Abortion and Family Formation: Circumstance or Culture? *

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ABSTRACT
Research using opinion surveys and abortion-patient censuses has found that opinion and practice on abortion often appear incongruent. This is generally attributed to circumstantial pressures that motivate women to make an atypical choice, conceived in terms of rational utility; but it may also be due to the fact that the socio-cultural values of women having abortions are not representative of their opinion group. Taking participation in marriage and family formation behavior as indicators of traditional cultural values, I examine fertility data from the National Survey of Family Growth (N=10,847) in order to determine whether women having abortions differ significantly in their opinions regarding such behaviors from those not having abortions. I find that women having abortions are twice as likely never to marry, 37% more likely to divorce, have (on average) twice as many lifetime sexual partners and three times as many partners before marriage, have fewer children, and experience both earlier sexual onset and later marriage. Having successive abortions or abortions on different pregnancies affects these differences not at all or only slightly. I argue that these differences suggest that abortion decisions stem in large part from diverse sociocultural values rather than from circumstantial concessions.

INTRODUCTION
It has often been observed that, collectively, abortion opinion is largely unrelated to practice (Henshaw and Silverman 1988; Cook, Jelen and Wilcox 1992; Henshaw and Kost 1996; Ladd and Bowman 1997). The abortion rate of women in groups that have higher opposition to abortion than the norm—Catholics, for example, or blacks—is consistently the same or higher than that of the general population. College-educated women, who voice higher support for reproductive rights, are less likely actually to procure an abortion than women with less education. Jewish women

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articulate one of the highest levels of acceptance of abortion in American life, yet have one of the lowest rates of abortion themselves. Why do women who approve abortion less appear to practice it more, and those who approve it more appear to practice it less?

To an extent, this riddle is part of the larger conundrum of the incongruence between moral ideals and actions, or religious beliefs and behavior, that can be observed in many aspects of American life. Increasingly Americans derive guidance in personal choice from individualized rather than shared collective norms, from autonomy rather than community. Thinkers such as Peter Berger and Bryan Turner have argued that this is a result of the secularization of society, a change in which the gods have become demystified and lost their power to guide choices. Others have seen the rise of autonomous conscience as implicated by the increasing confinement of religion and moral choice to a “private” rather than public sphere. Still others locate the divergence of personal practice from public profession in the exercise of a characteristically American pragmatism in response to changing social institutions and norms.

The apparent divergence of abortion practice from ideals does not fit neatly with the secularization thesis because the ideals regarding abortion are themselves highly divergent. The morality of abortion is the most contested issue in American public life, a centerpiece of the “culture war” (Hunter 1991). The legal system and the religious establishment—the two institutions of “robed authorities” that provide the strongest moral guidance in American life—give contrasting and often inconsistent direction on the issue. Abortion opinion, particularly among the young, is at least as likely to diverge from formal religious or moral instruction as it is to conform to it (Sullins 1999). Thus, when practice diverges from collective opinion on abortion, it is not clear whether this is due to circumstance, that is, a denial of principle or goals in the face of exigency, or to culture, that is, the operation of a contrasting principle or set of goals. I am using “culture” here to refer to a woman’s general orientation to matters of marriage and sexuality. Depending on one’s view of the role of socialization in cultural development, this orientation may include such matters as personal skills or competencies, social and
organizational ties, socially constructed definitions, or religious and moral values.

Abortion choices have also been considered particularly subject to moral ambivalence because they involve indisputably personal and private matters of sexual expression and personal health. Behind the veil of personal privacy, it is contended, women are forced by difficult circumstances into making choices that contravene their typical aspirations for marriage and family and/or moral values (Cannold and Denfield 2000). Accordingly, social scientific research on abortion decisions has adopted an explicitly economic model, examining issues of “demand,” “supply,” and “rational utility,” such as welfare benefits (Bartfield 2003), government regulation (Lundberg 1995), age, income, and unemployment (Lin 2002), or the availability of abortion providers (Henshaw 2003).

Yet abortion choices also have a less often recognized public component. As each pregnancy necessarily involves two persons, it is rare for an abortion decision to be made apart from the interpersonal context of conception. Social context apart from income, particularly education and work participation, is a strong predictor of abortion. Furthermore, an abortion, like a child, is conceived as part of an implicit or explicit career-plan or set of hopes for family formation. These expectations become formalized, in most cases, in marriage; thus it is marital status that is the strongest single factor influencing the probability of aborting a pregnancy. The characterization, therefore, of abortion decisions as pre-eminently private and personal, subject primarily to considerations of personal utility, is too simple; the actual situation is much more complicated.

As a traditional cultural institution, marriage is associated with root-values that mitigate against abortion practice. It is both an intensely personal and highly public decision, and it imposes principled constraints on sexual partnerships. At the same time, marriage offers the practical and financial support for child-rearing that makes this choice more feasible for most pregnancies. Thus the relation of abortion to marriage provides an opportunity to assess, in general terms, whether abortion is a principled decision, expressing cultural values that diverge from those
who reject an abortion, or a rational, instrumental choice that is made to overcome obstacles or to increase the prospects of achieving the same values as those who are not in the position to need an abortion. To what extent do women who choose abortion do so with a view to achieving marriage or avoiding it? Is an abortion a means of ensuring the resources to have children at a later time, or a means of reducing fertility altogether? Does having abortions promote more stable sexual partnerships and rational family planning or the opposite of these?

DATA AND METHODS

Data for this study are derived primarily from the 1995 National Survey of Family Growth (NSFG), with some validating comparisons made to two national surveys of abortion patients conducted by the Alan Guttmacher Institute in 1987 and 1995 (AGI 87 and AGI 95 respectively). These three surveys comprise the only nationally representative sources of information about the characteristics of women having abortions. The 1995 NSFG is the fifth of a series of large nationally representative surveys of women age 15-44 that have been collected at about 5-year intervals since 1973. Administered by the National Center for Health Statistics, the 1995 survey obtained from its 10,847 respondents an extensive body of information including a full history of all pregnancies. The specific outcome of each pregnancy, including induced abortion, was reported, thus providing a profile of abortion choices throughout each woman’s fertile years.

In 1987 and 1995 the Alan Guttmacher Institute, an agency whose mission is “to protect the reproductive choices of all women and men” (Alan Guttmacher Institute 2000) and one that works closely with abortion providers, administered similar surveys to a nationally representative sample of U.S. abortion patients. A total of 9,480 cases were collected in 1988, and 9,985 in 1995. Non-response was under 10% in both surveys, and the sample was carefully stratified and weighted to ensure representativeness. Both surveys, primarily intended to assess contraceptive use, were also designed to cover “a variety of demographic and socioeconomic characteristics that parallel information obtained from the National Survey of Family Growth respondents” (Henshaw 1990,
As noted above, both have been used by their author to report characteristics of women having abortions (Henshaw and Silverman 1988, Henshaw and Kost 1996). Since the entire sample of both surveys was abortion patients, these studies avoided by design (at least as regards the current abortion) the major methodological problem of any survey study of abortion behavior, which is the extensive under-reporting of abortions.

**ABORTION UNDER-REPORTING**

Abortion behavior has been chronically under-reported on every major fertility survey (see Jones and Forrest 1992a for a review). Self-reported abortions generally predict an aggregate estimate of abortions performed that is less than half the number reported by abortion providers. NSFG 95, while better than most surveys, is no exception to this problem. An estimate of the number of abortions performed in the United States based on those reported in the NSFG 95 during the 3-year period preceding the study yields an amount that is only 62% of those reported to the Centers for Disease Control and Prevention (CDCP) for the same period (NCHS-UG 1997: Section B). As the NSFG User's Guide warns, “abortion data should be adjusted for under-reporting before any substantive use of the data is made” (NCHS-UG 1997: Section B).

This problem, however, only applies to studies that attempt to enumerate abortions. No attempt is made in this study to estimate the total number or rate of abortions, thus reducing the under-reporting problem to one of possible bias in the distribution of reported abortions. Moreover, the primary interest of this study is not abortions but aborters, that is, women who have had abortions; and because most aborters have more than one abortion (the average on AGI 95 is 1.7), the undercount of aborters on the NSFG is much less than that of abortions. I have examined elsewhere (Sullins 2001) the issue of abortion under-reporting on the NSFG in greater technical detail and produced correction adjustments for estimating the incidence of abortions. Since the present study argues from differences between aborters and non-aborters, the extent to which they are indeed dissimilar under-reporting by aborters actually works to strengthen the results, because any under-reporting of
abortions can only attenuate comparisons between aborters and non-aborters. Thus any difference found between these groups as reported on the NSFG is somewhat smaller than it would be if all abortions were reported. It should be borne in mind that, because of probable under-reporting bias, the findings presented below probably understate somewhat the true effects in the population.

ANALYSIS AND DISCUSSION

Abortion decisions occur within the context of a life course of relational attachments and possible child-rearing. Such a life course must include sexual intercourse and pregnancy, without which a choice to abort is obviously moot. It may or may not include marriage and giving birth. Accordingly, my analysis was restricted to women who had achieved pregnancy; women who were not sexually active or had never been pregnant were excluded. Altogether 3,085 of the 10,847 NSFG respondents (28.4%) were excluded.

The variables of interest were those having to do with the relation of sexual activity to marriage and child-bearing. Four sets of variables were available to examine these issues: marital status, sexual partners outside marriage, sexual onset, and childbearing or natality itself. For each of these variable sets I examined the effect of each abortion as well as the effect of ever having an abortion compared to never having one. For most variables the latter distinction was far more powerful than the effect of each abortion singly.

A total of 2,221 (28.6%) of the 7,762 ever-pregnant women on the NSFG reported having had an abortion. As discussed above, this figure is probably somewhat lower than the true population proportion. In much of the analysis that follows, these women are compared with the remaining 5,541 women who were ever pregnant but who never reported having an abortion. For the sake of simplicity I have labeled these two groups “aborters” and “non-aborters.” This linguistic device is adopted solely for clarity, following previous convention in similar studies, and is not intended to imply any group identity or negative connotations. If desired, the reader is invited to substitute more felicitous terms according to her or his own sensibilities regarding these issues.
Since no woman in the NSFG sample is older than 44 years of age, it was not possible to obtain respondents at the conventional age of completed fertility (age 45). As the next best thing, in order to examine issues involving lifetime patterns or effects, analysis was restricted to women over age 35. This group of women averaged forty years of age, and had completed the large majority of their child-bearing and sexual relationship history. The lack of a group of women just a few years older, however, does induce some added variation in the analyses; the effects observed would be likely to be stronger in a slightly older group. A total of 3,238 respondents, or 41.7% of ever-pregnant women, were over age 35; of these 26.7% were aborters.

A third (32.9%) of aborters reported having had more than one abortion, with this number declining geometrically with increased numbers of abortions: 21.1% had had two abortions, 7.9% three abortions, and 2.6% four abortions. Only 2.3% of aborters, or 52 respondents, had had more than four abortions. These categories were used to examine the effects of successive abortions. Limitations of sample size prevented analysis beyond four abortions, but only a small minority of women reported having this many, and for most analyses there was no increased effect after the second or third abortion.

MARITAL STATUS

As already noted, research has consistently found, not surprisingly, that being married suppresses the probability of an abortion. The NSFG confirms this. Although 61% of all ever-pregnant women are married, only 15% percent of aborters were married at the time of their most recent abortion. Table 1 shows the data. This computes to an overall probability that unmarried women are about 9 times as likely to seek an abortion as are married women.

The effect of marriage is not a simple one, however, and not all pregnancies are at equal risk of being aborted. Considering a woman’s lifetime pregnancies, the probability of abortion increases with each successive pregnancy for those who are married, while it stays the same or decreases with each pregnancy for the unmarried. Thus, a woman’s first pregnancy is the one least likely to be aborted in marriage, but the
one most likely to be aborted outside of marriage. Nonetheless, every pregnancy conceived in marriage is at a lower risk of being aborted than the corresponding pregnancy outside of marriage.

While the fact that marriage inhibits abortion is well known, it is much less widely recognized that having an abortion also inhibits marriage. The NSFG indicates this reciprocal effect in a number of ways. First, aborters delay marriage more than non-aborters. The average age at marriage for aborters is 23.1 years; for non-aborters it is only 21.7 years. This is not surprising since delayed marriage, like abortion, is a direct means of reducing fertility and would be likely to result from many of the same motivations.

However, aborters are also somewhat less likely ever to marry than non-aborters. By their late thirties almost all sexually active women who will ever marry have done so; on the NSFG only 8% of all ever-pregnant women over age 35 remain unmarried. But this proportion is almost twice as large for aborters (12.4%) as for non-aborters (6.5%). These differences regarding marriage formation are significant but still relatively small. Although aborters marry a year and a half later, on average, and at a lower rate, by their late thirties 88% of aborters (albeit 94% of non-aborters) have married.

Much larger than these is the effect of abortion on marriage failure. A quarter (25.1%) of aborters over age 35 are currently divorced or separated, compared to only 19% of non-aborters. The result is that only 60% of aborters, but 72% of non-aborters over age 35 are currently married. Moreover, almost 40% of aborters, but only 22% of non-aborters, this age who are married have been married more than once. As Figure 1 illustrates, the cumulative effect of these marriage failures is that, by their late thirties, only a minority (37%) of aborters remain in their first marriage, compared to over 56% of non-aborters.
Figure 1
Marriage History (%) by Abortion Practice

Note: "Failed marriage" includes respondents who are divorced, separated or who have had more than one marriage.

Source: NSFG 1995 (Ever-pregant women over 35 only)
Figure 2
Percent Distribution of Lifetime Sex Partners,
Comparing Aborters with Nonaborters

Source: NSFG 1995 (Ever-pregnant women only)
NON-MARITAL SEX PARTNERS

As a sociological status, marriage, of course, is the formalization and typically the end-result of a process of relational attachment and mate-selection that women engage in through their early fertile years. For the majority of American women this process involves sexual partnerships with males before marriage, and to a lesser extent after a marriage that has end prematurely. An extension, therefore, of the finding that aborters experience less stability in marriage should be that they also show greater volatility in these non-marital sexual partnerships. The data provide strong evidence that this is the case.

The practice of abortion is allied with enabling a dramatically higher number of sex partners for women. See Table 1. Ever-pregnant women over age 35 reported an average of 6.6 lifetime sexual partners. Less than a fifth (19.3%) reported having no sexual partners before marriage. Non-aborters, however, reported only 4.4 lifetime sexual partners, on average, while aborters reported 12.7, a number that is almost twice the overall average, and three times the average for non-aborters. Similarly, only 7% of married aborters had no sexual partners before marriage, compared to 24% of non-aborters. Thus, aborters report having about 3 times as many sexual partners as non-aborters during their lifetime, on average, and are over 3 times as likely to have sexual partners before marriage.

The distribution of sex partners clarifies these average differences. As Figure 2 shows, at all points on the distribution non-aborters tend to have few sex partners, while aborters tend to have many. The modal number of sex partners for non-aborters is one; for aborters, it is five. Nearly a third of non-aborters (31.5%) have had only one sex partner, but only 7.2% of aborters. In part this is a direct result, of course, of the increased prevalence of marriage among aborters.

On the high end of the distribution, a quarter (25.7%) of aborters have had 10 or more sex partners, but only 8.4% of non-aborters. Even among these women with double-digit partners, aborters are more volatile in their relationships than non-aborters. Although information is not available on all sexual partners, the NSFG does gather detailed information on sexual partners women have had in the last 5 years.
### TABLE 1
Abortion and Family Formation
Comparing aborters and nonaborters on selected characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Nonaborters</th>
<th>Aborters</th>
<th>All women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married at most recent abortion*</td>
<td>54.8 **</td>
<td>15.3</td>
<td>46.8</td>
</tr>
<tr>
<td>Never married (%)</td>
<td>6.5</td>
<td>12.4</td>
<td>8.1</td>
</tr>
<tr>
<td>Currently married (%)</td>
<td>72.2</td>
<td>60.3</td>
<td>69.1</td>
</tr>
<tr>
<td>Age at marriage (mean) *</td>
<td>21.7</td>
<td>23.1</td>
<td>22.0</td>
</tr>
<tr>
<td>Divorced or Separated (%)</td>
<td>19.4</td>
<td>25.3</td>
<td>21.0</td>
</tr>
<tr>
<td>Married more than once (% of all married)</td>
<td>22.1</td>
<td>39.5</td>
<td>26.4</td>
</tr>
<tr>
<td>Sex partners before marriage (mean) ***</td>
<td>3.4</td>
<td>9.2</td>
<td>5.4</td>
</tr>
<tr>
<td>No sex partners before marriage (%)</td>
<td>23.9</td>
<td>6.7</td>
<td>19.3</td>
</tr>
<tr>
<td>Lifetime sex partners (mean)</td>
<td>4.4</td>
<td>12.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Births (mean) *</td>
<td>2.1</td>
<td>1.6</td>
<td>1.93</td>
</tr>
<tr>
<td>Pregnancies (mean) *</td>
<td>2.5</td>
<td>3.4</td>
<td>2.8</td>
</tr>
<tr>
<td>1 or 2 pregnancies (%)</td>
<td>58.9</td>
<td>36.3</td>
<td>52.4</td>
</tr>
<tr>
<td>5 or more pregnancies (%)</td>
<td>8.3</td>
<td>23.0</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Source: NSFG 1995, showing only women over age 35 who have ever been pregnant (N=7,762).

* Includes women under 35.

** Shows data at most recent pregnancy

*** Includes only married women.
Among women over 35 who report having 10 or more lifetime sexual partners, 40% of the non-aborters, but only 25% of the aborters, have had one continuous partner for the past 5 years. Among the remaining women, the aborters have had a higher average number of partners (2.2) than non-aborters (1.7). Aborters’ relationships have averaged a shorter duration, at 7 months, than those of non-aborters, at 8 months. Half (50.1%) of aborters, but only 41% of non-aborters, report at least one set of overlapping or simultaneous sexual partnerships. The proportion of relationships lasting 3 months or less is almost twice as high for aborters (41%) as for non-aborters (21%). These women are as far from fulfilling the marriage ideal as it is possible to get; yet even among them, those who have not chosen abortion are more stable in their sexual partnerships.

So far, almost all of the effects of abortion on marriage and sex partners have been captured in the propensity to have any abortions at all. While women having at least one abortion have differed substantially from those having none, women who have had successive multiple abortions have not differed significantly or greatly from those who have had one abortion. All of the factors influencing marriage, and the probability of sex before marriage, have been of this type. This type of association, I argue below, suggests that a cultural effect is being observed.

Regarding premarital sex partners, however, another type of association appears to be in play, because the association of abortion with more premarital sex partners is in part cumulative. Consistent with Table 1, Figure 3 shows that married women who had any sexual partners before marriage had a median number of two partners if they had no abortions. Corresponding aborters had twice as many premarital partners (a median of 4) overall, but the number of partners increased by about one partner with the first two abortions. Partners following marriage also increased. Women having only one abortion had a median number of three partners before marriage; those with two or more abortions had a median of four premarital partners, and five partners after marriage. (This trend appears even more strongly when comparing the means involved, however the mean of the distributions of women with two or more
abortions is highly skewed due to a small number of women who report having several hundred sex partners before and after marriage.) This suggests that, in addition to cultural differences, the first two abortions also have an instrumental or enabling effect on the possibility of a greater number of sexual partners.

Figure 3
Sex Partners Before and After Marriage (median), by Number of Abortions

Source: NSFG 1995 (Ever-pregnant women over 35 only, excluding women who had no sex partners before marriage)
Figure 4
Pregnancy and Abortion before Marriage (percents), comparing aborters and nonaborters

Source: NSFG 1995, showing only ever-pregnant ever-married women
SEXUAL ONSET

One part of women’s sexual experience in which the practice of abortion cannot have an enabling effect is at first intercourse. While having an abortion may reasonably enable more sex partners later in life, here any differences between aborters and non-aborters must be due entirely to factors that are better conceived as cultural.

For those who would later become aborters, sexual onset is much less likely to be related to marriage, or even occur within a stable relationship. 17.8% of non-aborters, but only 3.8% of aborters, had their first sexual intercourse on their wedding night. Non-aborters were almost twice as likely (57.2%) to have their first sexual experience with a husband or boyfriend than aborters (30.3%). A third of aborters (33.0%) reported regarding first intercourse that they “didn’t want it to happen at the time,” compared to only 22.8% of non-aborters.

Age at first sex for aborters (16.43) averages one year younger than for non-aborters (17.56). Aborters’ first partner is also a year younger (19.39) than non-aborters’ (20.45). Yet, as already noted, aborters tend to marry about a year and a half later (at age 23.1) than non-aborters (age 21.7). Thus, non-aborters average 4.1 years of sexual activity before marriage, but aborters 6.7 years, an increase of 63%. In this way cultural differences about sexuality and marriage directly affect the probability of abortion. Note that this increased risk of abortion is unrelated in any direct way to the woman’s moral stance or view regarding the acceptability of abortion itself.

This prolonged period of early sexual activity before marriage greatly increases the exposure of women to the risk of abortion, and thus increases the number of abortions procured disproportionately to the time involved. As noted above, first pregnancies outside of marriage are the ones most likely to be aborted. As Figure 4 illustrates, three-fourths (73.5%) of aborters, but only a third (32.2%) of non-aborters, who ever marry became pregnant prior to marriage. In risk factor terms, aborters were 5.9 times more likely to become pregnant before marriage than non-aborters. Adjusting for their longer time of exposure, aborters were 3.6 times more likely than non-aborters to become pregnant during any equivalent period of time before marriage.
Of aborters’ premarital conceptions, 71% were aborted. This is over four times the rate of abortion for all pregnancies (16.7%). These abortions thus account for a disproportionate amount (29%) of all abortions. This number is exclusive of abortions during the same age period procured by women who never marry, which account for an additional 17% of all abortions. Thus close to half (46%) of all abortions, and two-thirds (66.1%) of first abortions, occur before age 23.1. From these proportions it can be estimated that the increased period of early or premarital sexual activity among aborters increases the incidence of abortion by 29%, and their increased prevalence for pregnancy by another 32.8%, over what it would be if both of these factors were congruent with non-aborters. Thus the differences in early sexual activity between aborters and non-aborters increases the total number of abortions in America by over three-fifths (61.8%).

Note that none of the factors involved in this sizable proportion of abortions has anything directly to do with abortion. Even if the resulting decisions to abort were entirely circumstantial or pragmatic, aborters’ increased exposure and prevalence to the risk of pregnancy cannot be the consequence of an abortion. Rather, they must result from background influences, statuses, opportunity and values, that is, factors that are socio-cultural. With regard to sexual onset, purely cultural differences directly promote circumstances that make abortion much more likely.

**NATALITY**

Aborters bear fewer children than non-aborters. Although the claim has been made that those who abort some children eventually give birth to as many as those who never abort (Henshaw and Kost 1996), this is only true if women who never achieve a pregnancy are included among the non-aborters. Such an inclusion, of course, biases the findings, because it is not known whether those women would have aborted a child if they had become pregnant. When only ever-pregnant women are included, the NSFG reports that non-aborters give birth to an average of 2.1 children, but aborters only 1.6 children. Fifteen percent of aborters never have children at all.
Figure 5
Conditional odds on birth* by pregnancy

With any previous births
With any previous abortions
Although they bear fewer children, aborters, of course, achieve more pregnancies (3.4), on average, than non-aborters (2.5). Most of this difference lies in the increased propensity for non-aborters to stop at two pregnancies. Fifty-nine percent of non-aborters, but only 36% of aborters, achieve only one or two pregnancies. However, the proportion of women who have 5 or more pregnancies is also almost three times as large for aborters (23%) than for non-aborters (8%).

While there is obviously a direct, instrumental relationship between having an abortion and having fewer children, there is, even in childbearing, evidence of cultural influences associated with abortion. This can be seen in the fact that every abortion, besides terminating a current pregnancy, increases the probability of aborting (or decreases the probability of bringing to term) every subsequent pregnancy as well. Figure 5 presents the conditional odds on birth by pregnancy for all ever-pregnant women on the NSFG. The odds are simply the ratio of live births to abortions, ignoring other medical outcomes of pregnancy. The figure compares the effect of any previous birth or abortion on the odds of giving birth to the current pregnancy. Note that this is not a categorization of women, since after the second pregnancy some women will be represented in both lines on the figure. Overall, women were four times as likely to give birth rather than abort their first pregnancy. Those who gave birth to their first pregnancy were three times as likely to give birth to the second pregnancy, while those who aborted their first pregnancy were only half as likely to give birth to the second pregnancy. Thus, those who aborted the first pregnancy were six times less likely to give birth to the second pregnancy than those who brought the first pregnancy to birth. This odds ratio is represented in the chart by the gap between the dotted line, which shows the effect of previous abortions, and the solid line, which shows the effect of a previous birth. This gap narrows after the second pregnancy, but for each pregnancy the odds on birth following a previous birth are always greater than when following previous abortions.

The conditional odds lines shown in Figure 5 show two contrasting uses of abortion, or types of abortion careers, that contrast the instrumental and cultural types of effects of abortion that I have been
describing. Note that the effect of any previous abortion on the odds of bringing the current pregnancy are about the same from the second to the sixth pregnancy. Compared to corresponding effect of giving birth, the odds of which range from 4.1 to 12.1, the odds corresponding to the effect of abortion only range from 1.9 to 2.8. Regarding the probability of giving birth (or, inversely, of having an abortion) it does not matter much how many abortions a woman has had or on which pregnancy—any abortion at all will have about the same effect. The effect of abortion, in other words, is not for these women so much instrumental to the probability of having a child as it serves as a marker of a broad and persistent class of effects that are brought to bear upon the procuring of any abortion. This is the kind of effect that is associated with marriage, which as we saw above greatly lowers the probability of abortion for any pregnancy.

By contrast, those who give birth to earlier pregnancies become decreasingly likely, after the second pregnancy, to give birth to any more. The impulse to abort increases (thus the impulse to give birth decreases) with successive pregnancies and, by implication, births. It is not that those who have given birth do not ever procure an abortion. Even for the second pregnancy which follows a birth, one out of twelve pregnancies are aborted. But for this group the impulse to abort is retrospective, an instrumental decision affected by the presence and probably number of children that were the product, in part, of previous decisions not to abort a pregnancy. Here abortion is employed not in order to avoid or delay becoming a mother but because the aborter already is a mother.

CONCLUSION
As anticipated, I have found that the association of abortion and marriage is subject to a composite of cultural and instrumental factors. By far the strongest effects, however, appear to be cultural, that is, related to patterns of behavior that distinguish aborters, as a group, from non-aborters. For many of the associations examined, the effect of having one abortion on the life prospects for marriage and child-rearing is indistinguishable from, or very large relative to, the effect of multiple abortions. This suggests, I have argued, that having an abortion serves
more as a marker of distinct aspirations relative to marriage and related sexual choices than as a mechanism that enables or disables aspirations for marriage and related sexual choices that are congruent with those of non-aborters. Determining just what underlies such aspirations is beyond the competency of this study; they may be related to moral or religious values, but they may also be related to skills or competencies and/or social or organizational ties. The fact that the dichotomy of aborters and non-aborters, and not the number of abortions procured, is consistently associated with significant differences on these matters provides primary support for this claim.

This is not to say that instrumental effects are not present; culture and circumstance are not mutually exclusive, and no doubt both affect most decisions to abort a pregnancy. Even where abortions have an instrumental effect, however, what they appear to be enabling is not more stable relationships, increased marriage prospects or more children. On the contrary, the use of multiple abortions is associated with increasing marital failure, more short-term sexual partnerships and fewer eventual children.

Moreover, culture strongly influences context in a consequential way, by increasing the duration of sexual activity and prevalence of pregnancy before marriage for aborters. This alone increases abortions by over 60%. This cannot be the result of any abortion choice, but rather must relate directly to valued choices regarding sexual partnership and marriage. To say that these choices are shaped by family background, social location or opportunity does not negate but rather reinforces the claim that they are cultural, because these are precisely the mechanisms by which persons are socialized into culture. To argue that an abortion choice is only a pragmatic response to a difficult situation ignores this evidence that the difficult situation is itself in part a consequence of cultural values.

In sum, the availability of abortion appears to enable multiple, short-term, non-marital and non-reproductive sexual partnerships rather than long-term stable relationships that nurture children. Those who will subsequently abort a pregnancy engage in dramatically different behavior regarding sexual partnership and marriage prior to the occurrence of any
abortion. This behavior alone, apart from any circumstantial factors, accounts for a substantial proportion of abortions. The fact of having an abortion has a stronger effect on most of these matters than the number of abortions procured. To the extent that participation in marriage and related family formation behaviors expresses traditional socio-cultural values, aborters appear to operate with a different set of values than non-abortioners rather than conceding such values in the face of circumstance. To the extent that circumstantial factors are present, the values or culture represented in having an abortion work more strongly to retard marriage and family formation than any instrumental effect of the abortion may be to promote it.

Because cultural factors affect behavior at a high level of generality, this study has engaged in broad categorizations and comparisons in order to address widely-conceived concepts. A more rigorous and narrowly-conceived analysis may well qualify or refute its findings, though at the very real risk of reductionism, that is, defining away any true cultural distinctions. Nonetheless, the findings of this study should be assessed with the general caution that ought to attend all non-parametric analyses, and subject to all the limitations of the data discussed above.
REFERENCES


NOTES

i. Collectively, the incidence of abortion also has a direct effect on a society’s population size and structure. This public consequence of abortion makes it a legitimate object of social policy, a fact that is well-recognized with regard to developing nations but often ignored with regard to the United States.

ii. To avoid awkward sentence construction, throughout this paper I refer to women who have had abortions as “abortioners” and those who have not as “non-abortioners.”

iii. Taking under-reporting into account, this means that close to a third of all women who have ever been pregnant have had an abortion.

iv. The AGI surveys found that married women accounted for about 18 percent of abortion patients (Henshaw and Silverman 1988; Henshaw and Kost 1996).

v. The term “partners” as used in this literature includes all sexual liaisons, and is not meant to imply anything about the duration or quality of the relationships involved. The NSFG question makes this explicit: “Counting all your male sexual partners, even those you had intercourse with only once, how many men have you had sexual intercourse with in your life?”

vi. For women 35 and under the proportion with no sexual partners before marriage drops to 9.5%, reflecting the often-noted generational trend toward increasing acceptance of premarital sex.

vii. The NSFG invites women to state a range for the number of sexual partners. For all the analyses of this paper the low end of the reported range is used.

viii. The number of total and postmarital sex partners reported in Figure 2 does not match Table 1 because Figure 2 only reports married women.

ix. From Figure 5, 73.5% of abortioners become pregnant before marriage; thus 100-73.5=26.5% do not become pregnant. For non-abortioners, 32.2% become pregnant and 100-32.2=67.8% did not become pregnant. The odds on pregnancy before marriage, therefore, are 73.5/26.5 = 2.77 for abortioners and 32.2/67.8 = .47 for non-abortioners. The odds ratio of pregnancy before marriage is thus 2.77/.47 = 5.9 times larger for abortioners.

x. The common claim that one in four pregnancies end in abortion, an abortion rate of .25, is false. The ratio of abortions to live births is slightly less than one in four, but other outcomes to pregnancy are possible. Of the 21,333 pregnancy
outcomes reported on the NSFG, only 3552, or 16.7%, resulted in an abortion. This is exactly one in six pregnancies. Live births accounted for 14,944 pregnancies, or 70.1%. The remaining 13.2% of pregnancies had other outcomes, principally miscarriage. This reduction is not due to under-reporting, since almost all women who did not report an abortion also did not report the related pregnancy. Note that the ratio of abortions to live births with the numbers given above is .24, indicating little to no under-reporting.

xi. For 17% of first abortions—the ones reported by A-CASI—age information is not available. These percentages are based on the remaining 83% for which age was reported.

xii. Of the 3,304 reported abortions on the NSFG, 1,560 occurred before age 23.1. Reducing aborters’ exposure by 39% would reduce this number by 593 abortions; reducing their pregnancy prevalence by 3.6 times would account for another 670 abortions. The result would be 2,041 abortions instead of 3,304. Thus exposure increases abortions by 593/2041 = 29% and prevalence by 670/2041 = 33%.

xiii. The proportion of aborters over 35 with no births is 14.9%.