Pregnancy Intentions Before and After Pregnancy:
Do Young Women Change their Minds?

Jennifer Barber and Heather Gatny

Unintended pregnancy in the U.S. is high – half of all pregnancies (and a third of all births) are considered unintended by the mother (Finer and Zolna 2011; Mosher et al. 2012). The proportion of pregnancies and births that are considered intended increases with mother's age (Finer and Zolna 2011). However, due to low overall birth rates among the youngest teens, the highest rates of unintended pregnancy are concentrated in the late teens and early twenties; the rate per thousand for age 15-17 is 42; age 18-19 is 105; age 20-24 is 101; and age 25-29 is 69 (Finer and Zolna 2011). Unintended births are associated with adverse social, economic, and health consequences for both mother and child (e.g., Logan et al. 2007). Further, because most unintended births are paid for by public insurance programs, they are costly – for example, a conservatively estimated $11.5 billion in 2006 (Sonfield et al. 2011). Reducing unintended pregnancy and childbearing has been a national public health priority since 1980 via the "Healthy People" initiative.

A better understanding of pregnancy desires, or intentions, is fundamentally important for understanding and reducing unintended pregnancy (e.g., see Morgan et al. 2008; Seltzer et al. 2005). Understanding the temporal dimension of pregnancy desires may be especially important for reducing unintended pregnancy during the early adult years, when instability and change in attitudes and behavior are at their peak. Available large-scale data with measures of pregnancy intentions have largely lacked dynamic measurement, with a few notable exceptions (e.g., see Williams et al. 1999 using NSFG), and thus empirical analyses of the extent to which these assessments are dynamic has been sparse. However, there are theoretical reasons to expect that individuals' assessment of their pregnancies might change over time. Depending on individual

experience, they may become more positive or more negative (Williams et al. 1999). For young women in particular, there are reasons to expect desires for pregnancy may change between the time *just before* and *just after* the pregnancy is discovered (and reality starts to set in.) Relationship changes, partners' reactions, and other friends' and family members' reactions to the pregnancy may be particularly important determinants of changes in pregnancy desire over time.

In the paper we propose to present at PAA we will investigate pregnancy intentions measured just before and just after a reported pregnancy. We will use data collected by the Relationship Dynamics and Social Life study, funded by an R01 from NICHD (PI: Barber). RDSL's representative population-based random sample is comprised of 1,003 women ages 18 and 19 residing in a single Michigan county.

The first component of data collection (March 08-July 09) was a baseline face-to-face survey interview. (Response rate: 86%; cooperation rate for located respondents: 93%). The second and most innovative aspect of the data collection was the collection of dynamic, prospective measures of pregnancy desires, contraceptive use, and pregnancy, as well as related experiences, via a weekly journal spanning 2.5 years. Respondents – 99 percent of whom agreed to participate in the journal component (n=992) – completed 58,592 approximately 5-minute interviews on the internet or by phone.

The RDSL's weekly data include 13 distinct measures of prospective and retrospective pregnancy desires including desires in reference to a current partner and perceptions of a partner's desires. Every week each respondent was also asked whether it was possible that she might be pregnant. If she answered yes, she was asked if a pregnancy test had indicated that she was pregnant. 233 pregnancies were reported over the 2.5 year journal period.

In the proposed paper we will conduct an in-depth comparison of our detailed measures of pregnancy intentions reported just before and after pregnancy. Below we present preliminary results from a cross tabulation between a simple, dichotomous indicator for positive *prospective* pregnancy intentions and a simple, dichotomous indicator for positive *retrospective* pregnancy intentions (measured when the pregnancy was first reported). Using a response scale from 0 to 5, respondents were asked how much they wanted to get pregnant *during the upcoming month*. Responses 3-5 were coded "positive". Respondents who *retrospectively* reported that they wanted a child and that the pregnancy occurred at about the right time were coded "positive".

Figure 1 shows the results from the cross tabulation of the prospective and retrospective indicators. 37 of the 233 pregnancies reported involved a switch from a *positive* prospective assessment of the pregnancy to a *negative* retrospective assessment of the pregnancy. 18 of the 233 pregnancies switched from negative to positive. In total, for nearly a quarter of the pregnancies reported in the RDSL study (55 out of 233), respondents changed their assessment *after they learned that they were pregnant* of whether the pregnancy was intended.

Figure 1. Cross-tabulation of Pregnancy Intentions Before and After Pregnancy

Prospective Pregnancy Intentions	*Retrospective* Pregnancy Intentions: Negative	Positive	Total
Negative	162	**18**	180
Positive	**37**	16	53
Total	199	34	233

Between now and the PAA meeting, we will further investigate these differences. First, we will examine the full range of the RDSL study's measures of pregnancy intentions,

comparing the retrospective NSFG-style assessment to our prospective general and partner-specific, positive and negative measures of pregnancy desires.

Second, we will use multinomial logistic regression to model the probability of a positive → negative change, a negative → positive change, consistently negative assessment, or consistently positive assessment. Key predictors in this model will include relationship instability (break-up, decrease in commitment, fighting, extra-relationship sexual behavior, etc.); increases in relationship seriousness (moving in together, engagement, new level of commitment, increased level of spending time together, etc.); and important others' reactions to the pregnancy.

Third, we will estimate models of unintended pregnancy using both prospective and retrospective measures of intentions, and compare the model fit and coefficients.

References

Barber, J.S., Kusunoki, Y., Gatny, H.H., and Schulz, P. (2013). "Continued and On-Time Participation in a Weekly Web Survey." Under review. Presented at the 2009 Annual Meeting of the Population Association of America, April 29-May 2, Detroit, MI. PSC Research Report No. 13-786: http://www.psc.isr.umich.edu/pubs/abs/8267

Finer, L.B. and Zolna, M.R. (2011). Unintended pregnancy in the United States: Incidence and disparities, 2006. *Contraception* 84(5):478-485.

Gatny, H.H., Couper, M.P., Axinn, W.G., and Barber, J.S. (2009). "Using Debit Cards for Incentive Payments: Experiences of a Weekly Survey Study." *Survey Practice*: November.

Logan, C., Holcombe, E., Manlove, J., & Ryan, S. (2007). *The consequences of unintended childbearing: A white paper*. Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy. http://www.thenationalcampaign.org/resources/pdf/consequences.pdf.

Morgan, S.P., Bledsoe, C., Bianchi, S.M., Chase-Lansdale, P.L., DiPrete, T.A., Hotz, V.J., Sanders, S., Seltzer, J.A., & Thomas, D. (2008). Designing new models for explaining family change and variation. Available online at: http://www.soc.duke.edu/~efc/Docs/pubs/EFC%20FINAL%20AUG%2018%20complete%20w%20appendice.pdf

Mosher, William D., Jo Jones, and Joyce C. Abma. (2012). Intended and Unintended Births in the United States: 1982-2010. *National Health Statistics Reports*: 55.

Seltzer, J.A., Bachrach, C., Bianchi, S.M., Bledsoe, C., Casper, L.M., Chase-Lansdale, P.L., DiPrete, T.A., Hotz, V.J., Morgan, S.P., Sanders, S.G., & Thomas, D. (2005). Designing new models for explaining family change and variation. *Journal of Marriage and Family, 67*(4), 908–925.

Sonfield, A., Kost, K., Gold, R.B., and Finer, L.B. (2011). The Public Costs of Births Resulting from Unintended Pregnancies: National and State-Level Estimates. *Perspectives on Sexual and Reproductive Health* 43(2): 94-102.

Williams, L., Abma, J., & Piccinino, L.J. (1999). The correspondence between intention to avoid childbearing and subsequent fertility: A prospective analysis. *Family Planning Perspectives*, *31*(5), 220–227.