

**Does having an abortion enable women to achieve their life plans? Results from the Turnaway Study**

Ushma Upadhyay, PhD, MPH

Antonia Biggs, PhD

Diana Greene Foster, PhD

University of California, San Francisco

## Abstract

Women commonly report having abortions for reasons related to wanting to achieve personal life goals. However, only a few studies have investigated whether an abortion enables one to achieve such goals. We assessed the impact of having a wanted abortion on achievement of one-year plans. We compare one-year life plans among women who presented for abortion care just under facilities' gestational age limits (n=452) with those who presented just over, were denied an abortion and carried to term (n=146) at 30 U.S. facilities. One-year goals in the near-limit abortion patient group were significantly more likely to be aspirational than women who were denied an abortion (AOR=0.16,  $p<0.001$ ). After analyzing 40% of the one-year data, there were no significant differences in achievement of life plans, however less than high-school education and having at least one child at baseline were significantly associated with not achieving one-year aspirational goals ( $p<0.001$  for all comparisons).

## **Background**

Public support for a woman to have the right to abortion is often based on a belief that when faced with an unintended pregnancy, women who have an abortion have better life course outcomes than women who carry their unintended pregnancies to term. There is a belief that women are in a better position to achieve their personal goals, whether the goals are related to education, employment, or their other children.

Women themselves report having abortions for a variety of reasons related to achieving personal goals. National data finds that the primary reasons for abortion are to mitigate the effects of unintended pregnancy on life course plans (Finer et al. 2005). Specifically, among the top reasons women reported having an abortion were, a baby would dramatically change their lives, that they could not afford a baby now, that they did not want to be a single mother or had problems with their relationship, and that they were not ready for a child or another child. In the dataset for the current study among the primary reasons for wanting an abortion were feeling not financially not prepared (40%), not the right time (36%), and interferes with future opportunities (20%) (Biggs, Gould and Foster 2013). In all of these reasons, it is implicit that the unintended pregnancy was interfering with their plans and abortion would help them achieve their life goals.

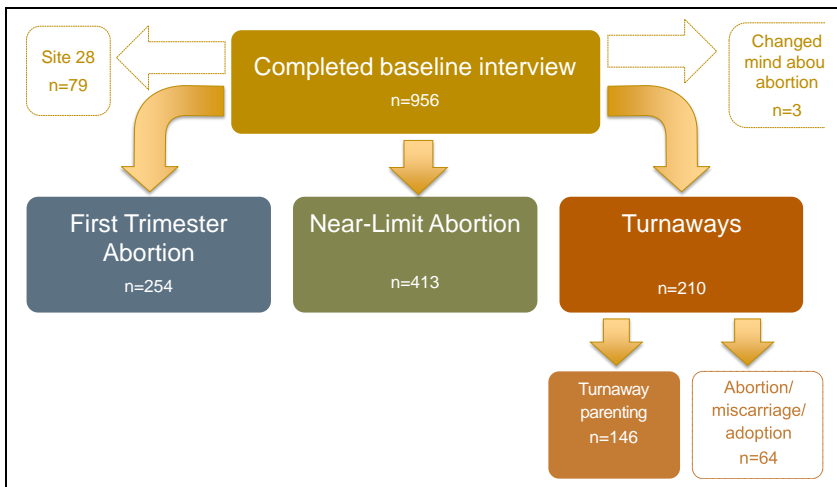
However, only a few studies have been done investigating whether an abortion enables one to achieve personal life goals; these studies report positive outcomes for education but not other life course milestones. For example, a 2 year longitudinal study found that teenagers who had an abortion were more likely to have graduated from high school or be in school than those who carried to term and than those who had never been pregnant (Zabin, Hirsch and Emerson 1989). Similarly, a 25 year longitudinal study in New Zealand examined the extent to which abortion mitigated educational, economic, and social disadvantages associated with pregnancy at among women less than age 21 (Fergusson, Boden and Horwood 2007). The study found that compared to young women who had unintended pregnancies and carried to term and young women who did not have unintended pregnancies, young women who obtained abortions were more likely to achieve educational milestones. However, there were no differences found in achievement of economic or relationship milestones. The study also found that family, social, and educational characteristics were more powerful in explaining subsequent life outcomes than whether they had an abortion not.

Both of these studies had a narrow focus—they looked at adolescent women and used their own subjective measures of what the women's goals should be, focusing on education goals. They did not include women across the lifespan not did they consider the woman's own stated life goals that often include residential, emotional, and other areas.

Using data from University of California, San Francisco's Turnaway Study, we aimed to examine the impact of having a wanted abortion on stated one-year plans. First, we assessed whether women who were able to have a wanted abortion were more likely to state aspirational one-year plans than women who were denied a wanted abortion and carried to term. Second we assessed whether women who were able to have a wanted abortion were more likely to achieve their one-year goals—as measured one-year after the abortion, compared with a control group of women who were denied a wanted abortion.

## **Methods**

The Turnaway Study is a 5-year longitudinal prospective study of women who receive an abortion and women who are denied an abortion because they present for care after the provider's gestational limit. The study was designed to assess a variety of outcomes of receiving an abortion compared with carrying an unwanted pregnancy to term. From 2008 to 2010, the Turnaway Study recruited women from 30 abortion providers across the United States. They were located in 21 states distributed relatively evenly across the country. Women were recruited on a 1:2:1 ratio: women who presented up to 3 weeks over the provider's gestational limit and were turned away ("turnaways"), women who presented up to 2 weeks under the limit and received abortions ("near-limit abortion patients"), and women who presented in the first trimester and received abortions ("first trimester patients"). (See figure 1)



**Figure 1: Sample by study group**

Women were eligible for participation if they sought an abortion within the gestation limits for each of the study groups, spoke English or Spanish, and were aged 15 years or older. Further details on recruitment and methods can be found elsewhere. (Dobkin et al. Under review; Foster et al. 2012; Roberts et al. 2012) After the baseline survey, subjects were contacted for a follow-up phone interview every six months for five years. Turnaway Study data for this analysis come from the baseline (one week after recruitment), and six month and one-year interviews.

To reduce losses to follow up, researchers collected detailed contact information and participants' preferred methods of communication and confidentiality protection preferences; they also called women after two months to confirm that the woman's primary and secondary contact information was still valid. When participants could not be reached, researchers called each day for up to 5 days. If she still could not be reached, researchers sent up to 3 follow-up letters by mail or email (according to her stated contact preferences) and continued to call at the same frequency for a maximum of 10 sequential days. To mitigate respondent burden and to compensate them for their time, they received a \$50 gift card to a large retail store upon completion of each interview.

### Measures

All measures were taken from the Turnaway Study. During the baseline Turnaway Study interview, participants were asked about sociodemographic characteristics, their reproductive histories, and a final, open ended question "How do you think your life will be different a year from now?" Respondents were permitted to provide as long a response as desired. The 6-month and one-year follow-up surveys included questions about whether they were going to school, whether they were working full or part time, what they did for work, their personal and household income, their household composition, their relationships, their children, and their emotions regarding the abortion and generally.

### Data Analysis

We conducted the analysis in three parts. First, we describe the sample, comparing the socio-demographic characteristics of First Trimester Patients, Near-Limit Abortion Patients, and Turnaways. We used bivariate mixed-effects regression models that included random effects for facility, and presented p-values from Wald tests that adjust for the clustering of participants within providers. We used mixed-effects logistic regression to assess group difference in binary variables, mixed-effects multinomial logistic regression for categorical variables, and mixed-effects ordinal logistic regression for ordered categorical variables. For continuously-coded characteristics, we used mixed-effects linear models to assess differences in means among the study groups.

Second we categorized each one-year plan by whether it was positive vs negative or neutral/matter of fact. Aspirational goals were defined as one-year plans that were positive. We then organized each one-year plan

into one of eight categories: Education, Employment, Financial, Child-related, Emotional, Living Situation/Residence, Relationship Status, and Other. We then examined each aspirational one-year plan and determined whether it was achieved based on 6-month and one-year data. All categorization and coding was done with the study group blinded.

Third we conducted two mixed effects logistic regression models: The first modeled the likelihood of having an aspirational one-year goal, by whether they received or were denied an abortion, adjusting for baseline covariates including age, race, education, employment, poverty status, union status, parity, and history of anxiety/depression. The second modeled the likelihood of achieving one-year aspirational goals by whether they received or were denied an abortion, adjusting for the same baseline characteristics. Statistical significance was set at  $P < .05$  for all comparisons and adjusted odds ratios (AORs), and 95% confidence intervals are reported. All statistical analyses were performed using STATA 12 (Stata Corp, 2011).

## Results

Socio-demographic characteristics of First Trimester Patients differed substantially from Near-Limit Abortion Patients. Near-Limit Abortion Patients were less likely to be ages 25-34, more likely to be multiracial or other race, less likely to have a college degree, less likely to be in the highest income category and less likely to be employed. There were few sociodemographic differences between Turnaways and Near-Limit Abortion Patients; Turnaways were younger, less likely to be employed, and less likely to have children than Near-Limit Abortion Patients.

Because each respondent could give multiple one-year plans, the sample of 875 respondents reported a total of 1,565 plans. The majority of one-year plans were aspirational in all study groups. One-year goals in the near-limit abortion patient group were significantly more likely to be aspirational than women in the turnaway-parenting group (88% vs 57%, Adjusted Odds Ratio=0.16,  $p < 0.001$ ). An example of an aspirational one-year goal is: "It will be different because I won't be able to go out as much, I'll have more responsibilities, I'm going to have finished one-year of college – I'll have done more than most young pregnant women."

Women in the Turnaway-Parenting group were significantly more likely than women in the Near-Limit Abortion group to mention one-year plans related to children, and significantly less likely to mention one-year plans related to employment, finances, and relationships (all  $p < 0.05$ ) (see Figure 2).

At the time of submitting this abstract, we have thus far analyzed whether Educational and Employment one-year plans have been achieved. These two categories represent 40% of the data ( $n=639$ ). There were no significant differences in achievement of one-year goals between the Near-Limit abortion patient group women in the Turnaway-Parenting group. However women with less than a high school education were less likely to achieve them than women who had a high school education, and women with one or two or more children were less likely to achieve them than women with no children (see Figure 2). We will complete the analysis to determine whether the non-significant difference by study group persists.

## Discussion

- Women in the Near-Limit Abortion group were significantly more likely to have one-year plans that were aspirational.
- Turnaways may temper or change their goals after being denied an abortion.
- No differences so far in achievement of one-year plans by study group.
- Previous demographic characteristics are more important than receipt or denial of abortion.
- Future studies that assess personal goals before pregnancy would better assess the true effect of abortion on life course outcomes.

**Table 1. Distribution of the sample by study group**

	First Trimester Abortion Patients	Near-Limit Abortion Patients	Turnaway-Parenting	Turnaway non-Parenting	Total	N
<b>Age category</b>						
14-19	14.1	16.6	30.8	25.4	18.9	165
20-24	30.2	39.3	33.6	42.4	35.9	314
25-34	47.1	36.1	31.5	25.4	37.8	331
35-46	8.6	8	4.1	6.8	7.4	65
Total	100	100	100	100	100	875

Pearson  $\chi^2(9) = 33.9490$  Pr = 0.000

**Race**

Non-Hispanic white	39.2	31.8	24.0	42.4	33.4	292
Non-Hispanic black	31.4	32.0	34.2	25.4	31.8	278
Latina	21.2	21.0	28.8	15.3	21.9	192
multi/other	8.2	15.2	13.0	16.9	12.9	113
Total	100	100	100	100	100	875

Pearson  $\chi^2(9) = 20.5336$  Pr = 0.015

**Highest level of education**

Less than HS	16.1	18.6	26.0	18.6	19.1	167
HS or GED	30.6	34.5	31.5	33.9	32.8	287
AA, some college, tech school	42.0	40.2	36.3	40.7	40.1	351
College degree	11.4	6.7	6.2	6.8	8.0	70
Total	100	100	100	100	100	875

Pearson  $\chi^2(9) = 11.7030$  Pr = 0.231

**Marital and cohabitation status**

Married	11.0	8.0	11.0	3.4	9.0	79
Not married, cohabitating	21.2	17.3	11.6	18.6	17.6	154
Not married, not cohabiting	67.8	74.7	77.4	78.0	73.4	642
Total	100	100	100	100	100	875

Pearson  $\chi^2(6) = 10.7908$  Pr = 0.095

**Poverty status**

below 100% FPL	45.1	62.7	63.0	69.5	58.1	508
100-200% FPL	26.7	22.9	19.9	22.0	23.4	205
above 200% FPL	21.2	11.1	10.3	6.8	13.6	119
FPL missing	7.1	3.4	6.8	1.7	4.9	43
Total	100	100	100	100	100	875

Pearson chi2(9) = 35.5123 Pr = 0.000

**Employment**

Not employed	36.5	46	58.2	62.7	46.4	406
Employed full or part time	63.5	54	41.8	37.3	53.6	469
Total	100	100	100	100	100	875

Pearson chi2(3) = 24.6452 Pr = 0.000

**Number of children**

none	41.7	36.5	50.0	49.2	41.1	359
1	24.0	31.2	21.2	28.8	27.3	238
2 or more	34.3	32.4	28.8	22.0	31.6	276
Total	100	100	100	100	100	873

Pearson chi2(6) = 13.9299 Pr = 0.030

**Diagnosed anxiety or depression**

No	59.6	67.7	71.9	55.9	65.3	571
Yes	40.4	32.3	28.1	44.1	34.7	304
Total	100	100	100	100	100	875

Pearson chi2(3) = 9.8113 Pr = 0.020

---

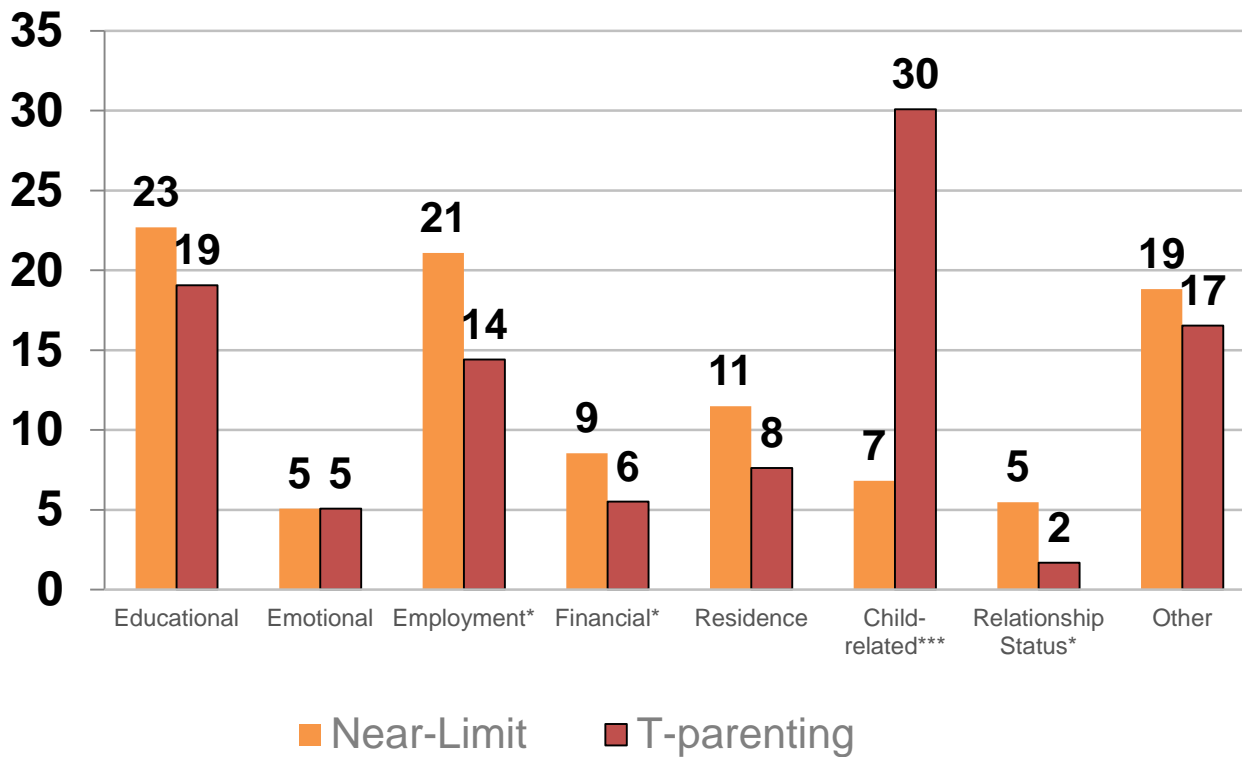


Figure 2: Distribution of one-year plan categories

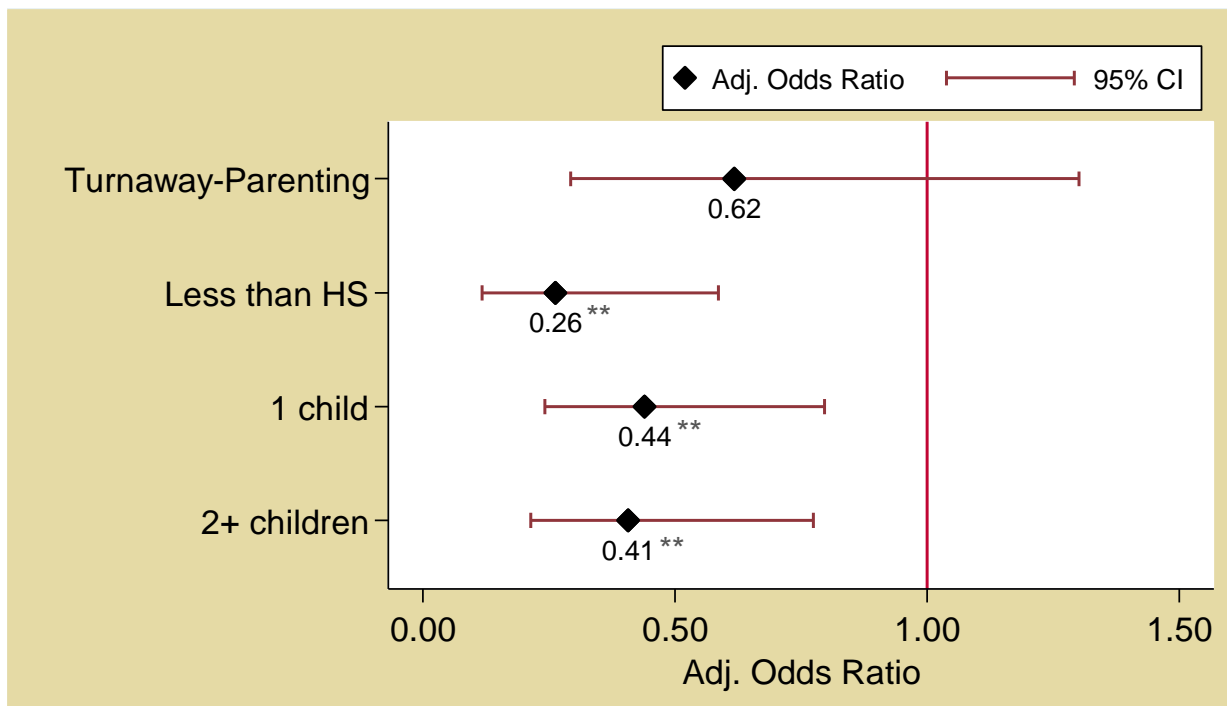


Figure 3: Adjusted Odds of Achieving One-Year Plans

\*\*p<0.01

Not significant: study group, age, race/ethnicity, employment, union status



## References

- Biggs, M.A., H. Gould, and D.G. Foster. 2013. "Understanding why women seek abortions in the US." *BMC Women's Health* 13(1):29.
- Dobkin, L., H. Gould, R. Barar, M. Ferrari, E. Weiss, and F. DG. Under review. "Implementing a prospective study of women seeking abortion in the United States: Understanding and overcoming barriers to recruitment."
- Fergusson, D.M., J.M. Boden, and L.J. Horwood. 2007. "Abortion among young women and subsequent life outcomes." *Perspect Sex Reprod Health* 39(1):6-12.
- Finer, L.B., L.F. Frohworth, L.A. Dauphinee, S. Singh, and A.M. Moore. 2005. "Reasons U.S. women have abortions: quantitative and qualitative perspectives." *Perspect Sex Reprod Health* 37(3):110-118.
- Foster, D.G., K. Kimport, H. Gould, S.C. Roberts, and T.A. Weitz. 2012. "Effect of abortion protesters on women's emotional response to abortion." *Contraception*.
- Roberts, S., L. Avalos, D. Sinkford, and D. Foster. 2012. "Alcohol, tobacco and drug use as reasons for abortion." *Alcohol and Alcoholism* 47(6):640-648.
- Zabin, L.S., M.B. Hirsch, and M.R. Emerson. 1989. "When urban adolescents choose abortion: effects on education, psychological status and subsequent pregnancy." *Family Planning Perspectives* 21(6):248-255.