 2: 4966.
- Claxton, A. and Perry-Jenkins M. (2008), No fun anymore: Leisure and marital quality across the transition to parenthood, *Journal of Marriage and Family*, Vol.70: 28–43.
- Costa P. T. and McCrae R. R. (1992), “Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual”, Odessa, FL: Psychological Assessment Resources.
- Cowan C.P., Cowan P.A., Heming G., Garrett E., Coysh W.S., Curtis-Boles H. and Boles A.J. (1985), Transitions to Parenthood, *Journal of Family Issues*, Vol.6; N.4: 451-481.
- Cox, M. J., Paley B., Burchinal M., and Payne C.C. (1999), Marital Perceptions and Interactions Across the Transition to Parenthood, *Journal of Marriage and Family*, Vol.61, N.3: 611-625.
- Craig L., Mullan K. and Blaxland M. (2010), Parenthood, policy and work-family time in Australia 1992—2006, *Work, Employment & Society*, Vol. 24, N.1: 27 -45.
- Craig L. and Siminski P. (2010), Men’s housework, women’s housework and second births in Australia, *Social Politics*, Vol.17, N. 2: 235-66.
- MacDermid M., Huston T.L. and McHale S.M. (1990), Changes in Marriage Associated with the Transition to Parenthood: Individual Differences as a Function of Sex-Role Attitudes and Changes in the Division of Household Labor, *Journal of Marriage and Family*, Vol.52, N.2: 475-486.

- Dempsey K.(1997), “Inequalities in marriage”. Melbourne: Oxford University Press.
- Doss B.D., Rhoades G.K., Stanley S.M. and Markman H.J. (2009), The Effect of the Transition to Parenthood on Relationship Quality: An Eight-Year Prospective Study, *Journal of Personality and Social Psychology*, Vol.96, N.3: 601–619.
- Esping-Andersen G. (2009), “The incomplete revolution: adapting Welfare State to women’s new roles”, Cambridge: Polity Press.
- Esping-Andersen G. and Bonke J. (2011), Family investments in children: Productivities, preferences, and parental child care, *European Sociological Review* ; Vol. 27, N.25: 43-55.
- Evanson R.J. and Simon R.W. (2005), Clarifying the Relationship Between Parenthood and Depression, *Journal of Health and Social Behavior*, Vol.46, N.4: 341-358.
- Frijters P., Johnston D.V. and Shields M.A. (2011), Life Satisfaction Dynamics with Quarterly Life Event Data, *Scandinavian Journal of Economics*, Vol.113, N.1: 190-211
- Gallie D. and Russel H. (2008), Work family conflict and working conditions in western Europe, *Social Indicators Research*, Vol.93: 445–467.
- Gattis K. S., Berns S., Simpson L. E. and Christiansen A. (2004), Birds of a feather or strange birds? Ties among personality dimensions, similarity and marital quality, *Journal of Family Psychology*, Vol.18: 564–574.
- Goldberg, L.R. (1992), The Development of Markers for the Big-Five Factor Structure, *Psychological Assessment*, Vol. 4: 26-42.
- Grote N.K. and Clark M.S. (2001), Perceiving unfairness in the family: Cause or consequence of marital distress? *Journal of Personality and Social Psychology*, Vol.80: 281–293.
- Headey B. (2006), Happiness: Revising Set Point Theory and Dynamic Equilibrium Theory to Account for Long Term Change, *DIW-Diskussionspapiere*.
- Hoffenaar P., van Balen F., and Hermanns J.(2010), The Impact of Having a Baby on the Level and Content of Women’s Well-Being, *Social Indicators Research* Vol.97, N.2: 279-295.
- Kalmuss D., Davidson A. and Cushman L.(1992), Parenting Expectations, Experiences, and Adjustment to Parenthood: A Test of the Violated Expectations Framework, *Journal of Marriage and Family*, Vol.54, N.3: 516–526.
- Kandel D. B., Davies M. and Raveis V.H. (1985), The Stressfulness of Daily Social Roles for Women: Marital, Occupational and Household Roles, *Journal of Health and Social Behaviour*, Vol.26, N.1: 64-78.
- Karney B. R. and Bradbury T. N. (1995), The longitudinal course of marital quality and stability: A review of theory, methods, and research, *Psychological Bulletin*, Vol.118: 3-34.
- Katz L.F., Wilson B. and Gottman, J.M. (1999), Meta-emotion philosophy and family adjustment: Making an emotional connection. In M.J. Cox and J. Brooks-Gunn (Eds.) “Conflict and cohesion in families: Causes and consequences. The advances in family research series”, pp. 131-165: Routledge.
- Keizer R., Pearl A Dykstra, Anne-Rigt Poortman (2010), The transition to parenthood and well-being: the impact of partner status and work hour transitions. *Journal of Family Psychology*; 24(4):429-38.
- Keizer R. (2013), Relationship satisfaction. In A.C. Michalos (Ed.), “Encyclopedia of Quality of Life Research”: Springer.
- Kohler H.P., Behrman J. R. and Skytthe A. (2005), Partner + children = happiness? An assessment

- of the effect of fertility and partnerships on subjective well-being in Danish twins, *Population and Development Review*, Vol.31, N.3: 407–445.
- Lawrence E., Nylen K., Cobb R.J..(2007), Prenatal Expectations and Marital Satisfaction over the Transition to Parenthood, *Journal of Family Psychology* Vol.21, N.2: 155–164.
- Locke H.J. and Wallace K.M. (1959), Short marital-adjustment and prediction tests: Their reliability and validity, *Marriage and Family Living*, Vol.21: 251–255.
- Losoncz, I., (2009), Personality Traits in HILDA, *Australian Social Policy*, pp. 169–198.
- Magee C.A., Heaven P.C. and Miller L.M. (2013), Personality change predicts self-reported mental and physical health, *Journal of Personality*, Vol.81, N.3: 324-334.
- Mattingly M. J. and Sayer L. C. (2006), Under pressure: Gender differences in the relationship between free time and feeling rushed, *Journal of Marriage and Family*, Vol.68: 205–221.
- McDonald P. (2000), Gender equity in theories of fertility transition, *Population and Development Review*, Vol. 26, N.3: 427-439.
- McDonald P. (2006), Low fertility and the state: the efficacy of policy, *Population and Development Review*, Vol.32, N.3: 485-510.
- McDonald P. (2013), Social foundations for explaining low fertility: Gender equity, *Demographic Research*, Vol.28, N.34: 981-994.
- Mencarini L., and Sironi M. (2012), Happiness, Housework and Gender Inequality in Europe.” *European Sociological Review*, *European Sociological Review*, Vol.28, N.2: 203-219.
- Myrskylä M., Goldstein J.R. and Cheng Y.A. (2013), New Cohort Fertility Forecasts for the Developed World: Rises, Falls and Reversals, *Population and Development Review*, Vol.39, N.1: 31–56.
- Myrskylä M. and Margolis R. (2014) Happiness: before and after the kids. *Demography* (forthcoming)
- Montag I. and Levin J. (1994), The five-factor personality model in applied settings, *European Journal of Personality*, Vol.8: 1-8.
- Moss P., Bolland G., Foxman R. and Owen C. (1986), Marital Relations During the Transition to Parenthood, *Journal of Reproductive and Infant Psychology*, Vol.4, N.1-2: 57–67.
- Nomaguchi K. M. and Milkie M.A. (2003), Costs and Rewards of Children: The Effects of Becoming a Parent on Adults’ Lives, *Journal of Marriage and Family*, Vol. 65, N.2: 356-374.
- O’Brien M. and Peyton V. (2002), Parenting attitudes and marital intimacy: A longitudinal analysis, *Journal of Family Psychology*, Vol.16:118–127.
- Pollman-Schult (2014), Parenthood and Life Satisfaction: Why Don’t Children Make People Happy? *Journal of Marriage and the Family*, Vol. 76: 319-336.
- Ridley C.A. (1973), Exploring the Impact of Work Satisfaction and Involvement on Marital Interaction When Both Partners Are Employed, *Journal of Marriage and Family*, Vol.35, N.2: 229-237.
- Rode J., Rehg M., Near J. and Underhill J. (2007), The Effect of Work/Family Conflict on Intention to Quit: The Mediating Roles of Job and Life Satisfaction, *Applied Research in Quality of Life*, Vol.2, N.2: 65-82.
- Roberts B.W. and Mroczek D. (2008), Personality trait change in adulthood. *Current Directions*,

Psychological Science, Vol.17: 31-35.

- Roberts B.W., Walton K.E. and Viechtbauer W. (2006), Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, Vol.142: 1 – 25.
- Rogers S. and Dee C. (2003), Spillover between Marital Quality and Job Satisfaction: Long-Term Patterns and Gender Differences, *Journal of Marriage and Family*, Vol.65, N.2: 482-495.
- Ruble D.N., Fleming A.S., Hackel L.S. and Stangor C. (1988), Changes in the marital relationship during the transition to first time motherhood: Effects of violated expectations concerning division of household labor, *Journal of Personality and Social Psychology*, Vol.55: 78-87.
- Saucier G. (1994), Mini-markers: A Brief Version of Goldberg's Unipolar Big-five Markers, *Journal of Personality Assessment*, Vol. 63: 506-516.
- Shapiro A.F., Gottman J.M. and Carrère S. (2000), The baby and the marriage: Identifying factors that buffer against decline in marital satisfaction after the first baby arrives, *Journal of Family Psychology*, Vol.14: 59–70.
- Singer J. and Willett J. (2003), “Applied Longitudinal Data Analysis. Modeling change and event occurrence”. Oxford University Press
- Soons J. P. M. and Liefbroer A. C. (2008), Together is better? Effects of relationship status and resources on young adults' well-being, *Journal of Social and Personal Relationships*, Vol.25: 603–624.
- Summers A. (2003), “Work, Babies and Women’s Choices in 21st Century Australia”, Milson’s Point, Australia: Random bHouse.
- Twenge J.M., Campbell W.K. and Craig A. (2003), Parenthood and Marital Satisfaction: A Meta-Analytic Review, *Journal of Marriage and Family*, Vol.65, N.3: 574-583.
- Wicki W. (1999), The Impact of Family Resources and Satisfaction with Division of Labor on Coping and Worries after the Birth of the First Child, *International Journal of Behavioral Development*, Vol.23, N.2: 431 -456.

Appendix

Growth model for satisfaction with the partner relationship, including control variables and personality traits of the partner, for both women and men.

	Women	Men
<i>Time:</i>		
Birth year	- .26**	- .21***
First year	- .42***	- .43***
<i>Personality traits</i>		
Extraversion	.17	.08
Agreeableness	.06	.21***
Emotional Stability	.15*	.11
Conscientiousness	.07	- .05
Openness	- .09	- .08
<i>Personality traits of the partner</i>		
Extraversion	.02	.19**
Agreeableness	.11	.03
Emotional Stability	.04	.07
Conscientiousness	- .05	.01
Openness	- .08	- .09
<i>Demographic characteristics</i>		
Age	- .04	- .02*
High education homogamy	.21	- .09
She higher education	- .14	- .02
He higher education	- .26	- .36*
He employed	- .12	.24
<i>Employment trajectories</i>		
Inactive (preg y.)	.28	- .09
Employed (preg y.) – Inactive (birth y.)	.22	.35***
Inactive (preg y.) – Employed (birth y.)	- .21	- .36
Inactive (preg y.) – Inactive (birth y.)	- .05	.21
Employed (preg y.) – Inactive (first y.)	- .10	.52**
Inactive (preg y.) – Employed (first y.)	.44	.36
Inactive (preg y.) – Inactive (first y.)	.09	.32
cons.	7 .80***	8 .13***

Note: * = $p \leq .5$; ** = $p \leq .01$; *** = $p \leq .001$ Note: N = 836