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Demographic Diversity in the Measurement and Meaning of Unintended Pregnancy

by

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Dissertation

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Dedication

In fulfillment of a promise made to Margaret Anne Aiken, 25th October 1946 – 21st September 2010, who put me on this path and walks with me still.

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Demographic Diversity in the Measurement and Meaning of Unintended Pregnancy

Abigail Rosemary Anne Aiken, PhD
The University of Texas at Austin, 2014

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Unintended pregnancy is a significant public policy issue in the United States, yet current understanding of the measurement and meaning of women's pregnancy intentions is incomplete. The aim of this dissertation is to provide new theoretical insight into women's childbearing intentions and feelings about pregnancy, particularly when these two measures appear to be incongruent (*i.e.* women report feeling happy about pregnancy, but at the same time report wanting no more children). Incongruence is particularly common among Hispanic women, and current literature tends to view such women as ambivalent, assuming that they lack a clear and strong desire to avoid conception. Ambivalence, in turn, has been linked to less effective contraceptive use. Using a mixed-methods approach, this dissertation examines the hypothesis that incongruent intentions and feelings are not necessarily a reflection of ambivalence but rather two distinct concepts: women may be quite resolute about avoiding future pregnancies, yet for various reasons still express happiness at the prospect of a pregnancy. In Chapter 1, we examine prospectively measured happiness and intentions among a cohort of Latina pill-users at the U.S.-Mexico border, providing evidence that feelings of happiness about pregnancy may co-exist with effective use of contraception and with plans to continue method use long-term to prevent conception. In Chapter 2, we

investigate the relationship between happiness and contraceptive desires, demonstrating that women with incongruent intentions and feelings often desire highly effective or permanent methods that they do not have the ability to access. Finally, in Chapter 3, we explore the concepts of happiness and intentions and the factors underlying each from women's own perspectives through in-depth interviews, and provide a range of explanations for why happiness about pregnancy may be expressed even when another child would be a significant financial or emotional burden. Findings strongly suggest that automatically classifying women with incongruent intentions and feelings as ambivalent may lead to inaccurate measurement of unintended pregnancy, hinder understanding of the difficulties these women face in obtaining effective contraception, and limit the ability to devise strategies to prevent unintended pregnancy and address disparities across racial and ethnic groups.

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Introduction

UNINTENDED PREGNANCY AS A PUBLIC PROBLEM

A central challenge at the intersection of public policy, demography, and medicine is the measurement and interpretation of unintended pregnancy. Almost half of the 6.7 million pregnancies occurring in the United States each year are estimated to be unintended, and rates are persistently higher among low-income women and among Hispanic and African-American women across all socioeconomic strata (Finer and Henshaw 2006), (Finer and Zolna 2011).

When viewed through a variety of policy lenses, unintended pregnancy is a major and seemingly intractable public health issue. First, from an ethical standpoint, unintended pregnancy is associated with a host of adverse maternal and neonatal outcomes, including delayed initiation of prenatal care, higher rates of maternal smoking and alcohol use, lower rates of breastfeeding, and premature birth (Dott et al. 2010), (Dye et al. 1997), (Gipson, Koenig and Hindin 2008), (Mohllajee et al. 2007), (Orr et al. 2000). The socioeconomic gradient associated with unintended pregnancy implies that these adverse consequences disproportionately affect the least advantaged members of the U.S. population (Finer and Henshaw 2006), (Finer and Zolna 2014). Moreover, the experience of an unintended pregnancy can negatively impact women's ability to fulfill personal, educational, and financial goals, further limiting socioeconomic mobility.

Second, from an economic perspective, unintended pregnancy results in substantial public costs. In 2008, two-thirds of the 1.6 million births resulting from unintended pregnancies were paid for by public insurance programs such as Medicaid, and total public expenditures for births resulting from unintended pregnancies nationwide were estimated at $12.5 billion (Sonfield et al. 2011). It should be noted, however, that this cost is overstated because the cost of mistimed births is not down-weighted. The only saving associated with mistimed births is that gained by postponing paying for a birth that would have eventually happened anyway. Trussell estimated that avoiding a mistimed birth saves only 9% of the full cost of an unintended birth. Since most unintended births are mistimed (60%), the cost of an unintended birth is estimated to be 46% of the full cost of an unintended birth (Trussell 2008). Nevertheless, in 2002, the direct medical costs of unintended pregnancies totaled $5 billion (Trussell 2007).

Finally, when viewed through a political lens, unintended pregnancy has become an increasingly visible and controversial problem, and policies regarding access to contraception and abortion sit at the heart of deep political divisions. At the national level, the Affordable Care Act requirement that employer-provided health plans must include coverage of contraceptives has been met with strong opposition and legal challenges, including the recent high-profile case of *Burwell v. Hobby Lobby*. The U.S. Congress has also considered proposals to eliminate Title X, the only federal grant dedicated exclusively to the provision of family planning, and to de-fund Planned Parenthood, the largest provider of reproductive health and family-planning services in America (Cohen 2011), (Annas and Mariner 2011).

There has also been a surge in legislation restricting public funding for contraception and limiting access to abortion at state level. Between 2010 and 2012, public funding for family planning faced deep line-item cuts across a diverse group of states: Florida, Georgia, Maine, Minnesota, Montana, New Jersey, Texas, Washington, and Wisconsin. In addition, Colorado, Indiana, Kansas, North Carolina, New Hampshire, Ohio, and Tennessee disallowed providers affiliated with abortion services from receiving state family-planning funds (Guttmacher Institute 2012). Reduced public funding for family planning decreases access to the most highly effective and long-lasting methods, such as IUDs and implants, which have the highest upfront costs and which require physician involvement for their initial placement and insertion (White et al. 2012). Because these methods are not user dependent and have very low intrinsic failure rates, they have great potential to reduce unintended pregnancy (Trussell and Wynn 2008), (Blumenthal, Voedisch and Gemzell-Danielsson 2011). In the midst of the current political climate towards family planning, however, women at the highest risk of unintended pregnancy are often left without access to the most effective methods.

The high rate of unintended pregnancy in the U.S. has changed little in the past decade (Finer and Zolna 2014), and policy-oriented action to reduce disparities in unintended pregnancy is clearly indicated. Yet defining what exactly constitutes an unintended pregnancy and how best to measure it is far from agreed upon among academic researchers and policy experts. A better understanding of how to measure and interpret pregnancy intentions, guided by theoretical insight into what these concepts mean to the women who express them, would allow more accurate calculation of the

burden of unintended pregnancy, clarify its associations with maternal and child health outcomes, guide clinical interactions during prenatal care and contraceptive counseling, and help target provision of effective contraception to the women in greatest need.

THEORETICAL FRAMEWORK FOR UNDERSTANDING THE PROBLEMS OF MEASURING UNINTENDED PREGNANCY

The measurement and meaning of unintended pregnancy have long been the subjects of debate. Use of the terms "unplanned," "mistimed," and "unwanted" to represent the various dimensions of intention and desire have been widely critiqued, (Klerman 2000), (Santelli et al. 2003), (Santelli et al. 2009) and their ability to represent the complexity of women's perspectives on pregnancy and childbearing have been repeatedly called into question (Kendall et al. 2005), (Barrett, Smith and Wellings 2004). In the ensuing debate, two dimensions of measurement have prevailed. The first is intentions: did the pregnancy occur at the right time, too soon, or was it never supposed to happen at any time? The second is feelings: was the pregnancy greeted with happiness or unhappiness? These two concepts are now standard elements of national and state surveys designed to measure unintended pregnancy, such as the National Survey of Family Growth (NSFG) and Pregnancy Risk Assessment Monitoring System (PRAMS). But the question of what intentions and feelings actually measure, and how best to interpret the responses they elicit is far from resolved, especially as they are most often asked about retrospectively (i.e. after the pregnancy or birth has already occurred) and are thus subject to recall bias (Rosenzweig and Wolpin 1993), (Koenig et al. 2006).

Demographers have traditionally been interested in the predictive value of pregnancy intentions (Westoff and Ryder 1977), (Bankole and Westoff 1998). Historically, through the works scholar such as Notestein and Thompson, population-level fertility was viewed as closely tied to the influence of economic development and changing population composition. Scholars in economics, such as Becker and Easterlin, developed economic models of fertility, in which preferences for children were either exogenous and fixed (Becker 1965), or endogenous and variable (Easterlin 1975), responding to either changes in economic opportunity only (in the former) or to actual changes in personal preferences in response to social influences (in the latter). Following the theoretical contribution of Ansley Coale through the Princeton European Fertility Project and the finding that fertility is not as strongly related to economic development as was previously expected, ideational theories such as that of Cleland and Wilson added a dimension of social influence to the understanding of fertility preferences and shifted the focus further to the individual level (Cleland and Wilson 1987).

Yet fertility decision-making and attitudes towards pregnancy do not always fit neatly into the paradigms favored by demographers and economists; influential qualitative studies of fertility perceptions in Africa and Latin America demonstrated that pregnancies that occur outside the idea of an economically derived "optimal" number of children are not always greeted with unhappiness (Bledsoe and Hill 1994), (LeVine 1993). Social psychologists have argued that reliance solely on pregnancy intentions ignores more nuanced dimensions of pregnancy desires, including motivations and feelings (Miller 1974), (Miller 2011). Medical and population health literature based

upon both survey data and interviews in the clinical setting has demonstrated that pregnancies arising due to contraceptive failures are often perceived positively, even though they were not intended (Trussell, Vaughan and Stanford 1999), (Sable and Libbus 2000) and, furthermore, that happiness, rather than intention, may be the best predictor of future maternal and child health and economic outcomes (Blake et al. 2007).

In recent years, many scholars have taken something of a blended view, with a focus on both pregnancy intentions and feelings about pregnancy through a theoretical framework derived from demography, medical sciences, and social psychology. Fertility intentions are viewed as demonstrated through contraceptive use, yet feelings and attitudes towards pregnancy are allowed to moderate intentions. While this approach allows a greater degree of complexity in defining unintended pregnancy, it also leads to difficulties with interpretation. The main problem is that intentions and feelings often appear to be inconsistent *i.e.* women profess happiness about pregnancies when no more children are planned in the future (Trussell et al. 1999). This apparent paradox is especially common among Latina women, who frequently express incongruent pregnancy intentions and feelings about pregnancy (Chandra et al. 2005), (Hartnett 2012). Throughout this dissertation, the phenomenon of wanting no more children yet expressing happiness at the prospect of a pregnancy is referred to as "incongruence".

In response to this thorny issue, the focus of the current literature is squarely on the concept of ambivalence; the idea that incongruent intentions and feelings represent the lack of a clear desire to avoid pregnancy (Kavanaugh and Schwarz 2009), (Barrett and Wellings 2002), (Moos et al. 1997), (Higgins, Popkin and Santelli 2012). While

ambivalence is a rich and nuanced concept, which is no doubt useful for making sense of inconsistent intentions and feelings when motivation to avoid pregnancy is uncertain, there is little theoretical insight to guide the interpretation of positive feelings when motivation to avoid pregnancy is clear. Indeed, classifying women as ambivalent solely on the basis that intentions and feelings are incongruent may lead to underestimation of unintended pregnancy rates, particularly for Latinas.

Very little is known about the factors that underlie happiness about pregnancy when no more children are desired; yet, until this apparent inconsistency can be explained, attempts to design instruments to accurately measure the burden of unintended pregnancy, address disparities in its prevalence across ethnic groups, and devise strategies to ensure women are able to obtain the contraceptive methods they require may be lacking important conceptual insight.

OBJECTIVES AND OVERVIEW

This dissertation explores in depth the paradox of incongruent pregnancy intentions and feelings about pregnancy. The research questions addressed are motivated by both the need for a better understanding of how to interpret pregnancy intentions (better theory) and the need for practical solutions that will help reduce unintended pregnancy (better practical policy). It is hoped that development of theory will inform real-word policy solutions, and that through practical application, theory will find a vocation.

In Chapter 1, we investigate whether incongruent intentions and feelings are a reflection of ambivalence or retrospective recall bias or whether they represent two distinct concepts among a cohort of Latina oral contraceptive pill users living at the U.S.-Mexico border. This line of enquiry is extended in Chapter 2, in which we compare contraceptive use and contraceptive desires among women with congruent *vs*. incongruent intentions and feelings using a cohort of predominantly Latina women who want no more children for at least two years. The correlates of happiness about pregnancy when no more children are intended are also examined. In Chapter 3, based upon these empirical insights, we explore pregnancy intentions and feelings about pregnancy in detail from women's own perspectives. Twenty-seven in-depth interviews conducted with participants selected from the study cohort employed in Chapter 2 allow exploration of the influences underlying feelings about unintended pregnancy in women's own words.

Through a combined quantitative and qualitative approach, we demonstrate that it is indeed possible to feel happy at the prospect of a pregnancy while wanting no more children and earnestly trying to prevent conception. We conclude by considering the implications of automatically viewing these women as ambivalent for the measurement and prevention of unintended pregnancy and for the effective provision of contraceptive services.

Chapter 1: Are Inconsistent Reports of Fertility Intentions and Feelings about Pregnancy among Contraceptive Users a Reflection of Ambivalence?

INTRODUCTION

One of the most cited contributions to the literature on the measurement and meaning of unintended pregnancy is Trussell, Vaughan and Stanford's provocative analysis of women's classifications of contraceptive failures from the 1995 National Survey of Family Growth (NSFG). Unintended pregnancies in the NSFG are classified in retrospect (*i.e.* after the pregnancy or birth has already occurred) as those that occurred too soon or at a time when no more children were wanted. Trussell *et al*. found that not all contraceptive failures were reported as unintended pregnancies and, furthermore, that 90% of women who classified a pregnancy resulting from a contraceptive failure as an intended pregnancy also professed happiness about it. Even more surprisingly, only 59% of women who classified a pregnancy resulting from a contraceptive failure as an unintended pregnancy professed unhappiness about it (Trussell et al. 1999). These findings raise questions about the definition and measurement of unintended pregnancy, the difference between pregnancy intentions and feelings about a pregnancy, and the reliability of retrospective reports of such items.

The first consideration is simply whether contraceptive use by itself can be interpreted as evidence of the intention to prevent pregnancy. The finding that many

pregnancies reported as resulting from contraceptive failure are also reported as having been intended (i.e. they occurred too late or at the right time) would seem to imply that some contraceptive users were not particularly intent on avoiding pregnancy. Additionally, contraceptive users who report having been happy to learn about a pregnancy, which they also classify as unintended (*i.e.* it occurred too soon or when no more children were wanted), may be seen as having had mixed or ambivalent feelings towards pregnancy. Going a step further, one could even speculate that the lack of a clear and strong intention to avoid pregnancy in the first place might have influenced the quality of contraceptive use and, thereby, the likelihood of getting pregnant (Schwarz et al. 2007), (Kavanaugh and Schwarz 2009), (Crosby et al. 2002). Evidence suggests that the influence of ambivalent feelings may be particularly pronounced among adolescent populations (Miller, Barber and Gatny 2012), (Moreau et al. 2012).

But there are other possible interpretations of and lessons that might be drawn from Trussell *et al.*'s findings. Another consideration is the likelihood that feelings asked about a pregnancy once birth has occurred tend to be more positive than those elicited during or before pregnancy (Koenig et al. 2006), (Rosenzweig and Wolpin 1993), (Joyce, Kaestner and Korenman 2002), (Miller 2009)and become increasingly positive over time as the child increases in age (Bankole and Westoff 1998). Thus, Trussell *et al.*'s apparent paradox of women reporting happiness about pregnancies they also classify as unintended might be a function of recall bias and would resolve if prospective data on intentions and happiness were available. It might also be the case that incongruence

between happiness and intention reflects a meaningful distinction between the two concepts (Sable and Libbus 2000), (Rocca et al. 2010b), (Fischer et al. 1999). Indeed, happiness is often more consequential for the outcome of the pregnancy in terms of its association with decisions regarding abortion or adoption and with maternal and children health outcomes (Blake et al. 2007), (Sable et al. 1997).

A related question is whether there are important differences across racial and ethnic groups in both the reporting and meaning of intentions and feelings towards pregnancy. Previous research using the 2002 and 2006-2010 NSFG indicates that Hispanic women reported greater mean happiness (on a 1-10 scale) about unintended births compared to non-Hispanic Black or White women (Hartnett 2012), (Chandra et al. 2005). Indeed, insights from ethnographic and qualitative research support these empirical findings. LeVine found that Mexican women in the 1980s generally reported wanting to have a greater number of children than they felt they could afford (LeVine 1993). This apparent discrepancy between intentions and feelings might be more usefully recognized as a reflection of two different constructs rather than being taken together as a sign of ambivalence. Far from being ambivalent, some groups of Latinas may be quite resolute that they want to avoid pregnancy but still express happiness at the idea of pregnancy and children. Other hints that Latinas may differ with regard to their feelings toward pregnancy may be found in the vibrant literature on the "Hispanic Paradox". Many of the explanations that have been given for the much greater than expected child

survival among Latinas, particularly those of Mexican origin, call on positive values regarding pregnancy and childbirth (Scribner and Dwyer 1989), (Zambrana et al. 1997).

The possibility that incongruent feelings and intentions are two distinct concepts that may be both meaningful and useful to consider independently has been afforded little consideration, yet it may represent an important oversight. Some interesting relationships between happiness and a woman's characteristics or situation might be neglected. For example, having a male partner who would welcome a pregnancy might be associated with women's own happiness about pregnancies they are trying to prevent. Indeed, previous work exploring women's feelings either during pregnancy or looking back on a previous pregnancy has demonstrated that the attitudes of male partners are highly influential to how women define their pregnancies (Fischer et al. 1999), and how happy they report feeling about them (Blake et al. 2007), (Stanford et al. 2000).

This chapter draws upon a prospective survey of oral contraceptive users conducted in a largely Latina population along the US-Mexico border that allows us to gain purchase on three questions: First, to what degree is contraceptive use associated with the desire to prevent pregnancy? Second, when asked prospectively, how congruent are intentions and feelings about pregnancy and to what extent are women's perceptions of their partners' feelings associated with incongruence? And third, to what degree does retrospective reporting of intentions and feelings about pregnancies resulting from contraceptive failures correspond to earlier reporting from prospective questions, asked of the same women? Before turning to this analysis, the hypothesis that the incongruent

reporting found by Trussell *et al.* is in fact more prevalent among Latinas than non-Hispanic Whites who experienced contraceptive failure in the NSFG is verified.

METHODS

Data

The analysis of the NSFG uses data from 2006-2010 collected by the National Center for Health Statistics (NCHS). The NSFG is a sample of 22,682 men and women, aged between 15-44 years, living in the United States, and is described in detail elsewhere (Chandra et al. 2005). Although prior studies have compared the prevalence of happiness about pregnancies reported as unintended between Hispanic and non-Hispanic White women, no previous study has examined this comparison specifically for women who experienced contraceptive failure. Happiness about pregnancy was measured using a 1-10 item scale describing how happy participants felt when they found out they were pregnant (1 = very unhappy, 10 = very happy). Following Trussell *et al.*, this 10-item scale was collapsed into 5 categories (very unhappy, unhappy, neutral, happy, very happy). Women were also asked whether they stopped using contraception before they became pregnant. Happiness about pregnancy was examined among women who did not stop using contraception and experienced contraceptive failure, comparing the distributions of Hispanic and non-Hispanic Whites among happiness categories using a Pearson's chi-squared test adjusting for the complex sampling design of the NSFG. One potential issue with comparing happiness about unintended pregnancies by ethnicity is that abortions may be disproportionately under-reported for Hispanic women in the

NSFG. To address this possible source of bias, the analysis described above was replicated for unintended pregnancies due to contraceptive failure that resulted in live births only, allowing comparison of happiness about pregnancy among Hispanic and non-Hispanic White women without any potential influence of abortion under-reporting.

The remaining analyses use data from the Border Contraceptive Access Study (BCAS), which followed a sample of 1046 women aged 18 to 44 years, residing in El Paso, Texas. This sample was recruited between December 2006 and February 2008. All women were using oral contraceptive pills for the specific purpose of preventing pregnancy at the time they entered this prospective study. Signed informed consent was obtained, and participants were interviewed in either Spanish or English in a one-hour long in-person baseline interview. Three subsequent interviews were conducted at 3-month intervals, the second and third by telephone, and the fourth again in person. Excluding those who declined to give a response to the questions of interest and any women not of Mexican-origin, the final sample size for this study was 956 women. Further details regarding BCAS may be found at the ICPSR web site and in Potter *et al.* 2010 (Potter et al. 2010).

Variables

Women's intentions with regard to preventing a future pregnancy were assessed by way of two different questions included in the baseline interview. The first referred to planned duration of pill use, and was phrased "How long do you plan to continue using

the pill?" with participants asked to choose between "Probably last pack", "1-3 months more", "4 months to a year more", "At least 1 more year", "2 or more years", and "Don't know". This variable proved to be strongly associated with actual continuation of the method during the nine-month follow-up period (Potter et al. 2011). The second question referred to future childbearing intentions, which were assessed with the question "Do you plan to have more children in the future?" with participants responding "Yes", "No", or "Don't know". Additionally, women's own perceptions of their likelihood of getting pregnant in the next 3 months were assessed using the question "How likely is it that you will become pregnant in the next 3 months?", with responses "Very likely", "Somewhat likely", Somewhat unlikely", "Very unlikely" and "Don't know".

At each interview, happiness about a future pregnancy was measured by asking "How would you feel if you became pregnant in the next 3 months?", with responses recorded on a five-item ordinal scale: "Very happy", "Somewhat happy", "Don't know", "Somewhat upset" and "Very upset". Perceptions about partner's feelings were also elicited, using the question "How would your partner feel if you became pregnant in the next 3 months?" with answers recorded on the same ordinal scale.

At each time point in the study, women were asked whether they had used the pill continuously since the last interview and, if not, on what date that they stopped using it. Those who had stopped pill use at any time since the last interview were then asked why, and those who answered "got pregnant' were classified as having experienced a contraceptive failure. In the fourth interview, women were also asked retrospectively

about their intentions and feelings at the time they learned of their last pregnancy. Intentions were captured using the question “At the time of your last pregnancy, did you want the child then, later or not at all?”. Responses were coded categorically as ‘Then”, “Later”, “Not at all” or “Don’t know”. Happiness about the pregnancy was assessed with the question “How did you feel when you became pregnant the most recent time?”, and response categories were the same as those detailed for the prospective happiness questions. Also in the fourth interview parous women who reported wanting no more children in the future or who did not know whether they wanted more children in the future were asked “Would you like to have been sterilized at the time of your last delivery”, and responded “Yes”, “No”, or “Don’t know”. Age, parity, and age at first birth were ascertained at baseline, as were details of country of birth, educational level, relationship status, possession of U.S. health insurance, and employment status (Potter et al. 2010).

Analyses

To assess the apparent consistency between prospective pregnancy intentions measured by duration of planned pill use and happiness about a pregnancy occurring in the next 3 months, categories of pill use duration were grouped into a dichotomous variable with categories “Less than one more year” and “At least one more year”. Feelings about pregnancy for women in these two categories were compared at baseline using a Pearson’s chi-squared test. The relationship between prospective happiness and future childbearing intentions was also examined by comparing feelings about pregnancy

for women who want more children and those who do not want more children at baseline, again using a Pearson's chi-squared test. Associations were also examined using Fisher-Freeman-Halton tests to obtain exact p-values, but these results are not shown here since they yielded virtually identical results.

Next, women's feelings about a pregnancy in the next three months were compared with their perceptions of the feelings of their husband or partner. Ordinal logistic regression models were used to investigate the variables associated with any apparent contradictions between intentions and happiness about a pregnancy occurring in the next three months. Two separate models were constructed to examine two distinct inconsistencies or contradictions: one focused on happiness about pregnancy in the next 3 months, given that pill use is planned for at least one year more, and the other focused on happiness about pregnancy in the next 3 months, given that no more children are planned in the future. Both used ranked categorical variables, where the hierarchy of responses runs: "Very happy", "Somewhat happy", "Don't know", "Somewhat upset", and "Very upset". "Don't know" is coded as the middle rank to represent an intermediate stage between happiness and unhappiness.

The main question addressed in these models is the association between contradictory or inconsistent happiness and perceived husband's or partner's feelings toward pregnancy, adjusting for other respondent characteristics. Thus, the predictor variable of interest is women's perceptions of partner's feelings about a pregnancy occurring in the next 3 months, which is coded in the same ordinal fashion, with

reference category “Partner would feel very happy”. Other covariates were selected on the basis of previous literature exploring the factors associated with intentions and feelings about pregnancy (Fischer et al. 1999), (Blake et al. 2007), (Thomson 1997). To control for reproductive timing and completed family size considerations, age and parity were included, coded as categorical variables with reference categories age 18-24, and parity 1. To control for influential socioeconomic and demographic characteristics, country of birth, educational level, relationship status, age at first birth, possession of U.S. health insurance, and employment status were all coded as indicator variables, with respective reference categories: “Born in the US”, “No high school”, “Married”, “Over 25”, “Has US health insurance” and “Unemployed”). Nulliparous women were excluded from the analysis, because their happiness about a pregnancy may not be a valid comparison to that of parous women—for example, nulliparous women might express happiness about an unintended pregnancy because it would constitute a demonstration of fertility (Higgins, Hirsch and Trussell 2008a), (Polis and Zabin 2012). On the contrary, parous women have clearly already demonstrated their capacity to reproduce.

Finally, for the small number of women in the BCAS sample who became pregnant during the nine-month follow-up period and reported the pregnancy in one of the interviews, the consistency of their prospective report of intention and happiness before they became pregnant with the retrospective report obtained in the fourth interview was assessed. In the retrospective report, the pregnancy was classified as wanted then, later, or never. Two women who were lost to follow-up were excluded from

this analysis. For the remaining small sub-sample, retrospective classification of intention was compared with retrospective feelings about pregnancy in the same fashion as Trussell and colleagues. Next, to assess the validity of retrospective classification in light of prospective intentions and feelings, planned duration of pill use at the time point before the pregnancy occurred, (categorized as “Less than one more year” and “At least one more year”) was compared to retrospective wantedness of the same pregnancy, categorized as “Then”, “Later” or “Not at all”. Finally, the same categories of retrospective wantedness were compared to stated future childbearing plans before the pregnancy occurred, categorized as “Want more children in the future”, “Do not want more children in the future”, and “Don’t know”.

All regression coefficients are denoted as changes in log odds, and all analyses were performed using the R statistical software package, version 2.14.1.

RESULTS

2006-2010 NSFG

Among those who experienced contraceptive failure and classified their pregnancy as unintended in the 2006-2010 NSFG, 50% of Hispanic women selected either 10 (very happy), or 6-9 (happy) on the ascending happiness scale, compared with 35% of non-Hispanic white women ($p<0.05$) (Table 1.1). Hispanic women were also significantly more likely than non-Hispanic white women to profess happiness about a pregnancy that resulted from contraceptive failure, regardless of whether the pregnancy was classified as

intended or unintended ($p<0.05$). Restricting the sample to live births only, Hispanic women were still significantly more likely than non-Hispanic White women to profess happiness about unintended pregnancies resulting from contraceptive failure (see Table 4.1 in Appendix A).

2006-2008 BCAS

About half the women in the BCAS sample of current pill users were over age 30, and all but 13% were mothers (Table 1.2). Of the mothers, 76% had their first birth before reaching age 25. Just over 71% of the sample was married or living in a consensual union. The proportion born in Mexico was 71%. Only 26% had any post-high school education, 57% were employed, and 17% had any US health insurance.

At baseline, 77% planned to use the pill for at least one more year, and 48% planned no more children in the future. Additionally, 86% stated they were "very unlikely" to get pregnant in the next 3 months, further implying their motivation to use contraception and their expectation of avoiding pregnancy. Forty-four percent said that they would feel "very happy" or "somewhat happy" if a pregnancy were to occur within the next 3 months, and 56% perceived that their partner would feel "very happy" or "somewhat happy" in reaction to such a pregnancy. Of those who had at least one child, and wanted no more children or did not know if they wanted more children in the future, 70% would like to have been sterilized at the time of their last delivery.

As expected, the percentage of women in the BCAS sample who would feel happy about a pregnancy is significantly lower among those planning longer duration of pill use than among those planning shorter duration (Table 1.3). Yet 41% of women who plan pill use for at least one more year still said that they would feel very or somewhat happy about a pregnancy occurring in the next 3 months. But this was not perceived to be likely, as 96% of these women stated that they were unlikely to get pregnant in the next 3 months (results not shown). Similarly, although the percentage of women who would feel happy about a pregnancy is lower among those who plan no more children in the future than among those who do plan further children, 34% of women who plan no more children still professed feeling happy at the prospect of a pregnancy in the next 3 months. Additionally, nearly 60% of these women also said that they would like to have been sterilized at the time of their last delivery (results not shown), thus making incongruent happiness and intention highly unlikely to be a reflection of ambivalence in this sample.

Next, the variables associated with happiness at the prospect of pregnancy are examined for women in the BCAS sample who plan to use the pill for at least one more year and for women who plan to have no more children in the future. The majority of these women perceive that their partner's feelings at the prospect of pregnancy are similar to their own, but where there is discordance, women tend to perceive their partner's feelings to be more positive than their own, and this trend is consistent across all happiness categories (see Table 4.2 in Appendix A). The association between perceived partner happiness and women's own happiness is statistically significant when

tested using ordinal logistic regression models, both when no further children are desired and when pill use is planned for at least one more year (Table 1.4). Both models suggest that the less happy a woman perceives her partner would feel, the less happy she herself is likely to feel. Each descending category of perceived partner happiness is associated an increasingly negative change in log odds. For example, the coefficient on the "Partner would feel very upset" dummy variable in the planned pill use model suggests that a woman's perception that her partner would feel very upset is associated with decrease of -4.43 in the log odds that she herself would feel any happier.

In the model of feelings about pregnancy when pill use is planned for at least one more year, having parity of 3 or greater is the only other variable significantly associated with happiness about pregnancy. In the model of feelings about pregnancy when no more children are wanted in the future, the only other variable significantly associated with happiness about a pregnancy is being single. Both variables are associated with a greater likelihood of unhappiness in their respective models, but the magnitude and statistical significance of their coefficients are much lower than those for partners' feelings.

Finally, we turn our attention to the 36 women who became pregnant due to contraceptive failure during the study. Comparing retrospective classifications of intendedness (*i.e.* whether the pregnancy was wanted then, later, or not at all) to prospective planned duration of pill use and prospective future childbearing intentions indicates considerable reporting bias. Eleven out of 27 women who planned to use the pill for at least one more year classified their pregnancy as wanted "then", and 7 out of 10

women who wanted no more children in the future classified their pregnancy as wanted "then or later" (results not shown). Comparing retrospective feelings for the same 36 women who became pregnant during the study due to contraceptive failure with the feelings they professed at the prospect of pregnancy before they became pregnant, it is clear that happiness is augmented in retrospect: the small number who said they would be unhappy prospectively switched to happiness in retrospect, and the number feeling "very happy" about the pregnancy increased from 14 to 24 (Table 1.5). However, the majority of retrospective happiness about unintended pregnancies is consistent with prospective reporting, and happiness does not appear to exhibit the same degree of bias as intention.

DISCUSSION

Trussell *et al*.'s analysis of contraceptive failures in the 1995 NSFG pointed out an apparent contradiction in the retrospective reporting of contraceptive failures: the phenomenon of women reporting being happy about pregnancies they were using contraception to prevent and even reporting many of these pregnancies as having been intended. The results presented here show that this phenomenon persists in the most recent rounds of NSFG and is more pronounced among Hispanics than non-Hispanic Whites. This difference is consistent with that found by Hartnett for all unintended births with NSFG (Hartnett 2012), as well as with ethnographic studies of Latina or Mexican attitudes toward childbearing and families (Amaro 1988), (Hondagneu-Sotelo 1994), (Guendelman et al. 2001).

The remaining analyses made use of a sample of Latina oral contraceptive users that included prospective assessments of feelings and intentions and also permitted examination of retrospective reporting of intentions and feelings for the small number of women who actually experienced a contraceptive failure during this prospective study. Intentions were measured along multiple dimensions with a high degree of consistency. From the responses that the women in this sample gave regarding how long they planned to use the pill, their future childbearing plans, their perceived likelihood of becoming pregnant during the next three months, and the high demand for postpartum sterilization, it seems clear that all but a very small percentage were using the pill for the specific and sincere purpose of preventing pregnancy. Yet 44% percent of the sample said they would be either somewhat or very happy if they were to become pregnant in the next three months. The apparent contradiction between feelings and intentions was especially striking in the prospective reports from women planning to use the pill for more than a year, and those who wanted no more children.

In light of these women's unequivocal intentions, interpretation of their positive feelings about a pregnancy as somehow contradicting their underlying desire to avoid conception is unsatisfactory. The only interpretation that can be offered for these findings is that feelings and intentions are indeed distinct concepts for most of the BCAS study participants. These women are earnestly trying to prevent a pregnancy that they could not afford, or which would be inconvenient, but nevertheless the prospect of pregnancy is something joyful. The exploration of the variables associated with the concept of

happiness for women who are using contraception to prevent pregnancy or who want no more children suggests that women's perceptions of their partner's happiness are strongly associated with their own feelings (we cannot tell using these data whether male partner's feelings are, in actual fact, concordant with those of the woman herself). That women are less likely to profess happiness about a pregnancy if they perceive their partner would feel unhappy is likely either a reflection of the meaning of an unintended pregnancy for the wellbeing of the relationship or a marker of the emotional or material support they feel is likely to be forthcoming. Thus, when considering findings from the NSFG showing that Hispanic women are more likely than non-Hispanic Whites to profess happiness about an unintended pregnancy in retrospect along with the findings presented here that the same phenomenon is present prospectively in this sample of Latina women, we conclude that it seems unlikely that these feelings are purely the reflection of a socially or culturally normative response about motherhood or childbearing.

A key implication of these findings is that survey responses regarding feelings about either a past or prospective pregnancy should not necessarily be used as an indicator of ambivalence or a lack of seriousness about avoiding pregnancy. On the contrary, happiness about pregnancy may coincide with strong indicators of motivation to avoid conception. A high percentage of women professing happiness at the prospect of a pregnancy in the next 3 months, yet at the same time wanting no more children in the future, viewed themselves as unlikely to become pregnant, and sometimes even wishing they had been sterilized postpartum. Recent work examining racial and ethnic variation in

motivation to avoid pregnancy calls for further investigation into the relationship between predicted emotional response to pregnancy and seriousness of intent to avoid pregnancy among Hispanic women (Hayford and Guzzo 2013). This chapter provides evidence that a positive emotional response to the prospect of pregnancy and serious intention to prevent conception can exist simultaneously. In a recent paper, Higgins, Popkin, and Santelli did use happiness at the prospect of pregnancy to construct a measure of ambivalence but found that the measure was not a significant predictor of contraceptive use, at least for females (Higgins et al. 2012). Moreover, in an analysis of factors associated with continuation on the pill among BCAS participants, the baseline response concerning how long they planned to use the pill was a strong predictor of continuation while feelings had no predictive power (Potter et al. 2011). Similarly, a recent study of the relationship between feelings about a possible pregnancy, and contraceptive discontinuation found no significant association (Rocca, Harper and Raine-Bennett 2013).

Findings with respect to the difference between prospective assessments of feelings and intentions regarding a future pregnancy and those assessed in retrospect, after what in all likelihood was an unintended pregnancy, raise doubts about the ability to assess either intention or feelings retrospectively. While, of course, we cannot be sure about intentions at the moment of conception, the retrospective reports of intendedness for many of these pregnancies represent a substantial departure from the motivational state that one would logically infer from baseline responses of planned pill use or future childbearing desires.

Similarly, the retrospective reports of happiness, while not entirely an artifact of a post-pregnancy adjustment or rationalization, show a recognizable shift toward greater happiness about pregnancy. This consistent pattern of expressing greater positivity about the result of a pregnancy than about the prospect of a pregnancy suggests likely under-reporting of unintended pregnancy in retrospective data.

Although the BCAS data afforded a good opportunity to assess intention and feelings about pregnancy prospectively, there are a number of limitations. First, even for prospective reporting, social desirability and acquiescence bias are concerns when interviewing subjects about personal and sensitive issues (Krosnick 1999). Indeed, there is evidence to suggest that these types of biases may be particularly common among Mexican-American respondents (Warnecke et al. 1997). Future research could attempt to circumvent these issues by using techniques such as anchoring vignettes to make it easier for women to express their intentions and feelings (Hopkins and King 2010). Second, the participants were recruited from a single city, and were composed of either first or second-generation women of Mexican origin. Moreover, due to the small number of women who became pregnant during the study, there were only a few opportunities to compare prospective and retrospective reports. Thus, while results suggest that estimates of unintended pregnancy based on retrospective surveys such as NSFG (NCHS 2006-2011) and the CDC surveillance project Pregnancy Risk Assessment Monitoring System (PRAMS) (CDC 2010) might be underestimates, more such prospective versus retrospective comparisons are clearly needed to strengthen this inference.

CONCLUSION

These analyses bring to light evidence from prospective data that viewing happiness and intention as distinct and separate concepts is both meaningful and useful when measuring and interpreting pregnancy intentions in a Latina population. Using contraception to prevent pregnancy, yet feeling happy at its prospect, are not mutually exclusive, nor should they automatically be considered a sign of ambivalence. Findings highlight concerns regarding both the accuracy of retrospective reporting of pregnancy intentions and the interpretation of pregnancy intentions and feelings from retrospective data.

TABLE 1.1—Percentage distribution of women who experienced contraceptive failure by their feelings about the pregnancy, 2006-2010 NSFG (n=389)

	Hispanic		**Non-Hispanic White**	
Feelings about pregnancy	**Intended n=43**	**Unintended n=100**	**Intended n=74**	**Unintended n=172**
Very unhappy	1.0	17.8	0.0	19.6
Unhappy	2.4	17.2	9.2	20.4
Neutral	3.1	15.5	5.0	25.0
Happy	8.9	31.8	44.3	25.5
Very happy	84.9	17.8	41.5	9.7
Total	100.0	100.0	100.0	100.0

Differences by ethnicity are statistically significant, $p \leq 0.05$
Percentages are weighted, n's are unweighted.

TABLE 1.2—BCAS Sample Characteristics at Baseline (n=956)

Characteristic	Frequency (%)
Age	
18-24	27.7
25-29	22.2
30-34	20.9
35+	29.2
Parity	
0	13.4
1	17.2
2	29.0
3	23.2
4+	17.2
Age at First Birth†	
<25	75.9
≥25	24.1
Relationship Status	
Married	51.2
Living Together	19.5
Single	20.3
Separated/Divorced/Widowed	9.1
Place of Birth	
Mexico	71.0
U.S.	29.0
Educational Level	
No High School	19.5
Some High School	29.7
Completed High School	24.8
Post High School	26.0
Work Status	
Employed	57.3
Not Employed	42.7
U.S. Health Insurance Status	
U.S. Health Insurance	16.6
No U.S. Health Insurance	83.4
Future Childbearing Intentions	
More Children Wanted in Future	47.0
No More Children Wanted in Future	48.0
Don't Know	5.0

TABLE 1.2 CONTNUED —BCAS Sample Characteristics at Baseline (n=956)

Planned Duration of Pill Use	
2 or more years	54.0
At least 1 more year	23.0
4 months to 1 year more	6.0
1-3 months more	2.0
Probably last pack	0.5
Don't know	15.0
Likelihood of Pregnancy in Next 3 Months	
Very Unlikely	86.2
Somewhat Unlikely	6.5
Somewhat Likely	3.8
Very Likely	0.7
Don't Know	2.8
Feelings About Pregnancy in Next 3 Months	
Very Happy	18.8
Somewhat Happy	25.5
Somewhat Upset	13.5
Very Upset	31.0
Don't Know	11.2
Perception of Partner's Feelings About Pregnancy in Next 3 Months	
Very Happy	32.3
Somewhat Happy	23.4
Somewhat Upset	12.6
Very Upset	21.3
Don't Know	10.4
Desire for Sterilization at Last Delivery‡	
Yes	70.2
No	27.3
Don't Know	2.5

†Denominator for age at first birth is parous women (n=827)
‡Denominator for desire for sterilization at last delivery is women who want no more children or who don't know if they want more children (n=520)

TABLE 1.3—BCAS Baseline comparison of planned duration of pill use and future childbearing intentions with feelings about pregnancy (n=956)

	Planned Duration of Pill Use		**Children Planned in Future**		
Feelings About Pregnancy in Next 3 Months	Less than 1 year more (n=215)	At least 1 year more (n=741)	Yes (n=449)	No (n=458)	Don't Know (n=49)
Very Happy	26.0	16.7	26.7	11.6	13.0
Somewhat Happy	31.6	23.8	29.0	22.7	18.5
Don't Know	13.5	10.5	9.1	11.6	24.1
Somewhat Upset	12.6	13.8	11.0	16.4	18.5
Very Upset	16.3	35.2	24.3	37.8	26.0
Total	100.0	100.0	100.0	100.0	100.0
	$\chi^2(4, N=956)$ *32.53****		$\chi^2(4, N=956)$ *50.26****		

Figures are in percentages. Percentages are calculated separately for each category of intention and may not total 100.0 because of rounding ***p ≤0.001

TABLE 1.4—Coefficients (and standard errors) from ordinal logistic regression analyses examining the association between selected characteristics and women's happiness at the prospect of a pregnancy

Characteristic	Pill Use Planned for at Least 1 More Year (n=741)		No Further Pregnancies Wanted in the Future (n=458)	
Age				
<24	ref		ref	
25-29	0.37	(0.24)	-0.13	(0.36)
30-34	0.44	(0.27)	-0.13	(0.35)
≥35	0.57	(0.28)	-0.09	(0.34)
Parity				
1	ref		ref	
2	-0.40	(0.23)	-0.12	(0.41)
3	-0.70*	(0.27)	-0.19	(0.42)
4+	-0.64*	(0.31)	-0.64	(0.45)
Age at first birth				
>25	ref		ref	
≥25	-0.41	(0.28)	-0.32	(0.31)
Perceived Partner's Feelings				
Partner would feel very happy	ref		ref	
Partner would feel somewhat happy	-0.65***	(0.21)	-0.28	(0.25)
Don't know partner's feelings	-1.15***	(0.26)	-0.71*	(0.31)
Partner would feel somewhat upset	-2.22***	(0.26)	-1.77***	(0.29)
Partner would feel very upset	-4.43***	(0.30)	-3.90***	(0.35)
Relationship Status				
Married	ref		ref	
Single	-0.44	(0.25)	-0.70*	(0.35)
Living Together	0.06	(0.20)	-0.05	(0.27)
Separated/Divorced	0.14	(0.29)	0.23	(0.33)
Nativity				
Born in the USA	ref		ref	
Born in Mexico	-0.25	(0.21)	0.01	(0.26)
Health Insurance Status				
Has US health insurance	ref		ref	
No US health insurance	0.17	(0.24)	-0.40	(0.30)
Employment Status				
Not employed	ref		ref	
Employed	0.08	(0.18)	-0.05	(0.21)

TABLE 1.4 CONTINUED—Coefficients (and standard errors) from ordinal logistic regression analyses examining the association between selected characteristics and women's happiness at the prospect of a pregnancy

Education				
No high school	ref		ref	
Some high school	-0.18	(0.22)	-0.37	(0.24)
Completed high school	-0.38	(0.24)	-0.49	(0.27)
Post-high school	-0.27	(0.27)	-0.56	(0.32)

Standard errors in parentheses. *** $p \leq 0.001$, *$p \leq 0.05$ ref=reference category

TABLE 1.5—Comparison of prospective and retrospective happiness for women who became pregnant due to contraceptive failure in BCAS (n=36)

Feelings about Pregnancy	Prospective Response	Retrospective Response
Very upset	3	0
Somewhat upset	4	0
Don't know	2	4
Somewhat happy	13	8
Very happy	14	24
Total	**36**	**36**

Chapter 2: Are Prospectively Measured Fertility Intentions and Feelings about Pregnancy Reflected in Women's Contraceptive Desires?

INTRODUCTION

Chapter 1 provided evidence that happiness at the prospect of a pregnancy can exist simultaneously with earnest intent to avoid pregnancy when intention is measured by two related constructs—future childbearing plans and planned duration of contraceptive use. The main underlying assumption of this assertion is that women's reported plans to realize intentions through contraceptive use will be faithfully implemented in reality. Among women in the BCAS sample, planned duration of contraceptive use was highly predictive of actual continued use, and professed happiness about pregnancy did not affect this association (Potter et al. 2011). Only one other study has focused specifically on the relationship between prospectively measured feelings about pregnancy and motivation to use contraception, and also found that happiness was not associated with lower likelihood of contraceptive continuation for women (although it was for men) (Higgins et al. 2012). Moreover, another recent study examining young women's perceptions about the benefits of childbearing, which could be reasonably

supposed to be related to feelings, found no association between positive perceptions and contraceptive discontinuation (Rocca et al. 2013).

It therefore seems plausible that either planned or actual contraceptive use could be employed as a valid measure of intent to avoid conception, even when the idea of pregnancy is viewed positively. There are, however, several other considerations to take into account. First, continued use of a contraceptive method to prevent pregnancy does not guarantee that use will be correct and consistent. In particular, there may be psychological reasons why method use is imperfect, and these may be related to complexity in motivation to avoid pregnancy (Kavanaugh and Schwarz 2009), (Schwarz et al. 2007). The risk of pregnancy itself may play a role in the heightening pleasure during a sexual encounter, provide escape from other stressful life circumstances, or produce feelings of romantic attachment to a particular partner (Higgins et al. 2008a). Motivational ambivalence, the interplay between desire for and desire to avoid pregnancy, may also play a role (Miller, Barber and Gatny 2013) There is evidence to suggest that consistency of contraceptive use increases as motivation to avoid pregnancy becomes stronger, although it is unclear exactly how such motivation is related to feelings about pregnancy and childbearing (Moreau et al. 2013).

A further consideration is the choice of contraceptive method being used. The analyses described in Chapter 1 involved a cohort of women using the oral contraceptive pill, and it is possible that women with the strongest desire and commitment to avoiding pregnancy might choose a more highly effective method to carry out their plans (Frost and Darroch 2008). If the same analyses were carried out in a cohort of women using a

range of contraceptive methods to prevent pregnancy, perhaps the least incongruence in intentions and feelings would be found among those using the most effective methods.

Yet the high frequency of unfulfilled desire for postpartum sterilization among women in the BCAS cohort who wanted no more children suggests that not all women were using the pill by choice. The implicit assumption in employing contraceptive use as a measure of intent to avoid pregnancy is that women are using the contraceptive method they actually want, and that they have the ability and motivation to use it effectively. But this assumption is problematic because women's choice of contraceptive method and the degree to which they can use it correctly is influenced and limited by a myriad of individual and structural factors, including education, age, ethnicity, and relationship status (Frost and Darroch 2008), (Frost, Singh and Finer 2007), and the influence of friends, family, and social networks as sources of information (Yee and Simon 2010), (Raine et al. 2010). For many women, method choice is limited due to financial barriers such as lack of insurance coverage or inability to afford a co-pay, logistical barriers such as inability to find reliable transport to a clinic, or provider barriers including prevailing but outdated clinical practice norms (Dehlendorf et al. 2010b), (Dehlendorf et al. 2010a). The huge increase in the uptake of highly effective long-acting and reversible contraceptive methods when offered free and with appropriate provider counseling demonstrated by the CHOICE project is testament to the what the levels of uptake of IUDs and implants might look like once such barriers are removed (Secura et al. 2010). Many women who rely on user-dependent methods such as condoms, oral contraceptive pills, patches, and rings may not be using them by choice and may find them difficult to

use correctly due to dissatisfaction (Moreau, Cleland and Trussell 2007), including interference with sexual function (Higgins et al. 2008b), inability to tolerate negative side-effects (Littlejohn 2012) or interference by an intimate partner (Miller et al. 2010). Far from being a sign of ambivalence about avoiding pregnancy, use of less effective contraceptive methods for some women may be a reflection of the inability to use the method they actually want.

In this chapter, it is proposed that these issues associated with relying on contraceptive use as marker of intentions could be ameliorated by also examining women's contraceptive desires (*i.e.* the ideal methods they want to be using but may not be able to obtain). Contraceptive desire in an ideal sense is a relatively novel concept, but has been explored previously in two studies based in Brazil and El Paso, Texas, with respect to postpartum sterilization (Potter et al. 2003), (Potter et al. 2012). If women with incongruent intentions and feelings frequently desire highly effective methods of contraception, even though they may not be using them, this would suggest serious intent to avoid pregnancy, even though the idea of a pregnancy is happy one. Drawing upon data from a prospective cohort study of postpartum women recruited from three hospitals in Texas, the following questions are addressed: First, how do prospectively measured childbearing intentions compare with feelings about pregnancy (*i.e.* how common is incongruence in this cohort of women)? Second, which methods of contraception are women with incongruent pregnancy intentions and feelings using, and are these methods more likely to be less effective than those used by women with congruent intentions and feelings? Third, which methods of contraception do women with incongruent pregnancy

intentions and feelings desire, and are they more likely to be less effective than those desired by women with congruent intentions and feelings? And finally, if the answers to the preceding questions provide evidence that incongruent intentions and feelings can indeed be interpreted as a reflection of sincere intention to avoid pregnancy, what factors are associated with happiness about a pregnancy that would be unintended?

METHODS

Data

Data are drawn from the Postpartum Contraception Study (PPC), a cohort of 803 postpartum women recruited between April 2012 and August 2014 from three hospitals in Texas: St David's Hospital in Austin, and University Medical Center and Las Palmas Hospital in El Paso. Hospitals were chosen to obtain a mix of publicly and privately insured participants, a variety of ethnic and socioeconomic groups and to allow for differences in contraceptive provision by policy context, since levels and sources of public funding for family planning vary between the two cities. Four hundred and three women were recruited in Austin, 303 of whom were publicly insured and 100 of whom were privately insured at the time of delivery. Four hundred women were recruited in El Paso, 300 of whom were publicly insured and 100 of whom were privately insured at the time of delivery. Eligible participants were aged between 18 and 44 years, wanted no more children for at least two years at the time of recruitment, delivered a healthy singleton infant whom they expected would go home with them upon discharge, and lived in the United States within 50 miles of the hospital of recruitment. After obtaining

signed informed consent, women were interviewed in person soon after delivery in either English or Spanish. Follow-up interviews then took place by telephone at 3 months, 6 months, and 9 months postpartum, and at 12 months postpartum for the Austin sample only. Participants were compensated $30 for completing the initial interview and $15 for completing each of the follow-up interviews. The follow-up rate was 89% at 6 months, and 83% at 12 months (for the Austin cohort only). Further details regarding PPC can be found in Potter et al. 2014 (Potter et al. 2014).

Two related sets of analyses are presented in this chapter. The first set is focused upon the 6-month interview and examines the association between intentions, feelings, and contraceptive desires for 578 women who had not been sterilized, gotten pregnant, or become lost to follow-up. The 6-month interview is the first time point at which prospective feelings about a future pregnancy were elicited, allowing time for childbearing preferences to stabilize following delivery. Contraceptive use and desires were also assessed at this time, affording the advantage that women's answers are less likely to be affected by considerations such as breastfeeding, abstinence from intercourse following delivery, and waiting periods for postpartum check-ups.

The second set of analyses is focused upon the 12-month follow-up interview, which involved only the cohort of women recruited in Austin. The sample consists of 139 women who were not sterilized, pregnant, or lost to follow-up at 12 months, and who wanted no more children for at least two years. The 12-month interview included a series of questions about the impacts and consequences of a pregnancy occurring in the next few months on women's lives. Comparing answers to these questions for women with

congruent and incongruent intentions and feelings allows exploration of the factors associated with happiness about a pregnancy when no more children are intended.

Variables

Future childbearing intentions at the 6 and 12 month interviews were assessed using the question "Do you plan to have more children in the future?" with participants responding "Yes", "No", or "Don't know". Those who did want more children were asked a follow-up question to assess the desired timing: "When would you like to have another child?" with responses "One year from now", "Two years from now", "Three years from now", "Four or more years from now", or "Don't know". Happiness about a future pregnancy was measured by asking, "How would you feel if you became pregnant in the next three months?" with responses recorded on a five-item ordinal scale: "Very happy", "Somewhat happy", "Don't know", "Somewhat upset" and "Very upset". Women's perceptions of their partner's feelings were also ascertained using the same ordinal scale.

Current contraceptive use at 6 months postpartum was captured using the question "Are you using a birth control method now? Please include any methods that your husband or partner is using." Women who answered "Yes" were then asked the question "What birth control method or methods are you using?" To account for the full range of ideas and opinions on what constitutes birth control, a follow-up probe was included for women who answered "No", using the question "Are you using any of the following?"

with answer options “Abstinence (Not having sex)”, “Condoms”, “Breastfeeding as birth control (Lactational amenorrhea method or LAM)”, “rhythm method, CycleBeads, Natural Family Planning or Fertility Awareness”, “Withdrawal”, or “None of the above”. Only women who answered “None of the above” were classified as using no method, and this categorization applied to only four women in the sample, none of whom were trying to get pregnant. The very small number of women who stated that they were using two methods together were classified as using the most effective of the two methods during typical use (Trussell 2011).

To capture contraceptive desires, a panel of questions was designed. The initial question asked “If you could use any birth control method you wanted, including methods your husband or partner could use, what birth control method would you like to be using three months from now?” At the 6-month follow-up, this refers to 9 months postpartum, the same time period women were asked about in terms of their feelings about pregnancy. Because preferred method is a novel concept, 16 in-depth interviews were conducted to test the question and gain a sense of how women in the sample would answer. These interviews highlighted two key issues. First, women initially often answered within the constraints of what they knew they could access rather than with their ideal method. And second, not all methods of contraception automatically fell within women’s perceptions of what counts as birth control, particularly with respect to permanent methods such as tubal ligation. To allow for these considerations, a set of follow-up probe questions was asked immediately following the initial question (Figure 1): “Did you leave out any method(s) because it was too expensive or not covered by

your insurance?" and if so, "What method(s) did you leave out?" Women who had not mentioned a long-acting reversible contraceptive (LARC) method or male or female sterilization in response to any previous question were also asked "Would you consider using an IUD if it was offered free or for a small fee?" The same question was also asked about the implant. To ensure that demand for sterilization was fully captured, women who did not want any more children or who did not know if they wanted more children in the future were also asked "Would you like to have had a tubal ligation in the hospital right after you had your new baby?" and those who responded "Yes" were added to the group who spontaneously mentioned sterilization as their preferred method. Each woman's desired method was categorized according to the most effective method mentioned across the set of probe questions described above.

Both current and desired methods were then grouped into a tiered hierarchy constructed according to method efficacy, following that detailed in *Contraceptive Technology* (Trussell and Guthrie 2011). The lowest tier, which is termed "less effective methods" (LEM), includes methods where 18 or more pregnancies per 100 women per year would be expected during a typical use. This category includes condoms, withdrawal, spermicides, sponges, fertility-based awareness methods (including the rhythm method), and abstinence. The middle tier, which is termed "hormonal methods" (no women in the study were using the diaphragm) includes methods for which 6-12 pregnancies per 100 women per year can be expected during typical use. This category includes combined and progestin-only contraceptive pills, the injectable, the vaginal ring, and the patch. The top tier, which is termed "highly effective methods" includes those for

which less than 1 pregnancy per 100 women per year can be expected during typical use. This category includes both LARC (the implant, Copper-T IUD, and Mirena IUD), and the permanent methods (female sterilization, and vasectomy). For desired methods, this top tier was split into separate categories for LARC and permanent methods.

The potential impacts and consequences of a pregnancy on participants' lives were assessed using a series of six questions to which women were asked if they strongly agreed, somewhat agreed, somewhat disagreed, or strongly disagreed. Women were asked "If you got pregnant in the next three months.... 1) You would worry about not having enough money to provide for your baby; 2) You would worry about not having enough help to care for your child; 3) You would worry about how you would keep up with work or school commitments; 4) It would make it hard to achieve your personal plans or goals; 5) You would worry that the pregnancy would hurt your relationship with your partner; and 6) It would be because it is God's plan for you or down to fate." Answer options were collapsed into "agree" and "disagree" categories.

Data on demographic and socioeconomic variables including age, education, ethnicity, parity, and income were collected at the baseline interview. Relationship status and type of health insurance were ascertained at baseline, and both were tracked over all subsequent follow-up interviews.

Analyses

Pregnancy Intentions, Feelings, and Contraceptive Use and Desires at 6 Months Postpartum

First, future pregnancy intentions were compared to feelings about pregnancy in the next three months. The sample was divided into five groups according to future fertility intentions: 1) Want no more children in the future; 2) Want no more children for at least 4 years; 3) Want no more children for 2-3 years; 4) Want more children in 1 year or less; 5) Don't know if want more children. To assess the degree of incongruence of intentions and feelings in the sample, the proportion of women who would feel very happy, somewhat happy, somewhat upset, very upset, or didn't know how they would feel for each of the five groups was examined across each of the five groups of intentions using a Jonckheere–Terpstra test for multiple independent ordered samples.

For the remaining analyses women who wanted more children within one year or did not know if they wanted more children, and women who did not know how they would feel about a pregnancy in the next three months were excluded. Within each of the three remaining groups of future childbearing intentions (want no more ever, want no more for at least 4 years, want no more for 2-3 years), contraceptive use at 6 months postpartum was compared between those who professed happiness about a pregnancy in the next three months and those who professed unhappiness about a pregnancy in the next three months. Chi-squared difference of proportions tests were used to compare the proportions of women who would be happy and unhappy about a pregnancy within each individual method tier. Fisher-Freeman-Halton tests were used to examine the association

between happiness and method use across the entire distribution of methods within each group of intentions. Pearson's chi-squared tests were also performed to assess the distribution of methods, but the results are not shown here as they were virtually identical to those of the Fisher-Freenman-Halton tests. Finally, the same comparisons were carried out for contraceptive method desired at six months postpartum.

Correlates of Happiness about Pregnancy at 12 months postpartum

For the purposes of this analysis, the three categories of intentions described above were collapsed into one category *i.e*. those wanting no more children for at least 2 years. Fifty three women wanted no more children ever, 35 wanted no more for at least 4 years, and 51 wanted no more for 2-3 years, making a total of 139 women. Women were defined as incongruent if they reported that they would feel happy about a pregnancy in the next 3 months and congruent if they would feel unhappy about such a pregnancy. The proportions of congruent and incongruent women agreeing with the six statements about the impact a pregnancy would have on their lives were compared using chi-squared difference of proportions tests. Finally, the associations of these impacts with happiness about a pregnancy when no more children are wanted for at least two years were examined using binary logistic regression. Other covariates were selected on the basis of previous literature exploring the factors associated with intentions and feelings about pregnancy (Fischer et al. 1999), (Blake et al. 2007),(Thomson 1997), (Santelli et al. 2003). To control for reproductive timing and completed family size considerations, age and parity were included, coded as categorical variables with reference categories age 18-

24, and parity 1. To control for influential socioeconomic and demographic characteristics, ethnicity, educational level, relationship status, and income were all coded as indicator variables, with respective reference categories: “Hispanic”, “Less than high school”, “Married”, and “Less than $10,000”.

In light of results from Chapter 1, the same logistic regression model was also conducted using a binary variable for women’s perceptions of their partner’s feelings (categories “very or somewhat happy” and “very or somewhat upset”) in place of the variable for impact of a pregnancy on their relationship with their partner. These variables are highly collinear and so were not included in the same regression model.

All analyses were performed using Stata version 12.0. Findings were considered statistically significant at an alpha level of 0.05. Human subjects approval for this study was obtained from the Institutional Review Boards at the University of Texas at Austin, the University of Texas at El Paso, St. David’s Hospital in Austin, Texas, and University Medical Center and Las Palmas Hospital in El Paso, Texas.

RESULTS

Descriptive characteristics of the sample are shown in Table 2.1. The majority of women (74%) were Hispanic, mean age was 27 years, 31% had at least 3 children, and 34% had a household income of less than $10,000 per year. Nearly half (49%) were married, and a further 31% were cohabiting. One third (33%) wanted no more children in the future, just under half (49%) said they would be somewhat or very happy about a pregnancy in the next three months, and 60% believed their partner would be somewhat

or very happy about such a pregnancy. By 6 months postpartum, 54% of women had no insurance coverage of any sort. Nearly three quarters (72%) desired a highly effective method (LARC or sterilization), but only 15% were using such a method.

Table 2.2 shows the distribution of feelings about a pregnancy in the next three months among women in the five different categories of future childbearing plans. As would be expected, the proportion of women that would feel very or somewhat happy about a pregnancy is highest among women who want more children within 1 year (88%). Yet 36% of women who want no more children in the future also said that they would be somewhat or very happy about a pregnancy in the next three months. Of women who want no more children for at least 4 years, 46% said they would be somewhat or very happy about a pregnancy in the next three months, and among women who want no more children for 2-3 years, the equivalent figure is 59%. There is thus an increasing gradient of happiness across the four categories of intention from want no more to want more within one year, excluding the "don't know" category ($p<0.001$), Yet a relatively high proportion of those who want no more children, or want no more for at least two more years have feelings that are incongruent with their intentions.

Table 2.3 shows the mix of contraceptive methods being used at 6 months postpartum for women in each category of future childbearing intentions. Within each category of intentions, the distribution of methods being used is not significantly different between women who professed happiness and women who professed unhappiness about a future pregnancy (want no more, $p=0.85$, want no more for at least 4 years, $p=0.80$, want no more for 2-3 years, $p =0.92$). Among women who wanted no more children in

the future, 15% who said that they would be somewhat or very happy about a pregnancy were using a LARC method, compared to 17% of those who said that they would be somewhat or very upset about a pregnancy, and this difference is not statistically significant (p=0.88). The proportions of women using hormonal and less effective methods also do not vary significantly according to happiness about pregnancy: 27% *vs*. 30% for hormonal methods (p=0.88), and 56% *vs*. 51% for less effective methods (p=0.68).

Among women who wanted no more children for at least 4 years, a slightly higher percentage were using LARC than among those who wanted no more children ever. Within this group, proportions using LARC were very similar among those who professed happiness about a pregnancy in the next three months and those who professed unhappiness (23% *vs*. 25% respectively, p=0.92). The proportions using hormonal, and less effective methods were also very similar: 25% *vs*. 28% for hormonal methods (p= 0.99), and 52% *vs*. 45% for less effective methods (p=0.70).

Women who wanted no more children for 2-3 years had a lower overall percentage of LARC use compared to women who wanted no more children for at least 4 years or not at all. Yet once again, the proportion using LARC within the group did not vary significantly by feelings about a pregnancy (10% *vs*. 11%, p=1.00), and the same was true of both hormonal methods (33% *vs*. 27%, p=0.55) and less effective methods (53% *vs*. 59%, p=0.58).

Table 2.4 shows the distribution of desired contraceptive methods for women in each category of intentions according to their feelings about a pregnancy in the next three

months. Within each category of intentions, the distribution of desired methods is not significantly different between women who professed happiness and women who professed unhappiness about a future pregnancy (want no more, p=0.09, want no more for at least 4 years, p=0.18, want no more for 2-3 years, p=0.66). Among women who wanted no more children in the future, 57% of those who professed happiness at the prospect of a pregnancy in the next three months desired a tubal ligation or a vasectomy for their partner. The equivalent figure among women with congruent intentions and feelings was 62%, and the difference between the two groups is not statistically significant (p=0.21). A further 18% of women with incongruent intentions and feelings desired LARC, compared to 27% of those with congruent intentions and feelings (p=0.46). Overall, 75% of women who wanted no more children in the future yet would feel happy about a pregnancy in the next three months expressed a preference for sterilization or LARC.

Among women who wanted no more children for at least 4 years, no women expressed a desire for sterilization, and 73% of those who would be happy about a pregnancy in the next three months expressed a desire for LARC, compared with 89% of those who would be unhappy about a pregnancy (p=0.06). The overall distribution of desired methods for this group is similar to that observed for women who wanted no more children in the future, and is not significantly different between congruent and incongruent women.

Finally, among women who want no more children for 2-3 years, the proportion of women desiring LARC was actually higher among women with incongruent intentions and feelings: 63% versus 57% of women with congruent intentions and feelings ($p=0.6$).

Overall, across all groups of pregnancy intentions, the distributions of desired methods do not differ significantly according to feelings about pregnancy. With this in mind, we compare the proportions of women with congruent and incongruent intentions and feelings who would worry about certain negative life consequences if pregnancy were to occur (Table 2.5). A similarly high percentage of women with congruent and incongruent intentions and feelings agreed that they would worry about providing financially for a new baby (69% *vs.* 62%, $p=0.20$). The percentage who agreed that they would worry about not having enough help to care for their new baby was higher among the congruent group (59% *vs.* 45%), but not significantly different ($p=0.11$).

Substantially more women who would feel unhappy about a pregnancy agreed that it would make it hard to keep up with work or school commitments (65% *vs.* 43%, $p<0.01$) or achieve personal plans or goals (85% *vs.* 60% $p <0.01$). The belief that a pregnancy would be God's plan or meant to be was very common among both groups, but significantly higher among those who would feel happy (82% *vs.* 64%, $p<0.05$).

By far the biggest difference between the two groups, however, was the potential impact a pregnancy might have on their relationship with their male partner. Among women who would be unhappy about a pregnancy, 38% agreed that the pregnancy might hurt their relationship with their partner, whereas only 10% of women who would happy shared this concern ($p<0.001$).

To allow for the possibility that these differences between women with congruent and incongruent intentions and feelings might be driven by women who are not in a relationship, Table 2.6 shows the first five comparisons in Table 2.5 only for women with a male partner. Although it appears that fewer women with a male partner would be unhappy about a pregnancy, the same differences between congruent and incongruent women are apparent.

Tables 2.7 and 2.8 show the results of binary logistic regression models used to examine the factors associated with happiness about a pregnancy in the next three months among women who intend no more children for at least two years. Table 2.7 includes all women in the sample, and shows that even when controlling for a range of sociodemographic variables, the likelihood of professing happiness when no more children are intended is higher among women who believe that pregnancy would be God's plan or meant to be (OR=3.34, p<0.05) and lower among women in cohabiting relationships (OR=0.30, p<0.05) and women who are single (OR=0.13, p<0.01). Table 2.8 includes only those women who are in a relationship with a male partner and shows that the likelihood of professing happiness when no more children are intended is again higher among women who believe that pregnancy would be God's plan or meant to be (OR=4.10, p<0.01), but lower among women in cohabiting relationships (OR=0.31, p<0.05) and women who would worry that a pregnancy would hurt their relationship with their partner (OR=0.22, p<0.01). To allow for the possibility that relationship status and concern that another pregnancy might hurt the relationship may have synergystic rather

than independent associations with happiness, an interaction term between the two was also tested, but was not significant (results not shown).

In the model where women's perceptions of their male partner's feelings about a pregnancy were included in place of women's concerns that a pregnancy would hurt their relationship with their partner, the perception that a male partner would be happy was significantly associated with an increased likelihood of a woman professing happiness herself (see Table 5.1 in Appendix B). This is reassuring, since it is very likely that perceptions of partner happiness and perceived impacts of a pregnancy on the relationship represent similar substantive concepts. The association between happiness and relationship status was also robust with respect to the measure used.

DISCUSSION

For a substantial proportion of women in this sample, an apparent contradiction exists between future fertility intentions and feelings about a future pregnancy. For these women, intention and feelings are incongruent, in that they simultaneously want no more children in the future or for a number of years, yet express happiness at the prospect of pregnancy in the next few months. Examining the seriousness of the intent of these women to avoid pregnancy through their use of contraception, we find that there is virtually no difference in the distribution of top, middle, and lowest efficacy-tier methods being used by women whose intentions and feelings are incongruent compared to those whose intentions and feelings are congruent. This finding suggests that happiness at the

prospect of a pregnancy that would not be intended is not associated with a weaker motivation to prevent conception.

The low overall use of highly effective contraceptive methods among women in our sample could still be interpreted as an indication of lack of commitment to or ambivalence about avoiding conception. Yet the very high proportions of women with incongruent intentions and feelings who desired LARC or sterilization provides strong evidence for the seriousness and strength of their motivation, especially since these proportions were not significantly different compared to women whose feelings and intentions were congruent. In the in-depth interviews used to explore method desires, women reported financial, logistical and provider-related barriers when attempting to access their desired methods, the most common of which were loss of insurance and inability to afford a co-pay. Moreover, many women wished to access the most highly effective and long-acting methods precisely because they were dissatisfied with their current method. Reasons for dissatisfaction included trouble remembering to take pills, dislike of using condoms, and difficulty keeping appointments to return to a clinic for the Depo shot.

In of light of their contraceptive desires, it seems highly likely that the women in this sample who have incongruent intentions and feelings are both earnest in their attempts to prevent conception yet simultaneously feel joy at the idea of a pregnancy. The exploration of the factors associated with such happiness presented in this chapter suggests that the basis for such positive feelings is less related to practical concerns and

more affected by the type of relationship in which a woman is involved, and the impact a pregnancy might have on the relationship.

Although the ability to provide financially for a new baby is a common concern among both congruent and incongruent women, there is little difference in frequency between the two groups, suggesting that economic concerns might be more related to intentions than to feelings. The same is true of having enough help or support to care for a new baby, a second practical consideration. Although this concern is slightly more common among women with congruent intentions and feelings it is not significantly different from the frequency among incongruent women.

When considering personal and emotional factors, the story looks rather different. Women with congruent intentions and feelings appear to be much more likely to worry about keeping up with work or school commitments and with achieving personal plans and goals, which is likely a reflection of competing priorities. Where financial and practical considerations may shape intentions for both congruent and incongruent women, the personal opportunity cost of a pregnancy may be relevant only to some women, depending upon their roles and aspirations. These associations do not hold in the regression models, suggesting that their contribution may be eclipsed by more important factors. However, these analyses are exploratory in nature, and their main function is to identify areas of focus for the in-depth interviews rather than to be interpreted as stand-alone evidence.

For women in relationships, by far the biggest difference between congruent and incongruent women is their perceptions of the potential impact of a pregnancy on their

relationship with their partner. Less than 10% of women who would greet an unintended pregnancy with happiness would worry that it might have a negative effect on her relationship, compared with over a third of women who would be unhappy about an unintended pregnancy. Findings from Chapter 1 hinted at the impact of women's perceptions of their partners' feelings about a pregnancy on their own feelings, and there is evidence from other studies that the intentions of male partners matter for at least women's own childbearing intentions (Schwartz et al. 2011), (McQuillan, Greil and Shreffler 2011), (Rocca et al. 2010a). The analyses presented in this chapter and in the appendix suggest that incongruent women are more likely to perceive that their male partners would also feel happy about the news of a pregnancy. Thus, the anticipated happiness of a male partner might form the basis of personal happiness as a result of pleasing the partner, promoting the wellbeing of the relationship, or ameliorating other concerns by providing an expectation of emotional and practical support. Interestingly, the perception that a pregnancy would hurt the relationship was associated with decreased likelihood of happiness regardless of the type of relationship.

For all women, relationship status itself also appears to be an important factor associated with happiness. Although marriage is still the modal pattern of childbearing among Latinas and whites, non-marital childbearing has been increasing since the 1970s (Bumpass and Lu 2000), and is largely driven by the growing share of births to women in cohabiting relationships (Raley 2001). According to the most recent round of data from the NSFG, rates of unintended pregnancy are also higher among cohabiting women than among married women (Finer and Zolna 2014), although contraceptive use in cohabiting

relationships typically looks very similar to that of marital unions, particularly among the least educated (Sweeney 2010). There is also variation by race/ethnic group, with African-Americans and Latinas being more likely than whites to be willing to consider having a child outside of marriage (Oropesa 1996). Indeed, within non-marital relationships, African-Americans and Latinas who are cohabiting are more likely than women who are single or in a relationship but not living together to report that their pregnancies were planned (Musick 2002).

No previous studies have examined happiness about pregnancy by relationship status. In the prospective analyses presented here, single and cohabiting women are less likely than married women to profess happiness about a pregnancy when no more children are intended, regardless of the perceived happiness of her male partner. This may be a reflection of the amount of anticipated emotional and economic support (especially for single women), the inherent instability of the union (*i.e.* happiness may hinge on the likelihood of staying together), or the perceived consequences of remaining in the union for her own emotional wellbeing and for the welfare of the new baby or existing children. Many low income women may have a rational basis for putting motherhood before marriage in the first instance, but the majority of these cohabiting relationships do not last and women frequently cite problems with the behavior of the baby's fathers as reasons for union dissolution (Edin and Kefalas 2005).

A high proportion of both congruent and incongruent women agreed that an unintended pregnancy would be down to fate or part of "God's plan", but such belief was significantly more common among incongruent women, regardless of relationship status.

Fatalistic attitudes towards pregnancy have previously been reported in studies of contraceptive use and pregnancy intentions, and are usually associated with ambivalence (Higgins et al. 2012), (Layte et al. 2007), (Sawhill, Thomas and Monea 2010). Although it is impossible to tell based on single-answer survey questions, fatalistic attitudes for women in this sample may be a reflection of religious belief that God decides the number of children one should have, a fatalistic approach to life, or alternatively, an indication of perceived degree of control over ability to prevent conception using an unsatisfactory method, or a mechanism for rationalizing or coming to accept an unintended pregnancy.

This study afforded important advantages by providing the ability to measure fertility intentions and feelings about pregnancy prospectively, and by providing a measure of contraceptive desires. However, it also has some limitations, including the relatively small sample size recruited from two cities in Texas and involving women for whom childbearing had occurred fairly recently, limiting the generalizability of results to other settings. The concept of method desires is also relatively unchartered territory, and we must rely heavily on the belief that the constructs designed to measure method preference are valid. Additionally, pregnancy intentions and feelings about pregnancy may change over time, and we examine them cross-sectionally in both sets of analyses. Fortunately, the prospective study design allows assessment of the stability intentions and feelings between the 6 month and 12 month follow-ups. Further analyses (not shown here) revealed that they were remarkably consistent, with 86% of women giving the same response regarding future childbearing plans at both 6 months and 12 months, and 90% giving the same response regarding their feelings about a pregnancy. Moreover, virtually

all of the small amount of switching that did occur took was in the direction of wanting no more children.

CONCLUSION

The evidence presented in this chapter further strengthens the assertion that happiness at the idea of pregnancy when no more children are intended is not necessarily a reflection of ambivalence. On the contrary, happiness about pregnancy often appears to coincide with strong indicators of motivation to avoid conception, and findings from the analyses presented here provide a foundation for understanding the possible basis of such happiness, including relationship-related factors, the attitudes of male partners, and emotional versus practical considerations. Chapter 3 builds upon this foundation by digging deeply into these underlying factors from women's perspectives.

FIGURE 1—Measuring Contraceptive Desires at 6 Months Postpartum

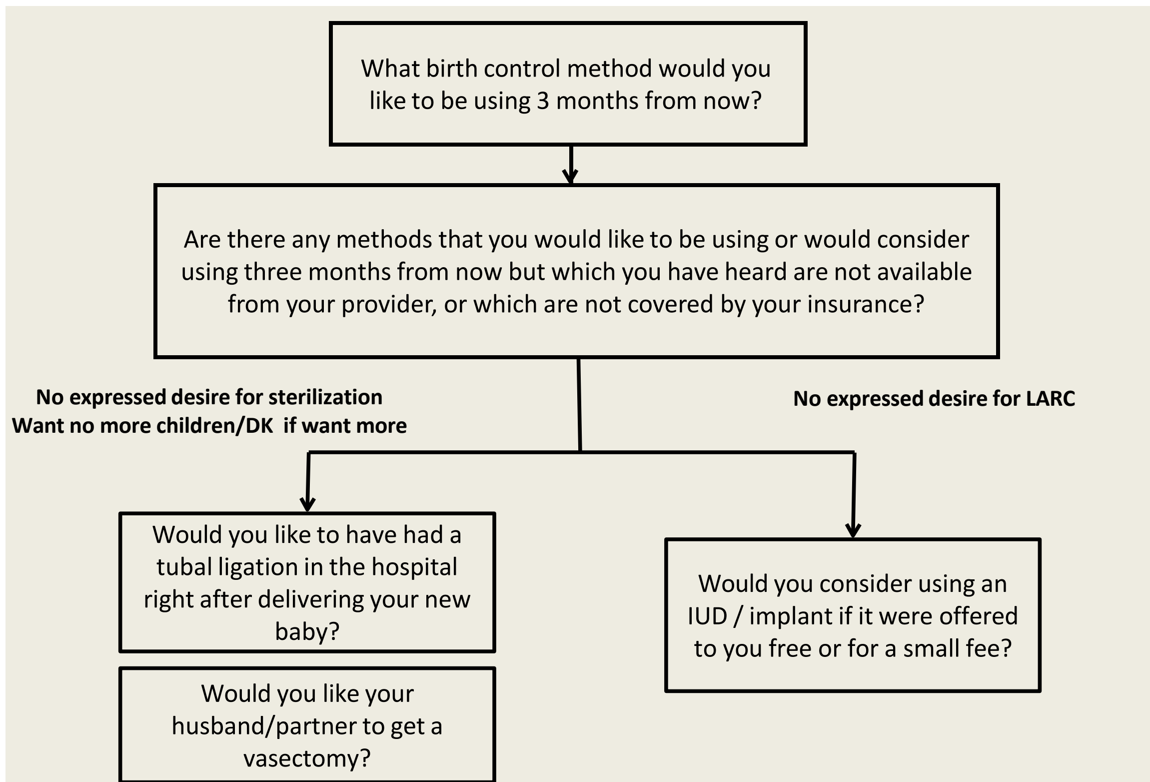

TABLE 2.1—Descriptive Characteristics of Women in the Study Sample (n=578)

Characteristic	**Frequency (%)**
City	
Austin	53.5
El Paso	46.5
Baseline Insurance	
Public	74.2
Private	25.8
Insurance at 6 months	
Public	16.8
Private	29.8
None	53.5
Age	
18-24	37.0
25-29	29.8
30-34	20.2
35+	13.0
Ethnicity	
Hispanic	74.0
African-American	6.4
White	16.6
Other	3.1
Parity	
1	36.3
2	33.2
3+	30.5
Education	
Less than High School	30.2
Completed High School	27.2
More than High School	42.6
Income	
<10,000	33.6
10,000-19,999	23.8
20,000-34,999	14.3
35,000-74,999	15.7
≥75,000	12.7
Relationship Status	
Married	48.9
Cohabiting	30.5
In a relationship (not living together)	9.4
Single	10.2
Separated/Divorced	1.0

TABLE 2.1 CONTINUED—Descriptive Characteristics of Women in the Study Sample (n=578)

Future Childbearing Desires	
Want No More Children in Future	32.9
Want More Children in Future	55.7
Don't Know	11.4
Timing of Future Childbearing*	
In 1 year	12.7
In 2-3 years	45.9
In 4 years or more	40.6
Don't Know	1.2
Feelings About Pregnancy in Next 3 Months	
Very Happy	16.8
Somewhat Happy	32.4
Don't Know	11.1
Somewhat Upset	20.4
Very Upset	19.4
Partner Feelings About Pregnancy†	
Very Happy	29.3
Somewhat Happy	30.3
Don't Know	9.5
Somewhat Upset	18.6
Very Upset	12.3
Contraceptive use at 6mo	
LARC	15.1
Hormonal	28.9
LEM	53.6
No Method	2.4
Contraceptive desired at 6mo	
Female or Male Sterilization	24.4
LARC	47.5
Hormonal	14.0
LEM	12.1
DK/No Method	1.9

* Denominator is women who want more children in the future (n=322)
† Denominator is women who are married, cohabiting, or in a relationship (n=505)

TABLE 2.2—Feelings About Pregnancy in the next 3 Months by Stated Pregnancy Intentions (n=578)

	Future Childbearing Plans				
Feelings About Pregnancy in the Next 3 Months	**Want No More Children in the Future (n=190)**	**Want No More Children for at Least 4 years (n=130)**	**Want No More Children for 2- 3 years (n=147)**	**Want More Children within 1 year (n=41)**	**Don't Know if or When Want More Children (n=70)**
Very Happy	7.9	13.1	21.1	58.5	14.3
Somewhat Happy	27.9	33.1	38.1	29.3	32.9
Don't Know	12.1	13.1	10.9	4.9	8.6
Somewhat Upset	23.2	18.5	20.4	4.9	25.7
Very Upset	29.0	22.3	9.5	2.4	18.6
Total	100.0	100.0	100.0	100.0	100.0

Figures in percentages and may not add to 100.0 because of rounding
Across categories of intentions (excluding "Don't Know"): Jonckheere-Terpsta test statistic -7.63, $p \leq 0.001$

TABLE 2.3—Women's Contraceptive Method Use at 6 Months Postpartum and Feelings About Pregnancy in the Next 3 Months by Category of Future Pregnancy Intentions (n=411)

	Method Use at 6 Months Postpartum				
No More Children Wanted in the Future	**LARC**	**Hormonal**	**LEM**	**No Method**	**Total**
Very or Somewhat Happy (n=68)	14.7	26.5	55.9	2.9	100.0
Very or Somewhat Upset (n=99)	17.2	30.3	50.5	2.0	100.0
No More Children Wanted for ≥4 years					
Very or Somewhat Happy (n=60)	23.3	25.0	51.7	0.0	100.0
Very or Somewhat Upset (n=53)	24.5	28.3	45.3	1.9	100.0
No More Children Wanted for 2-3 years					
Very or Somewhat Happy (n=87)	10.3	33.3	52.9	3.5	100.0
Very or Somewhat Upset (n=44)	11.4	27.3	59.1	2.3	100.0

Figures are in percentages
LEM = Less effective method (as defined in the main text)
No More Children Wanted in the Future: Fisher-Freeman-Halton test statistic 0.9, p=0.85
No More Children Wanted for ≤ 4 Years: Fisher-Freeman-Halton test statistic 1.5, p=0.80
No More Children Wanted for 2-3 Years: Fisher-Freeman-Halton test statistic 0.8, p=0.92

TABLE 2.4— Women's Contraceptive Method Desires at 6 Months Postpartum and Feelings About Pregnancy in the Next 3 Months by Category of Future Pregnancy Intentions (n=411)

	Method Desired at 6 Months Postpartum					
No More Children Wanted in the Future	**Female or Male Sterilization**	**LARC**	**Hormonal**	**LEM**	**Don't Know**	**Total**
Very or Somewhat Happy (n=68)	57.4	17.7	13.2	11.7	0.0	100.0
Very or Somewhat Upset (n=99)	61.6	27.3	7.1	4.1	0.0	100.0
No More Children Wanted for ≥4 years						
Very or Somewhat Happy (n=60)	0.0	73.3	15.0	10.0	1.7	100.0
Very or Somewhat Upset (n=53)	0.0	88.7	5.7	5.7	0.0	100.0
No More Children Wanted for 2-3 Years						
Very or Somewhat Happy (n=87)	0.0	63.2	16.1	18.4	2.3	100.0
Very or Somewhat Upset (n=44)	0.0	56.8	22.7	20.5	0.0	100.0

LEM = Less effective method (as defined in the main text)
Figures in percentages
No More Children Wanted in the Future: Fisher-Freeman-Halton test statistic 6.5, p=0.09
No More Children Wanted for at ≤4 Years: Fisher-Freeman-Halton test statistic 4.5, p=0.18
No More Children Wanted for 2-3 Years: Fisher-Freeman-Halton test statistic 1.7, p=0.66

TABLE 2.5—Frequency of Beliefs About a Pregnancy Occurring in the Next 3 Months Among Women Wanting no More Children for at Least Two Years (n=139)

Impacts on life if pregnancy occurred in the next 3 months	**Happy About a Pregnancy (n=87)**	**Unhappy About a Pregnancy (n=52)**
Would worry about not having enough money to provide for the baby	62.1	69.2
Would worry about having enough help to care for the baby	44.8	59.6
Would worry about keeping up with work or school commitments	42.5	65.4**
Would not be able to achieve personal plans or goals	59.7	84.6**
Would be God's plan or meant to be	81.6	63.5*
Would hurt relationship with partner[†]	9.8	37.5***

*p≤ 0.05 **p≤0.01 ***p≤0.001
Figures in percentages
[†] sample is women with a current partner (n=122)

TABLE 2.6—Frequency of Beliefs About a Pregnancy Occurring in the Next 3 Months Among Women Who are in a Relationship and Who Want no More Children for at Least Two Years (n=122)

Impacts on life if pregnancy occurred in the next 3 months	**Happy About a Pregnancy (n=82)**	**Unhappy About a Pregnancy (n=40)**
Would worry about not having enough money to provide for the baby	62.2	65.0
Would worry about having enough help to care for the baby	43.9	55.0
Would worry about keeping up with work or school commitments	41.5	60.0*
Would not be able to achieve personal plans or goals	59.8	80.0*
Would be God's plan or meant to be	81.7	60.0*

*$p \leq 0.05$
Figures in percentages

TABLE 2.7—Logistic Regression of Factors Associated with Happiness About Pregnancy When no More Children are Intended for at Least Two Years (n=122)

Variable	Odds Ratio (95% C.I)
Age	
18-24	Ref
25-29	1.75 (0.61-5.06)
30-34	4.42 (0.95-20.42)
35+	2.58 (0.47-14.11)
Parity	
1	Ref
2	0.57 (0.20-1.65)
3+	0.38 (0.11-1.29)
Ethnicity	
Non-Hispanic	Ref
Hispanic	0.91 (0.31-2.72)
Relationship Status	
Married	Ref
Cohabiting	0.30 (0.10-0.88)*
In a relationship but not living together	0.47 (0.12-1.92)
Single	0.13 (0.03-0.60)**
Education	
<HS	Ref
Completed HS	1.20 (0.38-3.50)
>HS	0.57 (0.14-2.28)
Income	
<$10,000	Ref
$10,000-19,999	1.64 (0.48-5.58)
$20,000-34,999	1.00 (0.26-3.84)
$35,000-74,999	1.16 (0.24-5.48)
≥$75,000	0.79 (0.10-6.11)
Worried About Affording Baby	
No	Ref
Yes	1.04 (0.34-3.16)
Worried About Having Enough Help to Care for Baby	
No	Ref
Yes	0.71 (0.26-1.95)
Worried About Fulfilling Personal Goals	
No	Ref
Yes	0.40 (0.14-1.15)[†]
Worried About Work or School Commitments	
No	Ref
Yes	0.74 (0.48-2.00)

TABLE 2.7 CONTINUED—Logistic Regression of Factors Associated with Happiness About Pregnancy When no More Children are Intended for at Least Two Years (n=122)

Would be Down to God's Plan or Meant to be	
No	Ref
Yes	3.34 (1.24-9.00)*

$^{\dagger}p \leq 0.1$ $*p \leq 0.05$ $**p \leq 0.01$
Ref = reference category

TABLE 2.8—Logistic Regression of Factors Associated with Happiness About Pregnancy Among Women in a Relationship When no More Children are Intended for at Least Two Years (n=122)

Variable	Odds Ratio (95% C.I)
Age	
18-24	Ref
25-29	1.98 (0.61-6.42)
30-34	3.67 (0.66-20.41)
35+	2.50 (0.41-15.28)
Parity	
1	Ref
2	0.58 (0.17-1.96)
3+	0.28 (0.07-1.11)
Ethnicity	
Non-Hispanic	Ref
Hispanic	1.06 (0.30-3.76)
Relationship Status	
Married	Ref
Cohabiting	0.31 (0.10-0.96)*
In a relationship but not living together	0.41 (0.09-1.82)
Education	
<HS	Ref
Completed HS	0.96 (0.27-3.41)
>HS	0.42 (0.09-2.00)
Income	
<$10,000	Ref
$10,000-19,999	1.68 (0.43-6.60)
$20,000-34,999	1.01 (0.22-4.55)
$35,000-74,999	1.17 (0.18-7.65)
≥ $75,000	1.43 (0.14-14.78)
Worried About Affording Baby	
No	Ref
Yes	1.07 (0.32-3.60)
Worried About Having Enough Help to Care for Baby	
No	Ref
Yes	0.83 (0.26-2.62)
Worried About Fulfilling Personal Goals	
No	Ref
Yes	0.58 (0.18-1.94)
Worried About Work or School Commitments	
No	Ref
Yes	1.01 (0.32-3.13)
Worried Pregnancy Would Hurt Relationship	
No	Ref
Yes	0.22 (0.07-0.74)**

TABLE 2.8 CONTINUED—Logistic Regression of Factors Associated with Happiness About Pregnancy Among Women in a Relationship When no More Children are Intended for at Least Two Years (n=122)

Would be Down to God's Plan or Meant to be	
No	Ref
Yes	4.10 (1.36-12.07)**

*p≤ 0.05 **p≤0.01
Ref = reference category

Chapter 3: A Blessing I Can't Afford: Factors Underlying the Paradox of Happiness About Unintended Pregnancy

INTRODUCTION

The empirical findings presented in Chapters 1 and 2 strongly suggest that there are important insights to be gained from considering happiness and intentions as distinct concepts. In this final chapter, we delve below the surface of these two concepts to discover the factors underlying each with a view towards explaining the paradox of happiness about a pregnancy that would truly be unintended. To explore in detail the nuances of women's childbearing intentions and feelings about pregnancy, we take a qualitative approach, allowing us to capture a richness of detail extending far beyond that afforded by single-answer survey data.

The majority of previous studies examining pregnancy intentions and feelings have equated incongruence with ambivalence, and thus the current literature provides only hints about what might be discovered when feelings and intentions are considered as independent constructs. Nevertheless, such hints are helpful in establishing a framework for identifying influences of possible importance. Previous qualitative work has demonstrated that women themselves make an important distinction between pregnancy plans and pregnancy desires, *i.e.* that their concrete childbearing plans are often different from their "ideal world" attitude to a pregnancy (Fischer et al. 1999), (LeVine 1993).

Explorations of this distinction have pointed to the discordance between pregnancy intentions and consistent contraceptive use and have identified both structural and individual factors (Kendall et al. 2005). One prominent example is the association between low educational attainment and increased unintended fertility, the hypothesized pathways for which include the influence of difficult economic circumstances on women's perception of their ability to use contraception effectively (Musick et al. 2009). In light of the unfulfilled desire for highly effective methods among women with incongruent intentions and feelings demonstrated in Chapter 2, it is certainly plausible that perceived inability to control fertility might influence women's feelings about a pregnancy that would be unintended *i.e.* for some women, professed happiness may reflect a lack of agency.

The social context in which women view motherhood and childbearing might also shape feelings about unplanned pregnancy. Highly influential work examining the reasons why unmarried women living in fragile socioeconomic situations have children before ensuring economic and marital stability suggests that their decisions can be understood as a product of their life and relationship experiences, their perceived opportunities, and their view of motherhood as an attainable goal (Edin and Kefalas 2005). Other studies focusing on teens have also linked earlier childbearing to fewer economic and educational opportunities (Rosengard et al. 2006). Exploring women's perceptions of what children bring to their lives, the circumstances in which their pregnancies occurred, and where childbearing fits with competing commitments and

aspirations is also likely to be important for understanding feelings at the prospect of an unintended pregnancy.

Further insights from the family demography literature suggest that the meaning of childbearing depends upon the household and extended family structure in which it occurs (Musick 2002). Becoming a parent, and the particular social role that accompanies the transition, appear to have a different meaning depending on the age and marital status of respondents (Morgan and Waite 1987). Transitions in family structure also play a role, with changes in family stability as a result of exiting or entering a marital or cohabiting union affecting maternal hardship and stress (Osborne, Berger and Magnuson 2012). Additionally, intergenerational research suggests a role for the influence of childhood social circumstance and familial experience on fertility intentions (Barber 2000), with mother's contraceptive use, total number of children, and religious affiliation all influencing the timing of childbearing among their daughters (Barber 2001). Experiences growing up and the perceived reaction of family members to an unintended pregnancy may also be relevant for women's own feelings, particularly in terms of anticipated sources of emotional and economic support.

Exploring the factors underlying feelings about unintended pregnancy may also shed light upon the higher propensity towards happiness that has been demonstrated for Latinas when compared to non-Hispanic whites (Chandra et al. 2005), (Hartnett 2012). Such differences may be linked to fewer economic and educational opportunities among ethnic minority groups (Minnis et al. 2013), a differential influence of religion and gender roles (Hayford and Morgan 2008), and increased challenges to obtaining more

effective methods of contraception due to both a higher likelihood of lacking health insurance (Montez, Angel and Angel 2009) and difficulty navigating the health system and gaining knowledge about contraceptive methods due to language barriers (Dehlendorf et al. 2010b). Previous studies have also pointed to differences in attitudes towards motherhood among Mexican women living in Mexico, Mexican women living in the United States, and U.S.-born Mexican-American women, with women with the closest ties to Mexico having the most positive attitudes (Guendelman et al. 2001). These studies underscore the potential relevance of Latina women's socioeconomic situations and the social and cultural origins of their beliefs about motherhood for their feelings about future pregnancies.

Finally, male partners' attitudes towards pregnancy have been shown to influence women's fertility intentions, ideal family size, and feelings about pregnancy (Thomson 1997), (Aiken and Potter 2013), (Carter et al. 2013). Qualitative work has been limited, but has demonstrated that the attitudes of male partners are influential both pre- and post-conception (Stanford et al. 2000). In one study examining family size preference among Mexican-origin women, male partner's childbearing preferences were the most influential factor (Zerden et al. 2013). In another, women choosing to terminate pregnancy were less likely to report that their partner wanted a baby (Santelli et al. 2006). Yet despite their clear importance, the particular mechanisms by which male partner attitudes mediate women's own feelings and desires have not been fully explored.

Building upon insights from the existing literature and the results presented in Chapter 2 regarding the influence of male partners, belief in fate, and the impacts of

another pregnancy on competing goals and aspirations, the aim of this chapter is to explore in depth women's feelings at the prospect of an unintended pregnancy, with a view to providing a better understanding of incongruent intentions and feelings and identifying key differences among demographic groups.

METHODS

Between September 2013 and February 2014, in-depth interviews were conducted with 27 women who wanted no more children in the future (n=23) or for at least four years (n=4). Participants were selected from the Austin arm of the postpartum contraception study, a longitudinal survey assessing contraceptive use, desires, and prospective pregnancy intentions and feelings among 403 postpartum women at regular intervals over 24 months. Further details regarding the survey can be found in the methods section of Chapter 2.

The sample matrix for selection of interview participants is shown in Table 3.1. The major comparison of interest was between women with incongruent intentions and feelings (*i.e.* women who wanted no more children or wanted no more children for at least four years, but professed happiness at the prospect of a pregnancy in the next few months) and women with congruent intentions and feelings (*i.e.* women who wanted no more children or wanted no more children for at least four years, and professed unhappiness at the idea of a pregnancy in the next few months). Women were selected for interview just after the 12-month follow-up survey had been completed, and only women

whose pregnancy intentions and feelings were consistent across the 6, 9 and 12-month interviews were eligible (see Chapter 2 for details of the survey questions used to assess pregnancy intentions and feelings).

To allow comparison of the influences on feelings about pregnancy between Latina and white women, participants within the incongruent and congruent groups were further selected on the basis of ethnicity (Latina *vs*. non-Hispanic white), and language spoken (English *vs*. Spanish). To account for differences in ability to implement childbearing plans through access to contraception and to allow comparison across socioeconomic strata, participants were also selected on the basis of insurance status (public *vs*. private). The Austin arm of the postpartum contraception study population was 75% publicly insured and 74% Hispanic. Survey participants were categorized as public if they had Medicaid or Emergency Medicaid to cover their delivery at baseline, or if they had no insurance at all to cover delivery. By the time of selection for interview, virtually all publicly insured women who had Medicaid or Emergency Medicaid at delivery had lost coverage and had no health insurance.

Potential participants were contacted by telephone and asked if they would be willing to be interviewed. All of the women contacted agreed to take part in the study and all gave their informed consent to be interviewed. Human Subjects approval for the study was granted by the Institutional Review Board at the University of Texas at Austin.

Seventeen women with incongruent intentions and feelings, and ten women with congruent intentions and feelings were selected and interviewed. Among incongruent women, 13 were Latina (7 of which were Spanish-speaking), and 4 were white. Thirteen

had public insurance, and 4 had private insurance. Among congruent women, 6 were Latina (of which 3 were Spanish-speaking), and 4 were white. Six had public insurance, and 4 had private insurance (Table 3.1). The interview sample was also diverse in terms of age, parity, relationship status, and level of educational attainment (Table 3.2). Six of the women selected for interview had already become unintentionally pregnant again.

Interviews lasted between 45 and 90 minutes, were conducted in either English or Spanish, and took place in person in participants' homes. Participants were compensated $30 in appreciation for their time. The interviewing process was semi-structured, ensuring that key topics such as the influences underlying participants' intentions and feelings were explored, while allowing sufficient flexibility for other interesting avenues to be spontaneously pursued. The content of the interview guide was based upon findings from the literature earlier described, the 12-month survey questions assessing the impact of a pregnancy on women's lives (described in Chapter 2), and insights gained from two pilot interviews (which are included in the total of 27). Pregnant participants were asked about both their prospective feelings and intentions on the basis of their answers to the survey questions and how they felt about the pregnancy now. In-depth interview guides in English and Spanish for both pregnant and non-pregnant participants can be found in Appendix C.

Two members of the research team (the author and one of two assistant interviewers) were present at each interview and convened immediately afterwards to discuss the case and write detailed field notes. All interviews were audio recorded and transcribed verbatim in the language of the interview. Interviews in Spanish were then

translated into English by a native Spanish-speaker who had extensive prior experience discussing pregnancy and contraception with Spanish-speaking women. Throughout the data-collection phase, the research team met regularly to discuss emerging themes, iteratively develop the transcript coding guide, and establish thematic saturation. Using the resulting coding guide, we conducted content and thematic analyses of each interview according to the principles of grounded theory (Strauss and Corbin 1990). Atlas.ti 7.0 software was used to assist with the coding and management of transcripts and notes.

RESULTS

Over the course of six months, we talked to women living in apartment buildings in the inner city, 5000 square-foot houses in the leafy suburbs, and trailer parks in the far outskirts of town. Each woman who so generously gave her time to talk to us painted a self-portrait, expressing her childbearing intentions and feelings about pregnancy in all their various shades and textures. While it is impossible to do complete justice to such richness in the space of a chapter, we focus here on describing eight of the most common and important themes: 1) the sincerity of childbearing intentions; 2) the time and money involved in raising children; 3) the complexity of feelings about pregnancy; 4) practical *vs*. emotional reasons underlying feelings; 5) the influence of male partner's feelings; 6) the influence of family and community; 7) motherhood as a purpose and a role; and 8) abortion and the ability to control fertility.

1. "I Just Don't Want No More Kids."

Regardless of feelings about a future pregnancy, the strength and sincerity of future childbearing intentions were clear and persistent across ethnic groups, countries of birth, and levels of socioeconomic disadvantage. Motivation to realize these intentions was expressed through an almost universal desire to use highly effective methods to prevent another pregnancy. Far from expressing ambivalent desires and motivations to avoid pregnancy, women with incongruent intentions and feelings were adamant and often frustrated in their attempts to cease childbearing. Marissa, a 34-year old U.S.-born Latina mother of five, expressed happiness at the idea of a pregnancy but told us about the difficulties of implementing her intentions when relying on Medicaid: "I don't want no more kids. I just want to get my life in order and want to relax and enjoy me and not have to worry about, you know, taking care of the baby. I had my oldest daughter when I was very, very young, and then my three youngest are only three years apart, and now I want to be able to just get up and do things, not, oh I have to find a sitter, so can't do this or that… I could do it, but I just don't want to do it. I really don't. I'm supposed to be having a tubal in a couple of weeks. I've signed that paper[1] five or six times, but something always comes up, like my Medicaid isn't good no more, so I'm going to try this one more time. I just don't want to deal with kids no more."

Delfina, a 40-year old publicly-insured Latina mother of seven who was born near Guadalajara, Mexico but moved to the U.S. when she married her third husband 12 years ago, also expressed happiness about the idea of a pregnancy in the next few months, but

[1] Meaning for informed consent, which must be given at least 30 days before the procedure.

was abundantly clear in her intentions to have no more children: "I definitely don't want to have any more…and it's very important for me not to get pregnant right now because I need to work so that the children can have a better life. I'm using the injection to keep from getting pregnant because for an IUD you have to pay $300 to get it, and the injection is much cheaper. They were also very rude to me at the clinic and I don't want to go there again. My annual exams are coming and I will have to deal with it again, but if I have the option to go somewhere else, I will try to find a way to get the IUD. Really, I would like my husband to use birth control but he doesn't want to. He doesn't want to use condoms and I've tried talking to him about vasectomy but it turns into a fight. He thinks he will lose his manhood if he has the operation, and he is scared".

For some women, both congruent and incongruent, their ideal number of children had already been long surpassed. Martina, a 31-year old cohabiting Latina mother of five who had no insurance at the time of her delivery, was born in Guanajuato, Mexico and moved to the U.S. 15 years ago. She expressed unhappiness at the idea of a pregnancy and told us how she struggled repeatedly to limit her family size: "Ideal for me was three because we were eleven in my family, and we always wanted things we couldn't have. I wish my parents would have been able to offer us more; and I don't want my children to go through the same situation. I just wanted three. I wanted to get sterilized when I had the second one, and then again, when the third one came, but I couldn't. I don't have enough money to pay for the surgery and the doctor always tells me it will cost $5000 to go in and $5000 to go out…But I have all the children I want. The ones I have are enough for me and I had not planned to have this baby. This one came because of my ignorance

and because of economic issues. Sometimes you do things you shouldn't. You buy birth control in other places because it's cheaper than at the clinic. But you run a bigger risk and then it fails you and that's it. I don't know if you've ever heard about La Pulga[2]? They sell all kinds of things and they had the injections there, so I bought them but I think they were the wrong kind because I got pregnant. At the time we didn't have any money and I was desperate for some protection. Thank God my baby girl is fine, but now God knows what I will use."

Kelly, a 29-year old white mother of four lives with her husband in a trailer on the outskirts of town. Although she would be happy about a pregnancy in the next few months she, like Martina, has already had more children than she ever wanted: "My ideal family size was two kids. We had our second one and that was going to be it and then suddenly we have two more—surprise! I don't want to have any more. My mom had five kids, and I don't want that. I don't have the patience for that." When asked about how important it was to her to avoid pregnancy right now: "It's very important because I don't want to deal with another kid. I really don't. When I can afford it, I'm going to do the tubal because I really don't want any more kids and that's the only thing I know that's guaranteed to work. It's for certain, but my insurance won't cover it even though it's a contraceptive thing. They didn't find out that it wouldn't be covered until after I had my son, which is when I was going to have it done."

These women's experiences are illustrative of those expressed by almost all of the women to whom we talked, and demonstrate the sincerity behind their answers to the

[2] Mexican Flea market

Yes/No childbearing intentions question asked in our survey. With the exception of one woman, whose childbearing intentions had changed due to a miscarriage that happened shortly before we interviewed her, incongruent women did not express ambivalence about avoiding pregnancy, wanting more children in the future, or using contraception. On the contrary, they were struggling to obtain the methods they needed to avoid another unintended pregnancy.

2. "We Barely, Barely Make it Work."

Exploring the underlying reasons for why these women wanted no more children, we found the first things they typically mentioned were inability to afford another baby and lack of the time and energy required to take care of one. Among very socioeconomically disadvantaged women, most of whom had trouble making ends meet even with their current family size, another child would often mean serious financial difficulty. We met Kaitlyn, a white 26-year old mother of three in a trailer park southeast of the city. She is married and her family gets by on an income of around $25,000 per year. She professed unhappiness at the idea of a pregnancy and explained to us why she wants no more children in the future: "Five is a lot of people to provide for financially, emotionally, and in every little way. We're not planning no more babies in the future. All the stuff you don't think of like baby Tylenol and thermometers that don't work and all that stuff really, really adds up. Formula, if you don't have WIC, formula's going to run you $300 a month. If you do have WIC, it's going to run you about $75 to $100 depending on what your baby eats. My husband makes fourteen something, but he gets

union wages so he gets time and a half and double time and all that. We barely, barely make it work. Barely. I just do not see how we would do it with another one."

The same concerns about affording and caring for another baby in financially fragile circumstances apply equally to women with incongruent intentions and feelings. Ana, a 26-year old married mother of three lives on a household income of around $15,000 per year. She was born in Michoacán, Mexico and moved to the U.S. five years ago. When we last talked with her by phone for the 12-month follow-up interview, she wanted no more children but expressed happiness at the idea of a pregnancy in the next few months. By the time we met up with her in her small, bare apartment in East Austin, she was pregnant again with her fourth child. She described to us the circumstances of her pregnancy and the reasons why she wanted no more children: "I was so frustrated. I thought no, I cannot be pregnant again. It was too soon and I just could not believe it…we were using withdrawal and I wanted to use the one that goes here *(gestures to her upper arm where the implant is placed)* but the cost was three sixty. I was going to try to pay in installments, but then I got pregnant…When it happened, we did not have a place to live. We were living with other people in their house. I did not want to get pregnant. I wasn't planning on getting pregnant. We had a lot of financial problems and you feel the pressure, the stress when children are little and they need so much care. It's a big responsibility."

Ashley, a 29-year old U.S-born Latina mother of three who lives in ramshackle house surrounded by fields about 15 miles out of town, described a similar struggle, not only with money, but also with time. She is married and her family lives on a household

income of around $20,000 per year. She expressed happiness at the idea of a pregnancy in the next few months, but explained: "It's very important to me not to get pregnant right now because I don't want to have children and not be able to afford them financially. Because there's so many bills and things that come, and you know, like everything's added, and when you add it all together you're like, maybe I'm living paycheck to paycheck now. And I not only want to be able to afford them but I also want to be able to see my kids grow and do a lot of things with them. For instance, right now when we go to the park I have to sit back a lot of the times or just stay in one area with the baby. So, you know, I wouldn't want to get pregnant again right now because I feel like it sets me back again. I want to see them grow and I want to enjoy them."

Yet financial considerations were not the concern solely of women living in economically disadvantaged circumstances. Both congruent and incongruent women living middle and upper middle-class lifestyles also frequently cited money and time as the most important reasons for wanting no more children. Jennifer, a 36-year old white mother of two who wants no more children in the future but greets the idea of a pregnancy with happiness, lives with her husband in a well-to-do suburb of Austin. Her household income is well over $75,000 per year, yet even then another child would have financial ramifications: "Adding another would be kind of a game-changer. It would be crazy, just logistically. We moved to this house because we didn't have enough room in our other one….we would need a bigger car because we wouldn't be able to fit three car seats and two adults into what we have now. And then, we'd like to retire someday. It would put me off returning to work so that would be another couple of years that I would

be home and more pressure on my husband. He’s the one breadwinner right now. He’s told me if we had another baby he would cry.”

Magdalena, a 38-year old mother of four, has private insurance and a household income of over $75,000 per year. She was born in a small town near Mexico City and has lived in the U.S. for 18 years with her husband. She would be unhappy about a pregnancy in the next few months and echoed Jennifer’s concerns: “I already have four children and it’s hard for us because we are not earning enough money. I think that for a family to have a better life, you have to have a small family. Maybe two children would be best, because with four you spend a lot, mostly on food. We have to pay for the school lunches and with the baby we needed diapers and formula. It was very expensive….and then there is the responsibility of having to work and having someone else taking care of him. When he’s sick I can’t go to work, and the responsibility is mine when I can’t find anyone to take care of him or when the person lives far away. And then I can’t use a daycare because they are so expensive, so we are always looking for a friend or someone we know to take care of him.”

The inability to devote sufficient time and resources to another baby and the financial difficulty it would precipitate cut across socioeconomic and ethnic groups as the predominant reasons women described for wanting no more children. Most interestingly, these practical concerns are applicable to women who nevertheless profess feelings of happiness at the idea of a pregnancy in the next few months.

3. "I'd be Scared at First but Eventually I'd be Happy"

In the course of our conversations, women with both congruent and incongruent intentions and feelings described a far more complex range of emotions when talking about their feelings about a future pregnancy than could possibly be captured by a single-response option question in a survey. While some incongruent women expressed unmitigated joy and happiness at the idea of pregnancy in the next few months, others said they would initially be shocked, but then start to feel happy as the news sunk in. Ariana, a 37-year old Latina mother of three who was born in the U.S., lives with her husband and mom in a small but cozy two-story house south of the city. She wants no more children primarily due to lack of space and the money required for extra childcare. She is using the Mirena IUD, which she obtained using her private insurance. She described for us her feelings if she were to find out she was pregnant in the next few months: "I would be like, oh my—I'd probably cry. I mean, like, oh, really, here it comes, that's not my plan. I'd be scared at first, but eventually happy. Babies are always happy. Who doesn't love a baby? You know what I mean? They're just always so cute."

For Lucia, a 28 year-old married mother of three who was born in rural Mexico and moved to the U.S. eleven years ago, her anticipated feelings were more straightforward. Although her family struggles to get by on their household income of around $25,000, and she is sure that she wants no more children, she tells us: "I'm not planning to have another baby, and it's very important that I don't get pregnant right now, because there are days when it's too difficult, days when I simply cannot do all the work at home. I mean, it's hard, and another baby would be a big responsibility. A baby

really is hard work…But if I get pregnant and have another baby, I am going to be happy, I love babies and my husband does too. I love being pregnant, I love giving birth, I love the feeling of holding my baby for the first time, and I love being with my children."

Despite the very different financial circumstances of these two women, both professed positive feelings about a pregnancy. Both women wanted no more children due to economic and personal time considerations and were not at all ambivalent in their intentions. Interestingly, Lucia, whose financial situation is much more fragile than Ariana's, would be the quicker of the two to feel happiness.

For some women, particularly Latina women of Mexican origin, the admission of unhappiness or frustration at the prospect of a pregnancy augured shame and guilt. These women explained that they would not disclose their unhappy feeling to others for fear of disapproval or even ostracization and described their eventual feeling as a kind of resignation or acceptance. Martina, the Latina mother of five who earlier told us about her experience of getting pregnant while using the injection she got from La Pulga, explained to us that although she admitted feeling unhappy about a pregnancy to us behind closed doors, she would not feel comfortable saying the same thing to friends or acquaintances in her community: "For me, the feeling would be total frustration. But with the last one I would complain about being pregnant because I didn't want more children and people still hold it against me… But I am desperate at the moment. I really don't want to have more children, and I tell God: please no more. Thank you for the ones you gave me, but look at them, I need help to guide them on the right path."

Martina's sentiments were frequently expressed or alluded to by the Mexican-born Latina women we interviewed, but they were not exclusive to this demographic. Kaitlyn, a white mother of five who earlier told us of the difficulties her family would face if she were to get pregnant, expressed a similar sentiment: "I don't want to say that I would be unhappy. I don't want to be on a recording saying, 'Oh my gosh, if I found out I was pregnant I would cry. I would cry and I would go and I would kick my husband in the junk.' Yeah I would cry, I would cry a lot. I would cry because I would be very sad, because it's not fair. It's not fair to me, it's not fair to the other kids." When asked if she felt like it was not ok to feel sad, she responded: "I do yeah. There's definitely guilt associated with it. There's a lot of guilt associated with saying hey, I need to establish being a person before having kids. It's the sacrifice of being a mother...no one explains it to you. From the time you wake up to the time you go to bed, if you're doing it right, it's not about you."

For these women, happiness is not a reflection of a joy associated with children, but a response to an expectation that happiness will be the automatic feeling a pregnancy will evoke, something that they attribute to the social norms of their kin and communities.

Yet for other women, devastation was outright. Isabelle, a 22 year-old white mother of two, was in a relationship with the father of her baby at the start of the survey, got married shortly thereafter, and a year later was divorced from the baby's father. She told us: "I would be super overwhelmed and defeated. I just can't do it right now. I just don't want to have another baby. I would feel sad. And I would just feel…with all I've

been going through lately, it would definitely be the last thing that I would need. I'd feel really defeated. Really upset."

It is clear by now that feelings about pregnancy are often not straightforward, and although the binary categories of happiness and unhappiness do hold validity, a woman may classify herself in one of the other on the basis of the strongest of multiple feelings. Strikingly, happiness about pregnancy, although perhaps more commonly expressed among Latina women than among whites, is not a response that is confined to a single socioeconomic or demographic group.

4. "A Blessing No Matter What"

We earlier demonstrated that financial and practical considerations were equally central to the childbearing intentions of both women with congruent and incongruent intentions and feelings. Turning our attention now to the factors underlying their predominant feelings at the prospect of a pregnancy, we find that they are strikingly different for congruent versus incongruent women.

When explaining their feelings of unhappiness, congruent women tended to describe the inability to afford a child financially and to provide for it in terms of time, resources and energy, *i.e.* the same factors that influenced their intentions to have no more children. These concerns were often intertwined with worries about keeping up with competing interests such as commitment to a career or with the fulfillment of personal aspirations such as the ability to return to school to obtain better qualifications. Olivia, a 24 year-old Latina mother of one, lives with her partner of two years in a tiny

rented apartment in the Del Valle area of South Austin. Following her last delivery, she had wanted a copper-T IUD but had been unable to obtain one before her Medicaid expired. She struggled to find an affordable method that she was comfortable using, and by the time we met up to talk, she was pregnant again. Her family currently lives on a yearly household income of under $10,000, one of the major reasons why she had wanted no more children for at least five years. She described her reasons for feeling upset about the pregnancy: “It was the last thing I wanted to happen. I was upset because of not having our own house, not being financially stable. People always tell you kids are expensive, but you never really understand until you have one. Then you understand the importance of having a job and a career. You want to be able to work, but who’s going to take care of your kids? It’s not like ‘oh my God, I don’t want to be pregnant because I don’t like kids,’ it’s the burden of worrying about them, or if you’re going to be able to take care of them. Before I found out I was pregnant again, I was already setting up this routine with my partner’s mom so that I could start working again and going to school. I want to get a degree in child management and have a career…but it all got sidetracked.”

Isabelle, the 22 year-old white mother of two who earlier described her reaction to another pregnancy as feeling “defeated”, explained how the financial and emotional strain combined with the derailment of personal goals would precipitate negative feelings: “I just wouldn’t be able to provide for them the way I want to…emotionally, financially, all that. It wouldn’t be fair. I mean, it’s just already so hard. Just trying to…like I just recently got my GED and that was a struggle. I just really want to go to

college. I *really* want to go to college. It's just like a huge dream for me. But it would just be so hard. Paying for childcare for three kids would be….wow, no, it would be a lot."

Interestingly, the influence of the perceived financial consequences of another baby on the feelings of these younger, socially disadvantaged women also applied to older and more economically stable women. Lauren, a white 30-year old mother of two who is married and has a household income of around $75,000 per years explained: "I would be really upset. Before I had kids I was not realistic about the expense of having children. I didn't know how expensive childcare was going to be. That tends to be, in my opinion, the greatest shock about having kids. It's a huge chunk of our budget. If we were to add another baby, I just don't think we could financially support that, and we wouldn't be able to relax and be happy because we would be too financially stretched...I think adding a third child, if we were to stay at our current income level would push us out of our comfort zone. I would end up going crazy. I love my kids so much, but they're a lot of work. It's time, energy, resources….There would be a small, little sliver of happiness, I think there always is. The idea of creating life is magical and I think you can't deny that. But the reality part that puts a real damper on that sliver of happiness would definitely be there."

The influence of lack of time due to competing priorities and the stress that would ultimately ensue was also mirrored in the negative feelings of women in financially stable circumstances. Samantha, a 37-year old white mother of two is married and has a yearly household income of over $75,000 told us: "I'd be pretty well freaked out and scared. I'd be overwhelmed with the thought of how are we going to make this work once the baby

comes home. From a mental health standpoint I think things would be a little crazy around here. From a time perspective it would affect me most, but I think emotionally and adjustment-wise it would affect everyone. [With my job] I have conference calls at weird hours and things and I can juggle that right now, although it's much harder than it was with just one. So looking at throwing in an additional child who's waking up on a different schedule or that much more laundry and things, I think it would just kind of push us over the tipping point."

Marisol, a 34-year old U.S.-born Latina mother of five echoed similar concerns. She and her husband make a combined income of around $75,000 per year: "I have a big family, five girls. My ideal family size was three…I ended up with five. It's overwhelming to have five kids and a full-time job and to try to get everything else in. Five is more than enough…. It's very important to me not to get pregnant right now. I would be devastated. My plate is so full and if I add any other side to it, I wouldn't be able to function for my kids. We'd have to change everything. We live in a small home. Another baby doesn't fit. We wouldn't have room for another baby, that's how I feel right now. I wouldn't have room for another baby. Everything would have to expand, and that would be more expenses, more everything. I also want to go back to school, and I was going to start in August, but I pushed that back because school requires more time that would be away from my kids. My family is very important to me, and I really do look forward to seeing them in the afternoon and spending that time, but I think I would be very overwhelmed. I would be shut down, just shut down. I wouldn't want to deal with it. I'm at my max".

Entwined with the burden of providing for the family materially and emotionally and the stress of conflicting personal goals, an important and frequently expressed reason for unhappiness, particularly among Latina women born outside of the U.S, was the desire for their children to have better life outcomes than they themselves did. These included the opportunity to go to college, which would not be possible with resources stretched to accommodate another baby. Martina, who earlier told us of her reluctance to disclose her unhappy feelings to others, explained: “I want my children to have a future, not to have limits on what on what they want to do because there’s not enough money to help them. I want them to go to college, to have a career. I don’t want them to have to struggle; I want them to be someone in life. I know it’s very expensive and I would love for them to reach that goal and go to university. And if I can’t pay for college, I will be limiting their future.”

We met Ximena, a 30-year old Latina mother of four, in her small house in the Pflugerville suburb of Austin. She was born in Durango, Mexico and moved to the U.S. 16 years ago, where she met her current partner, Cesar. They got together when he would come to eat at the Mexican restaurant where she worked and are currently getting by on a family income of around $25,000 per year. Ximena was one of 13 children, and described her family as always lacking in basic needs, something she did not want for her own children: “My parents, even though they were poor, had all the children God gave them. They were always struggling to provide for us: I started working when I was a little girl of 7 or 8 years old. Can you imagine? I didn’t have a childhood.”

Ximena had wanted a sterilization after her last delivery but did not have the procedure because Cesar talked her out of it by saying he would get a vasectomy instead. When we met for the interview, he had yet to do anything about it, and they were still using condoms. Like other women, she expressed complex feelings about another pregnancy, but she echoed the concerns of both Martina about providing for her children, and of Samantha and Marisol about competing personal interests: "I would feel scared, guilty, and also happy, because I love babies and it's so beautiful to be able to create a life. I can't find just one word. But scared, that would be the main thing. I feel guilty sometimes for feeling that way. But I would be scared. How would I go on feeding them, giving them a good education and raising them to be good citizens? I would also have to stop working because I wouldn't be able to handle it with another baby, and then I might get depressed because I really like my job. The ladies I work for are very good to me, and they also give me support. They are Americans, and since I left home when I was 14 years old, I love them as if they were family. It would be very hard to leave my job."

Concerns about the effect of another pregnancy on the ability to provide for existing children expressed in the form of negative feelings were not unique to women living in financially precarious situations. Magdalena, the 38-year old mother of four who was introduced earlier and makes almost triple the yearly income of Ximena and Martina told us: "I would be so frustrated. It's another baby and another nine months of pregnancy…with this last baby that I had, I felt sick all the time and tired. And it is another obligation, another responsibility. It would also be harder to send my son to college. He is the oldest one and already in 11th grade. If I had another baby it would be

more difficult for everybody and maybe we would not be able to do it. When I got married I just wanted to have one child because I thought I would have a better life and more time to do things if I only had one child. Then, before I knew it, I had three children. I would have liked to have a career, to live my life a little different to how my family lived, the traditions I grew up with, like the idea that as soon as you get married, you have children. So now I am going to make sure that my children have an education and a life different from mine. I encourage them to go to school and think about having a career. It's trying to make them understand that education is the most important thing, and once they finish their education and have a career, they will be able to do whatever they want."

Common threads running through the explanations given by congruent women regarding their feelings of unhappiness are that another child would be a significant source of emotional stress, would stretch competing interests to the limit, and create a burden of responsibility that would be too great to bear without serious negative consequences on their own lives and the lives of their families. By contrast, the feelings of happiness expressed by incongruent women were predominantly rooted in deeply emotional feelings about pregnancy as a magical or joyful event, a sincere belief in children as one of the greatest blessings in life, and particularly among non-U.S. born Latina women, the perception of pregnancy as a normatively happy event sanctioned by God.

Vanessa, a 34 year-old Latina mother of four was born in El Salvador and came to live in the United States six years ago. She is married and her family barely makes ends

meet on a yearly household income of less than $10,000. She wanted to get sterilized at the time of her last delivery but did not qualify for Medicaid. She and her husband ended up using condoms, and by the time we met up for the interview, she was already pregnant again. She described how, despite serious financial stress, feelings of love and joy prevailed: “There have been times when we’ve had a lot of debts, moments when the debts have been very high and we didn’t even have money for food. We are a big family and we have so many bills to pay each month. It’s a big burden and we worry about it all the time. I am definitely not asking for another child, but if he comes, I am not going to be upset. You have this love for your children, you created them, and they are here, and it is a life, so somehow you know what to do and don’t stop to think about all the bad things.”

Cristina, a 19-year old U.S.-born Latina mother of two, is married and gets by on a household income of $25,000 per year. She wants no more children for at least five years and had wanted a Mirena IUD but could not afford it due to difficulty paying bills for electricity, water, and rent. Yet despite grim prospects should another pregnancy occur, she tells us: “I think I would be excited. At the same time worried… but obviously I want to be happy—I’m having a baby. I also have to remember, you know, there’s not going to be this or that anymore because of the money. But it’s life you’re bringing into this world and it’s part of you, part of your husband, and that’s beautiful, you know? It’s part of you and your husband’s love. But if you can’t afford another kid then I don’t think you should be bringing any more. No money, no kids.”

Although they come from very different social and educational backgrounds and have vastly different financial means, Jennifer, the mother of two who earlier described the extra burdens another baby would place on her and her husband, echoed Vanessa and Cristina's feelings of joy: "I think I would be excited, but maybe a little sad too. I would love to have another baby. Babies are cute and cuddly and when you hold them… if you would have known me five years ago you would have thought there's no way she's having kids. But now that I have them and they're so wonderful and we're just having a really good time with them that I think 'oh it would be so nice to have another baby', but you forget how hard it is, and the reality would set in, and I think 'oh my gosh it would be so hard'…it's definitely my heart and not my head, the emotional side of me that's like 'oh we got another squishy baby', but then my logic side is like 'I really shouldn't, this is good now, we have a good life."

For congruent women, the foundation for unhappiness about a pregnancy often incorporated the lack of ability to fulfill personal goals or competing commitments. By contrast, incongruent women frequently explained that although they did not want more children, being a mom was their main goal. Kelly, the white mother of four who earlier told us of how she wanted a sterilization explained: "I would be 'yay, one more kid!' It wouldn't really change much, it would just be another person to look after right now. It wouldn't particularly alter my plans because I'm a stay-at-home mom, but I just don't have the attention and patience to look after any more kids than I currently have now. So I would feel a mix of resignation and then the 'yay' of having another little baby. Babies

are cute—you can't help but love them….You feel your kid move for the first time, and you hold your kid for the first time…there's nothing like it…."

Marissa, the Latina mother of five who earlier told us of her repeated unsuccessful attempts to obtain sterilization echoed Kelly's feelings: "I'd be little shocked, but happy. I wouldn't be mad. I wouldn't be mad at all about it. I'd be happy….I'm pregnant, I'm gonna have a baby, and that's, I mean, to me it's a blessing….it's joyous, it's bringing life into this world and no matter what the situation is or whatever, you're going to have to take care for and take care of. I just choose not to [have another baby] but if it happened, it happened, and of course I'll be happy, of course…There would really be no more big change: just another baby. I don't work or go to school or anything right now that I got to take care of my 18-month old, so it's be the same, just what I'm doing now, I'd just be more exhausted and busier because I'd have a toddler and an infant."

For some incongruent women, particularly Latina women born outside of the U.S., the idea of children as a blessing carried religious connotations. Although few of these women described themselves as belonging to a particular religious group and few attended religious services, they often mentioned faith as a component of their upbringing. Violeta, a 24 year-old Latina mother of three who was born in San Luis Potosi, Mexico, lives with her partner Oscar. Since only he is currently working, they are struggling to meet their family's needs on a yearly household of under $10,000. Violeta had wanted no more children for at least seven years and had wanted to use the implant but had no insurance to cover it. She and Oscar ended up very reluctantly using condoms, but by the time we met in her rented apartment on the East Side, she was pregnant again:

"At the moment, everything is a challenge. My husband is not working enough hours. You see, he works outside and if it rains he can't work, so it affects us a lot, because we can barely make the rent, and by the time we buy groceries we don't have much left. We barely make it. I have already signed the papers for a tubal ligation after this one…when I found out [I was pregnant] I was a little anxious, but I was also happy because a baby is a baby. It's a blessing and so you are happy for it. It wasn't planned, but we are all happy about it. You're always happy because a child is always a blessing from God and for you as a mother…at least for me, you think that children are the most beautiful thing in the world, a gift from God, and it makes you happy."

While Violeta's happiness certainly appeared heartfelt, other women alluded to the idea that a happy response to a pregnancy would be rooted in normative social expectations about children. Delfina, who was introduced earlier, had three more children than she had ever wanted and told us: "Maybe I would feel depressed because it is not in my plans, but I would have to process it and accept it. I would not call it a burden because we are talking about babies, and I would not like to call it that, because it's a human being, it's a life, it's my child. What I mean is, I can't call anybody a burden because we are all human beings and if God sends you a child, God is not sending you a burden but a gift. So I have to accept the way things are, and not call it a burden."

The explanations offered by these women have afforded us a clear and detailed demonstration of how feelings of happiness can simultaneously co-exist with earnest intention to avoid pregnancy. The dominance of deep emotions over practical realities, the centrality of children in individual life priorities, and both a normative and spiritual

view of children as a blessing form the fabric of positive feelings in the face of negative practical consequences. Although these reasons, and the latter in particular, were expressed most strongly among Latina women, they were present across ethnic, socioeconomic, and educational groups.

5. "The 'Look What I Did' Privileges With None of the Hard Work"

A dominant theme for both congruent and incongruent women was the influence of male partners' feelings on their own attitudes towards another pregnancy. All but two women had a current male partner, and among those who did, almost all perceived that their partner would either be unconditionally happy about a pregnancy from the outset or that it would be much easier for him to become happy over time than it would be for her herself.

Incongruent women described a range of ways in which their partners' perceived happiness affected their own feelings at the prospect of a pregnancy. For some, their partner's happiness served to potentiate their own positive feelings. Lucia, whose immediately joyful response at the idea of another baby was described earlier, told us: "My husband, he would jump up, hold me, and jump with joy! He would be so happy. Even when I am late *(meaning with her period)*, he will say 'Mami, you are pregnant…' He likes babies. He likes a big family. He loves his children so much and he likes to spend time with them, he likes to see his babies grow. It makes me happy to see."

For others, happiness was derived from the idea of making their partner happy by giving him a desired baby, even when they themselves wanted no more children. This

response was especially strong among Latina women, who often explained that their partners considered children a reflection of a good marriage, and among women in relationships where only some of the family's children were fathered by her current partner. Violeta, whom we earlier learned is expecting an unintended fourth child with her partner Oscar, told us: "He is happy, sometimes he even kisses my belly or touches it to feel the baby's movement. He wanted another because the two older children…he is not their father, so his first child is my daughter, and we planned to have her. It took us a long time, and he used to get sad because he thought maybe he wouldn't be able to have children. Then, when I got pregnant he was so happy, and now he feels the same about having another girl, even though it wasn't planned, because he is very close to his daughter."

Marissa, whom we earlier discovered so badly wanted a sterilization, told us of her partner Carlos: "Oh he'd be so happy. He'd be so *so* happy…. He'd be the one on the phone calling everybody 'She's pregnant! She's pregnant!' Yeah, he'd call his mom and his brothers and everybody. Because he'd be way more happy, I mean, he wants more kids. He wants a girl so bad, I guess, you know he has boys, so he wants a girl. I have my two girls already, but [he is not their dad], so he'd be way happy… and that would make me more happier."

Sometimes, the influence of male partners' feelings extended beyond influencing feelings at the prospect pregnancy to affecting major decisions about contraception and future fertility. As we finished up the interview, Marissa told us she had a sterilization scheduled for a couple of weeks later: "I haven't told Carlos yet though. Well, when we

talked about it before, he was kind of upset, like I said, he wants to have more children, but I don't. Every day he'll be like 'I want to have another baby.' So I haven't told him. He'd be jawing in my ear…don't get it…making me feel guilty because I made the decision without him. So, I don't know." When we followed up with Marissa three months later for the 18-month round of the survey, she was pregnant with her sixth child.

A final mechanism by which male partner attitudes influenced incongruent women's feelings was the idea that sharing in the creation of new life would strengthen the relationship, despite conflicting childbearing intentions. This idea was particularly relevant to relationships in which the current partner was fathering a mixture of stepchildren and his own biological children. Ashley, whom we earlier learned was using the IUD to avoid getting pregnant, explained: "My husband loves kids, and he tells me, let's have one more. But I'm like, 'no'. Plus, we have three girls and there's a chance that he might get a boy next time. But it's not like it even has to be a boy, he's just like 'they're mine. That's the way he is, he says they're mine.' He would be excited. We've been through it three times before, and it just brings us closer, closer, closer each time."

Flor, a 26-year old mother of one, was born in near Ciudad Juarez in Mexico but moved to the U.S. with her parents when she was a child. She wants no more children but was unable to afford the IUD she wanted after her last delivery. Her husband has another child from a previous relationship, whom he never sees due to an ongoing dispute with the child's mother. She echoed Ashley's feelings: "He's the one that wanted [the baby we have now], and he's the one that's been, since the beginning 'you know he needs a brother or sister, right? You know he needs one.' Because he was an only child and he

didn't like it. He's always telling me 'you know you're going to have another one, right?' I'm like, 'yeah when you can carry it, you can have as many as you want.' But yes, he's been telling me that he wants another one since the beginning, so I know he would be really really *really* excited. So if another baby came, it would just make our relationship closer and stronger."

For incongruent women, the happiness of male partners was connected to positive feelings of cementing a familial unit, close emotional bonding, and shared joy in the creation of new life. For congruent women, on the other hand, male partner happiness was predominantly attributed to a failure to understand the time and work involved in raising children and the physical and psychological strain of carrying and caring for them. This perceived lack of empathy was much more likely to lead to conflict or emotional stress. Ximena, who told us earlier about her partner Cesar talking her out of getting a sterilization explained: "I think since he is a man it would be easier for him. He's not at home. He doesn't do all the stuff a mother does. So for him to have another baby is not so hard. For example when I got pregnant last time, I cried, and he held me and said 'don't worry, we are going to make it. I will be there for you'. But he doesn't understand… I think that if I get pregnant again it would be fine with him. He doesn't feel responsible. Being a man, he'd be happy with another. He tells me 'don't work anymore, stay home'. But like I said before, going to work is relaxing for me and if I stay home all the time I would be more tired!" In parallel to Marissa's situation, she also describes the effect that carrying out her desire to have no more children would likely have had on her relationship: "I sometimes get angry at him because he's the reason I did not get my tubes

tied. [If I had done that] I would be more relaxed but he would be upset. If I had gone ahead with the surgery knowing he didn't agree to it we might have ended up separated."

Martina, whose reluctance to disclose her unhappiness about a future pregnancy to others was discussed earlier, also feels an element of disapproval from her partner: "He would say [another pregnancy] is fine, I can almost hear him. He feels this is his real family. They are his children. I get angry because he doesn't think about me; he just thinks about having children. It's like I don't count. He always reminds me that I was upset when I was pregnant with this one, that I didn't want her. I wish he knew what it was like to give birth. I tell him sometimes 'I wish you could have a taste of your own medicine so you know what giving birth is like'. It's nice to say you are father, it's a good feeling, but it doesn't mean you know how to raise your child. He gives us everything he can, but to say that he has struggled to raise the children? No, he has not."

The descriptions some congruent women gave of their male partner's feelings reflected elements of the accounts many incongruent women gave regarding their own happiness. Lauren, whose own unhappiness about another pregnancy stemmed from the investment of time and money it would involve, told us of the tension between her practical response and her husband's more emotional response to the idea of another pregnancy: "He would be stressed about the financial burden of it but he might tend not to want to terminate a pregnancy because he might still be in that place of 'it's a creation of ours and how could we not have this child?' He's got this more emotional thing about it than I do. I think that comes from the fact that I take on the day-to-day burden of the

tasks, so for him it's still a mythical 'babies, we made all these babies' thing. Yes, but you're not breastfeeding them, you're not changing their diapers."

The importance placed upon biological children by male partners was also relevant to congruent women, but for Kaitlyn, who earlier explained her reluctance to express her true feelings of unhappiness about another baby, the unequal burden of childcare outweighed any additional benefit to the relationship of another biological child: "My old man would be sad but probably more hopeful than me. He never said that [it was important for us to have a child together] but I knew it was. I knew that for him to be as happy as he could it would be necessary at some point, if that makes sense. The baby ties us all together. My husband doesn't treat his stepsons any different than he treats his son, but the baby ties us all together. He's the one we're all related to, and it kind of brought us all closer… But he doesn't have to carry the baby. He gets all the 'look what I did privileges' with none of the hard work."

Although male partners across the board were more likely to have felt happier about a future pregnancy than women themselves, negative feelings towards pregnancy were sometimes shared by both partners. Samantha, who earlier told us of the stress another baby would bring explained the strain it would place on her and her husband's relationship: "I think he would be worried about how life would change and just generally the kink thrown into our life plans. We're kind of counting down the days until we can get full nights of sleep and kind of get a little bit more of the equilibrium that we had found before back into our lives. Another kid would reset that clock again, and it would be even less time for us in our relationship."

Overall, the feelings of male partners are a central but complex influence on women's feelings about a future pregnancy, and relying on women's perceptions of their partners' feelings makes interpretation even more difficult. For incongruent women, male partner happiness appears to contribute to the positive feelings felt by the women themselves, yet for congruent women, such happiness appears to make women's negative feelings even stronger.

6. "It Takes a Village to Raise a Child"

While they carried less weight than the attitudes of male partners, the beliefs, reactions, and expectations of family members also influenced both congruent and incongruent women's feelings about future pregnancies. Some women lived in extended households, others had parents, grandparents and siblings living a few apartments over or in the next neighborhood, and still more had family living elsewhere in the state or across the border in Mexico. We talked with women about how they would announce a pregnancy, who they would tell first, and what the likely reaction would be. Incongruent women often imagined that their parents in particular would be happy at the announcement of a pregnancy (despite any potentially negative life impacts) and usually anticipated that support and help would be forthcoming. Emerald, a 29-year old Latina mother of two, had just moved into a duplex in a new housing development in South Austin when we visited with her. Having saved up a lot of money for the move, she and her husband were recently shocked to discover that she was pregnant again. Emerald was initially worried, but felt happy, partly because of the reaction of her family to her news:

"My extended family is huge—always kids running around, always, and it's just fun to have that big size family that love you, you know, and the help that you get from the extended family, they are willing to, you know, as you as soon as you walk into their house, the first thing they say is 'hey, where's your kids at?' And they just want to love on your kids. I guess that's just how my family has always been…the love of kids, you know? When I found out I was pregnant this time, I told [my mom] my concerns and stuff and she was, well, I wouldn't say disappointed, but she was kind of like 'well, you shouldn't feel concern over that, you know, a baby's coming and we're going to love the baby and that's it!' She was welcoming and a great support."

The propensity of the family to dote on kids was also commonly mentioned as a driver of desire for grandchildren among parents and parents-in-law. Ariana, who earlier told us that her feelings about a pregnancy would evolve from shock to happiness and trust that everything would be ok, told us: "My cousin just had a baby yesterday. You know, so I was just like, our family is growing, and my mother—we were counting the other day, I was like, mom, do you really know how many grandkids you have? She's like, 'let's count them again!' She has twelve grandkids and seven great-grandkids. I tend to leave the kids with her to go to do this and that. [My family] would be so excited [about another baby]. We love babies!"

Cristina, who earlier told us that she wanted to use the IUD because she could not afford to have another baby, described the shared excitement she and her mom would feel about another baby: "My mom would be happy because it's her grandchildren. It makes her excited because she wants another baby as well, but she's already too old and she had

diabetes and she doesn't want to risk anything, so she helps take care of my children, you know. I guess she feels like they're her own. So if I'm having another baby that means it's another baby for her as well. She taught us to think that bringing a baby is always a blessing."

The importance of children for strengthening family ties and the happiness that would be derived from family members' love of children was not exclusive to Latina women. Sandra, a 29-year old white mother of two told us: "I see my parents get a tremendous amount of joy out of grandchildren, and I love sitting down to a family dinner [with them]. I love the tradition and the family trips and just the idea of being this unit. My grandparents were a big part of my life. We'd all be together and I'd actually say it's one the bigger reasons why I would want a bigger family. It takes a village to raise a child."

For congruent women, the reactions of family and friends were much more likely to involve a mix of congratulations and concern. Lauren, whose own feelings towards a future pregnancy were very negative, explained: "I think [my family] would be happy, but I think they would also be concerned. I think they'd be concerned about how we're going to manage the next step. That would be the top emotion for them."

Some would even choose not to announce their pregnancies to relatives or friends at all. Martina, who we earlier learned found it hard to come to terms with her own negative feelings, told us: "I wouldn't tell anybody. I would just take care of myself, because it's frustrating. I hear comments that I wish I didn't. Last time, I waited seven

months to tell my family, neighbors, and the rest. Nobody would be excited to hear about it because they know how much I struggle during my pregnancies."

In general, few women cited the feelings of parents, grandparents, siblings and in-laws as the major influence on their own happiness. Yet insights into the value placed upon children by the family and the perceived ability to share both the excitement and the trials of another baby provides important context for how women understood and dealt with their own feelings.

7. "The Most Wonderful Thing That Can Happen to a Woman"

Beyond the influence of close family and friends, women's feelings about a future pregnancy were also mediated by a wider social framework. We talked to women about what they learned about motherhood growing up, and the circumstances in which they decided to or ended up having children. Although many women mentioned that children seemed like a natural next step in their lives after finding a partner, foreign-born Latina women, as well as U.S.-born Latina women with strong connections to Mexico, had by far the strongest opinions about prevailing attitudes towards motherhood and the opportunities available to women in their communities. They described an almost pre-ordained role of women as mothers and the social expectation that children would be the automatic next step following marriage.

Emerald, who earlier described her immediate family's love of children, told us: "That's how we were brought up from the very beginning. There was always kids, and that's just what happened. You get married, you have kids, have a nice family, and

everyone loves on you. I really don't think there was a decision about *if* we were going to have kids. That's just what happens, you know, you have a family. It's just being born in to that aspect, I guess."

For some, motherhood was a role to be proud of, and indicative of status within the community. Violeta, who professed unmitigated happiness about her pregnancy despite having wanted no more due to serious financial difficulties, explained: "I believe that being a mother is the most wonderful thing that can happen to a woman. There are a lot of women that can't have children and to be able to do it is so important. You have to thank God that you could have children. God loves you and has given you children. I was very young when I got pregnant with my oldest son. I was 15 years old, but I lived in a very rural community where parents teach you to survive. I could cook, make tortillas, everything. So I gave birth to my son, and I breastfed him; I lived with my mother and she taught me what to do, and it was very nice. Being a mother changes your life. It's harder to go to school, and you limit yourself in what you can do, but it's just so great and so important to be a mother, and you try to make it for your children."

Vanessa, whose feelings of joy about her current pregnancy also trumped the significant economic burden that would ensue, described to us the norms surrounding childbearing in her community, particularly the importance of having children as a sign of a good marriage: "Yes, ever since I was a little girl. I don't know if all women are like that, but I remember when I looked at a newborn baby, I always thought about having my own some day. I dreamed of loving them and protecting them. Maybe we are born with love like this, like maternal love. I always thought I was going to have children. I always

watched people around me in my community: they got married and then had a child, always; and if they couldn't have a baby soon, and the years went by, they were frustrated. So I realized how important it was to have a child, how that was the first and foremost thing in a marriage. Because without one, something is missing, you are incomplete in a home without children. So when we get married, we yearn to have a child."

Interestingly, these same socially enforced ideas and expectations surrounding motherhood were acknowledged by congruent women, who tended to criticize or reject rather than internalize them. Ximena, who earlier told us of her difficult upbringing in Durango, Mexico, explained how the attitudes of her mother's generation toward childbearing were no longer viable in today's world: "My mother had all the children God wanted for her and she never considered anything different: back then they did not even think about it. They just got pregnant again and again. I remember I used to tell her not to have any more babies. I would say 'Mami, don't have any more, there are too many of us, and sometimes we don't have enough to eat. My father hits you, and you keep having children.' And she would say 'No, m'hija, I won't have any more. Not another one, even if it was made of gold.' But nine months later there would be another one made of flesh….Sometimes she would be in a bad mood, and when I told her not to go on having children she would say: 'You're not going to have children when you grow up? Why do you think like that if children are beautiful and they are God's children?' I do believe they are God's gifts, because that's the way it is. He made Adam and Eve so they would have children. I do believe in all that. The problem is that life we live makes

us think in a different way: you can't have all the children God sends you because then you won't be able to give them an education and all the things that they need. My mother did not think that way; she was going to have all the children that God would send her and it didn't matter if there was food on the table or not. The times we live in now make you think in a different way."

Some women also linked the ingrained societal belief in childbearing as the ultimate role for women to the lack of other opportunities afforded to young girls. For Magdalena, her wish to have no more children so that she can provide a better life for the ones she already has originates from her own experiences growing up: "The thing is that back in Mexico very few women go to school; so you just start growing up and by the time you are 15 or 16 you only think about getting married since you don't have many options to study. I grew up with the idea that as soon as you get married, you have children. I think that if I had been born here I would have been able to continue going to school and would not have married so young. I think it all depends on education."

Intertwined with the lack of opportunities and weight of social expectations surrounding children, the attitudes of men also played a role in constructing the context for congruent women's feelings about motherhood and pregnancy. Martina, who we learned from the outset had already had more children than she had ever wanted, believed that the expectations placed upon women to have children were driven by the behavior of men: "Where I grew up, people believed that the reason your husband looks for someone else outside the home is because you do not satisfy him. That's what you hear when you are growing up; that's what I saw at home. So I thought, 'I am going to do it, because if

not he'll go someplace else'. But he did it anyway. Well not anymore: that has changed for me. And I always tell him: 'If this is not working, why more children? Why?' I want respect. I want to be an example for my children. Without respect there is no education. There's no nothing."

While incongruent women tended to internalize and draw upon these conventions to situate their feelings at the prospect of an unintended pregnancy, congruent women tended to identify them as the basis for why unintended pregnancies occur in the first place.

8. "Everything Happens for a Reason"

Although virtually all of the women with whom we talked desired a highly effective method of contraception, women with incongruent intentions and feelings frequently demonstrated the ability to rationalize or even accept the idea of an unintended pregnancy through either a belief in God's plan or in the power of fate.

Lucia, to whom we were earlier introduced, had wanted to use an IUD after giving birth to her fourth child but changed her mind after her husband told her it was abortifacient. Although she is still trying hard to avoid pregnancy by getting her husband to consistently use condoms, she explained: "God gave women this gift of motherhood. The gift of creating life inside your body. This is very important to me. And if I got pregnant I would say, 'I believe strongly in God', so I would think 'if God is sending me a baby, even without me planning for it, it is because I can handle it, I can take care of it.' If I am trying to prevent it and I still get pregnant, it's because for some reason God

wants to send me a baby. So I would have to accept it and be happy about it, and my husband would too."

Lucia's idea that God will send the right number of children regardless of her own desires was commonly expressed among foreign-born Latina women, even though very few claimed to be influenced by formal religious faith or membership. Delfina, who we earlier learned has seven children and wanted her husband to get a vasectomy after the birth of her last child told us: "It's still good to set some goals even if they don't work out: you have to have goals. But the truth is, plans never end up the way you wanted. There's a Mexican saying "you make your plans, God decides, and the devil comes and destroys it." So, your plans don't come through the way you wanted."

Such a belief in the power of a divine force to ultimately decide the right number of children also shed light upon an aspect of the difficulty many women have in classifying their pregnancies as unintended retrospectively. Vanessa, who is pregnant with her fifth child after another unplanned pregnancy, struggled even to describe the number of children she had wanted to have: "It's sort of difficult, because at first I used to think 'no we already have four and that's enough and we are not going to have any more'. But now that I've found out another one is coming, I can't say 'No you see we had four and it was the ideal family size'. Now I say 'it's going to be five and I really would like to stay with five children'. It's not an easy situation. So I couldn't answer your question about ideal family size because we have the children we have, you know? We bless all of them and thank God for the new one coming. I could have said "no, not now. I don't want another child because these two are very young and they need the time and

attention and everything". But now that another one is coming I can't say that I already had my ideal family size because we'll still love this one and welcome him with love. That's why I can't say that. Maybe with him we will have the ideal family size!"

Although the beliefs of Lucia, Vanessa, and Delfina were typical of those expressed by foreign-born Latina women, such opinions were not exclusive to this demographic. Ashley, who was born in the U.S. and earlier told us that she wanted to use an IUD to avoided another pregnancy, declared a similar belief: " I would be excited if I found out I was pregnant. I really would. Even though we don't want to have more children, I think just the gift of another baby…I think it would be all in God's will you know? If God wanted to give us more kids, then I would be ok with that.…Only we as mothers get to feel that excitement, only we as women get to feel that, the experience of being pregnant."

For other incongruent women, the ability to rationalize an unintended pregnancy stemmed not from an acceptance of God's plan but from an acceptance of fate. Ariana, a U.S-born Latina mother of three who had wanted to use a Mirena IUD, told us of the reassurance she would feel in the face of another pregnancy: "At first I'd be scared, nervous, but it wouldn't be like I'd be 'I can't do this', you know what I mean? There's a reason everything happens, you know, so I would just deal with it."

Marissa, who wanted so badly to get sterilized following the birth of her fifth child, echoed Ariana's sentiments: "I mean, I'd already be pregnant so there's nothing I could do about it. I wouldn't have chosen it, but if it happened, it happened. I'd be happy."

For women like Ariana and Marissa who are unable to access their desired methods of contraception, it is plausible that a belief in pregnancies as "meant to be" or down to fate could be linked to a strong feeling of constantly being in the hands of fate. Sandra, a white 39 year-old mother of two, provided some insight into this possibility from the perspective of one who was able to obtain her desired method: "I'm one of those people that thinks everything happens for a reason. If I didn't have the IUD, and I found out I was pregnant, I would just think it was what was supposed to happen."

A related possibility is that happiness at the prospect of an unintended pregnancy might be kindled by the perception that there is no other option but to have the baby. Yet although incongruent women did frequently express personal unwillingness to consider abortion, this was not always the case. Lisa, a 19 year-old white mother of one who wanted to use the implant to ensure that she did not pregnant again for at least another five years, explained: "I'd be happy because I like babies. Ever since I was little, I've always liked babies. [As for my options], I could either keep it or have an abortion. I would maybe consider abortion if I thought I just couldn't handle it."

Conversely, the perception that abortion was not an option did not automatically compel women to greet the idea of a pregnancy with happiness. Congruent women also expressed a reluctance to consider abortion. Olivia, who we earlier learned is currently pregnant with her second child and was very unhappy when she found out told us: "When I found out I was pregnant I was so sad about it. We're against abortion completely, so that would have been out of the question. It was not an option for us."

Ximena, whose outright unhappiness about a pregnancy was described earlier, explained that although she would not be comfortable thinking about having an abortion, she would not feel compelled to feel happy about the pregnancy either: "The biggest challenge would be to erase from my head the idea that abortion exists. To deal with five children instead of four…I don't even want abortion to cross my mind. It would be hard for me to think about abortion as a solution. Because I feel that if you make love, and you create this baby, if I couldn't prevent myself from getting pregnant … I don't ever want to go through the choice. I don't want it to even cross my mind, if I get pregnant, that abortion is a choice."

Thus a key difference between the feelings of congruent and incongruent women lies not in their attitudes towards their options for continuing a pregnancy once it has occurred but in their reaction to their ability to prevent a pregnancy in the first place. Neither group was typically able to obtain their desired highly effective method to implement their childbearing plans. Yet while congruent women frequently expressed unhappiness because of the serious negative impact another pregnancy would have on their own and their families' lives, incongruent women tended to rationalize or accept the pregnancy as having been bestowed by God or destined to happen.

DISCUSSION

Our exploration of the positive emotions women often express about a pregnancy that would be unintended has demonstrated that happiness can indeed coexist with sincere intent to prevent pregnancy and has identified multiple influences underlying

such happiness. Based upon the eight emergent themes described above, we consider five non-competing hypotheses to explain the phenomenon of happiness at the prospect of an unintended pregnancy.

1. Heart vs. Head

Both congruent and incongruent women feel a strong sense of maternal love for their children. But for incongruent women, these deep emotions are at the forefront when answering questions regarding feelings about a future pregnancy. For these women, the idea of not only their own children but of children in general is joyous, and babies evoke warm and happy feelings (For those who don't consider themselves 'a baby person', imagine the feelings prompted by particularly cute kittens or piglets). Despite wanting no more children, often due to the practical realities of providing for another baby, these warm feelings override such reservations. For congruent women, on the other hand, feelings about a future pregnancy are approached pragmatically, where the main considerations are money, time, and emotional reserve. In short, although both groups expressed similar reasons for not wanting more children, incongruent women answered the question regarding feelings about pregnancy with their hearts, whereas congruent women answered it with their heads.

2. Life Stress and the Tipping Point

Congruent women frequently explain their feelings of unhappiness about a future pregnancy in terms of the strain of providing financially for children, the difficulties

involved in creating the life they want to be able to give their children, and the desire for children to have better life outcomes than they themselves did. A dominant idea among these women is that of a “tipping point” where another child would push them over an economic or psychological threshold, resulting in a very negative impact on their lives. For incongruent women, this point may not have been reached, or may not apply, meaning that they and their partners would simply rise to the occasion and happily make it work. Alternatively, it is possible that the tipping point may have been surpassed already: *i.e.* the relative negative impact of another baby would be small in a financial or emotional situation that is already sufficiently bad, thus making another baby “just one more kid”.

3. Competing Interests and Life Opportunities

Congruent women often worry that the arrival of another baby would mean giving up a job or postponing plans to go back to school, thus encroaching upon personal goals, removing a source of stress relief outside of the home, or hurting personal fulfillment. Incongruent women tend to mention these considerations much less commonly and more often see being a mother as the main goal or role, suggesting that happiness may be partly a reflection of the utility derived from children and the opportunity cost of having another baby weighed against other competing interests. Another possibility is that feelings about pregnancy and childbearing depend upon one’s perceived options for personal fulfillment. A considerable body of previous literature has suggested that if an education or a career has never seemed possible or been encouraged, motherhood may become the

main goal early on in life (Garcia and Oliveira 1994), (Manlove 1997), (Edin and Kefalas 2005). For the women described in this chapter, what seems possible often depends upon the context in which their personal aspirations are embedded. Thus, for some women, even though no more children are planned, the positive reaction towards another one may stem from viewing motherhood as one's main source of personal satisfaction or achievement (Fedorowicz et al. 2014).

4. Social Norms and Expectations

Some incongruent women are in fact unhappy at the idea of a future pregnancy but are reluctant to admit it openly. This disjunction is related to a perceived need to adhere to an imperative reinforced by family, friends, community, and sometime also partners, that having children must automatically be viewed as a joyful, happy, and thankful event. Such reluctance to call children a burden appears to be most dominant among Spanish-speaking Latina women, who described growing up, getting married, and becoming a mother as a strict set of social norms which had been instilled in them as children and young adults in Mexico. For these women, professed happiness about a pregnancy that would be unintended is the product of an expectation that happiness will be the default reaction and that no other reaction would be acceptable. In this sense, it is not so much true happiness as fulfilling a sense of obligation or duty.

5. Fatalism and Belief in God's Plan

Difficulty obtaining highly effective methods of contraception and subsequent reliance on methods to which access is inconsistent or which are harder to use correctly often leave women uncertain of their ability to implement their childbearing plans. Although incongruent women do not tend to attribute conception itself to the will of God or to fate (*i.e.* they believe that ultimately they are responsible for whether or not they get pregnant), the idea of God's plan or fatalistic acceptance is often used to rationalize the occurrence of a pregnancy or as a way of viewing it in a positive light and lessening emotional or mental stress. Happiness about an unintended pregnancy may therefore be a reflection of making the best of an unwanted situation, perhaps potentiated by the inability to access contraception that will allow true peace of mind. This possibility in turn raises the interesting question of whether, if incongruent women were able to use the highly effective methods they desire, they would still express happiness about an unintended pregnancy. For example, if these women were enrolled in the Contraceptive CHOICE project (Secura et al. 2010) and could obtain access to highly effective methods for free, would they express their feelings at the prospect of a pregnancy differently? This is an important question because some prior research on ambivalence would suggest that such women are happy simply because they have mixed feelings about pregnancy, or because the concept of planning a pregnancy does not apply to them (Jaccard, Dodge and Dittus 2003), (Zabin 1999). The relationship between happiness and powerlessness in the

face of difficulty accessing women's desired methods of contraception merits further exploration.

Cross-Cutting Explanations

While no doubt a key influence on women's feelings at the prospect of an unintended pregnancy, male partner attitudes towards pregnancy appear to work in a complex fashion, playing into each of the five hypotheses described above. Male partners were almost uniformly perceived to be happier about an unintended pregnancy than woman themselves, but this happiness appeared to potentiate both positive feelings among incongruent women and negative feelings among congruent women. Male partners also played a key role in contraceptive decision-making, sometimes discouraging women from accessing permanent methods or being reluctant to use contraception consistently themselves. Yet the conclusions we can draw about the influence of male partners' feelings are limited by having information only on women's perceptions of what their partners' attitudes might be. These might differ substantially from stories men themselves would tell. For example, it is possible that some men might express happiness about an unintended pregnancy in an attempt to support their female partners emotionally or in response to a sense of duty, rather than in an attempt to convince them to have more children. Equally, men themselves might have very different perceptions of their partners' childbearing desires.

Although the sample of women we interviewed was relatively small and localized, we did appear to reach thematic saturation and representation of Latina and

white women from a range of different backgrounds was achieved. Most interestingly, the five hypotheses for why women express happiness about unintended pregnancy are applicable across ethnic, educational, and socioeconomic strata. Yet it is also possible to see why incongruence has previously been found to be more common among Latina women than among non-Hispanic whites. Latinas in the United States are more likely to live in socioeconomically disadvantaged conditions with fewer educational and employment opportunities. These may shape their life aspirations in a way that might make motherhood a more attractive option in the face of fewer competing interests. These conditions also render them more vulnerable to experiencing difficulty accessing contraception, thus perhaps encouraging the development of coping mechanisms such as belief in fate or acceptance of God's plan. Although happiness is not purely a normative response among these women, there does appear to be a deep social and cultural context for why it might be a more likely or expected response. Critically, professed happiness in response to a survey question may not be an accurate reflection of true desires for some women.

CONCLUSION

The women who so generously gave their time to talk with us told us in their own words that it is possible to feel happy at the idea of a pregnancy while simultaneously trying earnestly to prevent it. Despite lacking the ability to access their desired highly effective methods of contraception, their intentions are clear and concrete. Their feelings, on the other hand, are abstract and complex: sometimes ethereal, sometimes a product of

circumstance, sometimes concealed. Yet they do not detract from the seriousness of their intentions. The importance of understanding the difference between these two concepts is clear: both for the accurate measurement of the burden of unintended pregnancy and for ensuring that these women have the ability to control their own reproductive destinies.

TABLE 3.1—In-Depth Interview Participant Sample Matrix

	Incongruent Intentions and Feelings	**Congruent Intentions and Feelings**
Latina + Public Insurance	11[†]	4[*]
White + Public Insurance	2	2
Latina + Private Insurance	2[**]	2[**]
White + Private Insurance	2	2
Total	17	10

[†] 6 Spanish-speaking, 5 English-speaking
[*] 2 Spanish-speaking, 2 English-speaking
[**] 1 Spanish-speaking, 1 English-speaking

TABLE 3.2—Characteristics of In-Depth Interview Participants

	Incongruent Intentions and Feelings (n=17)	**Congruent Intentions and Feelings (n=10)**
Age (years)	29.5 (19-40)	29.5 (22-38)
Parity	3 (1-7)	3 (1-5)
Relationship Status		
Married	12	5
Cohabiting	4	4
Single	1	1
Level of Education		
Less than High School	4	3
High School	7	3
Greater than High School	6	4

Figures are means and ranges (in parentheses) or frequencies.

Conclusions

THEORETICAL CONTRIBUTIONS

While the collective evidence presented in this dissertation identifies a new theoretical dimension of pregnancy intentions and feelings, we do not dismiss the concept of ambivalence. For women who are equivocal about their future childbearing plans or who are not highly motivated to avoid pregnancy but equally do not actively plan to get pregnant, ambivalence is undoubtedly a fitting and useful construct. Rather, the key message is that women who want no more children but profess happiness at the prospect of a pregnancy should not *automatically* be considered ambivalent. For many women, the assumption of ambivalence would not only misrepresent their childbearing intentions but also contradict their sincere desire to use a highly effective method of contraception.

The interpretation of intentions and feelings as two distinct concepts can be usefully brought to bear on survey questions designed to measure unintended pregnancy. Revisiting Trussell *et al*.'s paradox of women in the NSFG who professed happiness about pregnancies they also classified as unintended, we now see clearly that such incongruence is not solely a function of retrospective rationalization of feelings. One of the key strengths of the data presented in Chapters 1, 2, and 3 has been its prospective and longitudinal nature, allowing us to elicit women's feelings about pregnancy from a different perspective than that presented in most studies, both ethnographic and survey-based. This prospective format is particularly useful because it allows women to express

their pregnancy intentions and feelings free from hindsight or *ex post* rationalization. In this dissertation, happiness about unintended pregnancies has been amply demonstrated to exist prospectively, even though it may be augmented when enquired about after the fact. Similarly, although women's intentions are no doubt prone to recall bias when asked about in retrospect (thus meaning that unintended pregnancy is commonly underestimated) women who classify their unintended pregnancies as happy are no longer so mysterious. Such happiness may be the result of powerful feelings of love towards children taking precedence over practical considerations, the perceived opportunity cost of another child, adherence to an instilled expectation that children be greeted with happiness, or acceptance of a pregnancy that is not desired but that would be difficult to prevent. In contrast to the idea of ambivalence, none of these things detract from the fact that the pregnancy was not intended.

While distinguishing between women who are truly ambivalent and women who sincerely wish to avoid pregnancy may be difficult on the basis of single-answer survey questions about intentions and feelings, one possible solution would be to include questions designed to assess contraceptive desires. Answers to these questions, taken in combination with professed childbearing intentions, would likely assist with the identification of women who earnestly wish (or wished) to prevent conception yet still profess happiness about pregnancy. As we have seen, relying on actual contraceptive method choice, continuation, or adherence ignores the very likely possibility that women who are using a less effective method or are using it inconsistently are doing so because they could not access the method they truly desire. Other constructs, such as the questions

included in the Relationship Dynamics and Social Life Study (RDSL) asking how much a woman wants to both avoid and achieve pregnancy, may also prove useful in distinguishing ambivalence from incongruence.

Overall, we can conclude that survey questions addressing both feelings and intentions are useful, but that intentions are generally the better concrete reflection of women's childbearing plans. Feelings, however, should not be disregarded. They are certainly important in the identification and understanding of women who truly are ambivalent towards pregnancy, and they may be especially important for downstream maternal and child outcomes. For example, a woman who experiences an unintended pregnancy but nevertheless feels happy about it may have a less stressful pregnancy and birth than a woman who experiences an unintended pregnancy and feels unhappy about it. Maternal stress during pregnancy has been linked to preterm labor (Cole-Lewis et al. 2014), whereas positive maternal affect has been associated with reduced risk of premature birth (Wadhwa et al. 1993).

The most recent published research on pregnancy ambivalence and contraceptive use has suggested moving towards subtypes of ambivalence, based on the finding that women who stated that avoiding a pregnancy was important but that they would be happy if it occurred were *not* less likely to use contraception effectively (Yoo, Guzzo and Hayford 2014). Such findings bring us a step closer to being able to view incongruent intentions and feelings as either ambivalence or as distinct concepts, as appropriate to each women's own situation. This is critical if women's childbearing intentions are to be properly understood and taken seriously. The inclusion of other questions, such as those

described above relating to contraceptive desires, may assist in the interpretation of incongruent intentions and feelings where collection of detailed in-depth responses is not feasible.

IMPLICATIONS FOR POLICY

The theoretical insight we have gained into the interpretation of incongruent intentions and feelings has important implications for both individual- and population-level strategies for the prevention of unintended pregnancy. The assumption that incongruent women are ambivalent about pregnancy could increase barriers to obtaining desired highly effective methods of contraception if their childbearing intentions are not taken seriously. Moreover, the women in Chapters 2 and 3 were recruited in Texas during a period of deep legislative cuts to public funding for family planning (White et al. 2012). The empirical findings, as well as the stories told by the women themselves, provide clear evidence that access matters. Given the current hostile climate surrounding family planning not only in Texas but in the United States as a whole, it seems likely that unintended pregnancy will become increasingly more difficult to prevent as barrier upon barrier is placed in the way of access to contraception.

In the context of a policy setting where access to contraception is so restricted, the importance of providing contraceptive methods in the postpartum period when many women are still covered by delivery-related insurance seems even more apparent. Yet although many of the women described in Chapter 3 were desperate to prevent another pregnancy, few reported having a plan in place to obtain their desired method in the

weeks following delivery. The prenatal and postpartum periods represent opportunities for providers to talk about contraception at a time when women might be particularly motivated to avoid another pregnancy and when those who would normally lack health insurance have enhanced access to the healthcare system. Furthermore, since 33% of unintended pregnancies occur within 18 months of a prior birth (US Department of Health and Human Services), the postpartum period is a key period of risk, during which intervention is likely to have a high payoff. Many women who experience a short inter-pregnancy interval have also experienced a previous unintended pregnancy, and an unintended pregnancy is itself a major risk factor for a repeat unintended pregnancy (Kuroki et al. 2008).

Having a plan in place to obtain postpartum contraception is crucial for low-income and ethnic minority women in Texas because of the nature of the public insurance upon which they rely. Those who lack private insurance may typically have their delivery covered by either Medicaid or Emergency Medicaid. Pregnant women in Texas qualify for Medicaid if their family income is less than 185% of the federal poverty level (FPL), which covers the costs of pre-natal care, delivery, and postpartum care including contraception up to 60 days following delivery. To qualify, women must be either U.S. citizens or permanent residents who have lived in the U.S. for at least 5 years. Women who do not qualify for Medicaid on the basis of citizenship (i.e. those who are undocumented immigrants or permanent residents of fewer than five years duration) must rely upon Emergency Medicaid, which covers only delivery and excludes prenatal and postpartum care, including contraceptive provision.

As a result, women who qualify for Medicaid on the basis of pregnancy have 60 days from the time of delivery to obtain a contraceptive method. The regular Medicaid qualification threshold for adults in Texas is extremely low at 31% of the FPL meaning that few women re-qualify once their pregnancy-related coverage runs out. Since the main opportunity for women to talk with their providers about contraception occurs at the postpartum check-up at 6 weeks following delivery, very little time remains for desired IUDs or implants to be ordered and for an appointment to be scheduled with a skilled provider before Medicaid expires. For too many women in the postpartum study who desired a long –acting reversible contraceptive (LARC), contraception was discussed for the first time at the postpartum check-up, with too little time left to obtain one.

Such issues with access are a problem not only in Texas, but also in other states. A study in California showed that only 41% of Medicaid recipients filed a contraceptive claim within 90 days of delivery and only 13% of women received contraception at the first postpartum visit (Thiel de Bocanegra et al. 2013). If clinicians discussed future childbearing intentions and contraceptive desires with women as part of routine clinical protocol, ideally during prenatal care, plans could be put in place to ensure methods are provided without delay postpartum, even within the limits of current Medicaid policy.

Yet the time limit on providing IUDs and implants before Medicaid expires could be circumvented entirely by instead providing them immediately postpartum (Cameron 2014), (Teal 2014). IUDs can safely be provided with no increased risk of perforation or bleeding within 10 minutes of placental delivery (Grimes et al. 2010), and implants can safely be provided at any time without risk of disrupting breastfeeding

(Kapp and Curtis 2009). In addition to the need for provider training and permissive hospital policy, the main obstacle to providing postpartum LARC is the current Medicaid reimbursement structure. Providers and hospitals are paid a global fee, from which costs associated with prenatal care, delivery, and postpartum care are deducted. Since there is no separate reimbursement for postpartum IUDs and implants, there is in fact a financial *disincentive* to providing it (Teal 2014). Yet compared to the costs associated with rapid repeat pregnancy, provision of postpartum LARC would be extremely cost effective (Han et al. 2014). Additionally, if coverage of postpartum LARC was extended to those relying upon Emergency Medicaid (who at present have no contraceptive coverage), the cost savings would be substantial (Rodriguez et al. 2010).

On top of the barriers many women faced accessing LARC, many of the incongruent women who had completed childbearing in both the postpartum contraceptive study cohort and the border contraceptive access study cohort described difficulty in obtaining a desired postpartum sterilization. Emergency Medicaid will cover delivery costs but not postpartum sterilization, and even for women covered by Medicaid, which will reimburse a postpartum sterilization separately from the global fee, significant hurdles still exist. The main issue is that the federally-mandated consent form for sterilization must be signed at least 30 and no more than 180 days prior to delivery and must be presented for inspection before the sterilization can occur (Borrero et al. 2014). If future childbearing intentions are not discussed with women well in advance of delivery and if their intentions are not taken seriously, they can all too easily find themselves

beyond the 30-day deadline for signing the consent form, with little hope of being able to obtain an interval sterilization beyond the 60-day postpartum period.

A substantial body of recent research has highlighted the potential of LARC and postpartum sterilization to reduce unintended pregnancy (Blumenthal et al. 2011), (Stevens-Simon, Kelly and Kulick 2001), (Trussell and Wynn 2008) Recent evidence from the Contraceptive CHOICE project shows that LARC uptake can be significantly improved when financial and other access barriers are removed (Secura et al. 2010) and that continuation of such methods is high over 24 months post-insertion (O'Neil-Callahan et al. 2013). Policy change at the state and federal level could substantially reduce the barriers women face in obtaining highly effective methods of contraception. Yet even in the absence of such major policy adjustments, careful and thorough discussion of future childbearing intentions and contraceptive desires by clinicians during the prenatal period and proper planning for the postpartum period could go a long way towards preventing unintended pregnancies among both congruent and incongruent women.

FUTURE RESEARCH DIRECTIONS

Overall, this dissertation has perhaps generated as many questions as it answered, and there are several promising avenues for future research. The first is to understand in detail the role of male partners' intentions and feelings about pregnancy in influencing women's own childbearing desires and contraceptive decision-making. Hearing men speak from their own perspectives is crucial for completing this particular piece of the incongruence puzzle. Moreover, it will be important to understand men's perspectives in

the context of their relationships and in particular to compare marital to cohabiting unions. Although male partner attitudes and relationship status are likely to be interdependent, how exactly they interact and the relative contribution of each to women's pregnancy intentions and feelings is as yet unclear.

The second is to elucidate the relationships between feelings about unintended pregnancy and maternal and child health outcomes among socially disadvantaged women. Although intentions might be clear, feelings about an unintended pregnancy that ends up occurring might matter for health outcomes during pregnancy and delivery especially when happiness is a powerful and sincere emotion. Discovering the biological and psychosocial mechanisms by which feelings might modulate outcomes such as preterm delivery and infant birth weight would represent a major step in bridging the divide between biomedical and social-science perspectives on unintended pregnancy.

The third is to understand how women's feelings about pregnancy might change if they could access their preferred contraceptive methods and truly believed that implementation of their intentions were possible. In light of the particular inability of low income and ethnic-minority women to access highly effective methods of contraception, it is particularly important not to make the assumption that they are ambivalent. If it could be demonstrated that a subset of these women would not even express incongruence if they did not require happiness as a coping mechanism, the case for better access could be even more strongly made, and perhaps more unintended pregnancies could be prevented.

Appendix A

TABLE 4.1—Percentage distribution of women who experienced contraceptive failure that resulted in a live birth, by their feelings about the pregnancy, 2006-2010 NSFG (n=286)

	Hispanic		**Non-Hispanic White**	
Feelings about pregnancy	**Intended n= 38**	**Unintended n=72**	**Intended n=61**	**Unintended n=115**
Very Unhappy (1)	1.0	18.0	0.0	13.0
Unhappy (2-4)	2.7	16.9	12.3	30.3
Neutral (5)	3.6	16.5	1.3	25.4
Happy (6-9)	8.5	30.6	38.7	17.5
Very Happy (10)	84.5	18.0	47.6	13.9
Total	100.0	100.0	100.0	100.0

Percentages are weighted, n's are unweighted
Differences by ethnicity are statistically significant, $p \leq 0.05$

TABLE 4.2—Comparison of the Feelings of Women and Their Partners Towards Pregnancy in the Next 3 Months, for Women who Plan to use the OCP for at Least One More Year (n= 741)

	Partner's Feelings	Very Happy	Somewhat Happy	Don't Know	Somewhat Upset	Very Upset
Women's Feelings	Very Happy (n=124)	**73.0**	18.5	5.6	2.0	2.0
	Somewhat Happy (n=176)	39.8	**46.0**	4.0	8.0	2.3
	Don't Know (n=78)	27.0	11.5	**52.3**	4.0	5.1
	Somewhat Upset (n=102)	26.5	16.7	4.2	**42.2**	10.8
	Very Upset (n=261)	10.3	12.3	4.2	11.1	**62.0**

Figures are in percentages, and percentages are calculated separately for each happiness category

Appendix B

TABLE 5.1—Logistic Regression of Factors Associated with Happiness About Pregnancy Among Women in a Relationship When no More Children are Intended for at Least Two Years (n=122)

Variable	Odds Ratio (95% C.I)
Age	
18-24	Ref
25-29	1.14 (0.30-4.25)
30-34	2.28 (0.32-16.11)
35+	1.47 (0.18-11.87)
Parity	
1	Ref
2	0.93 (0.24-3.59)
3+	0.66 (0.14-3.14)
Ethnicity	
Non-Hispanic	Ref
Hispanic	0.63 (0.133-2.93)
Relationship Status	
Married	Ref
Cohabiting	0.23 (0.06-0.80)*
In a relationship but not living together	0.56 (0.12-2.72)
Education	
<HS	Ref
Completed HS	1.67 (0.40-6.97)
>HS	0.79 (0.14-4.39)
Income	
<$10,000	Ref
$10,000-19,999	1.53 (0.36-6.57)
$20,000-34,999	0.87 (0.16-4.57)
$35,000-74,999	0.88 (0.10-7.65)
≥$75,000	1.83 (0.15-22.65)
Worried About Affording Baby	
No	Ref
Yes	1.95 (0.50-7.59)
Worried About Having Enough Help to Care for Baby	
No	Ref
Yes	0.37 (0.10-1.35)
Worried About Fulfilling Personal Goals	
No	Ref
Yes	0.46 (0.12-1.86)
Worried About Work or School Commitments	
No	Ref
Yes	0.94 (0.26-3.34)

TABLE 5.1 CONTINUED—Logistic Regression of Factors Associated with Happiness About Pregnancy Among Women in a Relationship When no More Children are Intended for at Least Two Years (n=122)

Would be Down to God's Plan or Meant to be	
No	Ref
Yes	2.77 (0.84-9.16)*
Perceived Partner's Feelings	
Very or somewhat upset	Ref
Very or somewhat happy	18.79 (4.91-71.97)***

*p≤ 0.05 ***p≤0.001
Ref = reference category

Appendix C

PREGNANCY INTENTIONS AND FEELINGS IN-DEPTHS TOPIC GUIDE: ENGLISH-SPEAKING NON-PREGNANT PARTICIPANTS

Main Purpose:

- ➢ To ascertain whether women who would feel happy about a pregnancy when no more children are wanted are ambivalent about avoiding pregnancy
- ➢ To assess what factors influence happiness about a pregnancy that is not intended

1. Introduction

- Thank the participant for agreeing to be interviewed
- Review the purpose and theme of the interview
- Review the consent form and check the participant is happy with the interview being recorded.

2. Intro Questions

- Let's begin by talking about your family: who lives at home with you at the moment?
    - o Has anyone moved in or out recently? Did that change things?
    - o Do you have a partner right now?
- How do you spend most of your day at the moment?
    - o Are you in school/working/staying at home?
- Tell me about the hardest part of your day
    - o Think about when you really hit a tough spot
- What would you say is your biggest financial challenge right now?

3. Future Childbearing Plans

- Tell me about your ideal family size
    - o How far apart would you like to have your children?
- Would you like to have more children in the future?
    - o Tell me more…
- How important is it to you to avoid getting pregnant right now?

- ➢ If she now does want more children → When we spoke in the last interview on the phone, you didn't think you would want to have any more children…Something has changed for you…?

4. Feelings About Future Pregnancy

- Let's imagine that you go to the doctor's office in the next few months, and the doctor tells you you're pregnant. How would you feel?
    - What would lead you to feel [happy/unhappy]? Tell me more… What led you to say that?
    - So you would be [happy] to be pregnant, even though you [don't want] to have any more children?
    - Ok, so that's your main feeling…are there any other feelings that go along with that?

➢ If we were expecting incongruence and got congruence (or vice versa): → When we spoke in the last interview on the phone, you thought you would be happy/unhappy if you got pregnant in the next few months…Something's changed for you…?

5. Partner/Relationship

- How would you partner feel about the pregnancy?
- What would make him feel [happy/unhappy]?
    - His feelings would be the same/different to yours…? Why?
    - How much would his feelings matter to you?
    - Tell me about how his feelings affect your feelings…
- How would a pregnancy change your relationship with your partner?
- Tell me about your relationship…
    - How do you make decisions in your relationship?

6. Effects of a pregnancy on her life

- What would be the biggest change in your life if you got pregnant in the next few months?
    - What would be other little changes?
    - What would be the biggest challenge?
- Would it change any of your plans (for yourself/for your family)?

7. Context for Influences on Intentions and Happiness

- How would you let people know about a pregnancy?
    - How do friends and family usually announce a pregnancy?
- Who is the first person you would tell?
- Who would be the most excited to hear about your pregnancy?
- Who would react really differently from that?
    - Is there anything you feel would need to hide about the pregnancy? A feeling or discomfort or anything else?
- How important is it to be a mother?

    - To you? To your family? Sometimes people talk about the wishes of their mother or mother-in-law…is that relevant here?
    - Sometimes people talk about things they learned about when growing up...
- Tell me more about your family
    - Where were you born? Was the rest of your family also born there? Do you visit them often?
- What would you say is the biggest reason you decided to have children?
- Do you consider yourself a spiritual or religious person?
    - Are you part of a religious community?
    - Does that affect how you feel about pregnancies or families?
- What do you think you're best at, as a parent?
- Can you tell me about how your past pregnancies might have affected the way you feel about having more children now?

- **8. Contraception and Motivation to Avoid Pregnancy**
- To finish up, we'd like to ask a little about anything you might be doing right now to keep from getting pregnant.
- Are you currently using birth control?
    - If yes:
        - Which method are you using?
        - Can you tell me about some of the reasons why you're using birth control?
        - Is this method working for you?
        - Is anyone getting in your way?
        - Are you using it all the time/the way your doctor would expect?
        - What is the thing you dislike most about using birth control?
    - If no:
        - Can you tell me about why you're not using birth control?
        - What is the thing you dislike most about using birth control?
        - Are you worried about getting pregnant?
- If you could use any method of birth control, including methods your husband or partner could use, would you like to be using?
  Probe→ Can you tell me about why you would like to use this method in particular? Probe → Does she want something more effective?
- Would you consider a permanent method of birth control, for example getting a tubal ligation, or a vasectomy for your husband/partner?

9. Wrapping up

- Thank participant for her time, ensure she receives her $30 compensation, signs the cash log, and remind her that our contact details are on her copy of the invitation to participate if she finds she has any questions or concerns.

PREGNANCY INTENTIONS AND FEELINGS IN-DEPTHS TOPIC GUIDE: SPANISH-SPEAKING NON-PREGNANT PARTICIPANTS

Main Purpose:

- ➢ To ascertain whether women who would feel happy about a pregnancy when no more children are wanted are ambivalent about avoiding pregnancy
- ➢ To assess what factors influence happiness about a pregnancy that is not intended

1. Introduction

- Thank the participant for agreeing to be interviewed
- Review the purpose and theme of the interview
- Review the consent form and check the participant is happy with the interview being recorded.

2. Preguntas Introductorias

- Comencemos platicando sobre su familia: ¿quién vive con usted en este momento?
  - ¿Ha llegado alguna persona nueva a vivir con usted, o se ha ido alguien que vivía con usted? ¿Qué cambios se han dado como resultado de esa situación?
  - ¿Tiene pareja en este momento?
- ¿En qué ocupa su tiempo la mayor parte del día?
  - ¿Está estudiando/trabajando/se dedica al hogar?
- Cuénteme, ¿qué parte del día se le hace más difícil?
  - Piense en la situación más difícil del día
- ¿Cuál diría que es su responsabilidad/problema económico más fuerte en este momento?

3. Planes para embarazos en el futuro

- Conversemos sobre el tamaño ideal de su familia- ¿Que es el tamaño ideal para su familia?
  - ¿Cuánto tiempo preferiría dejar pasar entre embarazos?
- ¿Le gustaría tener más hijos en el futuro?
  - Cuénteme un poco más sobre esto…
- ¿Qué tan importante es para usted en este momento el evitar un embarazo?

- ➢ Si ahora quiere más hijos → La última vez que hablamos por teléfono usted me comentó que ya no quería tener más hijos.... ¿Qué la hizo cambiar de parecer?

4. Emociones sobre embarazos en el futuro

- Imagínese que va donde el doctor en los próximos meses y que el doctor le dice que está embarazada. ¿Cómo se sentiría?
  - ¿Qué es lo que más influiría para que se sintiera contenta/descontenta? Cuénteme un poco más... ¿Por qué dijo eso?
  - ¿Así que estaría contenta de embarazarse, aún cuando [ya no quiere] tener más hijos?
  - Bueno, entonces el sentimiento más fuerte parece ser.... ¿Qué otras cosas siente, además de eso? ¿Qué otros sentimientos acompañan ese sentimiento?

➢ Si estábamos esperando que se sintiera contenta y ella dice que se siente descontenta (o al revés): → La última vez que hablamos por teléfono usted pensaba que se iba a sentir contenta/descontenta si quedaba embarazada en pocos meses… ¿Qué la hizo cambiar de parecer?

5. Pareja/Relación

- ¿Cómo se sentiría su pareja si usted quedara embarazada?
- ¿Qué lo haría sentirse contento/descontento?
  - ¿Usted cree que sus sentimientos serían iguales/diferentes a los suyos? ¿Por qué?
  - ¿Qué tanto la afectarían los sentimientos de él?
  - Cuénteme cómo la afecta lo que él piensa…
- ¿Cómo cambiaría la relación con su pareja si queda embarazada?
- Hablemos un poco de su relación…
  - ¿Cómo hacen las decisiones entre ustedes?

6. Efectos del embarazo en la vida de la mujer

- ¿Cuál sería el cambio más grande en su vida si quedara embarazada en los próximos meses?
  - ¿Habrían otros cambios de menor importancia? ¿Cuáles?
  - ¿Cuál sería el reto más grande?
- ¿Cambiarían algunos planes que tenía (para usted misma o para su familia)?

7. Contexto para determinar las influencias sobre las Intenciones y sobre la Satisfacción

- ¿Cómo le contaría a la gente de su alrededor que está embarazada?
  - ¿Cómo acostumbran sus amigos y su familiares anunciar un nuevo embarazo?
- ¿A quién le contaría primero?
- ¿Quién sería la persona más emocionada por su embarazo?
- ¿Quién reaccionaría totalmente diferente a eso?

    - ¿Hay algo sobre su embarazo que siente que tendría que ocultar? ¿Algún sentimiento, alguna inquietud o alguna otra cosa?
- ¿Qué tan importante es ser madre?
    - ¿Para usted? ¿Para su familia? Algunas mujeres hablan sobre lo que quiere su madre o su suegra.... ¿Es esto importante para usted?
    - A veces las personas hablan sobre las cosas que aprendieron cuando estaban creciendo ....
- Cuénteme un poco sobre su familia
    - ¿Dónde nació? El resto de su familia, ¿sus padres también nacieron allá? ¿Los visita a menudo? ¿Cuál cree que es la razón principal por la que decidió tener hijos?
- ¿Se considera usted una persona espiritual o una persona religiosa o devota?
    - ¿Pertenece a alguna comunidad religiosa?
    - ¿Cree usted que esto afecta cómo se siente en cuanto a embarazos o familia?
- ¿Cuál siente que es su mejor cualidad como madre?
- ¿Dígame como las experiencias en sus embarazos anteriores pueden haber afectado cómo se siente en cuanto a tener más hijos?

8. Anticonceptivos y el Deseo de Evitar Embarazos

- Para terminar, quisiéramos preguntarle lo que está haciendo en estos momentos para evitar un embarazo.
- ¿Está usando un método anticonceptivo en estos momentos?
    - Si sí:
        - ¿Qué método está usando?
        - ¿Podría decirme algunas razones por las que está usando un método anticonceptivo?
        - Este método, ¿está funcionándole bien?
        - ¿Hay alguien/algo que está interfiriendo en el uso del método?
        - ¿Está usando este método regularmente/en la forma que su doctor a indicado?
        - ¿Qué es lo que más le desagrada de usar métodos anticonceptivos?
    - Si no:
        - ¿Puede decirme por qué no está usando un método anticonceptivo?
        - ¿Qué es lo que más le desagrada de usar métodos anticonceptivos?
        - ¿Tiene miedo de quedar embarazada?

- Si tuviera la opción de usar cualquier método anticonceptivo que quisiera, incluyendo los métodos que puede usar su esposo o pareja, ¿cuál preferiría? Examine→ ¿Por qué cree que le gustaría usar ese método en particular? Examine → ¿Quiere usar algo que sea más efectivo?

- ¿Consideraría usar un método anticonceptivo permanente, como una ligadura de trompas, o una vasectomía para su esposo o pareja?

9. Wrapping up

- Thank participant for her time, ensure she receives her $30 compensation, signs the cash log, and remind her that our contact details are on her copy of the invitation to participate if she finds she has any questions or concerns.

Pregnancy Intentions and Feelings In-Depths Topic Guide: English-Speaking Pregnant Participants

Main Purpose:

- ➢ To ascertain whether women who had incongruent intentions and feelings before getting pregnant were ambivalent about avoiding pregnancy
- ➢ Among those who were not ambivalent, what factors influenced happiness about a pregnancy that is not intended?
- ➢ To assess whether and how prospective intentions and feelings about a pregnancy change after the pregnancy has occurred

1. Introduction

- Thank the participant for agreeing to be interviewed
- Review the purpose and theme of the interview
- Review the consent form and check the participant is happy with the interview being recorded.

2. Intro Questions

- Let's begin by talking about your family: who lives at home with you at the moment?
  - o Has anyone moved in or out recently? Did that change things?
  - o Do you have a partner right now?
- How do you spend most of your day at the moment?
  - o Are you in school/working/staying at home?
- Tell me about the hardest part of your day
  - o Think about when you really hit a tough spot
- What would you say is your biggest financial challenge right now?

3. Intention Status and Feelings About Current Pregnancy

- Tell me about your ideal family size
- When you first found out you were pregnant, how did you feel about it?
  - o Can you tell me some more about why you felt [happy/unhappy]?
  - o How did you partner about it?
  - o Had you been trying to get pregnant?
  - o Were you using birth control? If not: What was the main reason you were not using birth control? If so: Why do you think you got pregnant?

4. Partner/Relationship

- How did your partner feel when you found out you were pregnant this time?
- What made him feel [happy/unhappy]?

- His feelings were the same/different to yours…? Why?
    - How much did his feelings matter to you?
    - Tell me about how his feelings affected your feelings…
- Has your pregnancy changed your relationship with your partner in any way?
- Tell me about your relationship…
    - How do you make decisions in your relationship?

5. Intentions and Feelings Before Pregnancy Occurred

- Let me take you back to a few months before you got pregnant: How did you feel about the idea of a pregnancy then?
    - Can you tell me some more about why you felt [happy/unhappy]?
    - Your feelings now are different to your feelings back then…something has changed for you?
    - Why do you think you feel differently now?

➢ When we talked to you on the phone a few months before you got pregnant, you had said you would feel [happy/unhappy] about a pregnancy.
    - What were your thoughts then?
    - Something changed for you….?

- Still thinking back to a few months before you got pregnant, did you want to get pregnant at that time?

➢ When we talked to you on the phone a few months before you got pregnant, you had said that you [didn't want any more children/didn't want any more children for [2/3/4 years].
    - Something changed for you….?

6. Partner's Intentions and Feelings Before Pregnancy Occurred

- And how did your partner feel about the idea of a pregnancy at that time?
  - Why did he feel [happy/unhappy]?
  - His feelings were [the same/different] to yours?
  - How did his feelings affect your thoughts about a pregnancy at that time?
  - Why do you think he feels differently now?

➢ When we talked to you on the phone a few months before you got pregnant, you had said your partner would feel [happy/unhappy] about a pregnancy.
    - Something changed for him?

- Did he want to have more children at that time?
    - Why do you think he wanted to have more children?

- When we talked to you on the phone a few months before you got pregnant, you had said your partner [did not want any more children ever/in 2, 3, 4 years]
    - Something changed for him?

7. Effects of a pregnancy on her life

- How do you feel about your pregnancy now?
    - What would you say is biggest change in your life
- What would be other little changes?
- What would you say is the biggest challenge?
- Does it change any of your plans (for yourself/for your family)?

8. Context for Influences on Intentions and Happiness

- When you found out you were pregnant this time, how did you let people know the news?
    - How do friends and family usually announce a pregnancy?
- Who was the first person you told?
- Who was most excited to hear about your pregnancy?
- Did anyone react really differently from that?
    - Is there anything you felt you needed to hide about the pregnancy? A feeling or discomfort or anything else?
- How important is it to you to be a mother?
    - How about to our family? Sometimes people talk about the wishes of their mother or mother-in-law…is that relevant here?
    - Sometimes people talk about things they learned about when growing up...
- Tell me more about your family
    - Where were you born? Was the rest of your family also born there? Do you visit them often?
- What would you say is the biggest reason you decided to children?
- Do you consider yourself a spiritual or religious person?
    - Are you part of a religious community?
    - Does that affect how you feel about pregnancies or families?
- What do you think you're best at, as a parent?
- Can you tell me about how your past pregnancies might have affected the way you feel about having more children?

9. Contraception and Motivation to Avoid Pregnancy

- Now we'd like to ask a little more about the birth control you were using before you got pregnant
- Can you tell me some the reasons why you were using birth control?
    - Were you worried about getting pregnant?
- How happy were you with the method you were using?

    - Can you tell me what method you would like to have been using? Why?
- Would you have liked to have been using a permanent method of birth control, for example getting a tubal ligation, or a vasectomy for your husband/partner?

10. Wrapping up

- Thank participant for her time, ensure she receives her $30 compensation, and remind her that our contact details are on her copy of the invitation to participate if she finds she has any questions or concerns.

PREGNANCY INTENTIONS AND FEELINGS IN-DEPTHS TOPIC GUIDE: SPANISH-SPEAKING PREGNANT PARTICIPANTS

Main Purpose:

- To ascertain whether women who had incongruent intentions and feelings before getting pregnant were ambivalent about avoiding pregnancy
- Among those who were not ambivalent, what factors influenced happiness about a pregnancy that is not intended?
- To assess whether and how prospective intentions and feelings about a pregnancy change after the pregnancy has occurred

1. Introduction

- Thank the participant for agreeing to be interviewed
- Review the purpose and theme of the interview
- Review the consent form and check the participant is happy with the interview being recorded.

2. Preguntas Introductorias

- Comencemos platicando sobre su familia: ¿quién vive con usted en este momento?
  - ¿Ha llegado alguna persona nueva a vivir con usted, o se ha ido alguien que vivía con usted? ¿Qué cambios se han dado como resultado de esa situación?
  - ¿Tiene pareja en este momento?
- ¿En qué ocupa su tiempo la mayor parte del día?
  - ¿Está estudiando/trabajando/se dedica al hogar?
- Cuénteme, ¿qué parte del día se le hace más difícil?
  - Piense en la situación más difícil del día
- ¿Cuál diría que es su problema económico más fuerte en este momento?

3. Planes para embarazos en el futuro

- Conversemos sobre el tamaño ideal de la familia- ¿Qué es el tamaño ideal para su familia?
- ¿Como se sintio cuando primero se entero que estaba embarazada?
  - Cuenteme por que se sintio [contenta/descontenta]
  - ¿Como se sintio su pareja?
  - ¿Habia estado tratando de quedar embarazada?
  - ¿Estaba usando algun metodo anticonceptivo?
    Si no: ¿Cuál es la razon principal por la que no estaba usando ningun metodo anticonceptivo?
    Si sí: ¿Por qué cree que quedo embarazada?

4. Pareja/Relación

- ¿Cómo se sintio su pareja cuando se entero que estabas embarazada esta vez?
- ¿Qué lo hizo sentirse contento/descontento?
    - ¿Sus sentimientos fueron iguales/diferentes a los suyos? ¿Por qué?
    - ¿Qué tanto la afectaron los sentimientos de él?
    - Cuénteme cómo la afecta los sentimientos de él…
- ¿Su embarazo ha cambiado su relación con su pareja de alguna manera?
- Hablemos un poco de su relación…
    - ¿Cómo hacen las decisiones entre ustedes?

5. Intenciones y emociones antes de que ocurriera el embarazo

- Vamos a retroceder ahora unos meses al tiempo antes de que usted quedara embarazada: ¿Cómo se sentia en ese entonces acerca de la idea de un futuro embarazo?
    - ¿Me podría hablar un poco más de por que se sentía contenta/descontenta?
    - Sus sentimientos ahora son diferentes a los que tenia en ese entonces… ¿algo ha cambiado para usted (por que ha cambiado de parecer)?
    - ¿Por qué cree que ahora se siente diferente?

➢ La última vez que hablamos por teléfono, unos meses antes de que usted quedara embarazada, usted menciono que se sentiría contenta/descontenta acerca de un embarazo.

    - ¿En que pensaba en ese entonces?/¿Como se sentia en ese entonces?
    - ¿Qué la hizo cambiar de parecer?
- Aun pensando en unos meses atras antes de que usted quedara embarazada, ¿usted queria quedar embarazada en ese momento?

➢ Cuando hable con usted por telefono hace unos meses atras antes de que usted quedara embarazada, usted menciono que [no queria tener más hijos en el future/ no queria tener mas niños por 2/3/4 años].

    - ¿Que la hizo cambiar de parecer?

6. Intenciones y emociones de la pareja antes de que ocurriera el embarazo

- ¿En ese entonces, en el tiempo antes de que usted quedara embaraza, como se sentia su pareja acerca de la idea de un futuro embarazo?
    - ¿Por que se sentia content/descontento?
    - ¿Los sentimientos de él eran [iguales/diferentes] a los suyos?
    - ¿Como le afectaron los sentimientos de él sus ideas acerca de un embarazo en ese momento?
    - Por que cree que él se siente diferente ahora?

- Cuando hablamos por teléfono hace unos meses atras antes de que quedaras embarazada, usted habia mencionado que su pareja se sentiria [content/descontento] por un embarazo.
  - ¿Que cambio para él?

- ¿Él queria tener mas hijos en ese momento?
  - ¿Por que cree que él queria tener mas niños?

- Cuando hablamos por telefono hace unos meses antes de que usted quedara embarazada, usted habia mencionado que su pareja [no queria mas niños/queria un bebé en unos 2,3,4 años]
  - ¿Que cambio para él?

7. Efectos de un embarazo en su vida

- ¿Cómo se siente acerca de su embarazo ahora?
  - ¿Qué diria que es o que sera el cambio mas grande en su vida?
- ¿Habrian otros cambios de menor importancia?
- ¿Cuál seria el reto mas grande?
- ¿Cambiarian algunos planes que tenia (para usted misma o para su familia)?

8. Contexto para determinar las influencias sobre las Intenciones y sobre la Satisfacción

- Cuando se entero que estaba embarazada esta vez, ¿Cómo le conto a la gente de su alrededor?
  - ¿Cómo acostumbran sus amigos y su familia anunciar un nuevo embarazo?
- ¿A quien le conto primero?
- ¿Quién fue la persona mas emocionada por su embarazo?
- ¿Quién reacciono totalmente diferente a eso?
  - ¿Hay algo sobre su embarazo que siente que ha tenido que ocultar? ¿Algún sentimiento, alguna inquietud o alguna otra cosa?
- ¿Que tan importante es ser madre?
  - ¿Para usted? ¿Para su familia? Algunas mujeres hablan sobre lo que quiere su madre o su suegra.... ¿Es esto importante para usted?
  - A veces las personas hablan sobre las cosas que aprendieron cuando estaban creciendo ....
- Cuénteme un poco sobre su familia
  - ¿Dónde nació? El resto de su familia, ¿también nació allá? ¿Los visita a menudo? ¿Cuál cree que es la razón principal por la que decidió tener hijos?
- ¿Se considera usted una persona espiritual o una persona religiosa o devota?

    - ¿Pertenece a alguna comunidad religiosa?
    - ¿Cree usted que esto afecta cómo se siente en cuanto a embarazos o familia?
- ¿Cuál siente que es su mejor cualidad como madre?
- ¿Cree que las experiencias en sus embarazos anteriores pueden haber afectado cómo se siente en cuanto a tener más hijos?

9. Anticonceptivos y el Deseo de Evitar Embarazos

- Para terminar, quisiéramos preguntarle lo que estaba haciendo para evitar un embarazo antes de quedar embarazada.

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