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# GENDERED INTENTIONS AND FERTILITY-RELATED OUTCOMES IN SOUTHERN MALAWI

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by

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## ABSTRACT

Fertility is often viewed as a feminine domain due to the greater social and health consequences childbearing poses for women. However, empirical evidence finds that males often have power over fertility decision-making, especially in sub-Saharan Africa. I conceptualize fertility intentions as reflections of men's and women's influence and use multiple constructs (general intentions, partner-specific intentions, and expectations) to estimate the relative strength of male and female intentions to predict pregnancy and several proximate determinants of fertility in Malawi. I find that while female intentions are stronger predictors of pregnancy and condom use when measured by expectations, the findings for general and partner-specific intentions are mixed. Regardless of construct, male intentions are stronger predictors of sexual frequency while female intentions more strongly predict hormonal contraception use. The results underscore the need to consider various measures of fertility intentions for both men and women to gain a greater understanding of fertility decision-making.

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# INTRODUCTION

Fertility intentions are strong predictors of father-involvement, relationship quality between partners, and individual well-being for both men and women. Unintended children are more likely to experience poor parenting and live in hostile environments (East et al. 2012, Miller et al. 2008). They are also more likely to live in a household with only one parent as unintended pregnancies are related to higher relationship dissolution (National Campaign 2008). Further, fathers who intend pregnancies are more likely to reside with their children as well as act nurturing and warm towards them (Cabrera 2009, Bronte-Tinkew et al. 2007).

While fertility influences both men and women, it is often viewed as inherently feminine. Women are over-represented in studies on fertility and are usually the targets of family planning programs. Some scholars view this focus on women as a weakness (Watkins 1993, Santelli 2003, Dodoo and Frost 2008), and underscore men's role in fertility decision-making, especially in sub-Saharan Africa (Dodoo and Frost 2008).

Building on the previous literature, I use unique, detailed, couple-level panel data to examine the relative influence of male and female partners' fertility intentions in predicting pregnancy as well as sexual frequency, condom use, and hormonal contraception use. I acknowledge that fertility intentions are dynamic and multifaceted. Therefore, the relative influence of male and female intentions could depend on which aspects of intentions are being measured. I use three categories of intentions: general-intentions, partner-specific intentions, and expectations. Such a detailed study of fertility intentions and their impact on reproductive outcomes has not been carried out before.

## REVIEW OF THE LITERATURE

### *Gender and Fertility Intentions*

Power between men and women in romantic relationships has been measured in various ways including age differences between partners, relative economic resources of partners (Luke 2003), and macro-level kinship structures (Takyi and Dodoo 2005). I focus on the realization of men's and women's fertility intentions as an alternate measure of power within couples. If one individual's intentions have a stronger influence on an outcome, that person likely has more power to realize their preferences.

Fertility and reproduction are often viewed as women's areas of expertise and control. In sub-Saharan Africa, women's status is linked to producing children, and women have the major responsible for rearing and caring for children (Eisenstein 1988). Because sexual and reproductive health, including pregnancy and childbirth, are viewed as women's domains (Luke et al. 2001), family planning and maternal and child health programs target women as the main actors, if not the sole actors, in fertility-related behaviors and consequences (Greene and Biddlecom 2000). This view suggests that women have a vast amount of power in sexual and fertility-related decisions in sub-Saharan Africa (Baumeister and Vohs 2004).

Nevertheless, evidence suggests that men are very influential in sexual and reproductive decision-making in sub-Saharan Africa. Men have historically wanted more children than women have (Caldwell and Caldwell 1987), dominate decisions regarding if and when to have sex (MacPhail and Campbell 2001), and report strong preferences against the use of condoms (Vasilenko et al. 2013). In addition, although women ultimately use hormonal contraception, men can have a large impact on use by their wives and partners (Dodoo and Tempenis 2002). Men can have an indirect influence by discussing contraception with their partners or refusing to

pay medical fees that come as a consequence (Rutenberg and Watkins 1997), the first of which seems to be common practice in Malawi (NSO Malawi and ORC Macro 2011). However, men's power in contraceptive decision-making is limited. Women often use contraception secretly to maintain the view that their male partners are the decision-makers if their partners have rejected its use (Plummer et al. 2011).

Previous research on men's and women's fertility intentions in sub-Saharan Africa has produced mixed findings on men's relative influence on fertility and contraceptive use. Past studies have found that women's reported intentions were significant predictors of aggregated fertility trends (Santelli 2003) and, in several countries, were stronger predictors of contraception use than their husbands' intentions (Bankole and Singh 1998). Others have found that men's intentions were equal to that of women's when predicting pregnancy (Machiyama et al. 2015, Bankole 1995) or contraceptive use (Baschieri et al. 2013, Dube et al. 2012). Still others have shown that men's intentions were stronger predictors of contraception use than women's (Dodoo 1998, Dodoo and Tempenis 2002). To my knowledge, no studies have examined the relationship between couples' fertility intentions and condom use or sexual frequency. Further, separating condom use from other forms of contraception is important, especially in this context. Use of male condoms is much more likely to be controlled by men, while the same is not true for hormonal contraception use. My aim is to examine whether multiple measures of fertility intentions are associated with men's and women's relative influence over several spheres of fertility: frequency of sex, condom use, hormonal contraception use, and pregnancy.

### *Measuring Intentions*

While there is theoretical evidence that fertility intentions are much more complex than current measures account for, these theories have not been applied to gender and relative power.

Further, while there are several examinations of gender and the realization of fertility intentions, none account for the multiple aspects of intentions as outlined by these theories. This study was designed to address both of these gaps. Consider three aspects of intentions, starting with general intentions, the most common measures of fertility intentions (e.g., Dodoo and Tempenis 2002, Dodoo 1998, Baschieri et al. 2013, Santelli 2003). Survey questions on general intentions focus on the desired number of children and timing of future pregnancies. They ask whether individuals want a/another child, their ideal family size, and the timing in which they want to have a/another child. These measures, for women and for men, have proven to be strong predictors of fertility-related behaviors; nevertheless, fertility intentions are more complex than these measures express.

One added complexity is that reproductive decisions are made in dyads, through negotiation processes (Dodoo and Tempenis 2002, Luke 2003, Vasilenko et al. 2013, Yeatman and Sennott 2014, Machiyama et al. 2015). Fertility intentions, especially short-term intentions, are intertwined with the desires and expectations that individuals have regarding their current romantic relationship. While previous research recognizes both partners' intentions, these couple-level analyses have used measures of general intentions that might not capture how individuals' fertility intentions vary across partnerships. For example, it is plausible that individuals desire children but not with their current partner(s). Furthermore, some individuals have more than one partner at a time, and, thus, general intentions could mask variation in intentions across partnerships. The survey data I employ include unique measures of intentions relating to the timing and occurrence of pregnancy with a specific partner for both men and women.

Finally, I borrow from Ajzen's (2013) model of planned behavior and estimate the power of expectations. Expectations are meant to measure the actor's perceptions of how much he or she can control a particular behavior or outcome. There are multiple ways to measure perceived control. For instance, when asked about their ideal family size, respondents could indicate that it was "up to God." However, this sample used this response so rarely (less than one percent) that I could not use this measure. Instead, in this study, respondents were asked how likely it was that they would become pregnant, rather than being asked if they wanted to become pregnant. I consider this an important aspect of fertility intentions as it has a distinct impact on fertility behaviors (Mencarini et al. 2015). Expectations, along with attitudes and subjective norms, influence the desired timing of the next (or first) child (Dommermuth et al. 2015). Some examinations support the notion that uncertainty in fertility intentions has distinct impacts on later fertility behaviors (Dommermuth et al. 2015). Others have found that expectations exert a limited influence on the realization of short-term fertility intentions (Kuhnt and Trappe 2016).

While general intentions have been used to analyze the relative influence of male and female intentions widely, partner-specific intentions and expectations have not, especially in sub-Saharan Africa. Furthermore, fertility intentions have been widely studied in relation to pregnancy and contraceptive use, while studies relating to sexual activity and condom use are limited. This study advances the literature by exploring how various dimensions of intentions are associated with subsequent pregnancy as well as important proximate determinants: sexual frequency, condom use, and modern contraception use.

***The context of Malawi***

Malawi is an important context in which to study questions regarding gender and fertility intentions, especially among young people. Reducing the prevalence of unmet need has been a

highly established goal of both research and policy for some time (Santelli 2003). Unmet need refers to how many individuals do not want to have a child but are not using any form of contraception. A key component of unmet need is fertility intentions. The goal of reducing unmet need considers a human-rights perspective that all individuals should be able to have agency in childbearing decisions, a feminist perspective that women should have options outside of childbearing, and a demographic perspective of decreasing high fertility rates. All of this is related to delaying fertility or preventing young girls from becoming pregnant.

The age at first birth is strongly related to later fertility (i.e., total number of children) and the effectiveness of other "interventions" (i.e., the influence of schooling on later fertility was significantly moderated by the age at first birth) (Gupta and Mahy 2003); therefore, it has been considered an important point of focus. On average, women in Malawi begin participating in fertility-related behaviors at young ages. The average woman becomes sexually active at 17 and gives birth for the first time at 19, while men in Malawi usually experience these events at slightly older ages. This seems to be because men, on average, partner with younger women (NSO Malawi and ORC Macro 2011). Because of the importance of youth fertility for both individuals and populations, as well as the early initiation of romantic relationships and fertility, the young adult population of Malawi has become an important group to examine.

As a whole, Malawi still has relatively high fertility – 5.7 births per woman, which are spaced 34 months on average; on average, both men and women of reproductive age have fairly similar ideal family sizes – 4.0 children (NSO Malawi and ORC Macro 2011). However, the sample of youth in my study had a slightly lower ideal family size, 3.5 for both male and female respondents. Most childbearing is experienced within marriage (the average age of marriage, for women, is 18) even though non-marital sexual activity is common (Clark et al. 2009). Further,

estimates have shown a high incidence of pre-marital pregnancy, which is one mechanism by which early marriage occurs; marriage acts as a reaction to young non-marital pregnancy (Ministry of Education 2002).

While Malawi's total fertility rate is relatively high, it has fallen from 7.6 during the 1980s to 5.7 in 2010; however, most of this change is explained by the dramatic increase in the use of modern contraception, especially among women thirty years and older (NSO Malawi and ORC Macro 2011). Unlike contraception use, condom use has not increased, despite the high prevalence of HIV/AIDS and related information and behavior change programs (Mtonya and Chizimbi 2006). Condoms remain highly unpopular in all groups but especially among married couples (Tavory and Swidler 2009, NSO Malawi and ORC Macro 2011). According to the most recent Demographic and Health Survey (DHS), among those who were married 2.4 percent of women reported using condoms while 23.0 percent of unmarried, sexually active women reported using condoms (NSO Malawi and ORC Macro 2011). The highest rates of condom use in Malawi are between the ages of 20 and 34, whereas rates of contraception use remains fairly stable across all reproductive ages (NSO Malawi and ORC Macro 2011).

Although these estimates are largely focused on women, there is documented evidence that men are participating in many facets of fertility decision-making. The latest DHS found that 93 percent of all currently married women ages 15-49 had informed their partner about their current use of contraception (NSO Malawi and ORC Macro 2011). So, at a minimum, men are aware of these decisions. However, there is evidence that men play a more salient role than just being aware of what their female partners are doing. For young women in Malawi, entering a new relationship significantly changed women's own perceived ideal family size (Yeatman and

Sennott 2015). For these reasons, it is important to have information on young couples. This study utilizes such data to estimate the relative influence of male and female fertility intentions.

## DATA and METHODS

Data for these analyses come from the Tsogolo la Thanzi study (TLT). TLT is a longitudinal project in Balaka District, Southern Malawi, designed to examine how young adults navigate decision-making regarding childbearing and romantic relationships in an HIV/AIDS epidemic. TLT follows a random sample of young women and all of their current romantic partners for three years (May 2009 – April 2012). The first wave of data randomly sampled 1,505 females between the ages of 15 and 25. Respondents were interviewed every four months creating eight waves total. At each wave, respondents were asked to list all of their current partners. Women were then given tokens to pass to each of their partners, who were requested to come to the study office for an interview (for an incentive). This happened at each wave. This design is an added strength to these data; they include information on non-marital and concurrent partners, both of which are rare in examinations of couple-level fertility in sub-Saharan Africa. In fact, all of the studies of couples, fertility intentions, and fertility outcomes in sub-Saharan Africa are limited to married couples. These data provide an exciting and fresh look at couple-level fertility in this region.

As noted by Frye and Trinitapoli (2015), it is unwise to generalize to all of sub-Saharan Africa based on any sample of one country or region; nevertheless, focusing on this part of Southern Malawi, Balaka Township and its surrounding areas, has many advantages. Balaka is considered economically "underdeveloped;" it is mostly agricultural with one paved road, and most residents do not have electricity. Fertility remains high (6.2 births per woman in 2008). The TLT sample is similar to the Demographic and Health Survey's sample of Malawi at large in respect to many demographic characteristics (National Statistical Office of Malawi 2015).

Therefore, a study of fertility intentions in Balaka will shed light on how young couples carry out reproductive decision-making in a low-income setting where fertility transition is still under way.

## *Sample*

My unit of analysis is the couple-wave. The data include many respondents in a diverse set of circumstances. Some female respondents were not in a relationship during the first wave and entered partnerships in later waves. Other couples dissolved and therefore male partners were no longer sampled in subsequent waves. Some couples came in and out of the sample (i.e., after relationship dissolution and reunification or missing interviews). For example, if a woman was married at the start of the study, her husband enrolled at wave one, and they both participated in each study wave, then they contributed eight couple-waves to the analytic sample. If another woman was single when the study began but at wave three reported a new partnership, and he participated in the study for the rest of the waves (waves four – eight), then they contributed five couple-waves. Finally, if another woman was single when the study began but reported a new partnership during wave four, yet he did not enter the study until wave six and participated in wave six, seven, and eight, then they contributed three couple-waves.

Of these couple-waves, I began with 4,551, which included 862 female respondents and 948 male partners. The analytic sample includes all couples in each wave (that is, all female respondents who had at least one current partner who was also interviewed) that met the following criteria: (1) the couple was at risk of pregnancy and (2) the dependent variables captured aspects of the couple, not the individual. In order to fit with the first criterion, I excluded those who were currently pregnant during a wave, which deleted 802 couple-waves. I maintained the information about their pregnancy in a lagged variable for pregnancy (see below).

This way, I measure the incidence of pregnancy and not the same pregnancy across waves. I also excluded six women who were sterilized (ten couple-waves).

To fit with criterion 2, I only used couple-level measures. Condom use and sexual frequency referred to the couple, not the individual. For pregnancy, on the other hand, I utilized a question asking pregnant female respondents which of her male partners was the father of their child. I eliminated any couple where the male was not the father of the current pregnancy (deleting nine couple-waves). With these restrictions, my final sample included 3,730 couple-waves (totaling 919 distinct couples, including 688 women and 758 men). From this sample, 19 women had more than one partner within the same wave (less than two percent of women), with a maximum of three concurrent partners interviewed during one wave for one female respondent.

## *Measures*

### *Dependent Variables*

The first dependent variable, pregnancy, was measured by a pregnancy biomarker. Female respondents participated in rapid urine tests each wave that were interpreted by a trained interviewer. This measure is more accurate than self-reports because it is not influenced by whether or not women know they are currently pregnant or by their willingness to share that information. Pregnancy was coded as a dummy variable (1 yes, 0 no). Pregnancy was lagged so that intentions at time one are predicting pregnancy at time two. This variable was either lagged four or twelve months, depending on the model.

The second dependent variable is sexual frequency. It was measured as the female partner's response to the question, "Over the last 4 months, how frequently did/do you have sex with [your partner]?" The original variable was coded as an ordinal, not a continuous variable. Using this information, this variable was coded as 1 if the couple had sex at least once weekly

and 0 if they had sex a couple of times per month, less than two times per month, only once, or they had not had sex at all.

The third dependent variable, consistent condom use, was measured using the female partner's response to the following question, "Think about the last three times you had sex with [your partner], did you use condoms every time, twice, once or never?" This was coded as a dummy variable: 1 if the couple used condoms all three times, and 0 if they used condoms twice, once, or never.

The final dependent variable was modern, hormonal contraception use. Respondents were asked, "Apart from condoms, are you currently using contraception with [your partner]? What method(s) are you using?" Respondents were coded as 1 if they reported using modern, hormonal methods specifically (the pill, injectable, or an IUD) and were coded as 0 if they were not using any method or using string, calendar, traditional medicine, or any other form of traditional contraception.

***Independent Variables***

The key independent variables relate to pregnancy intentions and use information in response to the questions outlined in Table 3. The intention variables were organized into three groups: general intentions, partner-specific intentions, and expectations. **General intentions** included the responses to the following questions: (1) *Would you like to have a(nother) child?* The dichotomous variable is coded yes = 1; no = 0. (2) *How long would you like to wait before having your first/next child?* The response categories included respondent "wants a child in less than a year", "wants a child in more than a year", and "does not want a child". I constructed a set of dummy variables for each of these categories. (3) *If you found out you were pregnant next*

*month, would that news be good, bad, or neither?* I created a set of dummy variables: one for good news, one for bad news, and one for neither.

**Partner-specific intentions** included responses to the following questions: (1) *If you found out today that you were pregnant by [PARTNER] would that news be?* I created a set of dummy variables: one for good news, one for bad news, and one for neither. (2) *Do you want to have children with [PARTNER]?* The dichotomous variable is coded yes = 1; no = 0.

**Expectations** were measured as the response to the following question: *In the next year how likely is it that you will get pregnant or have another baby?* Respondents were given 10 beans and asked to indicate the number of beans that represented the likelihood of this event happening (0 being the event was certainly not going to happen, and 10 meaning that the event was certain to happen). This variable was kept as a continuous variable.

Questions related to the three categories of intentions were dispersed throughout the survey. General intentions were asked in the same section, partner-specific intentions were asked together in a separate section, and the expectation question was asked in a section on expectations (in this section respondents were also asked the likelihood of becoming infected with HIV, borrowing money from relatives, etc.). These constructs were presented as unique to the respondent and are conceptualized as distinct in these analyses. Further, these measures are generally not strongly correlated. The two exceptions to this are a/nother and with this partner (correlation for male partners = 0.8, for female partners = 0.9) as well as news (today) and news (month) (correlation = 0.9 for both male and female partners). To see the correlations of each of these independent variables, see Table A1 in the appendix.

***Control Variables***

I controlled for characteristics that are known to relate to fertility intentions, gender relations, and each of the dependent variables. Socioeconomic status (SES) is a known predictor of how many children are desired as well as contraception use, condom use, and pregnancy (Westoff et al. 2013). I calculated both female and male partners' socioeconomic statuses but only included the SES of female partners in the final models due to high correlation (c = 0.75). SES was measured through an index created using principal components analysis, such as the procedure used with DHS data, which allows consideration for more than income. Respondents indicated whether or not they owned certain items such as a bed with a mattress, television, radio, landline/mobile phone, refrigerator, and vehicle (each coded 1 if they owned the item and 0 if they did not), as well as their main source of water (safer sources coded higher) and main material used for the floor of their home (more expensive materials coded higher). To create this index, a weight or factor score was generated through principal components analysis. The resulting asset scores were then standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one.

Those who have higher levels of education are more likely to want fewer children (Westoff et al. 2013). Education, along with age, were measured as continuous variables. Past childbearing experience, both in terms of parity and spacing, can influence fertility intentions and behavior (Guzzo and Hayford 2011). Because of this, I included measures of both male and female parity (both as continuous variables) as well as a measure of when female participants had their last child. The latter was created using a question asking if respondents had had a child between waves. I created a variable coded 1 if they had had a child since the last wave (within last 4 months) and 0 if they did not. I then created a set of dummy variables: had not had a child

during the study, had a child less than one year ago, and had a child more than a year ago. Additionally, as mentioned, fertility and the couple relationship are very much intertwined. Therefore, I accounted for characteristics of the relationship: type of relationship (married or not), number of current sexual partners of both partners, and relationship length (in months). Finally, religious values are associated with views on contraception use, condom use, sexual relations, and pregnancy (Westoff and Bietsch 2015). I measured religion with dummy variables with the following categories – Catholic, Muslim, Protestant, and other.

## *Analytic Strategy*

The first step in my analysis was addressing missing data. If a couple was not interviewed during any given wave, they were not included in analyses. However, certain individuals did not have answers for various questions, yet they provided useful information on many other variables. Instead of using list-wise deletion and excluding every observation that did not answer any particular question, I utilized multiple imputation. As opposed to earlier methods addressing missing data, multiple imputation does not fill in missing cells with the mean or mode. Instead, multiple data sets are imputed using the relationships known from all non-missing data. This method adjusts for the uncertainty of missing information by adding random error components for each imputed value, each iteration. Each time a new data set is imputed, a new plausible value is filled into a specific cell; the range of these values depends on the strength of the relationship that variable has with other variables in the estimation. After the data sets are created, they are pooled by MI functions in Stata, providing the "best" estimate considering all estimates (Rubin 2004). These estimates have unbiased standard errors and parameters. Imputation of new data sets (estimating new values each time) can be limitless; however, it has

been found that 20 iterations is an acceptable threshold (Johnson and Young 2011). I used multiple imputation and performed 25 iterations to ensure confidence in my results.

For the analysis, I pooled all eight waves of data and first estimated descriptive statistics. Next, clustering at the couple-level, I utilized logistic regression. Models were clustered at the couple-level to account for dependence between the multiple observations of the same couple at different points in time. Models included men's and women's intentions and controls and were run separately for each different type of intention for each of the four dependent variables (24 regressions total). Pregnancy was lagged one wave (4 months) for all intention questions excluding the desired timing of the next child and expectations, for which pregnancy was lagged three waves (12 months). This was done to match the time frames for these questions as closely as possible. After each regression was estimated, Wald tests were run to estimate if male and female intentions were not only significant predictors of the dependent variable, but if they were significantly different from each other. All analyses were completed using Stata 14.

## RESULTS

A demographic overview of couples across waves can be found in Table 1. Both male and female partners had similar socioeconomic statuses (SES) because most couples were either married or living together, and, therefore household assets are likely shared between the couple. Male partners were slightly more educated (8.3 years vs. 7.0 years) and older (26 years old vs. 21 years old) than females on average. This is similar to other studies of couples in sub-Saharan Africa (Machiyama et al. 2015, Luke 2003, Dodoo and Tempenis 2002). In terms of religion, a majority of the sample was either Protestant (approximately 45 percent for both men and women) or Catholic (about 30 percent for men and 20 percent for women). About 20 percent of men and 30 percent of women identified as Muslim. On average, most partners only had one current sexual partner. Women had less than one sexual partner on average. This is because all couples were interviewed, whether or not they were sexually active.

**Table 1. Descriptive Statistics for Background Variables across Waves (N=3,730)**

| | **Male** | | **Female** | |
|---|---|---|---|---|
| | Mean or Percentage | Standard Deviation | Mean or Percentage | Standard Deviation |
| SES index | 0.1 | 2.2 | 0.1 | 2.3 |
| Education (years) | 8.3 | 3.2 | 7.0 | 2.7 |
| Parity | 1.3 | 1.2 | 1.2 | 1.0 |
| Age (years) | 25.8 | 5.0 | 20.8 | 2.9 |
| Religion | | | | |
| Muslim | 20.9 | | 30.5 | |
| Catholic | 28.9 | | 19.6 | |
| Protestant | 44.1 | | 42.6 | |
| Other | 6.1 | | 7.3 | |
| Current # of sexual partners | 1.0 | 0.4 | 0.9 | 0.3 |

Table 2 shows variables across couple-waves. Of the sample of couple-waves, 13.3 percent experienced a new pregnancy. In most waves (64 percent), couples were having sex

weekly, mostly without using condoms consistently or using modern contraception. As expected, more couples were using modern contraception across waves (42.8 percent) than were using condoms consistently (22.4 percent). Most women had not had a child during the study (almost 70 percent). However, of those who reported having a child, most had had that child within the last year (26 percent). In terms of relationship type, 81 percent of couples were married, across waves, and had been together about three and a half years on average.

**Table 2. Descriptive Statistics for Couple-wave Variables – Female Reports (N=3,730)**

| | Mean or Percentage | Standard Deviation |
|---|---|---|
| New Pregnancy | 13.3 | |
| Having sex at least once a week | 64.0 | |
| Used condoms always | 22.4 | |
| Using hormonal contraception | 42.8 | |
| Time since last birth | | |
| Did not have child | 69.8 | |
| Less than one year | 26.0 | |
| More than one year | 4.2 | |
| Married | 81.2 | |
| Relationship length (months) | 42.4 | 35.1 |

This study examines multiple constructs of fertility intentions (descriptive statistics of these are shown in Table 3). To examine general intentions, three questions were utilized: a question regarding wanting a(nother), timing, and whether pregnancy next month is good or bad news (hereby referred to as "news (month)"). Across all measures, it was clear that most partners, male and female, wanted a child in the future (about 90 percent of couple-waves for both women and men) but wanted to wait longer than a year to get pregnant (about 84 percent of couple-waves for both men and women). Thus, most felt that finding out they were pregnant in a month would be bad news (68 percent of couple-waves for males and 76 percent for females).

To examine partner-specific intentions, two questions were used: if it would be good or bad news to be pregnant with that partner today (hereby referred to as "news (today)"), and whether respondents wanted to have a child with that partner in general ("with this partner"). Across couple-waves, the vast majority of men and women wanted to have a child with their current partner; however, most felt it would be bad news to find out they were pregnant with that partner today. In terms of expectations, across couple-waves, most men and women felt it was unlikely to become pregnant within a year. An average of 3.1 – 3.2 beans were placed down by respondents, indicating a 31 – 32 percent likelihood of getting pregnant.

**Table 3. Descriptive Statistics (Percentages) for Intentions Questions (N=3,730)**

| **General Intentions** | **Male** | **Female** |
|---|---|---|
| **A/Another Child** (*Would you like to have a(nother) child?)* | | |
| Yes | 90.2 | 91.1 |
| No | 9.8 | 8.9 |
| **Timing** (*How long would you like to wait before having your first/next child?)* | | |
| Less than one year | 7.5 | 7.6 |
| More than one year | 84.3 | 83.6 |
| Don't want a(nother) child | 8.2 | 8.8 |
| **News (month)** *(If you found out you were pregnant next month, would that news be?)* | | |
| Bad | 67.9 | 76.4 |
| Good | 30.0 | 20.7 |
| Neither bad nor good | 3.1 | 2.9 |
| **Partner-Specific Intentions** | | |
| **News (today)** (*If you found out today that you were pregnant by [PARTNER] would that news be?)* | | |
| Bad | 69.9 | 74.8 |
| Good | 27.0 | 21.1 |
| Neither bad nor good | 3.1 | 4.1 |
| **With this Partner** (*Do you want to have children with [PARTNER]?)* | | |
| Yes | 91.4 | 90.0 |
| No | 8.7 | 10.0 |
| **Expectations** | | |
| **Beans** (*In the next year how likely is it that you will get pregnant or have another baby?) Mean (1: not going to happen 10: is definitely going to happen)* | 3.2 | 3.1 |

Results from the logistic regressions are shown in Table 4. Results from controls are not shown due to lack of space but can be found in the appendix (Tables A2 – A5). Further, when a set of dummy variables was used (for example, "good news" questions have three dummy variables: good news, bad news neither), only one variable (good news in reference to bad news) is shown in the table (neither will not be shown in Table 4 but is shown in the appendix (Tables A2 – A5)). For clarity, results are shaded to demonstrate whose intentions were stronger predictors of each outcome – male or female partners'.

The first column shows models in which lagged pregnancy was the outcome; thus, intentions were measured in a particular wave and the outcome (pregnancy) was either measured at the next wave, 4 months later, or twelve months later (three waves), depending on the model. All male and female intentions, regardless of construct, were positive and significant predictors of pregnancy and in the expected directions. In addition, across all measures, male and female intentions were significantly different from each other. When measured by general intentions, female intentions were the dominant predictors. For both a/nother and timing, female intentions were significantly stronger at predicting pregnancy than measures of male intentions. However, male intentions were stronger when measured by the good news (month) variable. Female partners who said it would be good news to find out they were pregnant next month were 60 percent more likely to become pregnant than females who responded that it would be bad news; however, males who said it would be good news were 94 percent more likely to find out their partner was pregnant compared to males who said it would be bad news.

When measured by partner-specific intentions the findings were mixed. When asked if finding out that they were pregnant today by their partner would be good or bad news, male intentions were stronger predictors of subsequent pregnancy. However, the opposite was true of

being asked if they wanted a child with their current partner in general, in that case female intentions were stronger predictors than male intentions. Finally, female intentions were stronger predictors of pregnancy than male intentions when measured by expectations; however, the difference between the odds ratios was not large. Overall, both male and female intentions were strong predictors of pregnancy, and it appears that both male and female partners had significant influence in the decision-making processes regarding pregnancy.

When predicting whether or not couples were having sex weekly (Column 2), male intentions were the dominant predictors. Aside from two measurements for men (wanting a/nother child and wanting a child with this partner) all intentions were positive and significant predictors of sexual frequency. By any measure, female intentions were not significantly associated with sexual frequency.

The same was not true for consistent condom use, both male and female intentions were strongly related to this outcome. With respect to general intentions, male intentions were stronger predictors when measured by a/nother and timing while the female intentions were stronger when measured by good news (month). The findings were mixed when measured by partner-specific intentions. When measured by good news (today), female intentions were stronger predictors (although the odds ratios for male and female intentions were quite similar), while male intentions were stronger predictors when measured by wanting a child with this partner. Finally, female intentions were the stronger predictor of consistent condom use when measured by expectations.

Female intentions expressed their dominance when predicting hormonal contraception use. With the exception of a(nother) and wanting a child with this partner (which were not significant predictors for either males or females), women's intentions were strong and

significant predictors of modern contraception use. Female intentions were consistently stronger predictors, often with very pronounced differences from male intentions. For example, across couple-waves, women who said it would be good news to find out they were pregnant next year were 70 percent less likely to be using hormonal contraception when compared to those who said it would be bad news, while men who responded it would be good news were only 30 percent less likely to report that their partner was using modern contraception.

**Table 4. Odds Ratios for Male and Female Partner Pregnancy Intentions Predicting Multiple Fertility-Related Outcomes**

| | Pregnancy[a] | | | Frequency of Sex | | | Consistent Condom Use | | | Hor. Contraception Use | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Female | Male | Wald[c] | Female | Male | Wald[c] | Female | Male | Wald[c] | Female | Male | Wald[c] |
| **Intentions – General[b]** | | | | | | | | | | | | |
| A/Another | 2.32* | 1.76ŧ | ** | 0.92 | 1.21 | -- | 0.88 | 0.55* | * | 1.23 | 1.16 | -- |
| Timing (< 1 year) | 3.13** | 1.82ŧ | *** | 1.32 | 1.82* | * | 0.40* | 0.35** | ** | 0.10*** | 0.42** | *** |
| Good News (month) | 1.60** | 1.94*** | *** | 1.16 | 1.55*** | *** | 0.56** | 0.62** | *** | 0.30*** | 0.71** | *** |
| **Partner-specific[b]** | | | | | | | | | | | | |
| Good News (today) | 1.74*** | 2.13*** | *** | 1.08 | 1.43** | ** | 0.52*** | 0.53*** | *** | 0.30*** | 0.68*** | *** |
| With this Partner | 2.10* | 1.90* | ** | 1.14 | 0.99 | -- | 0.72 | 0.68ŧ | ŧ | 1.21 | 1.20 | -- |
| **Expectations[b]** | | | | | | | | | | | | |
| Number of Beans | 1.06** | 1.05* | *** | 1.00 | 1.04* | ŧ | 0.95* | 0.97 | ŧ | 0.91*** | 0.94*** | *** |
| N | | 3,730 | | | 3,730 | | | 3,730 | | | 3,730 | |

*** p<.001 **p<.01 *p<.05 ŧ<.1

Lighter shades indicate female intentions were stronger predictors

Darker shades indicate male intentions were stronger predictors

All models control for marital status, parity, education, age, number of sexual partners, timing of last child, and relationship length for both men and women, female SES and religion, and the wave of survey

a. Models predicting pregnancy also control for hormonal contraception use

b. Each row (within each outcome) is a separate model

c. Wald tests indicate whether male and female intentions are significantly different from each other ("--" means they are not significantly different)

With regard to the control variables, across models, marital status had a significant influence on all fertility related behaviors (see appendix Tables A2 – A5). The most notable is that in several models those who were married were significantly less likely to become pregnant across couple-waves than those who were not married. This is the opposite of what would be expected, especially noting that childbearing in Malawi almost exclusively happens within marriage (Grant and Yeatman 2014). However, it is likely that youth in this sample are transitioning into their first marriage and first pregnancy. As noted by others, while non-marital childbearing is uncommon in Malawi, this does not always hold for non-marital pregnancy. Instead, many couples make the transition into marriage a short time after they experience their first pregnancy (Ministry of Education 2002). Of couples who became pregnant while not being married, 64 percent were married by the next wave (four months). It seems that, in many cases, couples were married within four months after the woman became pregnant. For all other variables, marital status was in the expected directions: married couples were much more likely to have sex at least once a week, use contraception, and not use condoms consistently (Tavory and Swidler 2009, NSO Malawi and ORC Macro 2011).

In regard to other controls, relationships are in the expected directions. In terms of pregnancy, women with higher SES were significantly less likely to get pregnant, as would be expected (Palamuleni 2011). Further, women who had had a child within one year were significantly less likely to become pregnant across most models, as expected (Guzzo and Hayford 2011). A similar relationship is shown for contraception use – those using hormonal contraception were significantly less likely to become pregnant. However, it is clear that women's intentions have a significant effect on pregnancy independent of hormonal

contraception use as hormonal contraception use is included in the models and female intentions are still large and significantly associated with pregnancy.

Different variables significantly influence sexual frequency, consistent condom use, and contraception. Those who had had a child less than a year ago were significantly less likely to have weekly sex, while females with more than one sexual partner were significantly more likely to have sex at least once a week with their index partner. Also, religion was only a significant predictor for sexual frequency (not for pregnancy, condom use, or hormonal contraception use). Compared to Muslims, Protestants or those belonging to another religion (or no religion at all), were more likely to have sex at least once a week. Further, education was negatively associated with consistent condom use for men. Finally, women who had more children, were more educated, had had a child within the past year, had additional sexual partners, and were in relationships with men who had additional sexual partners were more likely to use hormonal contraception, while women who were older were less likely to use contraception.

***Sensitivity Tests/Robustness Checks***

Measures were estimated in several ways to test the robustness of the findings (findings not shown but are available upon request). First, I chose to dichotomize all four dependent variables for simplification and clarity. In addition to this, I tested both condom use and sexual frequency using other possible cutoffs. Condom use was coded 1 if respondents used condoms only once during their three most recent sexual encounters, two out of the three times, and all three times (the latter was shown in the results). No matter how condom use was measured, the substantive results remained the same. Across all constructs, the results were mixed in terms of whether female or male intentions were stronger. Sexual frequency was coded as 1 when couples had had sex at all, sex once a month, more than once a week, etc. When the frequency of sex was

less (i.e., just had sex once) female intentions became more dominant than male intentions. However, when the threshold was increased to more than monthly, male intentions prevailed (as shown in Table 4). In addition to expectations being treated as a continuous variable, it was also constructed as a dichotomous variable (0 to 4 beans coded as unlikely, 5 to 10 beans coded as likely), and the cut offs for the dichotomous variable were changed (i.e., using 4 to 10 as likely). Each conceptualization resulted in similar findings to those presented.

Second, both male and female respondents reported condom use, contraception use, and sexual frequency. In the findings above, I utilized female responses, and excluded male reports. Male reports have been shown to both over-estimate and under-estimate several fertility-related behaviors (Watkins et al. 1997). Further, not all men know about their partner's contraception use and, therefore, may introduce more bias into the results (Miller, Watkins, and Zulu 2001). However, I estimated my models using male reports of these behaviors and found that my results were mostly robust to this adaptation. However, two distinctions were revealed. Fist, when estimated using male reports, all measures of intentions were significant and significantly different from each other when predicting sexual frequency and condom use. Second, across all constructs, when condom use was measured by male reports, male intentions dominated. This finding supports the view that sexual frequency and consistent condom use are determined to a greater extent by male's fertility intentions than female's. The findings for contraception remained as shown in Table 4.

Third, perceptions about the risk of an individual becoming infected with HIV/AIDS has been noted as an important influence on fertility intentions (Trinitapoli and Yeatman 2011). Because of this, I estimated my models using individuals' expectations about contracting HIV in

the next year, using both female and male expectations as controls. This had no substantive bearing on my conclusions and these variables were never statistically significant.

Fourth, I included sexual frequency as a control when estimating models predicting consistent condom use. I used both whether or not couples were having sex once a week or more and whether or not they were having sex at all. Neither changed my substantive findings or were predictive of condom use on their own.

Fifth, I estimated several models testing different hypotheses. According to bargaining theory, the partner who is the least dependent on the relationship for his/her own personal goals will have the greatest bargaining power (Homans 1958). In accordance with this theory, I ran models interacting individuals' characteristics such as SES, education, age, parity, and marital status, with fertility intentions (for both men and women) to see if this could explain variation in fertility-related behaviors. However, no clear patterns were discerned. I did this same process (examining interactions with intentions) with couple-level characteristics such as differences in age, SES, education, or parity between partners. While certain interactions were significant in certain models, there were no clear patterns to make a strong case for this argument. Next, I looked at disagreement between partners in their fertility intentions (see Tables A6 and A7). Instead of including male and female intentions separately in each model, I included variables measuring if both partners wanted a child, if they both did not, if only he did, and if only she did. I found that, for sexual frequency, condom use (see Table A6), and pregnancy, disagreements were not generally statistically significant. However, for contraception use (see Table A7), women's intentions, even in the presence of disagreement with her male partner, were consistently stronger predictors.

Sixth, I clustered the analyses on distinct females across couple-waves instead of distinct couples, as female respondents could be in the sample more than once (similarly to couples). However, no differences were found when changing the clustering procedure.

Finally, to thoroughly estimate the relative influence of male and female intentions on these outcomes, I ran tests for model fit by running models including only the female intention, only the male intention, and both the female and male intentions for each measurement of intentions and each outcome. I observed which model produced a better fit to determine which intentions were "better" estimators – males', females', or both. I used two measures of model fit – pseudo r-squared and the log-likelihood. Because my dataset was created using multiple imputation, I obtained these values for each of the 25 iterations for each model. I then averaged those values to give me the overall best estimator of model fit. While there is no reason to not utilize Wald tests on a logistic model, they do not necessarily indicate which coefficient is "stronger." Instead, they indicate whether two variables are significantly different from each other. I used model fit to validate such language (see Tables A8 and A9).

Table A8 (see appendix) shows the results from estimating model fit by pseudo r-squared. According to this estimation, when measured by general intentions, male intentions were usually the better fit for predicting pregnancy. In other words, if a model only included male intentions, it had a higher pseudo r-squared than a model that only included female intentions. However, when general intentions were measured by a/nother, female intentions were better in terms of model fit. When measured by partner-specific intentions, this estimation fit with Table 4 with male intentions being better predictors when measured by good news (today) and female intentions being stronger predictors when measured by with this partner. However, when intentions were measured as expectations, male intentions were better predictors. Overall,

when both male and female intentions were included in the model, the pseudo r-squared was higher, indicating a better model fit.

Still looking at Table A8, a similar story is told when predicting weekly sex – male intentions seem to dominate. However, there is more equality, meaning that neither male nor female intentions were stronger but both were equal, in terms of model fit. Female and male intentions had equal fit when intentions were measured by timing, a/nother child, or wanting to have a child with that particular partner ("with that partner"). And across these three constructs, model fit did not improve when both intentions were included. When consistent condom use was the dependent variable, general intentions were still mixed, similarly to in Table 4; however, partner-specific intentions estimated equality of model fit. When measured by expectations, male intentions provided a better fit than female intentions. Finally, contraception use was still dominated by female intentions. Female intentions always provided a higher pseudo r-squared except when measured by with this partner; then, male and female intentions were equal in terms of r-squared.

Table A9 (see appendix) shows the results from estimating each model's log-likelihood. When predicting pregnancy, male intentions more often provided the better fit with the exception of a/nother and with this partner. The same is true for predicting weekly sex, male intentions usually were the better fit, but when measured by with this partner, female intentions were. Condom use was mixed yet again; male intentions provided the better fit (a larger log-likelihood) when measured by a/nother, timing, and good news (today). However, when measured by good news (month) or expectations, female intentions were stronger predictors. And when predicting contraception use, female intentions were the better fit unless intentions were measured by

a/nother, then male intentions provided the better fit. Across almost all constructs and dependent variables, including both male and female intentions resulted in a better model fit.

Despite these differences, these tables provide support for the substantive conclusions of this paper – that construct is an important element when measuring gendered intentions and that fertility-behaviors have gendered domains. No matter how results were modeled, male intentions were stronger predictors of sexual frequency and female intentions were stronger predictors of hormonal contraception use. However, when predicting consistent condom use or pregnancy, results were highly dependent on which aspect of intentions was being measured.

## LIMITATIONS

This study has several limitations. First, as with all survey work, selection is problematic. The only partnerships included are those in which both partners were interviewed. This systematically excludes partnerships in which they did not have time or did not feel comfortable being interviewed. Further, it is likely that female partners would be more successful in recruiting more committed, long-term male partners. This type of selection could overestimate the influence male partners have in fertility-making decisions. More serious partners are likely to have a stronger influence; therefore, excluding less serious partners could exaggerate findings of male influence in fertility decision-making.

Next, my constructed groups of fertility intentions (general intentions, partner-specific intentions, and expectations) are not without flaw. I lack information on important aspects of fertility intentions including the expectations of each individual's social group (Ajzen 2013) or the strength of their desire (Prestwich et al. 2008). Additionally, because most of the women in my sample only had one partner, distinctions between partner-specific and general intentions are ambiguous. For instance, it is not possible to decipher whether the different results observed between the general and partner-specific intentions are due to the partner-specific nature of the questions or the specified timing. One of the questions conceptualized as a general intention ("If you found out you were pregnant next month, would that news be?") was highly similar to a question conceptualized as a partner-specific intention ("If you found out today that you were pregnant by [your partner] would that news be?"). There are two differences in this question that are important: only one asks about a specific partner and they ask about different time periods. While this does not influence my substantive findings, it does influence my interpretation of them. This ambiguity makes it so I cannot claim strong conclusions about what the difference

between these two measures really expresses. Future research using data sets collected in settings where individuals engage in multiple sequential or concurrent partnerships would be able to assess the benefits of focusing on partner-specific intentions in comparison to general intentions.

## DISCUSSION and CONCLUSIONS

Despite these limitations, this study provides valuable contributions. Such a detailed analysis of fertility intentions and their impact on fertility-related outcomes has not been carried out before. This study contributes several findings to the current literature: (1) the measurement of intentions should be considered an important element when making conclusions about fertility intentions as well as couple-level decision-making. (2) Certain dependent variables are unequivocally influenced by one partner's intentions, regardless of measurement, in this context. Contraception use was predominately affected by female intentions, regardless of how measured, while men's intentions were consistently better predictors than women's for sexual frequency. (3) Pregnancy and consistent condom use are especially sensitive to the construct of intentions. Whether female or male intentions were the stronger predictor was highly dependent on construct for these two outcomes.

Most research in sub-Saharan Africa has found that male preferences dominate or that male and female partner preferences are equal in predicting fertility-related behaviors and pregnancy (Ezeh 1993; Dodoo 1998; Wolff et al. 2000; DeRose, Dodoo and Patil 2002; DeRose and Ezeh 2005; Machiyama et al. 2015). However, I found that female intentions were the stronger predictors when measured by similar measures (the general intentions a/nother and timing). There are several differences that could explain my findings in contrast to others. First, this sample was a much younger sample. For example, Machiyama et al. (2015) used a sample of Malawian men and women aged 15-49 years old, while the current study targeted young adults (ages 15-25). Therefore, it could be that younger women have more of a say in family planning and fertility and are more able to realize their intentions than is captured when sampling all women of reproductive age. Second, this study utilized pregnancy tests every four months, while

many others examined reported live births. So, it could be that this study captured all pregnancies while others had captured all surviving pregnancies. From this view, women have more influence over pregnancy, and, perhaps, men have influence in ensuring a healthy pregnancy and childbirth. Third, I included any couple in the sample willing to be interviewed, including concurrent and non-marital/non-cohabitating partnerships. It could be the case that non-marital or non-resident male partners exert less of an influence than married or cohabiting male partners. However, I estimated models testing this explanation (interacting marriage and fertility intentions as well as dropping non-marital couples) and found no significant differences between married/cohabiting partners and non-marital, non-cohabiting partners (results available upon request). Finally, other studies using fertility intentions to predict pregnancy in Malawi have focused on Northern Malawi while this study focuses on Southern Malawi (Balaka District). Northern Malawi is patriarchal while Southern Malawi is matriarchal, meaning that blood lines are followed by women's names, and women, rather than men, own land. While women in Balaka are still disadvantaged and subject to male power (Vaughan 1983), they hold *more* power than in demographically similar patriarchal societies. Testing these possible explanations is out of the scope of this study; however, this could be a fruitful direction for future research.

While my findings regarding pregnancy support qualitative work undertaken by DeRose and Ezeh (2010) who found that most decisions were made jointly rather than as dominated by males or females, my findings also support the notion that gender is a powerful dynamic with respect to fertility-related behaviors (Widerman 2005). Across constructs, women had more influence on hormonal contraception use while men had more influence over sexual frequency. It

seems that sexual frequency is a more "masculine" aspect (particularly when carried out more frequently) while contraception use is a more "feminine" domain.

Qualitative work has shown that while men often oppose family planning methods for fear of losing their power, allowing their partner to be promiscuous, and being mocked by their peers (Rutenberg and Watkins 1997, Bawah et al. 1999), both men and women in committed relationships are weary of condom use. In fact, past research has focused on the couple, rather than just men, when addressing condom use because of its strong relation to romantic relationships and because both men and women seem to have strong aversions to condom use (Tavory and Swidler 2009). The findings of this study support the notion of addressing the couple, rather than just the male partners.

These are valuable findings for policy-makers. Because of the reality of limited resources such as money and time, it is best to target the most relevant populations. While there has been a large push for the inclusion of men in policy and programming related to fertility, policy can be more specific and more effective than just including men in a blanketed fashion. This study shows the gendered domains of fertility. If a policy is related to pregnancy or condom use, the couple is likely the best target. However, when focusing on sexual frequency, it would be wise to focus limited resources on men. Or, when it comes to hormonal contraception, a focus on women would be most appropriate and efficient.

# APPENDIX

**Table A1. Correlation Matrix for Each Measurement of Intentions – Male and Female**

| | Beans (M) | Beans (F) | A/Another (M) | A/Another (F) | Timing (M) | Timing (F) | News (today) (M) | News (today) (F) | News (month) (M) | News (month) (F) | With this Partner (M) | With this Partner (F) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Beans (M) | 1.00 | | | | | | | | | | | |
| Beans (F) | 0.23 | 1.00 | | | | | | | | | | |
| A/Another (M) | 0.17 | 0.08 | 1.00 | | | | | | | | | |
| A/Another (F) | 0.10 | 0.20 | 0.33 | 1.00 | | | | | | | | |
| Timing (M) | 0.29 | 0.21 | 0.07 | 0.06 | 1.00 | | | | | | | |
| Timing (F) | 0.21 | 0.34 | 0.03 | 0.09 | 0.31 | 1.00 | | | | | | |
| News (today) (M) | 0.41 | 0.24 | 0.16 | 0.07 | 0.45 | 0.32 | 1.00 | | | | | |
| News (today) (F) | 0.26 | 0.41 | 0.05 | 0.16 | 0.32 | 0.55 | 0.39 | 1.00 | | | | |
| News (month) (M) | 0.41 | 0.24 | 0.17 | 0.07 | 0.44 | 0.31 | 0.90 | 0.37 | 1.00 | | | |
| News (month) (F) | 0.26 | 0.42 | 0.05 | 0.15 | 0.31 | 0.56 | 0.39 | 0.91 | 0.39 | 1.00 | | |
| With this Partner (M) | 0.18 | 0.09 | 0.78 | 0.30 | 0.08 | 0.04 | 0.18 | 0.06 | 0.17 | 0.06 | 1.00 | |
| With this Partner (F) | 0.09 | 0.19 | 0.28 | 0.85 | 0.06 | 0.10 | 0.07 | 0.16 | 0.08 | 0.18 | 0.28 | 1.00 |

**TABLE A2. Odds Ratios for Male and Female Partner Pregnancy Intentions Predicting Pregnancy**

| | Intentions - General | | | Intentions - Partner | | Expectations |
|---|---|---|---|---|---|---|
| | **A/Another** | **Good News (month)** | **Timing (< 1 year)** | **Good News (today)** | **With this Partner** | **Number of beans** |
| **Intentions** | | | | | | |
| Positive Intentions (male) | 1.76† | 1.94*** | 1.82† | 2.13*** | 1.90* | 1.05* |
| | (0.58) | (0.28) | (0.61) | (0.31) | (0.57) | (0.02) |
| Other category (male) | N/A | 1.25[c] | 1.64†[d] | 1.50[c] | N/A | N/A |
| | | (0.42) | (0.45) | (0.52) | | |
| Positive Intentions (female) | 2.32* | 1.60** | 3.13** | 1.74*** | 2.10* | 1.06** |
| | (0.84) | (0.27) | (1.11) | (0.30) | (0.62) | (0.02) |
| Other category (female) | N/A | 1.92[c] | 1.64**[d] | 1.57[c] | N/A | N/A |
| | | (0.54) | (0.45) | (0.40) | | |
| **Controls** | | | | | | |
| Married | 0.93 | 0.73 | 0.51*** | 0.69† | 0.89 | 0.51*** |
| | (0.20) | (0.16) | (0.10) | (0.15) | (0.19) | (0.10) |
| Parity (male) | 0.80** | 0.81* | 0.96 | 0.81* | 0.80* | 0.95 |
| | (0.07) | (0.07) | (0.09) | (0.07) | (0.07) | (0.08) |
| Parity (female) | 1.25† | 1.30* | 1.23† | 1.32* | 1.25† | 1.17 |
| | (0.14) | (0.16) | (0.15) | (0.16) | (0.14) | (0.14) |
| Education (male) | 1.00 | 1.01 | 0.99 | 1.01 | 0.99 | 0.99 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Education (female) | 0.98 | 1.0 | 0.97 | 0.98 | 0.98 | 0.97 |
| | (0.02) | (0.02) | (0.02) | (0.03) | (0.02) | (0.02) |
| SES (female) | 0.89*** | 0.89** | 0.90** | 0.89** | 0.89*** | 0.91* |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Age (male) | 1.04* | 1.03 | 1.02 | 1.03 | 1.04* | 1.02 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Age (female) | 0.96 | 0.94† | 0.96 | 0.94† | 0.96 | 0.95† |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Had a child < a year[a] | 0.34*** | 0.51*** | 0.95 | 0.55** | 0.34*** | 0.97 |
| | (0.06) | (0.10) | (0.16) | (0.11) | (0.06) | (0.16) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Had a child > than a year[a] | 0.99 | 1.32 | 2.39 | 1.36 | 1.0 | 2.38 |
| | (0.36) | (0.49) | (1.3) | (0.05) | (0.36) | (1.30) |
| Using contraception | 0.35*** | 0.44*** | 0.92 | 0.45*** | 0.35*** | 0.96 |
| | (0.05) | (0.07) | (0.13) | (0.07) | (0.05) | (0.13) |
| # of partners (male) | 1.27† | 1.17 | 1.26 | 1.20 | 1.29† | 1.23 |
| | (0.17) | (0.16) | (0.22) | (0.16) | (0.17) | (0.21) |
| # of partners (female) | 1.34 | 1.22 | 1.31 | 1.13 | 1.28 | 1.25 |
| | (0.30) | (0.27) | (0.37) | (0.26) | (0.29) | (0.35) |
| Relationship length | 1.00 | 0.99 | 1.00 | 1.00 | 1.00 | 0.99 |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Catholic[b] | 0.80 | 0.81 | 0.85 | 0.80 | 0.80 | 0.87 |
| | (0.14) | (0.14) | (0.13) | (0.14) | (0.14) | (0.13) |
| Protestant[b] | 0.90 | 0.89 | 0.99 | 0.90 | 0.91 | 0.98 |
| | (0.14) | (0.14) | (0.14) | (0.15) | (0.14) | (0.14) |
| Other[b] | 0.80 | 0.81 | 0.84 | 0.82 | 0.80 | 0.81 |
| | (0.21) | (0.22) | (0.22) | (0.22) | (0.21) | (0.21) |
| Wave | 1.06† | 1.05 | 1.02 | 1.05 | 1.06† | 1.00 |
| | (0.03) | (0.03) | (0.04) | (0.69) | (0.03) | (0.04) |
| N | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 |

*** p<.001 ** p<.01 * p<.05

(Robust standard errors)

a. Reference group: didn't have a child
b. Reference group: Muslim
c. More than a year (reference: don't want children)
d. Neither good nor bad (reference: bad news)

**TABLE A3. Odds Ratios for Male and Female Partner Pregnancy Intentions Predicting Sexual Frequency**

| | Intentions - General | | | Intentions - Partner | | Expectations |
|---|---|---|---|---|---|---|
| | **Timing (< 1 year)** | **Good news (month)** | **A/Another** | **Good news (today)** | **With this partner** | **Number of beans** |
| **Intentions** | | | | | | |
| Positive intentions (male) | 1.82* | 1.55*** | 1.21 | 1.43** | 0.99 | 1.04* |
| | (0.45) | (0.18) | (0.20) | (0.17) | (0.19) | (0.02) |
| Other category (male) | 1.24[c] | 1.01[d] | N/A | 0.97[d] | N/A | N/A |
| | (0.20) | (0.23) | | (0.22) | | |
| Positive intentions (female) | 1.32 | 1.16 | 0.92 | 1.08 | 1.14 | 1.00 |
| | (0.38) | (0.16) | (0.16) | (0.15) | (0.19) | (0.02) |
| Other category (female) | 0.86[c] | 1.37[d] | N/A | 1.27[d] | N/A | N/A |
| | (0.14) | (0.36) | | (0.27) | | |
| **Controls** | | | | | | |
| Married | 20.99*** | 21.37*** | 22.33*** | 21.59*** | 22.51*** | 22.33*** |
| | (4.49) | (4.54) | (4.73) | (4.60) | (4.80) | (4.73) |
| Parity (male) | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.97 |
| | (0.07) | (0.06) | (0.06) | (0.06) | (0.07) | (0.06) |
| Parity (female) | 1.15† | 1.15† | 1.10 | 1.13 | 1.09 | 1.10 |
| | (0.09) | (0.09) | (0.09) | (0.09) | (0.09) | (0.09) |
| Education (female) | 1.01 | 1.01 | 1.01 | 1.01 | 1.02 | 1.01 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Education (male) | 1.02 | 1.02 | 1.02 | 1.02 | 1.00 | 1.02 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.2) |
| SES (female) | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Age (male) | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Age (female) | 1.00 | 1.00 | 1.01 | 1.00 | 1.02 | 1.01 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Had a child < a year[a] | 0.51*** | 0.56*** | 0.48*** | 0.53*** | 0.46*** | 0.48*** |
| | (0.06) | (0.07) | (0.06) | (0.07) | (0.05) | (0.06) |
| Had a child > than a year[a] | 1.20 | 1.27 | 1.13 | 1.22 | 1.10 | 1.13 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | (0.32) | (0.34) | (0.30) | (0.32) | (0.29) | (0.30) |
| # of partners (male) | 1.11 | 1.10 | 1.13 | 1.12 | 1.14 | 1.13 |
| | (0.14) | (1.14) | (0.14) | (0.14) | (0.14) | (0.14) |
| # of partners (female) | 22.05*** | 22.41*** | 22.36*** | 22.10*** | 22.16*** | 22.36*** |
| | (6.28) | (6.34) | (6.37) | (6.28) | (6.29) | (6.37) |
| Relationship length | 0.99 | 1.00 | 1.00 | 0.99 | 1.00 | 0.99 |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Catholic[b] | 1.07 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 |
| | (0.14) | (0.14) | (0.14) | (0.14) | (0.14) | (0.14) |
| Protestant[b] | 1.34* | 1.35* | 1.34* | 1.35* | 1.34* | 1.34* |
| | (0.17) | (0.17) | (0.17) | (0.17) | (0.17) | (0.17) |
| Other[b] | 2.02*** | 2.00*** | 1.98*** | 2.00*** | 2.00*** | 2.00*** |
| | (0.38) | (0.38) | (0.37) | (0.38) | (0.37) | (0.37) |
| Wave | 1.11*** | 1.11*** | 1.11*** | 1.12*** | 1.12*** | 1.11*** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| N | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 |

*** p<.001 ** p<.01 * p<.05
(Robust standard errors)

a. Reference group: didn't have a child
b. Reference group: Muslim
c. More than a year (reference: don't want children)
d. Neither good nor bad (reference: bad news)

**TABLE A4. Odds Ratios for Male and Female Partner Pregnancy Intentions Predicting Condom Use**

| | Intentions - General | | | Intentions - Partner | | Expectations |
|---|---|---|---|---|---|---|
| | **Timing (< 1 year)** | **Good news (month)** | **A/Another** | **Good news (today)** | **With this partner** | **Number of beans** |
| **Intentions** | | | | | | |
| Positive Intentions (male) | 0.35** | 0.62** | 0.55* | 0.53*** | 0.68† | 0.97 |
| | (0.14) | (0.09) | (0.13) | (0.09) | (0.14) | (0.02) |
| Other category (male) | 0.51**[c] | 0.96[d] | N/A | 0.88[d] | N/A | N/A |
| | (0.13) | (0.27) | | (0.24) | | |
| Positive Intentions (female) | 0.40* | 0.56** | 0.88 | 0.52*** | 0.72 | 0.95* |
| | (0.15) | (0.11) | (0.23) | (0.10) | (0.16) | (0.02) |
| Other Category (female) | 0.93[c] | 0.72[d] | N/A | 0.63[d] | N/A | N/A |
| | (0.25) | (0.23) | | (0.19) | | |
| **Controls** | | | | | | |
| Married | 0.14*** | 0.14*** | 0.13*** | 0.15*** | 0.13*** | 0.13*** |
| | (0.03) | (0.03) | (0.02) | (0.03) | (0.03) | (0.03) |
| Parity (male) | 0.83* | 0.83† | 0.85† | 0.83† | 0.86† | 0.86 |
| | (0.08) | (0.08) | (0.08) | (0.08) | (0.08) | (0.08) |
| Parity (female) | 0.86 | 0.88 | 0.93 | 0.87 | 0.92 | 0.93 |
| | (0.11) | (0.11) | (0.12) | (0.11) | (0.12) | (0.12) |
| Education (female) | 1.02 | 1.01 | 1.02 | 1.01 | 1.02 | 1.02 |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Education (male) | 0.95* | 0.95* | 0.95* | 0.95* | 0.95† | 0.95† |
| | (0.02) | (0.02) | (0.22) | (0.02) | (0.22) | (0.02) |
| SES (female) | 0.98 | 0.97 | 0.98 | 0.97 | 0.98 | 0.97 |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Age (male) | 1.00 | 1.01 | 1.00 | 1.01 | 1.00 | 1.00 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Age (female) | 1.06† | 1.07† | 1.04 | 1.07* | 1.04 | 1.06 |
| | (0.04) | (0.04) | (0.03) | (0.04) | (0.03) | (0.04) |
| Had a child < a year[a] | 0.74† | 0.64* | 0.86 | 0.60** | 0.86 | 0.79 |
| | (0.13) | (0.12) | (0.14) | (0.11) | (0.14) | (0.14) |
| Had a child > than a year[a] | 0.54 | 0.49† | 0.64 | 0.46† | 0.62 | 0.58 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | (0.22) | (0.20) | (0.26) | (0.19) | (0.25) | (0.23) |
| # of partners (male) | 0.85 | 0.86 | 0.82 | 0.85 | 0.81 | 0.84 |
| | (0.12) | (0.12) | (0.11) | (0.12) | (0.11) | (0.12) |
| # of partners (female) | 0.97 | 0.99 | 0.94 | 1.05 | 0.97 | 0.98 |
| | (0.21) | (0.22) | (0.20) | (0.23) | (0.21) | (0.21) |
| Relationship length | 0.99 | 1.00 | 0.99 | 0.99 | 1.00 | 1.00 |
| | (0.00) | (0.01) | (0.00) | (0.01) | (0.00) | (0.01) |
| Catholic[b] | 0.92 | 0.92 | 0.93 | 0.91 | 0.93 | 0.90 |
| | (0.17) | (0.17) | (0.17) | (0.17) | (0.17) | (0.17) |
| Protestant[b] | 0.88 | 0.90 | 0.89 | 0.89 | 0.89 | 0.90 |
| | (0.16) | (0.16) | (0.16) | (0.16) | (0.16) | (0.16) |
| Other[b] | 1.24 | 1.26 | 1.30 | 1.25 | 1.29 | 1.29 |
| | (0.34) | (0.35) | (0.36) | (0.03) | (0.36) | (0.36) |
| Wave | 1.01 | 1.02 | 1.01 | 1.02 | 1.01 | 1.03 |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| N | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 |

*** p<.001 ** p<.01 * p<.05
(Robust standard errors)

a. Reference group: didn't have a child
b. Reference group: Muslim
c. More than a year (reference: don't want children)
d. Neither good nor bad (reference: bad news)

**TABLE A5. Odds Ratios for Male and Female Partner Pregnancy Intentions Predicting Contraception Use**

| | Intentions - General | | | Intentions - Partner | | Expectations |
|---|---|---|---|---|---|---|
| | **Timing (< 1 year)** | **Good news (month)** | **A/Another** | **Good news (today)** | **With this partner** | **Number of beans** |
| **Intentions** | | | | | | |
| Positive Intentions (male) | 0.42** | 0.71** | 1.16 | 0.68** | 1.20 | 0.94*** |
| | (0.12) | (0.09) | (0.22) | (0.08) | (0.22) | (0.02) |
| Other category (male) | 1.32 | 0.61*[d] | N/A | 0.70[d] | N/A | N/A |
| | (0.27) | (0.14) | | (0.16) | | |
| Positive Intentions (female) | 0.10*** | 0.30*** | 1.23 | 0.30*** | 1.21 | 0.91*** |
| | (0.04) | (0.04) | (0.24) | (0.04) | (0.21) | (0.02) |
| Other category (female) | 1.42†[c] | 0.53**[d] | N/A | 0.58**[d] | N/A | N/A |
| | (0.27) | (0.12) | | (0.12) | | |
| **Controls** | | | | | | |
| Married | 6.08*** | 6.97*** | 4.58*** | 7.00*** | 4.50*** | 5.89*** |
| | (1.39) | (1.63) | (1.03) | (1.64) | (1.02) | (1.35) |
| Parity (male) | 1.09 | 1.08 | 1.14 | 1.08 | 1.14 | 1.08 |
| | (0.09) | (0.10) | (0.10) | (0.95) | (0.10) | (0.10) |
| Parity (female) | 1.87*** | 1.85*** | 2.13*** | 1.84*** | 2.13*** | 2.00*** |
| | (0.21) | (0.20) | (0.24) | (0.20) | (0.24) | (0.22) |
| Education (female) | 1.08** | 1.08** | 1.10*** | 1.08** | 1.10 | 1.08*** |
| | (0.27) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Education (male) | 1.03 | 1.01 | 1.03 | 1.02 | 1.02 | 1.02 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| SES (female) | 0.98 | 0.99 | 0.99 | 0.98 | 1.00 | 0.98 |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Age (male) | 0.99 | 0.99 | 0.99 | 0.99 | 0.98 | 0.99 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.03) |
| Age (female) | 0.88*** | 0.88*** | 0.86*** | 0.88*** | 0.86*** | 0.86*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Had a child < a year[a] | 1.10 | 0.87 | 1.56*** | 0.85 | 1.56*** | 1.18 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | (0.15) | (0.13) | (0.21) | (0.13) | (0.21) | (0.17) |
| Had a child > than a year[a] | 4.12*** | 3.73*** | 5.80*** | 3.76*** | 5.81*** | 4.61*** |
| | (1.12) | (1.00) | (1.55) | (1.00) | (1.55) | (1.22) |
| # of partners (male) | 1.38** | 1.39** | 1.31* | 1.35** | 1.31* | 1.38** |
| | (0.16) | (0.15) | (0.15) | (0.15) | (0.15) | (1.56) |
| # of partners (female) | 3.15*** | 2.98*** | 2.75*** | 3.10*** | 2.72*** | 2.96*** |
| | (0.54) | (0.51) | (0.48) | (0.54) | (0.47) | (0.51) |
| Relationship length | 1.00 | 0.99 | 0.99 | 1.00 | 0.99 | 0.99 |
| | (0.01) | (0.00) | (0.01) | (0.01) | (0.01) | (0.00) |
| Catholic[b] | 1.15 | 1.19 | 1.14 | 1.17 | 1.13 | 1.14 |
| | (0.19) | (0.19) | (0.19) | (0.19) | (0.19) | (0.19) |
| Protestant[b] | 1.24 | 1.25 | 1.23 | 1.24 | 1.23 | 1.21 |
| | (0.19) | (0.19) | (0.19) | (0.19) | (0.19) | (0.18) |
| Other[b] | 0.87 | 0.84 | 0.93 | 0.83 | 0.93 | 0.88 |
| | (0.21) | (0.22) | (0.24) | (0.21) | (0.23) | (0.23) |
| Wave | 0.96† | 0.95 | 0.94* | 0.95* | 0.94* | 0.96 |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| N | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 |

*** p<.001 ** p<.01 * p<.05
(Robust standard errors)

a. Within the last three years
b. Reference group: Muslim
c. More than a year (reference: don't want children)
d. Neither good nor bad (reference: bad news)

**TABLE A6. Odds Ratios for Male and Female Partner Pregnancy Intentions Predicting Condom Use: Disagreement**

| | Intentions - General | | | Intentions - Partner | | Expectations |
|---|---|---|---|---|---|---|
| | **Timing (< 1 year)** | **Good news (month)** | **A/Another** | **Good news (today)** | **With this partner** | **Number of beans** |
| **Intentions** | | | | | | |
| Agreed Positive Intentions | 0.92 | 1.51* | 0.99 | 1.77*** | 0.71* | 0.75 |
| | (0.36) | (0.25) | (0.26) | (0.31) | (0.12) | (0.15) |
| Agreed Negative Intentions | 1.99** | 0.57* | 2.21† | 0.56* | 1.34 | 1.12 |
| | (0.47) | (0.13) | (0.92) | (0.13) | (0.35) | (0.18) |
| Female wants, but male does not | 0.93 | 0.89 | 1.64 | 0.93 | 1.101 | 0.88 |
| | (0.31) | (0.24) | (0.63) | (0.24) | (0.25) | (0.17) |
| N | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 |

*** p<.001 ** p<.01 * p<.05

(Robust standard errors)

All models control for marital status, parity, education, age, number of sexual partners, timing of last child, and relationship length for both men and women, female SES and religion, and the wave of survey

**TABLE A7. Odds Ratios for Male and Female Partner Pregnancy Intentions Predicting Contraception Use: Disagreement**

| | Intentions - General | | | Intentions - Partner | | Expectations |
|---|---|---|---|---|---|---|
| | **Timing (< 1 year)[a]** | **Good news (month)** | **A/Another** | **Good news (today)** | **With this partner** | **Number of beans** |
| **Intentions** | | | | | | |
| Agreed Positive Intentions | 0.10*** | 1.16 | 1.15 | 1.15 | 1.24 | 0.47*** |
| | (0.06) | (0.5) | (0.26) | (0.16) | (0.24) | (0.06) |
| Agreed Negative Intentions | 3.18*** | 0.23*** | 0.75 | 0.22*** | 0.80 | 1.16 |
| | (0.69) | (0.04) | (0.25) | (0.04) | (0.26) | (0.13) |
| Female wants, but male does not | 0.22*** | 0.695** | 1.06 | 0.58** | 1.07 | 0.87 |
| | (0.08) | (0.162) | (0.1) | (0.10) | (0.27) | (0.12) |
| N | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 | 3,730 |

*** p<.001 ** p<.01 * p<.05

(Robust standard errors)

All models control for marital status, parity, education, age, number of sexual partners, timing of last child, and relationship length for both men and women, female SES and religion, and the wave of survey

a. This model is based on 11 iterations, rather than 25, because in certain iterations agreement perfectly predicted contraception use

**Table A8. Psuedo R2 across Different Models**

| | Pregnancy | | | Frequency of Sex | | | Consistent Condom Use | | | Hormonal Contraception Use | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Only Female | Only Male | Both Included | Only Female | Only Male | Both Included | Only Female | Only Male | Both Included | Only Female | Only Male | Both included |
| **Intentions - General** | | | | | | | | | | | | |
| A/Another | 0.080 | 0.078 | 0.083 | **0.305** | **0.305** | 0.305 | 0.140 | 0.143 | 0.144 | 0.154 | 0.153 | 0.154 |
| Timing (< 1 year) | 0.082 | 0.086 | 0.091 | **0.306** | **0.306** | 0.306 | 0.146 | 0.147 | 0.151 | 0.194 | 0.170 | 0.203 |
| Good News (month) | 0.085 | 0.090 | 0.096 | 0.306 | 0.309 | 0.310 | 0.149 | 0.148 | 0.154 | 0.186 | 0.164 | 0.189 |
| **Partner-specific** | | | | | | | | | | | | |
| Good News (today) | 0.087 | 0.095 | 0.101 | 0.305 | 0.307 | 0.308 | **0.152** | **0.152** | 0.159 | 0.186 | 0.165 | 0.190 |
| With this Partner | 0.080 | 0.078 | 0.083 | **0.305** | **0.305** | 0.305 | **0.142** | **0.142** | 0.143 | **0.154** | **0.154** | 0.154 |
| **Expectations** | | | | | | | | | | | | |
| Number of Beans | 0.082 | 0.089 | 0.095 | 0.305 | 0.306 | 0.306 | 0.413 | 0.141 | 0.144 | 0.165 | 0.159 | 0.168 |
| N | 3,730 | | | 3,730 | | | 3,730 | | | 3,730 | | |

Lighter shades indicate female intentions were a better fit
Darker shades indicate male intentions were a better fit
**Bolded values indicate male and female intentions were an equal fit**

**Table A9. Log-likelihood across Different Models**

| | Pregnancy | | | Frequency of Sex | | | Consistent Condom Use | | | Hormonal Contraception Use | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Only Female | Only Male | Both Included | Only Female | Only Male | Both Included | Only Female | Only Male | Both Included | Only Female | Only Male | Both included |
| **Intentions - General** | | | | | | | | | | | | |
| A/Another | **-1324** | **-1324** | -1318 | -1714 | -1710 | -1709 | -1679 | -1671 | -1670 | -2123 | -2119 | -2118 |
| Timing | -1323 | -1317 | -1310 | -1717 | -1716 | -1713 | -1671 | -1669 | -1661 | -2027 | -2089 | -2004 |
| Good News (m) | -1319 | -1311 | -1302 | -1716 | -1708 | -1706 | -1665 | -1666 | -1655 | -2047 | -2101 | -2037 |
| **Partner-specific** | | | | | | | | | | | | |
| Good News (t) | -1316 | -1304 | -1293 | -1716 | -1711 | -1709 | -1659 | -1657 | -1644 | -2044 | -2098 | -2033 |
| With this Partner | -1327 | -1328 | -1322 | -1719 | -1720 | -1718 | **-1677** | **-1677** | -1673 | **-2127** | **-2127** | -2125 |
| **Expectations** | | | | | | | | | | | | |
| Number of Beans | -1323 | -1314 | -1305 | -1721 | -1718 | -1718 | -1677 | -1680 | -1675 | -2101 | -2117 | -2092 |
| N | | 3,730 | | | 3,730 | | | 3,730 | | | 3,730 | |

Lighter shades indicate female intentions were a better fit

Darker shades indicate male intentions were a better fit

**Bolded values indicate male and female intentions were an equal fit**

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