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Individual's Intentions to Have Additional Children and Husband-Wife Agreement/disagreement about Fertility Intentions in Mexico.

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Abstract: The objectives of this paper are to investigate the influence of spouses over each other's intention to have additional children; to analyze the effect of the sex-composition of children ever born (CEB) on the spouses' intention to have additional children; and to explore the influence of selected variables including the sex-composition of CEB on the husband-wife agreement about intentions to have additional children. Through the analysis and interpretation of data derived from the Mexican Family Survey (MxFLS) we found a statistically significant association between the sex composition of children ever born, spouses' intention to have additional children, and husband-wife agreement on fertility intentions. By looking at these relationships we hope to shed light on the fertility decision making process and the influence husbands and wives exert over one another in that process.

Key words: Fertility intentions, intentions to have additional children, sex preferences, spousal discordance.

Background

Previous research on fertility has demonstrated that major changes in women's reproductive patterns have taken place: women are marrying later, using contraceptives, postponing the birth of their first child, and choosing to remain single or childless (Bongaarts and Potter 2002; Folbre 2002; Robey, Rutstein and Morris 2002). Together this has highly reduced fertility worldwide (Bongaarts and Potter 2002; Trovato 2002). Research on fertility has increasingly drawn attention to the predictive ability of fertility preferences (Nair and Chow 1980; Monnier 1989; Thomson *et al*. 1990; De Silva 1991; Bongaarts 1992; Bankole and Westoff 1998; Roy *et al*. 2008; Gipson and Hindin 2009; Jennings and Pierotti 2016). The socio-demographic literature recognizes three fertility preferences indicators which have long been used to determine the demand for children in a population (McClelland 1983). Two of the most widely used measures for assessing fertility trends are the ideal family size and the intention to have additional children (Roy *et al*. 2008).

Population researchers have demonstrated that fertility preferences such as ideal family size, and birth timing preferences are associated to demographic and socioeconomic factors (Díez 1965; Kahl 1966; Figueroa 1996; Campbell and Campbell 1997; Gwako 1997; Rafalimanana and Westoff 2000; Menkes y Mojarro 2003; Sahleyesus *et al*. 2009; Harbour 2011; Bryan, Fernandez-Lamothe and Kuppermann 2012; Yeatman, Sennott and Culpepper 2013). As for the intentions to have additional children, most of the literature has shown that, in addition to socio-demographic and economic variables (Hiekel and Castro-Martin 2014), intentions to have children are also related to social networks and support, residential satisfaction and stability (Bühler and Frątczak 2004; Park *et al*. 2007), views on gender roles (Isiugo-Abanihe 1994), and ideational change (Philipov, Speder and Billari 2005).

Research conducted in Southeastern and Southern Asian countries has shown parents' preferences for the sex of their children, and the sex composition of children ever born to be related to intentions to have additional children (Prachuabmoh, Knodel and Alers 1974; Khan and Sirageldin 1977; Malhi et al. 1999; Dey and Chaudhuri, 2009; Jayaraman, Mishra and Arnold, 2009). Spouses' preference for the sex of their children are important to studies of fertility intentions not only because they may have demographic consequences (Pong 1994), but also because they may provide insights on the value of children based on their gender (Gray and Evans 2005). While the effects of parents' preferences for the sex of their children on fertility, fertility intentions, and contraceptive use have been widely documented (Arnold 1985; Arnold and Liu 1985; Rahman and DaVanzo 1993; Pong 1994; Brockmann 2001; Pollard and Morgan 2002; Leone, Matthews and Dalla Zuanna 2003; Gray and Evans 2005; Yamaguchi and Ferguson 2005; Andersson, Hank and Vikat 2007; Kippen, Evans and Grey 2007; Gipson and Hindin 2009), much less is known about its effects on husband-wife agreement about intentions to have additional children.

Parents' preferences for the sex of their children can be measured using two methods. The first relies on intention data, that is to say, on the respondent's sex preferences of intended births, whereas the second uses behavioral data which refers to the sex of existing children (Gray and Evans 2005). According to Marleau and Saucier (2002), behavior data reveals actual parents' preferences for the sex of their children, in that one can measure subsequent fertility based on existing children. Because the sex of existing children and the intentions to have additional children have been related to fertility, in this article we assume that the sex

of existing children influences intentions to have additional children and, therefore, subsequent fertility.

The importance of men in reproductive decision-making has been broadly discussed (Ryder 1973; Mason and Taj 1987; Stein, Willen and Pavetic 2014; Testa, Cavalli and Rosina 2014). However, men are rarely interviewed in fertility surveys of any kind and women are still the main actors and the most reliable reporters of childbearing events (Testa, Cavalli and Rosina 2014). Nonetheless, fertility decision-making within a partnership can be viewed as a result of an interaction process.

Although several studies in more traditional settings have documented women's disadvantage in reproductive decision-making (Casterline, Perez and Biddlecom 1997; Beegle, Frankenberg and Thomas 2001; Jejeebhoy 2002; DeRose and Ezeh 2010), some research on husband-wife agreement about conception and fertility behavior suggests that couples communicate and negotiate contraceptive use, and and child-timing intentions (Mitchell 1972; Ezeh 1993; Lasee and Becker 1997; Ramirez *et al*. 2005; Gipson and Hindin 2007; Kulczycky 2008; Testa, Cavalli and Rosina 2014). Yet, few studies examine the influence of spouses' intentions to have additional children over each other's intentions (Iacovou and Tavares 2011). Likewise, very little work explores husband-wife agreement about fertility preferences, and those that have looked at this issue have done so at a descriptive statistics level (Coombs and Fernandez 1978; Coombs and Chang 1981; Mott and Mott 1985; Bankole and Singh 1998).

In this article we extend prior research on fertility preferences by specifying, estimating and testing models that examine the following: first, the influence of spouses over each other's intention to have additional children; and second, the influence of selected variables on the husband-wife agreement about intentions to have additional children. In addition, we extend the research concerning the effects of sex preferences on fertility intentions by considering the impact of the sex-composition of children ever born on the spouses' intention to have additional children, and on couples' agreement/disagreement about fertility intentions. By looking at these relationships we may have a better understanding of the fertility decision making process, the influence husbands and wives exert over one another in that process, and the role of the parents' sex preference on fertility behavior.

Because patterns of fertility and fertility preferences can vary by setting, it is important to

expand the geographic scope of these investigations. Much of the existing research on fertility preferences, more specifically on the intentions to have additional children, has been conducted in European, African and Southern Asian countries. However, little work has been done in the Latin American and the Caribbean region. The study reported here focuses on the intentions to have additional children of a group of married women, and their matched husbands in Mexico. In order to get a clearer picture of the relevance of the sex composition of the children ever born and the influence husbands and wives exert over one another to fertility decision-making, we need deeper insights from a country with different institutional settings and a closer look at the socio-demographic mechanisms related to couples' intentions.

Fertility and Fertility Preferences in Mexico

Mexico's population was estimated at 120 million in 2015, with an annual growth rate of 1.4% and an adult literacy rate of 94% (95% for women). According to Tuiran *et al*. (2002), three stages in the process of fertility decline in Mexico have been observed. In the first decade from 1964-1973 the total fertility rate (TFR) fell relatively slowly dropping by almost one child (an average decline of 0.09 children per year). This was followed by a decade of rapid decline from 1974-1984, when the TFR decreased by almost two children (an average of 0.20 children per year), corresponding closely with the establishment of a new national population policy. In the third stage, which spans from 1985 to 2001, TFR dropped more slowly (an average decrease of 0.10 children per year) half the speed of the reduction observed in the eleven previous years (Tuiran *et al*. 2002). Thus, fertility registered an average of five children per woman in 1978; fell to four children in 1985; decreasing to three children in 1993, reaching around 2.2 children in 2014 (INEGI 2015).

In Mexico, the use of contraceptive methods has proven of great importance in bringing down fertility. In 1976, one out of three married women regulated their fertility using some kind of contraceptive method. In 1987 the prevalence of contraceptives was estimated at 53%, and in 1995, two thirds of the married women used contraception (Gómez de Leon and Hernández 1997). The contraceptive prevalence rate among women of reproductive age (15 – 49) plateaued at 50% in 2009, and rose to 52% in 2014 (INEGI 2015). While the use of contraceptive methods in Mexico has increased significantly, important differences can still

be observed between urban and rural environments. In 1997, women in rural communities had a TFR of 3.9 children, whereas women living in urban areas had 2.6 children. In 2014, the TFR for women in rural areas decreased by one child (2.8) but remained higher than that of women in urban areas (2.0) (INEGI 2015).

As for fertility preferences in Mexico, ideal family size slightly declined from 2.9 children per woman in 1997 to 2.6 children in 2014. However, there are differences across age groups; in 2014, women between the ages of 15 and 19 had an average ideal family size of 2.3 children, whereas women at the end of reproductive age had 3.2 (INEGI 2015). The proportion of women who intended to have additional children varies significantly with age and parity. In 1997, 91% of childless women aged 15 – 29 intended to have children. This rate declined roughly by half among women with two children, and to less than a third among women with more than three. Among older women (20 – 40 years) only one out of five intended to have children; 24% of women with two children intended to have additional children, whereas one out of ten with four or more children intended to have more (INEGI 2006). In 2014, 71% of women aged 15 – 29 intended to have (additional) children, while only 17% of older women (30 – 49 years) intended to have children (INEGI 2015).

Although in Mexico the rapid fertility decline has been associated with changes in governmental policies, the empowerment of women through education, and greater participation in the paid economy have also influenced Mexican women's childbearing patterns through delayed age at marriage and an increasing demand for control over their own reproduction (References). While declines in the average ideal family size have been related to women's education, labor force participation and rural-urban residence (Figueroa 1996; Menkes and Mojarro 2003), relatively little work examines the effects of socio-demographic variables on the intentions to have additional children (Regules 2014). As for the parents' preferences for the sex of their children, qualitative research conducted in Mexico City and Eastern Mexico has shown that son preference encourages parents' intentions to have additional children (Rojas 2006; Regules 2014).

Data and Methods

Database and Subjects

We use data from the Mexican Family Life Survey (MxFLS), a longitudinal database which contains information for a 10-year period, collected in three rounds: 2002, 2005-2006 and 2009-2012.[1] The information collected during the surveys was organized into different databases, each one of them containing specific information on fertility, fertility preferences, and socioeconomic and contextual characteristics.

Our analyses are based on data from the first wave (2002). The subjects were 2,750 married women (wives) between the ages of 15 and 49, and their matched husbands. Since we measure the individual intention to have additional children, and the couple's agreement/disagreement on the intentions to have additional children our units of analysis are: (1) wives; (2) husbands; and (3) couples.

In Mexico fertility preferences have become more or less standard topics of surveys aiming to map populations dynamics, however, only the MxFLS considers men's fertility preferences. This database is therefore essential to explore how spouses' fertility intentions influence and are influenced by one another, and to analyze couple's agreement/disagreement on fertility preferences.

Variables and measurements

The dependent variables are: (1) wives' intention to have additional children; (2) husbands' intention to have additional children; and (3) the husband-wife agreement about intentions to have additional children. The first dependent variable was derived from the question "How many (more) children would you like to have?" with the answer in a continuous scale. The second dependent variable, husbands' intention to have additional children, was built from the question "Personally, do you desire to have one child/more children (besides the ones you have)?" with the answer categories 1= "yes", and 3 = "no."

[1] Mexico's National Survey of Demographic Dynamics (ENADID, in its Spanish acronym) provides information on fertility preferences. However, the survey does not collect sexual and reproductive data from men or couples, unlike the Mexican Family Life Survey (MxFLS) data examined here.

We constructed the third dependent variable from data derived from the previous questions on the intentions to have additional children.

We controlled for demographic factors by including age, union duration, and parity. In addition, we included socioeconomic and contextual indicators such as educational attainment, rural-urban residence, rural-urban residence at 12 years old, and access to health services. We treated age difference between spouses as a gender system *proxy* (Barbieri and Hertrich 2005). Other variables that were included in the analysis were husband's children with other partners, and whether or not women had had miscarriages and/or stillborn children.

We treated age, parity, union duration, and age difference between spouses as continuous measures. Educational attainment consisted of two categories: (1) none, incomplete or complete primary; and (2) incomplete or complete secondary and higher. Rural-urban residence, rural-urban residence at 12 years old, husband's children with other partners, access to health care services, and women's miscarriages and/or stillborn are binary variables.

In the models, we treated wives' intention to have additional children, husbands' intention to have additional children, and the sex composition of children ever born as key explanatory variables. As noted above, the sex of existing children may reveal parents' sex preferences and, therefore, influence intentions to have additional children. For the sex composition of children ever born, we computed three categories: (1) mixed; (2) only girls; and (3) only boys.

Study Limitations

The current study has some limitations. First, as we mentioned earlier, the MxFLS is a three-wave longitudinal database. In the first wave of the MxFLS only married men were asked about their intentions to have additional children. However, in the second and third waves re-interviewed married men were not asked again their fertility intentions, whereas re-interviewed women of reproductive age (15 – 49 years) were asked again. Consequently, we could only analyze husband and wife's intentions to have additional children, and spousal agreement/disagreement on intentions to have additional children in 2002.

Second, male respondents were asked differently from female respondents with regard to their intentions to have additional children, which may lead to subjective interpretations of the survey's questions.

Finally, there are mechanisms of selectivity regarding to the following sample selection criteria: (1) it includes only married women of reproductive age (15 – 49), and their matched husbands who answered the survey independently; and (2) most couples had at least one child, as in Mexico the protogenesic intervals are relatively short.[2]

Data analysis and statistical models

We divided the statistical analysis into three parts. First, we use simple descriptive statistics to describe selected independent variables and fertility intention differentials according to each category of each dependent variable. Then we turn to Binary Logistic Regression models (one for each spouse) to predict membership of the following fertility intention categories: (1) does not have intentions to have additional children (y=0); and (2) does have intentions to have additional children (y=1). Lastly, we perform a Multinomial Logistic Regression to predict couples' membership of the following husband-wife agreement categories: (1) do not agree; (2) both have intentions to have additional children; and (3) both do not have intentions to have additional children.

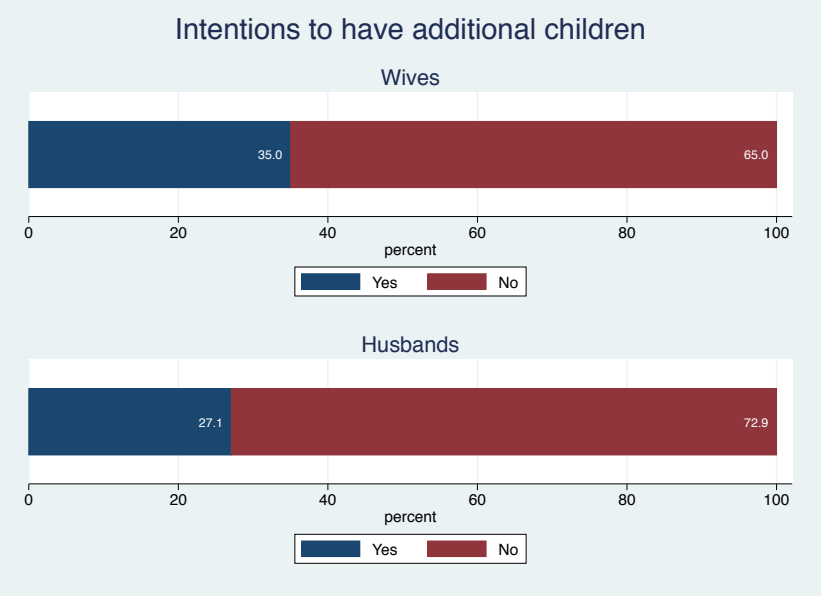
Results

Descriptive findings

Figure 1 shows that 35% of wives intended to have additional children, whereas only 27% of their husbands expressed intentions to have additional children. As pointed above, our sample includes only married men and women, and many of them already have kids. This selection bias might explain the low levels in intentions to have additional children. Whereas discrepancies in the reporting of events can indicate reporting errors on the part of one or both spouses, differences in reports of intentions to have additional children are expected because these are subjective and hypothetical indicators.

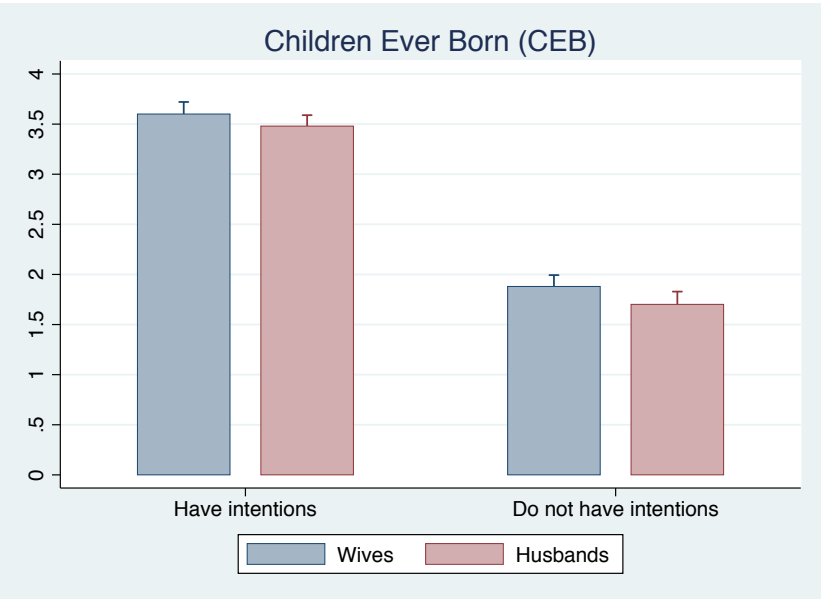
[2] In 1997, the protogenesic interval was less than a year for 48% of married women, while in 2009 decreased to 46% (Villagomez, Mendoza and Valencia, 2001, p.24).

FIGURE 1. PERCENTAGE DISTRIBUTION OF HUSBAND AND WIFE'S INTENTIONS TO HAVE ADDITIONAL CHILDREN.



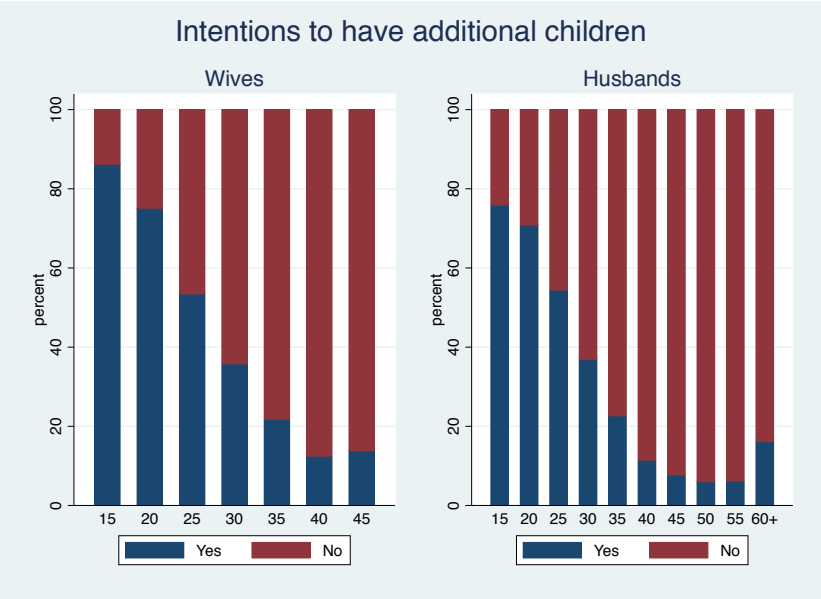
The average number of children ever born (CEB) for the entire sample is 2.99 children. The average number of live births for wives and husbands who intend to have additional children is 3.60and 3.48. Wives and husbands who do not intend to have more children have lower fertility: an average of 1.88 and 1.70 children respectively (Figure 2).

FIGURE 2. CHILDREN EVER BORN (CEB), BY INTENTIONS TO HAVE ADDITIONAL CHILDREN. WIVES AND HUSBANDS. MEXICO 2002.



The proportion of wives and husbands who intended to have additional children varies significantly with age: women and men aged 15 – 29 intended to have more children than people in older ages do (Figure 3). Younger couples may be at the onset of their reproductive life and, therefore, may not have yet achieved completed parity, whereas the older may have reached their desired fertility goals. As we are analyzing married couples, we have a restriction regarding age. The MxFLS only collect CEB and intentions data from women of reproductive age (15-49), but that restriction is not applicable for husbands, we have information of husbands aged 49 and more, as Figure 3 shows. Not shown in the figure is the wives' mean age, 33.86 and husbands, 37.05, which indicates an important age difference within the couples' members.

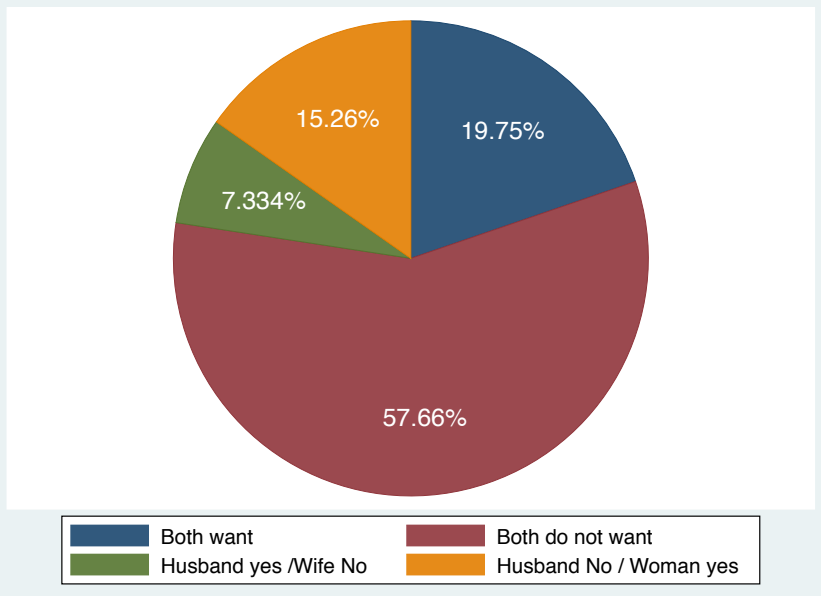
FIGURE 3. INTENTIONS TO HAVE ADDITIONAL CHILDREN, BY RESPONDENTS' AGE. WIVES AND HUSBANDS. MEXICO 2002.



As shown in Figure 4, husbands and wives in this Mexican sample are more likely to agree than differ on their intentions to have additional children: 78% and 22% respectively. Among disagreeing couples, wives are more likely to intend having additional children than husbands, whereas among agreeing couples, wives and husbands have more chances to do

not intend to have other children. This agreement prevalence is similar to other regions' outcomes related to fertility preferences analysis (Becker, 1996).

FIGURE 4. HUSBAND-WIFE AGREEMENT/DISAGREEMENT ABOUT INTENTIONS TO HAVE ADDITIONAL CHILDREN. MEXICO 2002.



Binary and Multinomial Logistic Regression Models

In this section, we present the results as estimates of the marginal effects on the spouses' probabilities of having intentions to have additional children, and on the couple's chances of agreement/disagreement about the intentions to have other children. For the complete models, see annexes.

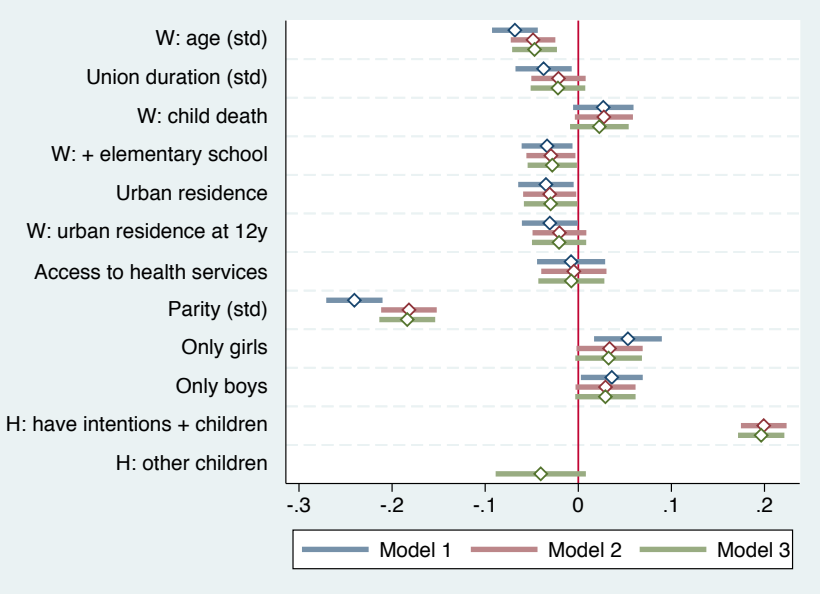
Binary logistic regression model results

1) Wife's intention to have additional children

The dependent variable is wife's intention to have additional children, which is coded as "1" if the individual does have intentions to have additional children, and as "0", otherwise. A positive coefficient indicates that the higher the value of the covariate, the more likely the individual is not to intend to have more children. An overview of the first model' results shows a statistically significant negative relationship between the wife's intention to have

additional children and demographic variables, such as age, union duration, and parity. Women with higher educational attainment, living in urban centers and who at 12 years old lived in cities are less likely to have intentions to have additional children. As for the sex composition of children ever born, the model shows that women with daughters only are more likely to have intentions to have more children if compared to women with daughters and sons. Women with sons only are also more like to have intentions to have additional children; however, the effect is less significant. In model 2, we introduced the husband's intention to have additional children while controlling for contextual variables and women's demographic and socioeconomic characteristics. As in model 1, in this model, age and parity are statistically significant. Nevertheless, union duration, the sex composition of children ever born, the type of residence, and the type of residence at 12 years old are no longer significant. Model 2 shows a statistically significant positive relationship between the husband's intention to have additional children and the wife's intention to have additional children. Finally, in model 3 we introduced the variable "husband's children with other partners" which was not significantly related to the wife's intention to have additional children.

FIGURE 5. MEAN MARGINAL EFFECTS FOR THE PROBABILITY OF INTENTIONS TO HAVE ADDITIONAL CHILDREN. WIVES. MEXICO 2002. (CONFIDENCE INTERVAL = 90%)



Source: own estimates with MxFLS 2002, and models in section 1 of Table 1 in Annexes.

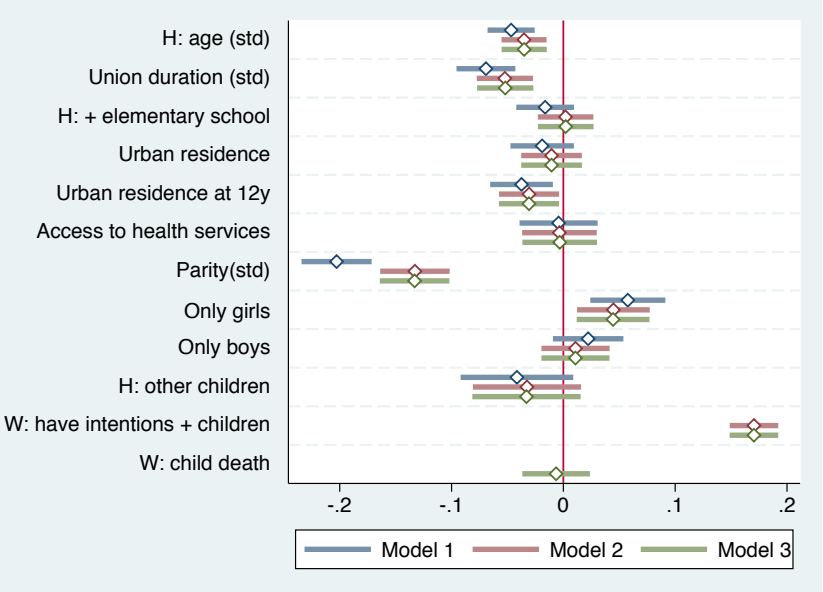
Note: "W": Woman; "H": Husband; "std": standardized values. The age and

duration of marriage includes an interaction. Parity includes a non-linear quadratic effect.

2) Husband's intention to have additional children

As expected, results from the husbands' first model shows that age, union duration, and parity has a significant effect in reducing the intentions to have additional children. The contextual variable "type of residence at 12 years old" also has a significant effect on the dependent variable. Unlike their wives, educational attainment and type of residence are not statistically significant. As for the sex composition of children ever born, the model shows that men with daughters only are more likely to have intentions to have more children if compared to men with daughters and sons. Having an offspring of boys only does not present a statistically significant correlation with the intention to have additional children. In model 2, we introduced the wife's intention to have additional children, but it is not significant. In model 3, we introduced the variable "women had had miscarriages and/or stillborn children" which is not significantly related to the husband's intention to have additional children.

FIGURE 6. MEAN MARGINAL EFFECTS FOR THE PROBABILITY OF INTENTIONS TO HAVE ADDITIONAL CHILDREN. HUSBANDS. MEXICO 2002. (CONFIDENCE INTERVAL = 90%)



Source: own estimates with MxFLS 2002, and models in section 2 of Table 1 in Annexes.

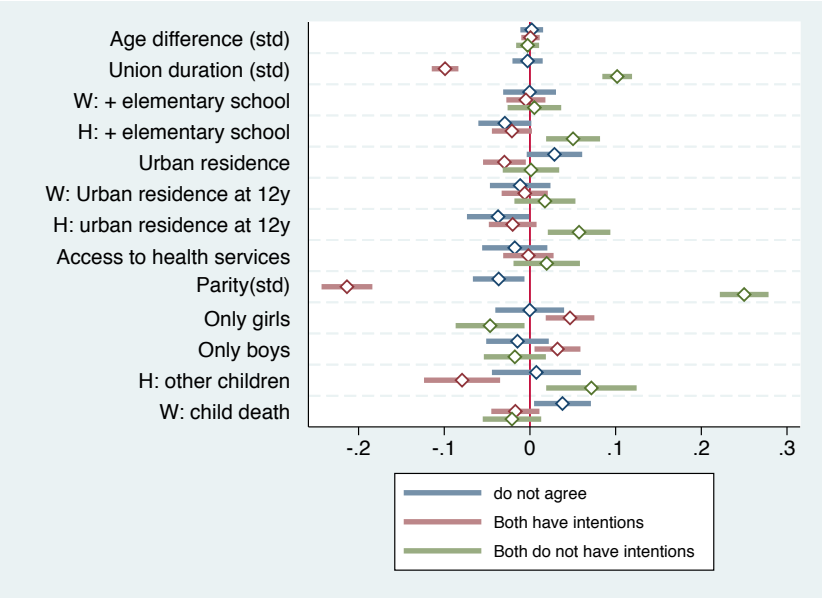
Note: "W": Woman; "H": Husband; "std": standardized values. The age and duration of marriage include an interaction. Parity includes a non-linear quadratic effect.

Multinomial logistic regression model

Husband-wife agreement/disagreement about intentions to have additional children

Figure 7 shows the results for the husband-wife agreement categories: (1) do not agree; (2) both have intentions to have additional children; and (3) both do not have intentions to have additional children. When spouses' intentions match (either when both have intentions or when both have no intentions to have additional children), most of the statically significant variables operate in a similar way. Variables such as union duration, urban residence, and parity affect husband-wife agreement in the same direction as the individual intentions to have additional children. The sex composition of children ever born has a significant effect on the probabilities of both spouses having intentions to have more children, especially if the children ever born are girls or boys only. The model shows that husband's children with another partner significantly affects husband-wife agreement, and much more than it does in the individual models. It is important to notice that the model indicates that disagreement about intentions to have additional children operates in a different fashion. For instance, husband's educational attainment, type of residence at 12 years old, and parity decrease the probability of a disagreement. Whereas current urban residence, husband's children with other partners, and being a woman who had had miscarriages and/or stillborn children increase the probability of disagreement.

FIGURE 7. MEAN MARGINAL EFFECTS FOR THE PROBABILITIES OF HUSBAND-WIFE AGREEMENT ABOUT INTENTIONS TO HAVE ADDITIONAL CHILDREN. MEXICO 2002. (CONFIDENCE INTERVAL = 90%)



Source: own estimates with MxFLS 2002, and model in Table 2 in Annexes.
Note: "W": Woman; "H": Husband; "std": standardized values. Parity includes a non-linear quadratic effect.

Discussion

The study reported here explored the effects of husband's and wife's intentions to have additional children on each other's fertility intentions in Mexico. Additionally, we used couple level-data to investigate the effects of selected variables on husband-wife agreement/disagreement about intentions to have more children. We also analyzed how the sex of existing children interacts with individual fertility intentions and couple agreement about reproductive goals.

The results from the individual models (one for each spouse) show substantial differential effects of selected variables on husband's and wife's intentions to have additional children. As expected, our results reveal that age and parity have an important influence on individual intentions to have additional children. However, rural-urban residence at 12 years old has a statistically significant association only with husband's intentions to have more children, whereas rural-urban residence and educational attainment resulted significant only for wives' intentions.

We also found strong evidence that husband's intentions influence wife's fertility goals and vice versa which could explain the high rate of husband-wife agreement about fertility intentions (77%). According to Mason and Taj (1987), men and women may have similar fertility goals because their individual intentions have been formed by the same values and norms, or because they have been taught to perceive the same costs and benefits of children (Mason and Taj, 1987). Despite this, the strong significant positive correlation between husband's and wife's intentions to have additional children should be interpreted with caution as they may be an indicative of unequal inter-spousal power relations.

Gender inequalities are still evident in the sexual and reproductive health sphere in Mexico (References). Although our variables do not capture the dimensions of gender-power relations and fertility goals negotiations, parental preference for the sex of children may provide insights regarding the relative importance of gender in reproductive behavior. The results from our models show that husbands are more like to intent to have additional children when their existing children are only girls. While sex composition of children had a significant initial effect on wife's fertility intentions, the variable lost its predictive power when adding to the model husband's intentions. It is noteworthy that when analyzing husband-wife agreement fertility intentions, couples are more likely to agree in their intentions to have additional children when their existing children are only girls. Together this may suggest that, to some extent, husband's sex preferences influences wife's intentions to have additional children.

In our model for husband-wife agreement/disagreement relatively few variables show statistical significance, which indicates the nature complex of the dependent variable. We feel that couple-level research requires high-quality survey data that include information on both partners. These data are indispensable for ascertaining the differences between partners' reproductive goals and identifying the contribution of each partner to the childbearing outcome. In addition, couple-level data and its further analyses could shed light on the nature of gender differences in reproductive goals and, therefore, help to clarify what Mason and Taj (1987) refer to "a fundamental theoretical controversy over the extent to which fertility decision-making arises from conflict or consensus within the family" (Mason and Taj 1987, p. 612).

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Annexes

TABLE 1. LOGIT MODELS FOR THE PROBABILITY OF INTENTIONS OF HAVING ADDITIONAL CHILDREN FOR EACH SPOUSE.

	Women's intentions				Husband's intentions			
	(Model0) $e^{\hat{\beta}}$/(ee)	(Model1) $e^{\hat{\beta}}$/(ee)	(Model2) $e^{\hat{\beta}}$/(ee)	(Model3) $e^{\hat{\beta}}$/(ee)	(Model0) $e^{\hat{\beta}}$/(ee)	(Model1) $e^{\hat{\beta}}$/(ee)	(Model2) $e^{\hat{\beta}}$/(ee)	(Model3) $e^{\hat{\beta}}$/(ee)
Independent variables								
W: age (std)	0.6204***	0.6580***	0.7175**	0.7249**				
	(0.060)	(0.069)	(0.078)	(0.079)				
W: Child death	1.1577	1.1524	1.1833	1.1721				0.9476
	(0.154)	(0.154)	(0.165)	(0.164)				(0.144)
W: more than elementary school	0.7997**	0.8169*	0.8225*	0.8235*				
	(0.087)	(0.091)	(0.096)	(0.096)				
Union duration (std)	0.8145*	0.8027*	0.8755	0.8673	0.5788***	0.6034***	0.6614***	0.6634***
	(0.093)	(0.097)	(0.111)	(0.110)	(0.066)	(0.071)	(0.081)	(0.081)
Urban residence	0.8140*	0.8088*	0.8248	0.8228	0.8669	0.8655	0.9159	0.9160
	(0.098)	(0.099)	(0.104)	(0.104)	(0.112)	(0.114)	(0.125)	(0.125)
W: urban residence at 12y	0.8296	0.8111*	0.8656	0.8708	0.7623**	0.7518**	0.7753*	0.7747*
	(0.099)	(0.099)	(0.111)	(0.111)	(0.098)	(0.098)	(0.105)	(0.105)
Access to health services	0.9204	0.9355	0.9438	0.9387	0.9642	0.9679	0.9713	0.9734
	(0.137)	(0.140)	(0.147)	(0.146)	(0.154)	(0.157)	(0.163)	(0.164)
Parity (std)	0.2701***	0.2259***	0.2893***	0.2888***	0.2978***	0.2520***	0.3731***	0.3723***
	(0.032)	(0.028)	(0.037)	(0.037)	(0.041)	(0.034)	(0.053)	(0.053)
Only girls	1.7593***	1.4417**	1.2785	1.2757	1.8663***	1.5518**	1.4496**	1.4461**
	(0.252)	(0.215)	(0.201)	(0.201)	(0.282)	(0.243)	(0.239)	(0.238)
Only boys	1.4604**	1.2824*	1.2415	1.2460	1.3517**	1.1841	1.0945	1.0939
	(0.192)	(0.174)	(0.177)	(0.178)	(0.192)	(0.173)	(0.168)	(0.168)
W: age (std) # Union duration (std)		1.1687**	1.1249*	1.1266*				
		(0.079)	(0.077)	(0.077)				
Parity (std) # Parity (std)		1.3108***	1.2357***	1.2357***		1.3326***	1.2413***	1.2416***
		(0.052)	(0.054)	(0.054)		(0.056)	(0.054)	(0.054)
H: have intentions to have additional children			4.1927***	4.1634***				
			(0.508)	(0.506)				
H: children with other partners				0.7353	0.7314	0.7288	0.7633	0.7606

	Women's intentions				Husband's intentions			
	(Model0)	(Model1)	(Model2)	(Model3)	(Model0)	(Model1)	(Model2)	(Model3)
	$e^{\hat{\beta}}$/(ee)	$e^{\hat{\beta}}$/(ee)	$e^{\hat{\beta}}$/(ee)	$e^{\hat{\beta}}$/(ee)	$e^{\hat{\beta}}$/(ee)	$e^{\hat{\beta}}$/(ee)	$e^{\hat{\beta}}$/(ee)	$e^{\hat{\beta}}$/(ee)
H: age (std)				(0.157)	(0.168)	(0.170)	(0.186)	(0.186)
					0.6997***	0.7181**	0.7639**	0.7646**
H: more than elementary school					(0.068)	(0.075)	(0.082)	(0.082)
					0.8740	0.8831	1.0165	1.0176
H: age (std) # Union duration (std)					(0.103)	(0.106)	(0.127)	(0.128)
						1.0644	1.0621	1.0623
W: have intentions to have additional children						(0.081)	(0.080)	(0.080)
							4.1135***	4.1126***
							(0.502)	(0.502)
Observations	2611	2611	2611	2611	2611	2611	2611	2611
R^2 McFadden	0.274	0.285	0.326	0.327	0.295	0.305	0.348	0.348
R^2 McFadden adjusted	0.267	0.277	0.318	0.318	0.288	0.296	0.339	0.339
R^2 Nagelkerke	0.299	0.310	0.346	0.346	0.294	0.303	0.338	0.338
R^2_ Cragg-Uhle	0.411	0.426	0.475	0.476	0.424	0.436	0.487	0.487
Deviance	2466.9	2427.9	2287.7	2285.6	2178.3	2147.8	2012.8	2012.7
Log-likelihood	-1233.4	-1213.9	-1143.8	-1142.8	-1089.2	-1073.9	-1006.4	-1006.4

Exponentiated coefficients

* p<0.10, ** p<0.05, *** p<0.001

W: Wife; H: Husband; std: standardized values

Source: MxFLS, 2002

TABLE 2. MULTILOGIT MODEL FOR THE PROBABILITY OF HUSBAND-WIFE AGREEMENT OF INTENTIONS OF CHILDREN FOR EACH SPOUSE.

	Do not agree	Both have intentions	Both do not have intentions
	$e^{\widehat{\beta}}$/(ee)	$e^{\widehat{\beta}}$/(ee)	$e^{\widehat{\beta}}$/(ee)
Age difference (std)	1.0174	1.0152	1.0000
	(0.055)	(0.075)	(.)
Union duration (std)	0.6941***	0.2912***	1.0000
	(0.051)	(0.033)	(.)
W: age (std)	0.9805	0.9416	1.0000
	(0.125)	(0.151)	(.)
H: age (std)	0.7517**	0.6964**	1.0000
	(0.096)	(0.115)	(.)
Current urban residence	1.1087	0.7645	1.0000
	(0.147)	(0.134)	(.)
W: urban residence at 12y	0.9016	0.8914	1.0000
	(0.130)	(0.168)	(.)
H: urban residence at 12y	0.7122**	0.6848*	1.0000
	(0.106)	(0.133)	(.)
Access to health services	0.8740	0.9192	1.0000
	(0.136)	(0.189)	(.)
Parity (std)	0.3526***	0.0896***	1.0000
	(0.044)	(0.017)	(.)
Parity (std) # Parity (std)	1.1572**	1.5873***	1.0000
	(0.056)	(0.084)	(.)
Only girls	1.1747	1.7813**	1.0000
	(0.195)	(0.359)	(.)
Only boys	1.0067	1.4141*	1.0000
	(0.150)	(0.265)	(.)
H: other children	0.8011	0.3856**	1.0000
	(0.168)	(0.119)	(.)
W: Child death	1.2407	0.9251	1.0000
	(0.167)	(0.180)	(.)
Observations		2611	
R^2 McFadden		0.272	
R^2 McFadden ajusted		0.260	
R^2 Nagelkerke		0.412	
R^2_ Cragg-Uhle		0.480	
Deviance		3705.7	
Log-likelihood		-1852.8	

Exponentiated coefficients

* p<0.10, ** p<0.05, *** p<0.001

W: Wife; H: Husband; std: standardized values

Source: MxFLS, 2002