## INTRODUCTION

In 1956, Kingsley Davis and Judith Blake wrote, "abortion... does not require cooperation between man and woman. It is a woman's method and can be practiced without the man's knowledge" (230). Almost half a century later, Dalton Conley, a prominent NYU sociologist, agreed but took issue with the legal context in which this "woman's method" occurs. Published as an op-ed in The New York Times, Conley asked, "If a father is willing to legally commit to supporting and raising the child himself, why should a woman be able to end a pregnancy that she knew was a possibility of consensual sex?" (A33). Similar, then, to the American colonists' rallying cry of "No taxation without representation" he went on to write, "If you play, you must pay. But if you pay, you should get some say."

Although Conley's article met with severe criticism that eventually led to an on-line response in which he clarified and retracted various points, ${ }^{1}$ it cannot be ignored that men's rights are conspicuously absent from abortion law. Writing on behalf of the majority in the landmark 1973 Roe v. Wade decision, Supreme Court Justice Blackmun noted, "Neither in this opinion nor in Doe v. Bolton...do we discuss the father's rights, if any exist in the constitutional context, in the abortion decision. No paternal right has been asserted in either of the cases." Three years later in the 1976 case of Planned Parenthood of Missouri v Danforth, however, the Supreme Court specifically addressed men when it struck down spousal consent laws related to abortion (Kapp 1982). Thus, the Court ruled that a state could not make a woman's right to choose contingent upon her husband's approval. In 1992, in Planned Parenthood v Casey, the court reaffirmed its 1976 ruling and declared spousal consent unconstitutional, which subsequently overrode laws in 11 states that included spousal consent clauses. Since that ruling, there has been a marked decline in cases in which men have tried to defend their rights in the

[^0]abortion decision (Nolan 1998), although on March 9, 2006, the National Center for Men filed Roe v. Wade for Men on behalf of a Michigan man's desire to decline fatherhood after his exgirlfriend carried an unintended pregnancy to term. ${ }^{2}$ Even more recently, state Representative John Adams (R-Ohio) submitted a bill in July 2007 that would provide fathers the option to overrule a woman's decision to have an abortion (Hixenbaugh 2007).

Two notable points are implicit in both Conley's argument and the debate surrounding men's reproductive rights. First, the current structure of reproductive rights is problematic because it allots women unilateral decision-making power in spite of the fact men make a necessary biological contribution to all pregnancies, whether wanted or unwanted. Second, a woman's decision to terminate a pregnancy is not independent of the social context in which it occurs - again, which necessarily includes the man who impregnated her. Taken together, then, women wield power in intimate relationships by way of reproductive control assigned to them by the state in spite of the fact that men are biologically and possibly emotionally invested in the decision to carry a pregnancy to term. In short, the decision whether or not to abort a pregnancy represents a rare reversal of gender norms in which women are empowered by law to exercise unilateral decision-making power. To date, however, this assumption has not been evaluated empirically in spite of the fact that it is at the heart of the controversy surrounding abortion practice and policy.

In this paper, I advance the premise that a woman's decision to terminate a pregnancy occurs within a social context and take the first steps toward evaluating whether or not the macro-level power granted women by way of judicial decree translates to the micro-level. In particular, I operationalize power via demographic characteristics and address a variety of research questions. First, how do men and women who report abortion compare demographically

[^1]with men and women who do not? Similarly, how do these groups of men and women compare with each other? Finally, how can these demographic data be used to generate a set of questions that could inform the argument about legal rights and individual power?

## BRINGING MEN BACK

Until recently, the overwhelming majority of research on reproduction and family planning has been based on "an assumption of women's primacy in fertility and contraceptive use" (Greene and Biddlecom 2000: 81). On account of the global AIDS epidemic, and in conjunction with increasing rates of STIs, researchers have begun to specifically address men's roles in fertility, thereby shifting reproduction away from individual women toward the social realm in which men and women are decision-makers. As a result, contemporary researchers have been challenged "to bring men back into a realm from which they have been excluded for years" (Edwards 1994: 77).

Recognizing that " $[\mathrm{m}]$ en play a key role in bringing about gender equality since, in most societies, men exercise preponderant power in nearly every sphere of life, ranging from personal decisions regarding the size of families to the policy and programme decisions taken at all levels of Government" (United Nations 1995: Paragraph 4.24), the 1994 International Conference on Population and Development (ICPD) placed reproductive health at the center of the global gender equality agenda. Specifically, the ICPD's Programme of Action stated:

It is essential to improve communication between men and women on issues of sexuality and reproductive health, and the understanding of their joint responsibilities, so that men and women are equal partners in public and private life...Special efforts should be made to emphasize men's shared responsibility and promote their active involvement in responsible parenthood, sexual and reproductive behaviour, including family planning; prenatal, maternal and child health; prevention of sexually transmitted diseases, including HIV; prevention of unwanted and high-risk pregnancies; shared control and contribution to family
income, children's education, health and nutrition; and recognition and promotion of the equal value of children of both sexes. (1995: Paragraphs 4.24, 4.27)

In response, researchers from a variety of disciplines around the world have begun to study men's roles in three main areas: contraceptive use, disease transmission and prevention, and family planning within the context of coupled relationships (Ringheim 2002; Blanc 2001; Greene and Biddlecom 2000; Johansson, et al 1998). Unwanted pregnancy, however, has continued to remain outside the purview of research on male fertility, particularly in the United States (Edwards 1994). Thus, in spite of the fact that 1.29 million abortions were reported in the United States in 2002 (Finer and Henshaw 2005), little research exists that document's men's reactions to and experiences with abortion (Fox 1998; Marsiglio 1998; Nolan 1998; Boyle 1997; Major, Cozzarelli, Testa \& Mueller 1992, Shostak, et al 1984; Kapp 1982) and the research that does is often embedded as a side note within broader studies that focus primarily on women (Johansson, et al 1998; Boyle 1997; Lunneborg 1992). Considering both the ideological and methodological challenges presented by the particular topic of men and abortion, however, this finding is not particularly surprising.

## IDEOLOGICAL CHALLENGES

An ideological challenge to many researchers interested in understanding men's experiences with abortion is the desire to consider men's roles with full respect paid to women's authority, self-determination, and rights (Greene 2002; Greene and Biddlecom 2000; Johansson 1998). That is, "'The process of 'bringing men in' needs to be carefully considered so that in no way are we undermining the often precarious rights of women to control their own bodies and make their own decisions'" (Ringheim 2002: 170). Thus, one solution has been to focus attention
on how men impact women's experiences during both the decision-making and postabortion periods (Marsiglio 1998).

First, men are "psychologically central" (Boyle 1997: 124-25) to abortion by way of their role in the decision-making process, and in the support they do or do not provide. For example, Shostak conducted a small study of 12 to 24 year-old unmarried men and found that men often deferred the abortion decision to their partners (2004). This study highlights the more general finding that oftentimes, men avoid talking about their emotions with their partners because they do not want to add stress to an already tense situation. Thus, they focus their energy completely on their partners, when in fact women would much prefer to talk through the decision-making process together. Rather than being supportive as they intended, men are thus viewed as insensitive and non-responsive (Kushner 1997; Shostak, et al 1984).

More specifically, in Vietnam, where the number of induced abortions exceeded the number of live births in 1996, Johansson, et al. interviewed 20 couples and found that overall, men and women agreed that husbands were the primary decision-makers with regard to family and children (1998). The negotiations surrounding the specific decision to abort a pregnancy, however, was less clear given the fact that some women had abortions without consulting their husbands. In addition, about half of the study respondents reported that the abortion decision was jointly made, which illustrated a potential shift away from traditional male authority in the household.

Second, the postabortion period has received attention by those interested in including men in their research. Conducted in 1984, Shostak, McLouth, and Seng interviewed 1,000 men in the waiting rooms of 30 U.S. abortion clinics independent of the women they impregnated. The respondents were asked to complete a three-page questionnaire comprised of 102 questions,
and 75 of these men were contacted afterwards for a personal interview that was transformed into a narrative.

Shostak, et al. found that men felt the need to appear supportive regardless of their own feelings about the abortion. As Shostak explained from his own experience with abortion, in the process of rushing to support his partner and allay her fears, "I had rushed right past the task of gaining any insight into my own confused feelings and ideas" (1984: xii, italics in original). Men's ignorance of their own feelings often contributed to the break-up of the relationship after the abortion. In fact, among the 75 men interviewed after the abortion, $25 \%$ blamed the abortion for the end of their relationships. According to Shostak, et al., two of the reasons that the relationships ended were the men's inability to express themselves, and their unmet needs for guidance through the procedure and its aftermath.

More generally, in 1992, Major, et al. designed a study to scientifically measure how men's coping expectations affected their partners' adjustment to the abortion. The study sampled 73 couples on the day of the abortion at the clinic, and the researchers hypothesized that the men who did not think they would be able to cope well with the abortion would negatively affect their partner's reactions in two ways. First, the men would likely communicate their stress to their partners, and second, the men would be unable to effectively support their partners if they were preoccupied with their own anxiety. The study concluded that men's coping abilities were most significantly related to their partner's adjustment in situations in which the female indicated low coping expectations herself. In other words, women with low coping expectations experienced increased depression as their partners' expectations decreased. When a woman was expected to cope well, however, her partner's behavior did not significantly impact her psychological adjustment to the abortion.

The international community has also paid specific attention to men's roles in postabortion care. For instance, a Population Council survey in Kenya conducted "in five hospitals in which more than one in three admissions to the gynecological ward were for complications of induced abortion" (Ringheim 2002: 173) revealed that in spite of an overwhelming desire for information from hospital staff about their wives' condition, only $14 \%$ of men interviewed received any. Also, only $15 \%$ of men received any information about future family planning, again in spite of the overwhelming demand (Ibid; Blanc 2001).

The Population Council in Egypt also studied male involvement in postabortion recovery among women suffering from complications, and revealed that husbands and wives were counseled separately and were provided with different information regarding patient care. Moreover, sessions with men and couples lasted longer than sessions with women, and women's input was either ignored or challenged $28 \%$ of time whereas men's comments were never questioned (Ringheim 2002; Blanc 2001). Thus, unlike the study in Kenya, men were receiving information but unfortunately, it often competed with rather than complemented patient counseling.

As studies such as those described above continues to emerge, ideological concerns over bringing men into the realm of reproductive health continue to decrease (Ringheim 2002). Little by little, men are being portrayed as active agents rather than passive accessories (Greene and Biddlecom 2000; Johansson et al. 1998) and as a result, reproduction is shifting away from "women's business" (Blanc 2001: 196) toward "a relational act occurring between two people" (Ringheim 2002: 170). Regardless of ideological shifts, however, formidable methodological challenges still exist.

## METHODOLOGICAL CHALLENGES

In addition to ideological concerns, abortion presents daunting methodological challenges. First, no relevant discourse exists. According to Jacqueline Darroch Forrest, former Vice President for Research at The Alan Guttmacher Institute, "'We don't even have a term for men who are involved in pregnancy'" (Edwards 1994: 77).

Second, both women and men may underreport abortion for a variety of personal reasons (Greene and Biddlecom 2000), but many men might not even be aware that they have impregnated a woman much less one who subsequently had an abortion. For example, researchers reported only a $55 \%$ concordance rate between married couples surveyed in India for the total number of pregnancies in the last two years (Blanc 2001), and the research specific to abortion is less encouraging. Although Alfred Kinsey published a 76\% spousal concordance rate for the number of abortions reported (1953), a 1993 study of Vermont couples reported a $71 \%$ spousal concordance rate for the number of spontaneous abortions but only a $35 \%$ concordance rate for the number of induced abortions (Fikree et al.). Finally, a 1993 study compared results from a variety of studies in Latin America and reported partner concordance rates between 32\% and $60 \%$ among men aged 15-24 (Morris).

Although underreporting plagues abortion-related research, studies have emerged that quantify women's experiences (Finer and Henshaw 2005; Jones, et al 2002) and men's experiences (Alan Guttmacher Institute 2002) in the United States. For instance, Jones, et al. reported that women who had abortions tended to be under 30, never-married, and from minority and low-income backgrounds (2002). According to data compiled by the Alan Guttmacher Institute (AGI; 2002), which are summarized in Table 1, age is also inversely related to abortion among men; men under 30 account for $66 \%$ of all abortions. Given the structure of the data,
particularly the fact that the statistics are assembled from a variety of unrelated studies, additional trends are difficult to decipher.

Table 1: Characteristics of men included in the 2002 AGI report.

| AGE OF MEN |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 18 | 18-19 | 20-24 | 25-29 | 30-39 | 40-49 |
| Population (in millions) | * | * | 9.2 | 9.1 | 21.0 | 20.5 |
| Abortions | 5\% | 8\% | 29\% | 24\% | 26\% | 8\% ** |
| Union Status |  |  |  |  |  |  |
| Married | * | * | 18 | 42 | 65 | 78 |
| Cohabiting | * | * | 9 | 13 | 7 | 4 |
| Divorced/Separated/ Widowed | * | * | 3 | 7 | 9 | 13 |
| Never married/ not cohabiting | * | * | 70 | 38 | 19 | 5 |
| Employment |  |  |  |  |  |  |
| Employed | * | * | 73 | 87 | 89 | 88 |
| Seeking employment | * | * | 7 | 5 | 3 | 3 |
| Not in labor market | * | * | 20 | 8 | 8 | 9 |
| Poverty status |  |  |  |  |  |  |
| Poor | * | * | 13 | 10 | 8 | 7 |
| Low income | * | * | 20 | 16 | 16 | 12 |
| Moderate income | * | * | 27 | 26 | 27 | 23 |
| Better-off | * | * | 40 | 48 | 49 | 58 |

* Not available ** Accounts for men 40 and older

Recently, two studies have been carried out that asked both women and men to report on their experiences: the National Health and Social Life Survey (NHSLS) and Cycle 6 of the National Survey of Family Growth (NSFG). Unlike the partner studies summarized above, these surveys focused on individuals and as a result, partner concordance cannot be gauged.

Nevertheless, demographic trends do emerge from these studies that allow for within-study comparisons between men and women, thereby unraveling more of the social context in which abortion occurs.

The 1992 NHSLS gathered information on sexual conduct contextualized within the era of the global AIDS epidemic. Unlike the "major source of existing data [at the time], the Kinsey studies of males and females" (Laumann, Gagnon, Michael \& Michaels 1994: 38), the NHSLS was based on nation-wide probability sample. Nearly 3,500 adults aged 18 to 59,
conversationally competent in English, and living in the United States, completed 90-minute interviews, with an approximate response rate of $80 \%$. The results of this study are summarized in Table 2.

Of the 6,608 conceptions reported by respondents $-4,176$ by women and 2,432 by men $10.4 \%$ of known pregnancies over a lifetime resulted in abortion, behind live births ( $75 \%$ ) and miscarriages (12.3\%). More specifically, women reported that $9.7 \%$ of all conceptions resulted in abortions whereas men reported $10.4 \%$. In general, the fraction of conceptions that end in abortion appears to decrease with age for both men and women and be more prevalent among minorities and the never married. Education appears to have a direct relationship with the fraction of conceptions that end in abortion, such that individuals who have more education terminate more pregnancies.

Table 2: Observed percentage of conceptions ending in abortion for men and women across demographic characteristics. Reprinted from Laumann, et al 1994: 458-459.

|  | Percentage of Conceptions <br> Resulting in Abortion: Men | Percentage of Conceptions <br> Resulting in Abortion: Women |
| :--- | :--- | :--- |
| All | $\mathbf{1 0 . 4 \%}$ | $\mathbf{9 . 7 \%}$ |
| Age: |  |  |
| $18-24$ | 27.0 | 23.5 |
| $25-29$ | 23.7 | 14.6 |
| $30-34$ | 14.1 | 11.2 |
| 35-39 | 9.6 | 12.4 |
| 40-44 | 13.1 | 14.0 |
| 45-49 | 8.8 | 16.4 |
| 50-54 | 1.7 | 12.5 |
| 55-59 | 1.6 | 12.0 |
| Current marital status |  |  |
| Nev. marr., not coh. | 50.0 | 27.1 |
| Nev. marr., coh. | 25.8 | 32.5 |
| Married | 5.7 | 6.8 |
| Div./sep./wid., not coh. | 16.0 | 9.0 |
| Div./sep./wid., coh. | 8.5 | 14.8 |
| Education |  |  |
| Less than HS | 6.3 | 5.2 |
| HS grad. or eq. | 7.2 | 9.8 |
| Some coll./voc. | 13.9 | 11.2 |
| Finished coll. | 12.9 | 10.9 |
| Master's/adv. deg. | 11.8 | 14.4 |
| Current religion |  |  |
| None | 10.7 | 17.1 |
| Type I Prot. | 8.5 | 11.0 |
| Type II Prot. | 12.1 | 6.7 |
| Catholic | 8.9 | 9.5 |
| Jewish | 14.7 | 15.3 |
| Other | 30.4 | 26.7 |
| Other Protestant | 3.7 | 6.8 |
| Race/Ethnicity | 14.0 | 11.4 |
| White | 25.5 | 20.8 |
| Black | 6.5 | 4.8 |
| Hispanic |  |  |
| Asian |  |  |
| Native Am. |  |  |
|  |  |  |

Second, conducted ten years after the NHSLS and released in 2005, the 2002 NSFG-6 interviewed both women and men unlike the five cycles that preceded it, which only interviewed women. Men and women were asked questions related to birth, pregnancy rates, reproductive health, and parenthood. Thus, the NSFG-6 provides rare, publicly available current national data that can be analyzed to address the aforementioned research questions.

## DATA

Data compiled in the NSFG-6 were based on voluntary and confidential interviews completed with 12,571 noninstitutionalized civilians - 7,643 females and 4,928 males - using an area probability sample. The response rates for women and men were $80 \%$ and $78 \%$, respectively. Respondents were between the ages of 15 and $44 .{ }^{3}$ After removing cases on account of missing data, all but seven respondents were included in this analysis: 7,636 women and 4,928 men.

Guided by the NHSLS and AGI research, five demographic variables were excerpted from the NSFG-6: current age, current marital status, current education, race, and current poverty level. Age was left as a continuous variable. To facilitate cross-study comparison, marital status and education were recoded to correspond with the five NHSLS categories, with "Never married, not cohabiting" and "Less than a high school degree" as the reference categories, respectively. Race was recoded to correspond as closely as possible with the NHSLS categories; in order to do, the small number of non-Hispanic Native Hawaiians and Pacific Islanders were subsumed within the "Asian" category. ${ }^{4}$

Finally, the poverty variable was divided by 100 such that the poverty line became equal to one, with a range from zero to five. Incomes greater than five times the poverty line were also coded as 5 in the original data. Since the upper bound included a wide range of unobserved incomes, a second dummy variable, "High income", was created for anyone with a value of 5 in order to preserve the linearity of the poverty variable over the 0 to 4.99 range. Table 3 below summarizes the NSFG-6 data across these five variables.

[^2]Table 3: Summary of characteristics of women and men who participated in the NSFG-6 ( $\mathrm{N}=12,564$ )

|  | Men $(\mathrm{n}=4928)$ | Women $(\mathrm{n}=7636)$ |
| :--- | :--- | :--- |
| Age: |  |  |
| $15-19$ | $22.7 \%$ | $15.1 \%$ |
| $20-24$ | 19.0 | 17.8 |
| $25-29$ | 14.4 | 16.9 |
| $30-34$ | 14.7 | 17.7 |
| $35-39$ | 15.1 | 16.6 |
| 40-45 | 14.0 | 15.8 |
| Current marital status |  |  |
| Nev. marr., not coh. | 57.9 | 38.5 |
| Nev. marr., coh. | 6.5 | 7.5 |
| Married | 25.0 | 40.3 |
| Div./sep./wid., not coh. | 9.4 | 11.6 |
| Div./sep./wid., coh. | 1.1 | 2.1 |
| Education |  |  |
| Less than HS | 27.7 | 22.3 |
| HS grad. or eq. | 30.6 | 28.4 |
| Some coll./voc. | 25.4 | 28.5 |
| Finished coll. | 11.3 | 15.3 |
| Master's/adv. deg. | 5.0 | 5.5 |
| Race/Ethnicity |  |  |
| White | 52.9 | 54.6 |
| Black | 18.9 | 20.1 |
| Hispanic | 22.8 | 20.7 |
| Asian | 3.9 | 3.5 |
| Native Am. | 1.5 | 1.0 |
| Income |  | 21.0 |
| 0-99\% of poverty level | 15.7 | 22.1 |
| 100-199\% of poverty level | 20.1 | 17.4 |
| 200-299\% of poverty level | 17.3 | 14.3 |
| 300-399\% of poverty level | 15.7 | 13.1 |
| 400-499\% of poverty level | 13.9 | 12.1 |
| 500\% or greater | 17.2 |  |

## RESULTS

Figures 1 and 2 summarize the distributions of the number of reported abortions for both men and women. Men reported a modal number of 0 abortions, ranging from 0 to 18 . Women also reported a modal number of 0 abortions, ranging from 0 to 9 .


Figures 1 \& 2: Histogram of men's and women's number of reported abortions
Table 4 below summarizes the observed percentages of women and men reporting abortion across a variety of demographic characteristics. Overall, $16 \%$ of women $(\mathrm{n}=1224)$ and $9.8 \%$ of men $(n=484)$ reported at least one abortion, and greater percentages of women and men 30 and older reported abortion as compared with younger women and men. Also, greater percentages of previously married men and women reported abortion as compared with currently or never married. Just under one-quarter of Black women reported abortion, whereas $13 \%$ of Black men reported abortion. Finally, no notable relationships emerged within the poverty category, although a larger proportion of wealthy men reported abortion than did other income groups.

Table 4: Observed percentage of women and men reporting abortion across demographic characteristics. ( $\mathrm{N}=$ $12,564)$

| REPORTED AT LEAST ONE ABORTION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Men } \\ \mathrm{n}=4928 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Women } \\ \mathrm{n}=7636 \\ \hline \end{gathered}$ |
| Abortions | 9.8\% |  | 16.0\% |  |
| Age: |  |  |  |  |
| 15-19 | 1.6 |  | 3.2 |  |
| 20-24 | 7.5 |  | 10.9 |  |
| 25-29 | 9.2 |  | 16.7 |  |
| 30-34 | 13.7 |  | 20.1 |  |
| 35-39 | 14.3 |  | 22.9 |  |
| 40-45 | 18.1 |  | 21.5 |  |
| Current marital status |  |  |  |  |
| Nev. marr., not coh. | 6.8 |  | 12.2 |  |
| Nev. marr., coh. | 14.6 |  | 17.2 |  |
| Married | 11.7 |  | 15.7 |  |
| Div./sep./wid., not coh. | 17.9 |  | 27.0 |  |
| Div./sep./wid., coh. | 28.6 |  | 27.3 |  |
| Education |  |  |  |  |
| Less than HS | 4.7 |  | 9.1 |  |
| HS grad. or eq. | 10.8 |  | 18.4 |  |
| Some coll./voc. | 12.2 |  | 19.1 |  |
| Finished coll. | 14.0 |  | 15.6 |  |
| Master's/adv. deg. | 10.5 |  | 17.6 |  |
| Race/Ethnicity |  |  |  |  |
| White | 9.1 |  | 14.5 |  |
| Black | 13.7 |  | 23.3 |  |
| Hispanic | 9.1 |  | 12.8 |  |
| Asian | 4.6 |  | 17.7 |  |
| Native Am. | 9.5 |  | 13.8 |  |
| Income |  |  |  |  |
| 0-99\% of poverty level | 6.6 |  | 14.8 |  |
| 100-199\% of poverty level | 7.7 |  | 15.8 |  |
| 200-299\% of poverty level | 8.2 |  | 16.7 |  |
| 300-399\% of poverty level | 10.7 |  | 15.8 |  |
| 400-499\% of poverty level | 10.7 |  | 16.8 |  |
| $500 \%$ or greater | 15.4 |  | 17.0 |  |

Given that the dependent variable represents a count, I estimated a series of models by the maximum likelihood method. ${ }^{5}$ First, I estimated both Poisson and negative binomial models. As Figures 1 and 2 and Table 4 illustrate, however, the overwhelming majority of both male and female respondents did not report abortion ( $90.2 \%$ and $84 \%$, respectively). These distributions resulted in an excess of zeroes, which represent both structural and counting zeroes. For example, women who did not report abortion in the NSFG may have done so because they have

[^3]not had an abortion and due to changes in fertility or perhaps religious beliefs, will never have an abortion; these are structural zeroes. Other women, in contrast, may not have reported abortion but are reproductively capable of having one and would consider the option if necessary; these zeroes are products of a counting process that could produce a positive count. Similarly, men may not have impregnated a woman who subsequently had abortion, again which would be a structural zero. In contrast, it is quite possible that a subset of reported zeroes among men represent unintentional reporting errors. That is, men may have impregnated a woman, or a number of women, who subsequently had an abortion without their knowledge, which represent counting zeroes. Thus, zero-inflated models were appropriate given the fact that it is impossible to know the exact composition of the types of zeroes included in the data. Table 5 below presents the coefficients for the zero-inflated negative binomial, which emerged as the best fitting model for the data. ${ }^{6}$

[^4]Table 5: Side-by-side comparisons of zero-inflated negative binomial models for male and female data. Standard errors are in parentheses.

| FACTORS ASSOCIATED WITH WHETHER AND HOW MANY ABORTIONS |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| MEN AND WOMEN REPORT |  |  |  |  |

[^5]Table 5 highlights several demographic characteristics related to the expected number of abortions reported by both men and women. The table is divided into four columns; the first two present the zero-inflated negative binomial model that was run for the male sample and the third and fourth columns present the model for the female sample. Some of the men and women in the sample are structural zeroes, whereas the remainder of the sample consists of people who could or would consider an abortion. The count of abortions for the latter group is modeled by a negative binomial whose coefficients are recorded in the columns marked "Count Coefficients." These coefficients can be interpreted in the same way one would interpret Poisson or negative binomial coefficients in any other model under the assumption that the hypothetical person considered is willing and able to report an abortion.

Never married and previously married men reported significantly more abortions than their married counterparts. In addition, age was directly related to the number of reported abortions, such that older men reported more. Men with college degrees reported significantly fewer abortions than other educational groups. Native American, Black, and Hispanic men reported significantly more abortions than did White and Asian men. Finally, as men moved further away from the poverty line in the positive direction, they reported a higher number of abortions.

Similar to men, never married and previously married women reported significantly more abortions than their married counterparts, as did older women. The size of the age effect for women, however, was noticeably smaller. Women who had completed some college reported significantly more abortions than other educational groups. Finally, black women reported the greatest number of abortions of any racial/ethnic group, also again, the size of the effect was
smaller than the effect among Black men. Finally, there was no significant relationship between poverty and the number of reported abortions.

Figure 3 below presents side-by-side comparisons of the expected count of abortions for hypothetical men and women across various demographic categories, again under the assumption that they are willing and able to report abortions (Tau-Type 1). Each black dot represents an expected count calculated from the zero-inflated negative binomial model presented in Table 5, and the horizontal lines encompass the $95 \%$ confidence interval for each estimate. For each row, I calculated the expected count of abortions for someone with the described characteristic, while all other characteristics were held at the mean of the sample. For example, the first row of Figure 3 shows that a 20 year-old man is expected to report 0.18 abortions [CI: $0.10,0.30$ ], while a 40 year-old man is expected to report 0.70 abortions [CI: $0.43,1.09$ ].

Figure 3 also highlights differences between men and women. Overall, abortion appears to be stable for women across all of the demographic categories, whereas it is variable for men. Also, the size of the effects for men and women varies. For example, as previously noted, a 20 year-old man is expected to report 0.18 abortions, while a 40 year-old man is expected to report 0.70 abortions. Thus, the expected number of abortions men report increases 0.52 as men move from 20 to 40 years old. In contrast, a 20 year-old woman is expected to report 0.23 abortions, while a 40 year-old woman is expected to report only 0.36 ; the size of effect is only 0.13 abortions.

A man with an advanced degree is expected to report 0.64 abortions, while a similarly educated woman is expected to report only 0.25 . Black men also are expected to report a greater number of abortions than Black women, 0.70 versus 0.40 , respectively. Finally, Native American men are expected to report approximately three times as many abortions as Native American
women (1.34 versus 0.30 ); however, the wide confidence interval around the expected count for Native American men indicates an imprecise estimate.


Figure 3: Side-by-side comparisons for Tau-Type 1 men and women across demographic categories.

## DISCUSSION

In her groundbreaking text Dubious Conceptions, Kristin Luker complicated the categories that for too long had framed the discussion surrounding early pregnancy. Specifically, she argued that the experiences of young mothers were not sufficiently represented by the dichotomy that characterized them as either rational actors or victims of traditional masculinity. She wrote, "These categories induce us to label one sex or the other as the main participant in early pregnancy and childbearing, and we forget that pregnancy results from a dynamic that includes two people" (1996: 39, emphasis added).

In spite of the fact that aborted pregnancies also result from the sexual union of two people, the majority of relevant research has continued to focus exclusively on women. As a result, very little is known about the interpersonal dynamics that surround the decision to terminate a pregnancy and what has emerged is often embedded within a discourse surrounding men's reproductive rights. For instance, six days after his original op/ed appeared in The New York Times, Dalton Conley posted an online article in which he retracted and clarified various arguments. He wrote, "... the notion is that we should act to preserve life that is wanted by at least one of the progenitors" (2005), preferably through private negotiations. If these negotiations fail, however, Conley argued that the state should have a variety of options in place, such as nonbinding arbitration or pre-sex contracts that grant men and women the opportunity to separate sex from procreation. Implicit, then, in Conley's argument is the idea that the current legal structure that grants women unilateral decision-making power translates into unilateral power at the level of the dyad. As a result, men should be granted a complementary voice by way of male reproductive rights that define fatherhood as a voluntary status, similar to that granted women under Roe v. Wade.

The purpose of this paper has been to expand the social context of reproduction to include unwanted pregnancies and analyze the demographic characteristics that are associated with abortion among both men and women. Although these characteristics provide an important foundation for future research, these data are limited insofar as they cannot speak directly to how the decision to abort a pregnancy is made. Furthermore, aggregate trends do not necessarily translate to individuals; thus, this analysis cannot address whether or not legal rights translate into individual decision-making power. Two trends, however, do emerge from this analysis that can certainly inform the debate and generate questions for future research.

First, the expected count of abortions among older men is higher than the corresponding count for older women, while the count is slightly higher among younger women than younger men. Second, men with advanced degrees are more than twice as likely to report abortion as similarly educated women, and report more abortions than men in any other educational group. Together, then, at the aggregate level, there is a noticeable age and educational disparity between men and women who report abortion. If this finding is robust at the level of the dyad, this raises interesting questions for the types of relationships in which abortion might occur and the corresponding distribution of power.

In conclusion, similar to research conducted around the world that has brought men back into the realm of reproduction, this paper has broadened the scope further to include men in the social context of abortion. Still, more research needs to be done, particularly within the dyad, in order to answer a variety of questions. For example, what factors influence the likelihood that women will tell their partners about conceptions? How do women involve men in the decision to terminate a pregnancy, and how do men involve themselves? Finally, how do men and women respond in disparate situations in which one partner wants to bring a pregnancy to term and the
other does not? By asking and addressing these questions, researchers not only acknowledge the gendered nature of abortion but also they empirically evaluate whether or not the rights granted women in Roe v. Wade translate into micro-level decision-making power.

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## APPENDIX A

Table 6: Factors influencing whether and how many abortions men report across four models. Standard errors are in parentheses.

| FACTORS | $\begin{gathered} \hline \text { MODEL } \\ \mathbf{1} \\ \text { Poisson } \end{gathered}$ | MODEL <br> 2 <br> Negative <br> Binomial | MODEL$\mathbf{3}$Zero-InflatedPoisson |  | $\begin{gathered} \text { MODEL } \\ 4 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Zero-Inflated Negative Binomial |  |
|  |  |  |  |  |  |  |
|  |  |  | Logit of any | Expected count | Logit of any | Expected count |
|  |  |  | abortions |  | abortions |  |
| Intercept | -5.43 | -5.63 | 2.89 | -2.70 | 1.73 | -3.76 |
|  | (.20) | (.27) | (.43) | (.35) | (.80) | (.59) |
| Age: | . 07 | . 08 | -. 03 |  | -. 02 | . 07 |
|  | (.005) | (.007) | (.01) | (.008) | (.02) | (.01) |
| Current marital status (Ref = Never married) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nev. marr., | . 70 | . 73 | -. 60 | . 25 | -. 69 | . 36 |
| coh. | (.12) | (.19) | (.24) | (.17) | (.43) | (.26) |
| Married | -. 11 | -. 12 | -. 36 | -. 36 | -. 70 | -. 47 |
|  | (.09) | (.14) | (.19) | (.14) | (.33) | (.20) |
| Div./sep./wid., | . 32 | . 26 | -. 21 | . 19 | -. 13 | . 24 |
| not coh. | (.10) | (.17) | (.20) | (.13) | (.33) | (.22) |
| Div./sep./wid., | . 78 | . 68 | -. 56 | . 56 | -. 54 | . 52 |
| coh. | (.18) | (.37) | (.37) | (.22) | (.62) | (.39) |
| Education (Ref: Less than High |  |  |  |  |  |  |
| School) |  |  |  |  |  |  |
| HS grad. or eq. | . 21 | . 29 | -. 61 | -. 21 | -. 70 | -. 15 |
|  | (.12) | (.16) | (.21) | (.16) | (.33) | (.25) |
| Some coll./voc. | . 50 | . 47 | -. 66 | -. 04 | -. 97 | -. 14 |
|  | (.12) | (.17) | (.21) | (.16) | (.38) | (.26) |
| Finished coll. | . 06 | . 09 | -1.25 | -. 80 | -1.91 | -. 78 |
|  | (.15) | (.21) | (.32) | (.22) | (1.00) | (.35) |
| Master's/adv. | . 09 | . 16 | . 14 | . 23 | . 59 | . 55 |
| deg. | (.18) | (.26) | (.32) | (.24) | (.49) | (.40) |
| Race/Ethnicity (Ref: White) |  |  |  |  |  |  |
| Black | . 88 | . 92 | . 15 | 1.02 | . 57 | 1.23 |
|  | (.08) | (.13) | (.17) | (.12) | (.32) | (.19) |
| Hispanic | . 36 | . 37 | . 11 | . 43 | . 42 | . 57 |
|  | (.10) | (.14) | (.20) | (.15) | (.36) | (.22) |
| Asian | -. 26 | -. 16 | 1.07 | . 54 | 1.20 | . 38 |
|  | (.27) | (.32) | (.49) | (.40) | (1.13) | (.83) |
| Native Am. | 1.16 | . 77 | . 74 | 1.87 | 1.24 | 1.69 |
|  | (.21) | (.41) | (.44) | (.24) | (.63) | (.56) |
| Income |  |  |  |  |  |  |
| Poverty level | . 22 | . 19 | -. 004 | . 19 | -. 04 | . 16 |
|  | (.03) | (.05) | (.06) | (.05) | (.10) | (.07) |
| High income | -. 05 | . 02 | -. 54 | -. 41 | -. 52 | -. 19 |
|  | (.10) | (.17) | (.22) | (.15) | (.41) | (.26) |
| AIC | 4727.7 | 3987.9 |  | 48 |  |  |

Table 7: Factors influencing whether and how many abortions women report across four models. Standard errors are in parentheses.

| FACTORS | $\begin{gathered} \hline \text { MODEL } \\ \mathbf{1} \\ \text { Poisson } \end{gathered}$ | MODEL <br> 2 <br> Negative <br> Binomial | MODEL$\mathbf{3}$Zero-InflatedPoisson |  | $\begin{gathered} \text { MODEL } \\ 4 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Zero-Inflated Negative Binomial |  |
|  |  |  |  |  |  |  |
|  |  |  | Logit of any abortions | Expected count | Logit of any abortions | Expected count |
| Intercept | -3.47 | -3.78 | 2.72 | -1.14 | 10.9 | -1.92 |
|  | (.12) | (.15) | (.32) | (.26) | (1.38) | (.25) |
| Age: | . 05 | . 06 | -. 03 | . 04 | -. 48 | . 02 |
|  | (.003) | (.005) | (.009) | (.007) | (.08) | (.006) |
| Current marital status (Ref: |  |  |  |  |  |  |
| Never married) |  |  |  |  |  |  |
| Nev. marr., | . 23 | . 30 | -. 47 | -. 03 | -1.90 | -. 13 |
| coh. | (.09) | (.12) | (.22) | (.16) | (.74) | (.14) |
| Married | -. 20 | -. 18 | -. 05 | -. 20 | -. 50 | -. 44 |
|  | (.06) | (.08) | (.14) | (.11) | (.52) | (.09) |
| Div./sep./wid., | . 25 | . 27 | -. 64 | -. 11 | -5.69 | . 04 |
| not coh. | (.07) | (.10) | (.17) | (.11) | (28.28) | (.10) |
| Div./sep./wid., | . 41 | . 42 | -. 53 | . 12 | . 24 | . 21 |
| coh. | (.13) | (.19) | (.28) | (.18) | (1.49) | (.19) |
| Education (Ref: Less than High |  |  |  |  |  |  |
| School) |  |  |  |  |  |  |
| HS grad. or eq. | . 39 | . 42 | -. 57 | -. 003 | -1.28 | . 09 |
|  | (.08) | (.10) | (.15) | (.12) | (.52) | (.11) |
| Some coll./voc. | . 48 | . 47 | -. 70 | -. 03 | . 45 | . 27 |
|  | (.08) | (.10) | (.16) | (.12) | (.52) | (.11) |
| Finished coll. | . 17 | . 13 | -. 72 | -. 36 | 2.06 | -. 05 |
|  | (.10) | (.13) | (.23) | (.17) | (.79) | (.14) |
| Master's/adv. | . 21 | . 17 | -. 65 | -. 26 | 2.41 | -. 04 |
| deg. | (.13) | (.16) | (.31) | (.21) | (1.12) | (.18) |
| Race/Ethnicity (Ref: White) |  |  |  |  |  |  |
| Black | . 57 | . 64 | -. 36 | . 39 | -1.55 | . 42 |
|  | (.06) | (.08) | (.14) | (.09) | (.43) | (.08) |
| Hispanic | . 05 | . 05 | . 29 | . 28 | -. 39 | -. 06 |
|  | (.07) | (.09) | (.14) | (.11) | (.47) | (.09) |
| Asian | . 30 | . 36 | -. 36 | . 11 | -. 74 | . 29 |
|  | (.13) | (.17) | (.37) | (.25) | (.67) | (.19) |
| Native Am. | . 23 | . 21 | . 39 | . 48 | -1.19 | . 09 |
|  | (.23) | (.31) | (.43) | (.32) | (1.37) | (.32) |
| Income |  |  |  |  |  |  |
| Poverty level | -. 04 | -. 03 | -. 12 | -. 11 | . 04 | -. 001 |
|  | (.02) | (.03) | (.05) | (.04) | (.13) | (.03) |
| High income | . 16 | . 12 | . 42 | . 42 | . 40 | . 15 |
|  | (.09) | (.12) | (.22) | (.15) | (.63) | (.13) |
| AIC | 9493 | 8731 | 8760 |  | 8599 |  |

## APPENDIX B

Like the negative binomial model, the zero-inflated negative binomial assumes that the number of events that occur is a draw from the negative binomial distribution. In contrast, the zeroinflated negative binomial also allows some observations to be structural zeroes (i.e. no event occurs for those observations regardless of the draw produced by the negative binomial). Denote cases where a draw from the negative binomial is observed by $\tau_{i}=1$, and denote structural zeroes by $\tau_{i}=0$. The probability of whether a respondent falls into either of these categories is governed by a Bernoulli distribution such that

$$
\tau_{i} \sim f_{\text {Berroulli }}\left(\pi_{i}\right),
$$

where $\pi_{i}$ is modeled as a logit for convenience, $\pi_{i}=1 /\left(1+e^{-\mathbf{z}_{i} \boldsymbol{\phi}}\right)$.
If the observation is a $\tau$-type $\left(\tau_{i}=1\right)$, we observe a draw, $Y_{i}$, from the negative binomial distribution,

$$
Y_{i}= \begin{cases}f_{\mathrm{NB}}\left(\lambda_{i}\right) & \text { if } \tau_{i}=1 \\ 0 & \text { otherwise }\end{cases}
$$

where $\lambda_{i}$ is $\lambda_{i}=e^{\mathbf{x}_{\boldsymbol{\beta}}}$


[^0]:    ${ }^{1}$ http://www.huffingtonpost.com/dalton-conley/why-my-mans-right-to-_b_11883.html

[^1]:    ${ }^{2} \mathrm{http}: / /$ www.nationalcenterformen.org/page7.shtml

[^2]:    ${ }^{3}$ Individuals between 18 and 44 were recruited, although three male respondents were 45 at the time of the interview.
    ${ }^{4}$ Sixteen men and 35 women identified as non-Hispanic Native Hawaiians and Pacific Islanders, which represented $.3 \%$ of the male sample and $.5 \%$ of the female sample.

[^3]:    ${ }^{5}$ See Appendix A for coefficients for all four of the estimated models.

[^4]:    ${ }^{6}$ See Appendix B for mathematical explanation of the zero-inflated negative binomial model.

[^5]:    ${ }^{*} \mathrm{p} \leq .05,{ }^{* *} \mathrm{p} \leq .01,{ }^{* * *} \mathrm{p} \leq .001$

