

Work-family Conflict Moderates the Relationship between Childbearing and Subjective Well-Being¹

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Abstract

Many empirical studies find that parents are not as happy as non-parents or that parenthood exerts a negative effect on subjective well-being (SWB). We add to these findings by arguing that there is a key moderating factor that has been overlooked in previous research, i.e. the level of work-family conflict. We hypothesize that the birth of a child means an increase in the level of work-family tension, which may be substantial for some parents and relatively weak for others. To outline such an approach, we estimate fixed-effects models using panel data from the Household, Income and Labor Dynamics in Australia (HILDA) survey. We find that childbearing negatively affects SWB only when parents, mothers in particular, face a substantial work-family conflict, providing thus support for our hypothesis.

Keywords: Fertility; subjective well-being; work-family conflict

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1. Introduction

In the recent decade, demographic research has become interested in the effects children exert on individuals' subjective well-being (hereafter SWB) (Aassve et al. 2012 and 2015; Baranowska 2010; Billari 2009; Billari & Kohler 2009; Dykstra & Keizer 2009; Frijters et al. 2011; Hansen 2012; Kohler et al. 2005; Margolis & Myrskylä 2011; Myrskylä & Margolis 2014). This interest developed after the publication of seminal papers by Billari (2009) and Billari and Kohler (2009), who argued that the “quest for happiness”, in which children play a key role, is the “commonality” that may provide an enhanced understanding of fertility behavior and differentials in contemporary societies. Nonetheless, there is little consensus in the existing literature concerning the effect of childbearing on individuals' SWB in high-income countries. Whereas some studies report positive, although weak, effects of parenthood on SWB (e.g., Kohler et al. 2005, Baranowska & Matysiak 2011), the majority of them have shown that having children has either non-significant or negative effects on SWB (Clark & Oswald 2002; Clark et al. 2008; Frey & Stutzer 2000, Clark & Oswald 2002; Nomaguchi & Milkie 2003). These inconsistencies may result from the fact that the effect of children on SWB presumably is moderated by several characteristics, not always considered in the studies – i.e., the number and age of children (Clark et al. 2008; Kohler et al. 2005; Myrskylä & Margolis 2014), the “initial” pre-birth happiness level (Kohler et al. 2005, Myrskylä & Margolis 2014), or the the life course stage of the parents (Margolis & Myrskylä 2011).

While we recognize the importance of these moderating factors, in this paper we point to one more factor, which is the intensity of the work-family conflict experienced by parents. We argue that the negative effect of children on parents' subjective well-being, which was found in the previous studies, can be, among others, caused by work-family tensions. In other terms, working parents may experience a decline in SWB after an increase in their family size if they experience high stress levels from juggling work and family obligations because of receiving insufficient support for combining paid work and care, and if they continuously monitor the reaction of their employer to their involvement at home. But the decline in SWB after an increase in the family size does not have to happen to all parents. Those who have good access to external childcare services of high quality, who receive support from their partners, relatives and friends or who have jobs with flexible working hours or little overtime, may be more likely to benefit from close and intimate relationships with their children. Those parents may experience no decline, or even an increase, in their SWB after a birth of a (subsequent) child.

With this paper we thus contribute to the literature on the fertility and SWB nexus by contending that the experience of work-family conflict may represent a further potential moderating factor of the impact of parenthood on SWB that has so far not been considered. We are particularly interested in the moderating role of the reported work-family conflict and not in the actual division of labour between partners. We decided for this approach as the reported levels of work-family conflict captures not only individual experiences with combining paid work and care, but also the psychological reaction to these experiences. Individuals may differ in their preferences concerning how much time they want to spend on paid work and childrearing and amount of workload and spillover of responsibilities from one sphere to the other which causes them stress and dissatisfaction.

Our study is based on the Australian panel data from the Household, Income and Labor Dynamics in Australia (HILDA) survey, because compared to other available panel data it uniquely provides the most comprehensive set of questions on the experience of work-family tensions, collected at each wave, in addition to the longitudinal information on fertility and SWB. Importantly, Australia is also an interesting case study because it exemplifies a country where the strong cultural norm of having – at least two – children (McDonald & Moyle, 2010) is combined with relatively modest public support for working parents and dual-earner couples with children (Brennan, 2007). Australia is a country with liberal policies for families and a relatively high total fertility rate (1.9 in 2013, according to the Australian Bureau of Statistics), with relatively low offer of childcare services, and often with a shift from an egalitarian to a traditional gender role-set balance within the couple exactly during the transition to parenthood (Baxter 2015; Craig et al. 2010, McDonald 2001). Overall, at least before the recent changes in family policies (2009-2011) and the introduction of universal parental leave, the problem of reconciling work and family was very common, having a negative impact on parents', and in particular women's, aspirations and satisfaction with their involvement in the family and the labour market (Luppi, 2016). This situation has been only partly mitigated by the favourable situation of the labour market (e.g. low unemployment rate, easy entry or re-entry), and the availability of part-time contracts, which helps women to combine work and family commitments, but at the price of renouncing, at least partially or temporarily, to some career prospects (Baxter 2013; Cass, 2002).

2. Background

Theoretically childbearing and childrearing brings benefits as well as costs to the parents. On the one hand, some theoretical arguments suggest that parents derive satisfaction from having children. “Needs theory” argues that children may gratify basic human needs whereas parenthood confers emotional rewards (Veenhoven 1996). “Goal theory” and “comparison theory” (e.g., Michalos 1985) predict positive effects because parenthood is widely thought to be an important life goal and may be a strong marker of personal success, which brings social recognition, pride, esteem, and satisfaction. The sociological (Durkheimian) theories argue that parenthood structures people’s lives and integrates people into social networks, thereby providing their lives with meaning and purpose. For parents, having children may lead to a strengthening of social ties, provide enjoyable and novel experiences, and contribute to a sense of personal fulfilment. Moreover, a child can represent a potential source of support in old age (Hoffmann & Hoffmann 1973). Further, in the economic rational-choice models of fertility, the utility derived from having children is the fundamental tenet (Becker 1981), though the precise specification of the innate value of children is actually a missing component (Nauck 2000). Finally, evolutionary theories suggest that parenthood may have a positive effect on SWB because humans have evolved a predisposition to nurture (e.g., Rodgers et al. 2001). This implies that parents may enjoy taking care of children and fostering their intellectual and physical development.

On the other hand, however, it is undeniable that bearing and rearing children also brings certain costs for parents. First, parenthood requires financial expenditures and increases financial responsibilities (Zimmermann & Easterlin 2006). Second, it imposes opportunity costs in the form of foregone earnings and human capital on the parent who reduces involvement in paid employment to provide care (Becker 1981, Even 1987, Joesch 1994, Ranson 1998). Furthermore, childrearing reduces leisure time (Sanchez & Thomson 1997), leads to time conflict (Pailhe & Solaz 2009), and affects the quality of the couple’s relationship (Lavee et al. 1996, Keizer et al. 2010). Overall, it may also result in emotional distress (McLanahan & Adams 1987).

Besides the previous theoretical approaches, there is a life course-related perspective represented by the so-called “set-point theory” of happiness. This theoretical approach asserts that a large fraction of variation in well-being is due to social or biological endowments, and life events may change the level of well-being only temporarily. In the now-famous metaphor of Brickman and Campbell (1971), each individual would be on a “hedonic treadmill” and having children would have only temporary effects on happiness. The existence of a hedonic treadmill implies, in fact, that people

adapt to their life-course circumstances, and thus improvements yield no real benefits and worsened conditions will not necessarily translate into a lower assessment of well-being. Every individual is presumed to have a predefined happiness level that he or she returns to as time goes by (Williams & Thompson 1993; Kahneman et al. 1999, Csikszentmihalyi & Jeremy 2003). In this vein, several empirical studies support the prediction that objective circumstances appear to be limited in the magnitude, scope, and particularly duration of their effects on psychological well-being, which, in the long run, would be likely to reflect stable characteristics of the individual (Costa et al. 1987; Lykken & Tellegen 1996; De Neve et al. 2012). Nevertheless, recent analyses focussing on the long-term patterns of subjective well-being, have led to revisions of the set-point hypothesis. A number of psychological (i.e., Sheldon & Lucas 2014), demographic (Kohler et al. 2005; Margolis & Myrskylä 2011), and economic (Zimmerman & Easterlin 2006) studies, in fact, have consistently suggested that demographic events do indeed bring about long-lasting shifts in SWB. Changes in family-related domains seem even more enduring than in domains related to their material standard of living, i.e., income (Diener et al., 1999; Argyle, 2001). Myrskylä and Margolis (2014), consistent with prior literature using longitudinal designs (e.g., Clark et al. 2008), documented a transitory gain in happiness around the time of birth. They also showed that this gain may be stronger and more permanent for some groups rather than the other. For instance, older parents and men were shown to experience stronger and more long-lasting increases in SWB after birth and the gains in happiness were larger after the first and second child than after higher order births (Kohler et al 2005, Myrskylä and Margolis 2014). Finally, it was also demonstrated that the post-birth changes in happiness depend on the country context and parents are more likely to experience gains in happiness in countries that offer better support for working mothers (Margolis and Myrskylä 2011, Aassve et al 2015).

Overall, the effect of children on parents' SWB has been shown to depend on numerous individual- and country-level factors. As far as we know, however, there is no study that explicitly evaluates – as we aim to do here – the potential moderating role of the experienced work-family conflict in assessing the impact of fertility on SWB. Our main argument is that, for some parents, the excessive workload and psychological distress resulting from combining paid work with care, may overshadow their benefits from interacting with their children. This may cause, in turn, lower parents' subjective well-being. By contrast, those individuals who receive more support in combining paid work with family life – from the state, partners, relatives or employers – experience fewer difficulties with combining the two activities. In turn, they may be more likely to benefit from close and intimate relationships with their children and thus may experience no decline or even an increase in their SWB

after a birth of a (subsequent) child. The experience of work-family conflict may weaken the joy of interacting with children especially for mothers because the parental and domestic workload is still mainly borne by women. Sanctions and expectations regarding fulfilling of various roles may also vary according to gender. Men have more expectations regarding the fulfilment of their resource provider role while women have more for their motherhood role (Goffman, 1977; Qian, 2016).

In the literature, engagement in multiple life roles – e.g., worker, spouse, and parent (Kossek & Ozeki, 1998) – having humanly limited time and energy, is indicated as possible source of inter-role conflicts. The concept of work-family conflict is defined as when the resources associated with one role are insufficient to meet the demands of another role (Voydanoff, 2005). In other terms, it occurs when meeting demands in one sphere – work or family – makes it difficult to meet obligations in the other. It is a bi-directional phenomenon by nature (Frone et al., 1997; Carlons et al., 2000). Family-to-work conflict (FWC) emerges when fulfilling family roles interferes negatively with paid employment with the possibility of performing professional roles and related duties (Greenhaus & Beutel, 1985). It is stronger for parents who receive little support either from the other partner, other family members, friends, or the state in combining paid work with childbearing (Michel et al. 2011). Work-to-family conflict (WFC) occurs when individuals' participation in paid work prevents them from fulfilling their family role to the extent desired. WFC is stronger for individuals who work under time pressure, face a large work overload, receive little support in their work from either work colleagues or the organisation, have low autonomy at work, or face repetitive tasks. Furthermore, personality characteristics were shown to matter for the intensity of WFC and FWC, which can be stronger for parents with low internal locus of control or parents who score high for negative affect or neuroticism (Michel et al. 2011). Both FWC and WFC can lead to psychological distress and important losses in either family or professional life, with likely negative consequences on individual life satisfaction. Overall, we believe that accounting for both conflicts is of pivotal importance to gaining a deeper understanding of the mechanisms through which fertility may affect SWB.

3. Analytical strategy

3.1 Data and sample

We evaluate the moderating role of work-family conflict on the association between parenthood and SWB using panel data from the Household, Income and Labour Dynamics in Australia (HILDA)

Survey. This survey was selected for our analyses because it provides longitudinal and detailed information on SWB, labour market, and family dynamics of individuals together with a comprehensive set of questions that allow the measurement of perceived work-family conflict. The HILDA Survey was conducted for the first time in 2001 on a sample of 7,682 households (out of the sample of 11,693 originally sampled households) and 19,914 individuals, of which 15,127 were aged 15 or older, thus eligible for a personal interview. Panel members were re-interviewed every year since then. The response rate for households participating in the previous wave ranged from 87.0 per cent in wave 2 to almost 92 per cent in wave 12 (Summerfield et al. 2015). As well, the sample has been gradually extended to new household members who moved into the household or reached age 15, at which time individuals qualified to complete the individual questionnaire. In 2009 new household members who arrived in Australia for the first time after 2001 were added to the sample. Finally, the sample was topped up with an additional 2,153 households (5,477 individuals) in 2011. Currently, thirteen waves of the survey are available for research. This study makes use of the first twelve waves.

During the interview individuals were asked to fill in the household and personal questionnaires, and were also given a self-completing questionnaire that was collected by interviewers at a later date or was returned by respondents by mail. This questionnaire comprises mainly attitudinal questions that might be sensitive or uncomfortable to respond to in a face-to-face interview. Among others, the self-completion questionnaire covers a battery of questions about the experience of work-family conflict. The response rates to the self-completion questionnaire were usually slightly lower than the response rates to the personal questionnaire (e.g., 87% of eligible individuals completed and returned the self-completion questionnaire in the first wave, in comparison with 92% who completed the personal questionnaire).

In our study, we included individuals who filled in the household questionnaire and responded to both the personal and self-completion questionnaires. We selected individuals born in 1960 or after and followed them from the time they entered the panel, but not before they turned 18. Hence, our respondents were 18-41 at the first wave and 18-52 at the last wave. Furthermore, we limited our analysis to those who had a maximum of three children by the end of the observation window. Higher parities were rare (parents of four or more children made up slightly less than 8% of person-years). Together, our sample comprises 3,754 women and 3,382 men, which correspond to 25,508 female-years and 23,985 male-years.

3.2 Dependent variable: life satisfaction

Life satisfaction is our dependent variable. It is measured as a response to the question “How satisfied are you in your life?” The responses are given on an 11-point Likert scale where 0 means totally dissatisfied and 10 stands for totally satisfied. Our respondents are relatively satisfied with life: the average life satisfaction for women over the observation period is 7.9 and for men 7.8. Nearly 95% of the responses to this question fall in the interval from 6 to 10, for both women and men.

3.3 Key explanatory variable: child trajectory

Number of children and time since each conception, which ended in a life birth, are our major explanatory variables. Number of children is a categorical variable that varies over time and assumes values from 0 to 3. It refers to resident own (biological and adopted) children of the respondent. Time since each conception is time-varying as well. Since we had no information on the month of birth, the variable was computed as the difference between the calendar year and the year of birth of each child, and the time around the conception was established at one year before birth. Next, the variable was grouped into the following categories for each child: around pregnancy time (one year before birth), newborn (below 1), aged 1 but less than 2, 2-3, 3-4, 4-6, 7+. Additionally, we introduced the category “no children & not pregnant” for individuals who did not have children during the observation period as well as the observation spells two or more years before the first birth. We distinguished the time around the pregnancy from the rest of the time before birth as it has been shown that happiness increases strongly already one year before birth for both women and men in anticipation of an upcoming birth (Clark et al 2008, Myrskylä & Margolis 2014).

Since we did not have information on the exact age of the child, we performed a robustness check in order to verify whether lack of this information may affect our findings. To this end, we estimated our models on a sample of women who gave birth to their first child during the panel. For these women we had information on the trimester of the birth and hence were able to compute the age of the youngest child with quite high precision. Irrespective of whether we used the trimester of birth or not for measuring age of the youngest child, our models yielded similar trajectories of life satisfaction before and after childbirth for women who became mothers during the panel. Based on this robustness check (results not shown, but available upon request) we opted not to limit our analysis only to people who became parents after entering the panel. Such a strategy would strongly limit the number of cases and severely restrict our possibilities for studying how work-family conflict moderates the impact of childbearing on the level of life satisfaction.

3.4 Moderation variables: work-family conflict

The level of work-family conflict represents our moderation variable. We constructed two indicators of the reported work-family conflict. These indicators were built based on the statements included in the self-completion questionnaire. Respondents were asked to react to these statements using a 7-point Likert scale where 1 stands for strongly disagree and 7 for strongly agree. Importantly, such information were collected at each wave, allowing us to construct longitudinal measures of work-family conflict. Our first conflict indicator captures tensions resulting from the spillover of paid work to family (work-to-family conflict) and is composed of the answers to the following three statements: “Because of the requirements of my job, I miss out on home or family activities that I would prefer to participate in”, “Working leaves me with too little time or energy to be the kind of parent I want to be”, and “Working causes me to miss out on some of the rewarding aspects of being a parent”. Our second conflict indicator measures tensions resulting from the spillover from the family to paid work (family-to-work conflict). It is constructed based on of the answers to two statements: “Because of my family responsibilities, I have to turn down work activities or opportunities that I would prefer to take on”, “Because of my family responsibilities, the time I spend working is less enjoyable and more pressured”. We averaged over respondents’ answers within each category. Further, we transformed the obtained continuous variables into categorical ones by dividing their values into three equal intervals, denoting strong, moderate, and weak family-to-work and work-to-family conflict, respectively. We also created additional categories for people who were not asked to answer the statements on the experience of work-family conflict, namely the childless and/or non-working individuals. These additional categories are: “not working and no children”, “working and no children” and “not working and has children”.

The distributions of the created variables among women and men are presented in Figures 1a-d. One can see that our respondents are exposed to experiencing work-family conflict (i.e. are working and have children) for more than one third of their observation time. This exposure is somewhat larger for men (slightly more than 40% of their observation time) than women (36,7%), since mothers spend more time in non-employment than fathers (around 24% of their observation time compared to 4% among fathers). Working parents, and in particular working fathers, are most likely to suffer from the work-to-family conflict. Around 20% of working mothers and 28% of working fathers experience a strong work-to-family conflict and 40% of working mothers and nearly 50% of working fathers a moderate work-to-family conflict. Family-to-work conflict is experienced less severely and the difference between women and men in that respect is very low. Only 10% of working mothers and 7%

of working fathers suffer from a strong family-to-work conflict and one out of two working parents experiences a weak family-to-work conflict.

3.5 Confounders

In addition to our major explanatory variables, we also considered a series of time-varying control covariates that may jointly affect fertility, the experience of work-family conflict, and life satisfaction, and thus may confound the relationships in which we are interested. Namely, we control for respondents' age and age squared, partnership status (single or divorced or widowed / cohabiting / married) and partner's employment status (employed / unemployed / inactive), respondent's educational attainment (low / medium / high) and attendance at education, respondent's health status (dummy variable denoting experience of long-term health problems or diseases), and an index of economic resources (grouped in deciles), which measures socio-economic relative disadvantage of the region of respondents' residence². In the model for men we also at first included a control for the fact of having biological non-resident children, but it turned out to be insignificant and thus was dropped from the final model.

The basic descriptive statistics of the sample are presented in Table 1, which presents the distributions of the sample person-years. It can be seen that our respondents are thus on average 32-33 years old. On average, individuals spend 50% of the observation time in marriage and 25% in cohabitation. Women's partners spend 91% observation time in employment, whereas men's partners 72%. Women are childless on average for 45% of the observation time, are mothers of one child for 16% of the time, mothers of two children for 24% of the time and mothers of three children for 15% of the time. For men these proportions amount to 56% as childless, 14% of with one child, 19% with two children, and 10% with three children. We considered the following educational attainment groups: primary (which we labelled as low education), secondary and upper-secondary (medium education), and post-secondary and tertiary (high education). Women are on average more often highly educated than men (30% of female person-years versus 24% of male person-years), but men have more often medium education (55% of male person-years versus 47% of female person-years). Hardly any gender difference is observed in the time spent as low educated. 10% of the observation time is spent

² It is the Socio-Economic Indexes for Areas (SEIFA) that ranks Australian regions according to relative socio-economic advantage and disadvantage. It is computed based on the five-yearly Census, for more information see Adhikari (2006).

education (11% of female person-years and 8.5% of male one). Furthermore, long-term health problems affect 15% of the observation time.

3.6 Modelling

We regressed life satisfaction against our major explanatory variables in the fixed-effects linear regression framework. Our models were estimated separately for women and men. We treated life satisfaction as a cardinal rather than ordinal variable since it was shown that there is not much difference between the two approaches, when the Likert scale on which life satisfaction is measured as it is in our study (Ferrer-i-Carbonell & Frijters 2004). Furthermore, we applied fixed-effects models as they allow accounting for time-constant unobserved characteristics, such as personality traits or genetic endowments, which may jointly affect overall SWB and fertility behaviours (Tavares 2016, Skirbekk & Blekesaune 2014, Le Moglie et al. 2015).

Number of children and time since each conception are our main explanatory variables. They were introduced into the model in a two-way interaction and gave us new variables which denote the time since conception i . This allowed us to investigate the effect of the age of each child and each pregnancy on life satisfaction. The reported work-family conflict is our moderation variable. This variable starts operating after a first child is born. Interacting it with parity and introducing it to the model together with time since conception i implies thus that the estimated relationships between time since conception i and life satisfaction refer to the reference category of the work-family conflict (which in our case is the least conflicted individuals). In order to compute the relationship between time since conception i and life satisfaction for individuals who are more conflicted or do not work we need to either add the appropriate coefficients for the parity-specific work-family conflict to the coefficients for time since conception i or to introduce a three-way interaction between parity, time since each conception and work-family conflict. The first solution is easier, but it is justified only if it can be assumed that the level of the reported work-family conflict shifts the effect of the time since conception i on life satisfaction proportionally across all child's ages. In this study, we employed both strategies. The models with a three-way interaction resulted in many insignificant coefficients with large standard errors. This is due to the fact that despite the large size of our overall sample, the number of cases for the specific combinations between parity, age of the child and work-family conflict turned out to be too small to produce robust findings. Nonetheless, one could notice that the child trajectories obtained for each child and each level of the reported work-family conflict on the basis of the three-

way interaction were quite consistent with the trajectories obtained on the basis of the two two-way interactions (i.e., between parity and time since each conception, and between parity and reported work-family conflict). We concluded that the assumption about the proportionality of the shift in the association between time since conception i and SWB by the level of the reported work-family conflict is justified. Hence, we opted for the more parsimonious model.

Our fixed-effects models account for time-constant unobserved characteristics which may jointly affect overall SWB, fertility behaviours as well as the experience of the WFC. In this way we account for selection of intrinsically (un-)happy individuals into the group of parents and individuals who experience a strong work-family conflict. This is the advantage of our modelling strategy. Nonetheless, our empirical approach has also one shortcoming. Namely, some of the non-working parents, in particular women, may be out of employment because they terminated their contracts due to difficulties with combining paid work and family. However, we do not have this information in our data. We therefore may underestimate the real effects of work-family conflict as well as the effects of non-employment on SWB. This situation will mainly concern women who usually withdraw from employment to provide childcare (in fact the proportion of non-employed mothers in our sample is much higher than the proportion of non-employed fathers; see Figure 1a-d). These issues need to be taken into account in the interpretation of our findings.

Figure 1. Distribution of the indicators of work and family balance (% person-years)

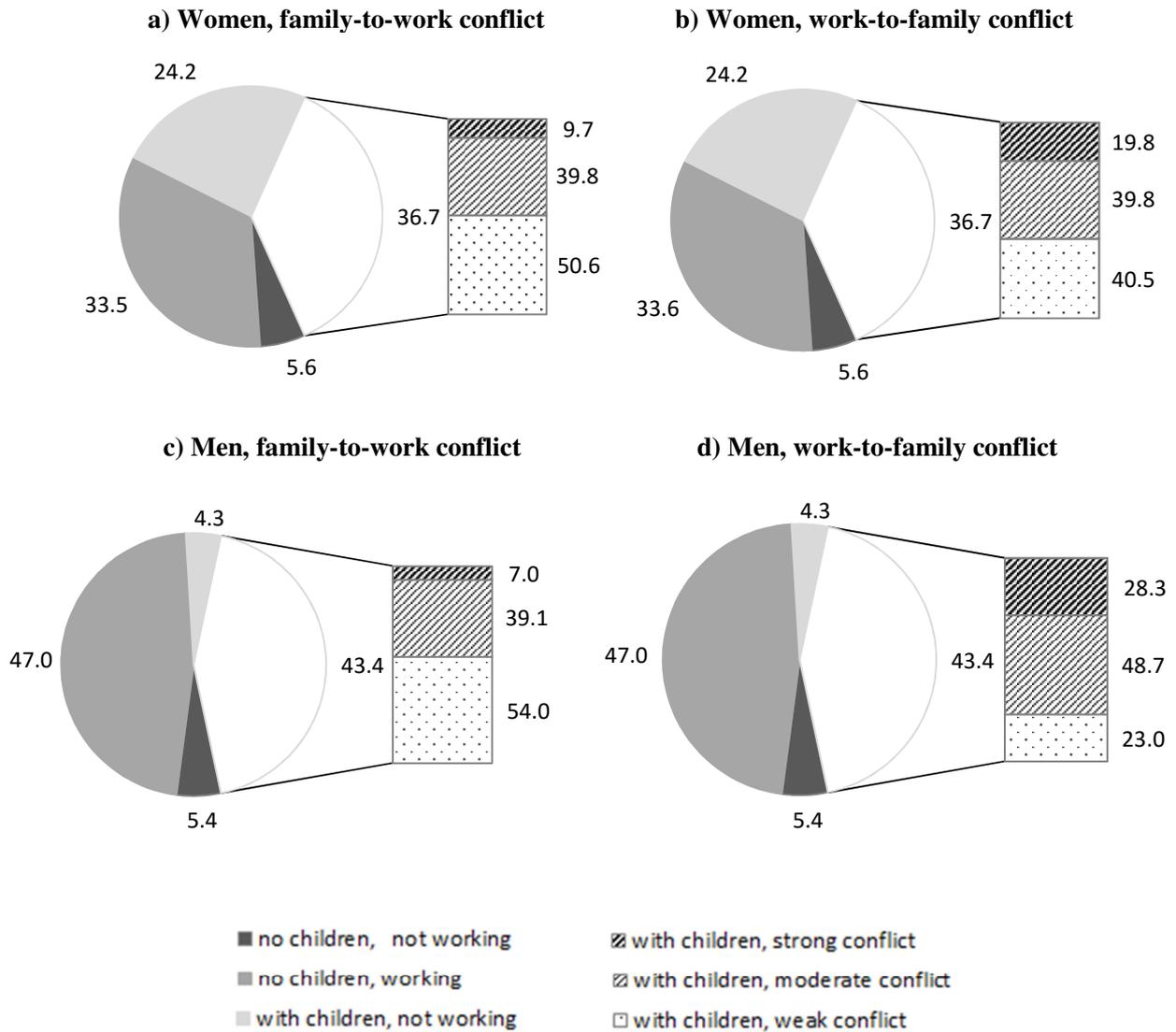


Table 1. Descriptive statistics for sample person-years

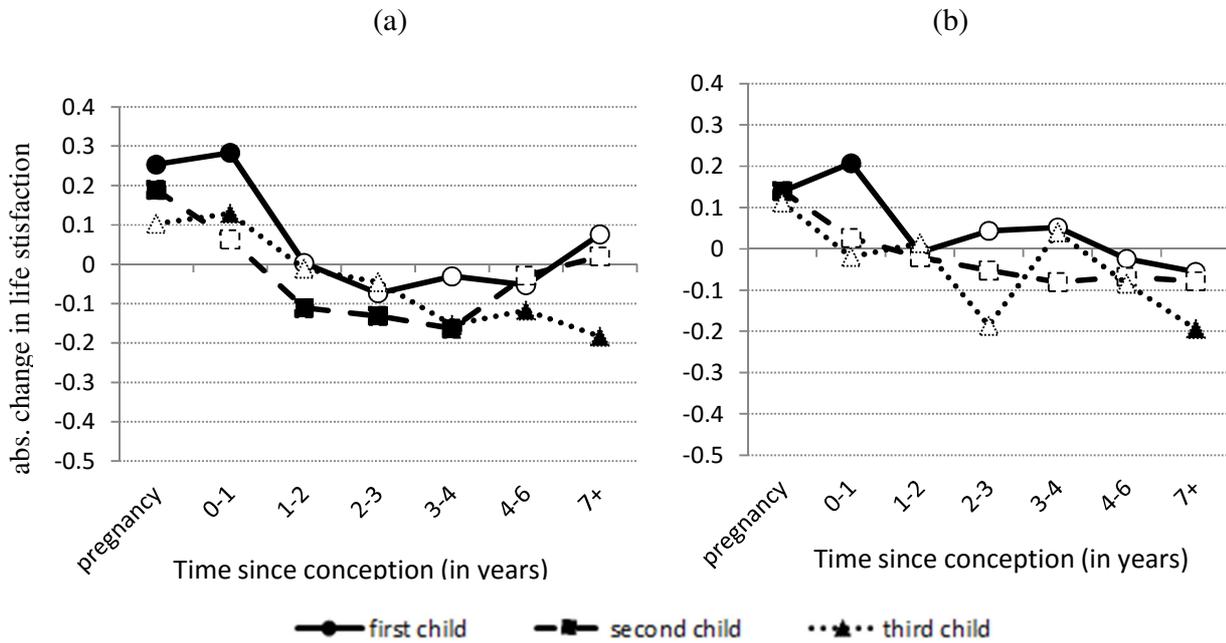
Variable	Men	Women
Number of person-years	23,985	25,508
Number of persons	3,382	3,754
Age		
average	32.9	31.8
st dev	8.0	7.8
Partnership (%)		
single	18.8	16.9
cohabiting	26.7	25.6
married	49.6	52.3
divorced	4.9	5.2
total	100.0	100.0
Partners' employment status (%)		
inactive	25.2	5.6
unemployed	3.2	3.0
employed	71.6	91.4
total	100.0	100.0
Number of children (%)		
none	56.5	45.1
one	14.3	15.7
two	19.1	24.0
three	10.1	15.2
total	100.0	100.0
Educational level (%)		
low	20.6	22.8
medium	55.0	46.9
high	24.4	30.3
total	100.0	100.0
Enrolment in education (%)		
no	91.5	89.1
yes	8.5	10.9
total	100.0	100.0
Health long term problems (%)		
no	84.9	85.4
yes	15.1	14.6
total	100.0	100.0

4. Results

4.1 Estimated effects of childbearing on life satisfaction

Figure 2 displays the trajectory of life satisfaction during the pregnancy and after the birth of the child by parity. The full model estimates are presented in the Appendix. The reference category in these graphs is the period corresponding to two or more years before the first birth. The absolute change in life satisfaction after the birth of the child is denoted on the Y axis. It is to be considered as significantly different from the period before the pregnancy if the line marker is filled, otherwise it is not significant. In general, life satisfaction of both women and men increases around the first and second but not the third pregnancy. This is, however, a temporary effect: already after the first child reaches one year of age, life satisfaction declines to pre-pregnancy levels and remains there until the first child is seven or more; similar development is observed in case of the second child, but it occurs even faster, i.e. life satisfaction returns to pre-pregnancy levels already around the birth. The changes in the life satisfaction trajectories evoked by childbearing and childrearing are similar for both women and men, but for women we even observe a decline in life satisfaction when the second child is between one and four years of age. Third child leads to a modest increase in women's life satisfaction around the birth; afterwards life satisfaction returns to pre-pregnancy levels and when the child exceeds four it even leads to a decline in SWB. This decline is also observed for men, but after their third child approaches seven years of age. Overall, the relationship between parenthood and SWB appears to be rather weak, shows up only around the pregnancy and birth (when an increase in parental SWB is observed and this increase is higher for lower parities) and then life satisfaction tends to return to pre-pregnancy levels afterwards. It is, however, notable that for women, by contrast to men, some signs of a decline in life satisfaction below the pre-pregnancy levels are observed in case of the second and in particular the third child.

Figure 2. The relationship between parenthood and life satisfaction, (a) women and (b) men



Note: The marker is filled if the difference – difference between life satisfaction in pregnancy or when the child is aged x and life satisfaction before pregnancy – is significant ($p < 0.1$) and empty otherwise. Pregnancy refers to the year before birth. Estimates are controlled for age, partnership status, partner’s labor market status, economic resources, experience of long-term health problems, and educational level.

4.2 The role of work-family conflict

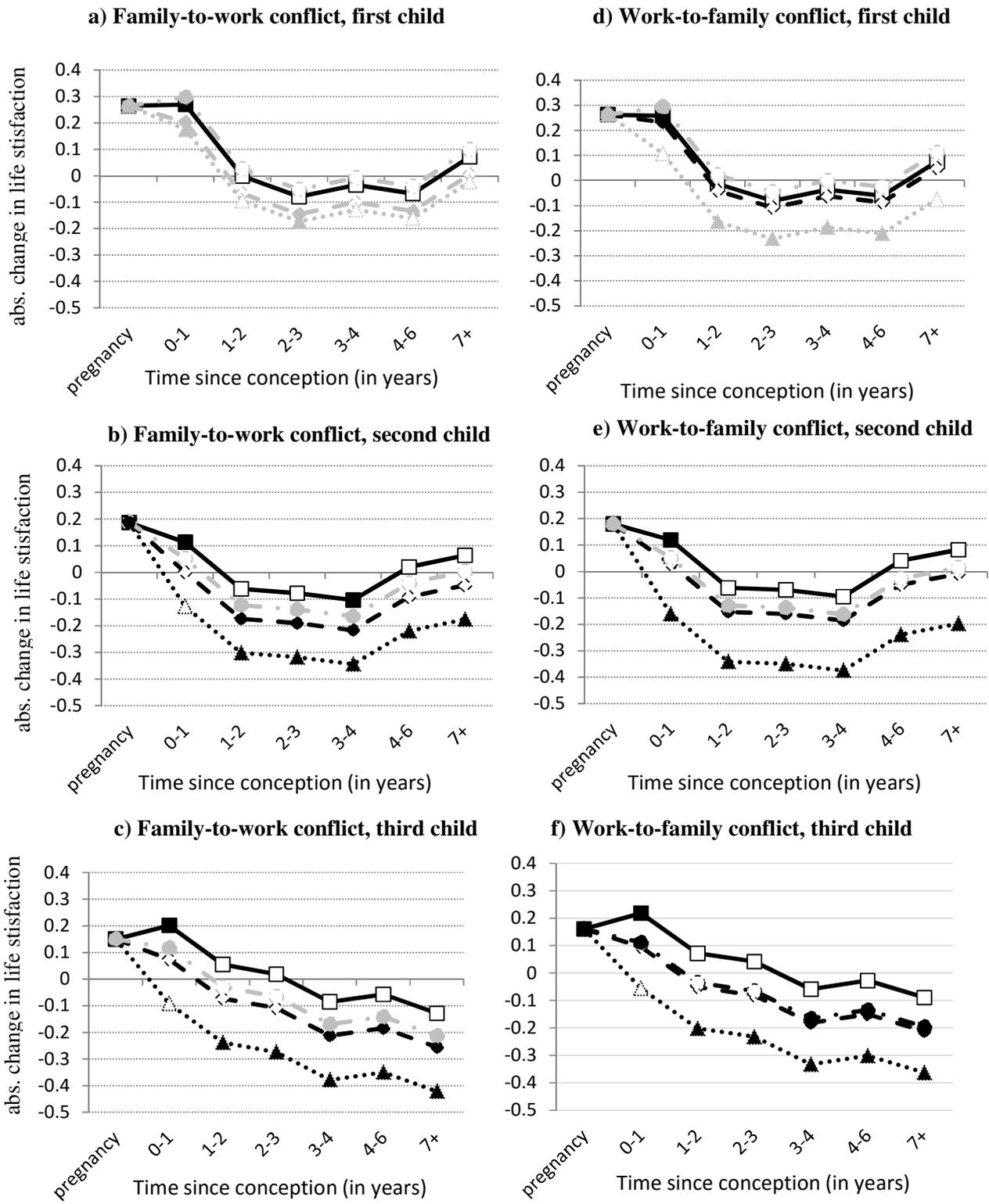
In the next step we evaluated whether the effect of parenthood on parents’ SWB depends on parents’ employment status and, in case of the working parents, on the experienced level of work-family conflict. The life satisfaction trajectories by child’s age and the employment status / work-family conflict are displayed in Figures 3(a)-(f) for women and in Figures 4(a)-(f) for men. They are drawn on the basis of our model estimates under the assumption that an increase in work-family conflict, which starts to operate after the first child is born and changes its intensity with each following birth, shifts the life satisfaction trajectories proportionally across all child’s ages. This is achieved by adding up the estimated coefficients for the time since i -th conception, and the level of work-family conflict. The solid black line in Figures 3(a)-(f) represents the trajectory of changes in life satisfaction across the child’s age for parents who experience the weakest conflict. Similar to before, the markers are filled in if parental life satisfaction at a certain age of the child is significantly different than before the first pregnancy. Furthermore, the trajectory of changes in life satisfaction, which belongs to individuals with the weakest work-family conflict, serves as the reference category and is always represented with a

solid black line with squares. This means that the trajectory of changes in life satisfaction of people who experience stronger conflict, or who do not work, is always compared with the trajectory of the least-conflicted individuals. The former trajectory is displayed in black if the difference is statistically significant and in grey otherwise.

Our findings show that work-family conflict indeed moderates the relationship between childbearing and SWB. The experience of work-family conflict seems to play no role only for mothers of one child; a group whose SWB seems to be unaffected by work-family conflict or employment status (working / not working). Second and third births lead to much higher increases in life satisfaction among the least conflicted mothers and not working mothers than among women who experience moderate or strong work-family conflict. Furthermore, life satisfaction of the least conflicted mothers rather does not fall below the pre-pregnancy levels after their second and third children's first birthdays, which is the case of all other mothers with two or three children (i.e. those who experience moderately or strong conflicts and even the non-working ones). Whereas the declines in life satisfaction of non-working or moderately conflicted mothers of two or three children are relatively modest, the SWB of the most conflicted mothers with two or three kids deteriorates most substantially. Namely, the most conflicted mothers of two or three children experience a relatively abrupt decline in life satisfaction already after child birth. If a highly conflicted woman does not give birth to the third child her SWB improves slightly after the second child's fourth birthday. No such improvement is, however, observed after the third child is born – in that case highly conflicted women experience a decline in their SWB even after the child becomes seven or older. Overall, it seems thus that the experience of the weak work-family conflict does not affect women's SWB after the first birth in the long-term, but it has an effect on mothers' life satisfaction after the second or third birth. A birth of the second or third child does not lower mothers' SWB if they experience only a weak conflict, but has a negative and long-lasting effect on women's SWB if they experience a strong conflict. Finally, having no job and raising a child has either no significant effect or only slightly negative effect on mothers' SWB. Given that the group of non-working women may also contain women who withdrew from employment because of the difficulties with combining paid work and care, this finding may mean two things. On the one hand, it may imply that non-working indeed relieves mothers from the pressures related to work and family reconciliation, thereby increasing their satisfaction with life. On the other hand, this finding may mean that the condition of having children but having no job for other reasons than work-family incongruities has an even more positive effect on women's life satisfaction than we observe in our data.

Work-family conflict moderates the relationship between parenthood and men's SWB largely in a similar way as for women, but some differences are also found. As it is the case for women, the least conflicted men experience the highest increases in life satisfaction around the birth and smallest declines in life satisfaction as the child ages. Exactly like for women the reverse is observed for the most-conflicted men. Nonetheless, one can also observe numerous gender differences in the moderating effects of employment status / work-family conflict. First, the experience of the work-family conflict moderates the relationship between parenthood and men's life satisfaction at all three parities and not only at parities higher than one, which is the case for women. Second, the life satisfaction of the least conflicted men increases more strongly around the birth and in some cases it even remains above the pre-pregnancy levels after the child's age exceeds one, which is not a case for women. Next, not working men usually experience the strongest declines in life satisfaction after the arrival of a new child, even stronger than the most conflicted fathers, while not working women scored much higher on the SWB than the most conflicted ones. The exceptions are only fathers of two children, which seem to display a similar pattern to women. It has to be noted, however, that non-working fathers constitute a very small group, which may affect the robustness of the estimates for this group. Finally, while for women no visible differences in the moderating role of the conflict were observed with respect to its direction; in case of men the level of work-to-family conflict seems to play a slightly stronger moderating role than the level of family-to-work conflict, which is particularly visible for fathers of three children.

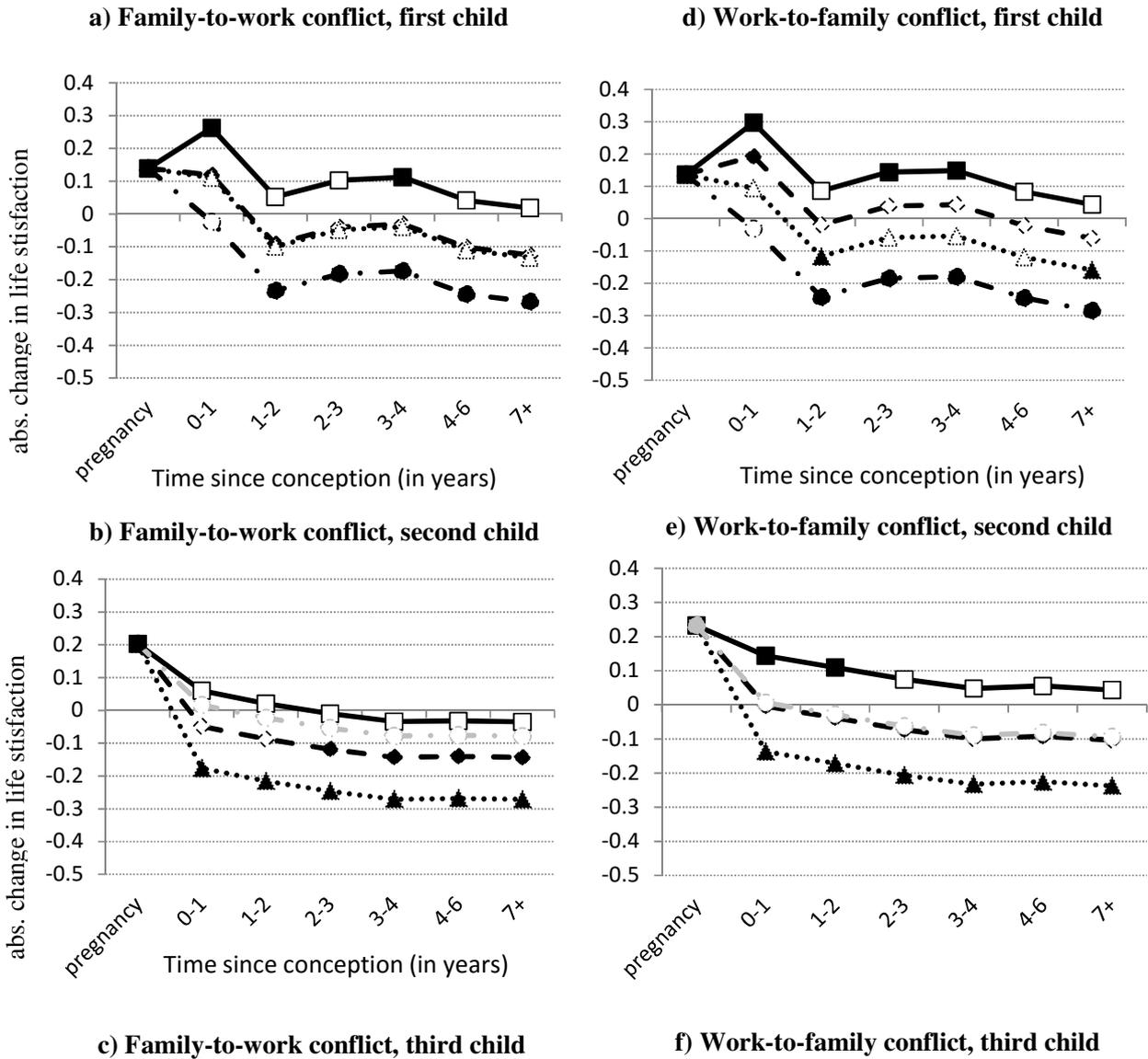
Figure 3. Relationship between parenthood and mothers' life satisfaction by employment status and experienced work-family conflict (family-to-work conflict in the left panel and work-to-family conflict in the right panel)

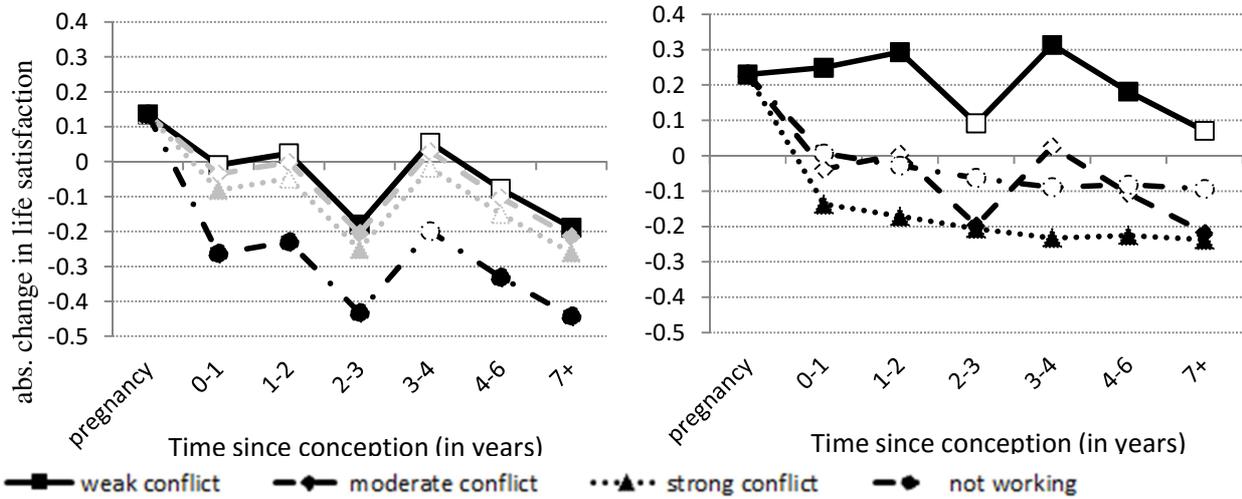


—■— weak conflict —◆— moderate conflict ...▲... strong conflict —●— not working

Note: The solid black line for the “weak conflict” serves as a reference category for all remaining displayed categories. All the three remaining effects, denoted by the dashed or dotted lines, plotted in black if they are significantly different from the reference at 10%, and in grey otherwise. The marker is filled if the difference between life satisfaction when the child is aged x and life satisfaction before pregnancy is significant and white otherwise. Pregnancy refers to the year before birth. Estimates are controlled for age, partnership status, partner’s labor market status, economic resources, experience of long-term health problems, and educational level.

Figure 4. Relationship between parenthood and fathers' life satisfaction by employment status and experienced work-family conflict (family-to-work conflict in the left panel and work-to-family conflict in the right panel)





Note: The solid black line for the “weak conflict” serves as a reference category for all remaining displayed categories. All the three remaining effects, denoted by the dashed or dotted lines, plotted in black if they are significantly different from the reference at 10%, and in grey otherwise. The marker is filled if the difference between life satisfaction when the child is aged x and life satisfaction before pregnancy is significant and white otherwise. Pregnancy refers to the year before birth. Estimates are controlled for age, partnership status, partner’s labor market status, economic resources, experience of long-term health problems, and educational level.

5. Concluding discussion

This article aimed to evaluate the moderating effect of work-family conflict on the link between childbearing and SWB, recognizing the bidirectional nature of work-family conflict, accounting for unobserved characteristics that may affect the experience of work-family conflict and life satisfaction at the same time, and focusing on both genders. Several important key findings emerged from our analysis. First, our results suggest that the average effect of parenthood on parents' SWB is rather small. It is most pronounced around the pregnancy and birth when an increase in parental SWB is observed and this increase is higher for lower parities. After the birth life satisfaction declines. For men, it returns to pre-pregnancy levels regardless of the parity. For women, the pattern is similar when it comes to the first and second births, but for the third women's life satisfaction declines even below the pre-pregnancy levels. These findings are largely consistent with the previous studies by Clark et al (2008) and Margolis and Myrskylä (2014) who conducted their analysis for first births.

Second, our study has shown that the relationship between parenthood and SWB is significantly moderated by the degree of work-family conflict experienced by parents. The only exception are first-time mothers whose SWB does not depend on the level of the experienced conflict. Apart from this group, life satisfaction of parents who experience strong or moderate work-family tensions starts to decline immediately after birth. As a result, the SWB of strongly and often also moderately conflicted parents is lower when their youngest child exceeds one than it was before the birth. In contrast to strongly and moderately conflicted parents, the least conflicted tend to experience an increase in life satisfaction around the pregnancy and childbirth and a decline in SWB to pre-pregnancy levels afterwards (in case of men the SWB may not even remain above the pre-pregnancy levels).

Finally, our findings reveal several gender differences in how parenthood affects parental SWB and how this relationship is moderated by the experienced work-family conflict. We found that mothers' life satisfaction reacts more strongly to changes in parenthood status. In particular, the birth of the second or third child leads to a decline in women's SWB whereas no such an effect is observed for men. Clear gender difference is also found in how non-employment moderates the effect of parenthood on individuals' SWB. Non-employed mothers experience nearly as high improvements in SWB around the pregnancy and birth and as low declines in SWB afterwards as the least conflicted mothers. By contrast, men's SWB usually deteriorates after childbirth among non-working fathers, and this deterioration is often even stronger than for the strongly conflicted but working men. Last but not least, men are more likely to experience work-to-family conflict than women (while no gender difference in observed in the frequency of experiencing the family-to-work conflict) and this conflict seems to

moderate the effect of parenthood on men's life satisfaction to a slightly larger extent than family-to-work conflict. No difference in the moderating effect of the two types of conflict was observed for women. These gender differences in the effects of children and work-family tensions on SWB clearly reflect the still relatively traditional division of labour according to which women are more often responsible for care provision and men for providing income (Craig et al, 2010; Craig and Siminski, 2010; McDonald, 2001).

Overall, our results reject the notion of a simple, uniform, and uni-directional relationship between childbearing and life satisfaction. Without evaluating the moderating role played by the level of work-family conflict, we could have concluded that the impact of the second and third child on women's life satisfaction is always negative. This is not the case, however. When the level of the conflict is weak, childbearing is not detrimental for either women's or men's life satisfaction. In fact, employed parents who experience weak conflict display the highest levels of SWB whereas those who experience strong conflict as well as not working men display the lowest SWB. Furthermore, we also demonstrated that not only the relationship between parenthood and SWB, which was already shown in previous studies, but also the moderating effects of work-family conflict vary by gender.

Future research on the topic could go in several directions. First, it could be beneficial to replicate our findings using other measures of the work-family conflict in order to get a wider picture of how the tensions between paid work and the family may moderate the relationship between fertility and parental SWB. In this paper, we looked at the self-reported levels of work-family conflict because they capture the psychological reaction to workload and spillover of responsibilities and the individual regrets related to an inability to perform certain roles in line with individual preferences. Nonetheless, our findings could be complemented by objective measures, i.e., division of household labour or certain workplace characteristics that may produce the conflict. Second, the use of larger datasets could facilitate to investigate how the moderating effect of the conflict changes with the combination of both the age of the child and parity. In our study, we were limited by our sample size and thus had to assume that the work-family conflict shifts the trajectories of life satisfaction over child's age proportionally. Next, future studies could try to assess the effects of the predicted work-family conflict after accounting for the fact that non-working women could have withdrawn from employment because of the inability to combine paid work with care or that anticipated work-family conflict led them to abandon having (more) children. This has not been done in our study, which implies that the effect of the work-family conflict is in fact stronger than it was revealed by our study. Furthermore, if we

accounted for these anticipatory adjustments of women we might have found that having no job has even a positive effect of women's SWB.

Last but not least, our findings were obtained for one country only (Australia) where public policies are not particularly supportive to working parents, but where, on the other hand, parents have wide possibilities to work part-time. In that respect our findings are likely to pertain also to other countries (for example, the low fertility European countries) where reconciling paid work with family is a similarly difficult endeavour. The moderating effects of work-family conflict can be stronger in countries where parents receive even less support from the state or employers for combining paid work and care and part-time work opportunities are more limited. One could also imagine the gender differences in the obtained findings to be larger where women are more expected to perform care activities and withdraw from employment for the period of care than in Australia. This possible variation in the moderating role of the work-family conflict is to be explored in more detail in future research.

Our results leave the door open for a policy intervention. From a policy perspective, a central goal for any modern welfare state should be to decrease the difficulties parents experience in everyday life while raising their children, especially in a low fertility context. Reducing the conflict between work and family can not only stimulate employment and fertility, as has been shown by previous empirical research (e.g. Rindfuss et al 2010, Begall and Mills 2011, Misra et al 2011, Nieuwenhuis et al 2012), but, as we demonstrated in this paper, also contribute to an improvement in general life satisfaction. This result may be an additional reason to develop and target policy interventions that help people combine family life and paid work.

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Appendix

Table 1A. Estimates from fixed-effects linear regression with life satisfaction as dependent variable, women

Covariates		(a) FAMILY-TO-WORK CONFLICT			(b) WORK-TO-FAMILY CONFLICT		
		coeff.	std error	sign.	coeff.	std error	sign.
Parity * Time since conception							
childless and not pregnant		ref			ref		
first child	pregnancy	0.26	0.045	***	0.26	0.045	***
	0-1	0.27	0.062	***	0.26	0.063	***
	1-2	0.00	0.059		-0.01	0.059	
	2-3	-0.08	0.066		-0.08	0.067	
	3-4	-0.03	0.066		-0.04	0.069	
	4-6	-0.07	0.077		-0.06	0.080	
	7+	0.07	0.078		0.08	0.081	
second child	pregnancy	0.19	0.060	***	0.18	0.062	***
	0-1	0.11	0.062	*	0.12	0.062	*
	1-2	-0.06	0.058		-0.06	0.058	
	2-3	-0.08	0.060		-0.07	0.061	
	3-4	-0.10	0.058	*	-0.09	0.058	
	4-6	0.02	0.062		0.04	0.063	
	7+	0.06	0.064		0.08	0.065	
third child	pregnancy	0.15	0.079	*	0.16	0.079	**
	0-1	0.20	0.081	**	0.22	0.083	***
	1-2	0.05	0.078		0.07	0.080	
	2-3	0.02	0.079		0.04	0.081	
	3-4	-0.09	0.076		-0.06	0.079	
	4-6	-0.06	0.079		-0.03	0.082	
	7+	-0.13	0.079		-0.09	0.084	
Parity * Work-family conflict							
No children	not working	-0.12	0.038	***	-0.12	0.038	***
	working	ref			ref		
First child	not working	0.03	0.051		0.04	0.052	
	strong conflict	-0.09	0.091		-0.15	0.072	**
	moderate conflict	-0.07	0.052		-0.03	0.056	
Second child	weak conflict	ref			ref		
	not working	-0.06	0.044		-0.07	0.045	
	strong conflict	-0.24	0.069	***	-0.28	0.059	***
	moderate conflict	-0.11	0.043	***	-0.09	0.045	**
Third child	weak conflict	ref			ref		
	not working	-0.08	0.056		-0.11	0.060	*
	strong conflict	-0.29	0.104	***	-0.27	0.080	***

	moderate conflict	-0.13	0.058	**		-0.12	0.062	**	
	weak conflict	ref							
Age		-0.01	0.003	***		-0.01	0.003	***	
Partnership									
	single	ref				ref			
	cohabiting	0.29	0.030	***		0.29	0.030	***	
	married	0.22	0.038	***		0.23	0.038	***	
	divorced / separated / widowed	-0.31	0.055	***		-0.32	0.055	***	
Partner's labour market status									
	inactive	-0.01	0.046			-0.01	0.046		
	unemployed	-0.04	0.053			-0.04	0.053		
	employed	ref				ref			
Index of economic resources									
		0.01	0.005	*		0.01	0.005	*	
Long-term health problems									
	yes	-0.22	0.027	***		-0.22	0.027	***	
	no	ref				ref			
Education level									
	low	ref				ref			
	medium	-0.18	0.065	***		-0.17	0.065	***	
	high	-0.13	0.083			-0.12	0.083		
Being in education									
	yes	0.00	0.029			0.00	0.029		
	no	ref				ref			
Intercept									
		8.31	0.096	***		8.30	0.096	***	

Table 2A. Estimates from fixed-effects linear regression with life satisfaction as dependent variable, men

Covariates		(a) FAMILY-TO-WORK CONFLICT			(b) WORK-TO-FAMILY CONFLICT		
		coeff.	std error	sign.	coeff.	std error	sign.
Parity * Time since conception							
childless and not pregnant		ref			ref		
first child	pregnancy	0.14	0.043	***	0.14	0.043	***
	0-1	0.26	0.051	***	0.30	0.061	***
	1-2	0.05	0.053		0.09	0.062	
	2-3	0.10	0.065		0.14	0.073	**
	3-4	0.11	0.066	*	0.15	0.073	**
	4-6	0.04	0.082		0.08	0.088	
	7+	0.02	0.080		0.04	0.085	
second child	pregnancy	0.20	0.057	***	0.23	0.065	***
	0-1	0.06	0.058		0.14	0.065	**
	1-2	0.02	0.055		0.11	0.064	*
	2-3	-0.01	0.059		0.07	0.066	
	3-4	-0.03	0.055		0.05	0.063	
	4-6	-0.03	0.061		0.06	0.068	
	7+	-0.03	0.063		0.04	0.069	
third child	pregnancy	0.14	0.087		0.23	0.093	**
	0-1	-0.01	0.081		0.25	0.094	***
	1-2	0.02	0.082		0.29	0.095	***
	2-3	-0.18	0.083	**	0.09	0.097	
	3-4	0.05	0.078		0.31	0.091	***
	4-6	-0.08	0.085		0.18	0.097	*
	7+	-0.19	0.087	**	0.07	0.099	
Parity * Work-family conflict							
No children	not working	-0.34	0.038	***	-0.34	0.038	***
	working	ref			ref		
First child	not working	-0.29	0.077	***	-0.33	0.083	***
	strong conflict	-0.15	0.083	*	-0.20	0.061	***
	moderate conflict	-0.14	0.043	***	-0.10	0.053	**
	weak conflict	ref			ref		
Second child	not working	-0.04	0.084		-0.14	0.089	
	strong conflict	-0.24	0.075	***	-0.28	0.056	***
	moderate conflict	-0.11	0.039	***	-0.15	0.047	***
	weak conflict	ref			ref		
Third child	not working	-0.25	0.111	**	-0.51	0.120	***
	strong conflict	-0.07	0.102		-0.46	0.080	***
	moderate conflict	-0.03	0.055		-0.29	0.069	***
	weak conflict	ref			ref		

Age		-0.01	0.003	***		-0.01	0.003	***
Partnership								
	single							
	cohabiting	0.23	0.029	***		0.23	0.029	***
	married	0.19	0.039	***		0.19	0.039	***
	divorced / separated / widowed	-0.48	0.055	***		-0.48	0.055	***
Partner's labour market status								
	inactive	0.00	0.026			0.01	0.026	
	unemployed	-0.02	0.052			-0.01	0.052	
	employed	ref				ref		
Index of economic resources		0.01	0.005			0.01	0.005	
Long-term health problems								
	yes	-0.23	0.027	***		-0.23	0.027	***
	no	ref				ref		
Education level								
	low	ref				ref		
	medium	-0.19	0.066	***		-0.19	0.066	***
	high	-0.31	0.087	***		-0.31	0.087	***
Being in education								
	yes	0.12	0.032	***		0.12	0.032	***
	no	ref				ref		
Intercept		8.13	0.096	***		8.16	0.095	***