Choosing Abortion

D. Paul Sullins
Assistant Professor
Department of Sociology
Catholic University of America
Washington, D.C.   20064
Email: sullins@cua.edu

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Although the social determinants of abortion choices are widely acknowledged to be diverse and complex, no quantitative study has attempted to distinguish among or specify such choices. Exploratory and confirmatory factor analysis is employed to that end in this study on a set of 9 comparable demographic variables from three national surveys of women of childbearing age--1988 (n=9,480) and 1995 (n=9,985) Alan Guttmacher Institute surveys of abortion clinic patients, and the 1995 National Survey of Family Growth (n=10,847). A three-factor solution, that explains 60% of the variance and has a nearly identical pattern of unique high (> .50) loadings in all three datasets, confirms the presence of differentiable, persistent types of abortion choices. The factors are interpreted as: 1) abortions chosen to limit family size; 2) abortions associated with career factors; and 3) abortions associated with relationship deficit or instability. Categories derived from the factor types specify otherwise weak determinants into stronger contrasting effects for age, education, race and marital status. I argue that differentiating types of abortion choices can clarify our understanding of their social determinants, and enable multivariate analyses as the logical next step in this research.

Choosing Abortion

It is remarkable that, for being one of the most contested choices in American public discourse, there has been almost no study of induced abortion as a social fact. Although myriad research analyzes collective opinion about abortion (For reviews see Cook et al 1992, Ladd and Bowman 1997, Roper Center 1997), only a much smaller set of studies examines the behavior of choosing abortion itself. These studies, moreover, often treat abortion only as a subsidiary concern (e.g. Berger et al. 1991), are concerned mainly to show how behavior confirms or is at variance with opinion (e.g. Plotnick 1996), or tend to the psychological or the demographic (e.g. Henshaw 1998. Most studies in *Family Planning Perspectives* or *Demography* are of this nature.) in their treatment of abortion. Much rarer is research that attempts to address social causes or correlates of this much-disputed part of American life from a mainstream sociological perspective; and there is no body of research that might be called a sociology of abortion. A search of all major sociological journals from 1990-2000 turned up only three articles with any variant of the word "abortion" in the title. All dealt with abortion opinion; none with behavior[1].

The lack of a sociology of abortion is all the more surprising in that, in the highly polarized public debate about abortion, there is growing consensus that social policy should work toward reducing the number of abortions. Those who affirm the legal right to choose abortion increasingly qualify the conditions under which they approve the actual practice of that right (Ladd and Bowman 1997). There are growing concerns that pre-abortion counseling address the emotional conflictedness and complexity in which abortion choices are made (Jackson 2000) and the ethics of responsible motherhood (Cannold and Denfield 2000). For the past decade the dominant political position on the issue has asserted that "abortion should be safe, legal--and rare". Virtually no effort, however, is expended toward the reduction of abortions consistent with their continued legality, and many analysts supporting reproductive rights, including some in the judiciary,

interpret any reduction in the incidence of abortion as an abridgement of that freedom. Those opposed to the legality of abortion, seeking to restrict reproductive rights where they cannot eliminate them, have focused on legal means to reduce the number of abortions while virtually ignoring much less controversial social supports and interventions which would be likely to achieve the same or an increased numerical reduction in abortions (Reardon 1996). A corollary of this lack of interest in social intervention has been a lack of scholarly interest in research on the social understanding of abortion decisions. Research has also been impeded by the difficulty of obtaining accurate data on abortions and the fact that what social effects on abortion have been discovered have been relatively weak. Both of these issues are addressed in detail below.

A notable exception to this research gap has been two studies by Henshaw and collaborators (Henshaw and Silverman 1988, Henshaw and Kost 1996) that attempt to provide a summary profile of women having abortions. Based on data collected at abortion clinics, these articles compute an "abortion index" comparing the proportions among women having abortions with those of all fertile U.S. women of selected social characteristics, including age, race, marital and cohabitation status, education and income. Since the primary purpose of both of these excellent, careful studies is to analyze contraceptive use, the treatment of general "background characteristics" is (appropriately) only descriptive and summary. All the effects described are zero-order; no attempt is made to examine relations among the findings, either among the women having abortions by making distinctions, or among the variables describing them by applying controls.

The present study, accordingly, attempts to advance this research by attempting to make distinctions among abortion choices and the women who make them. In it I examine the best available data on women who choose abortion, starting with those used by Henshaw et al. (1988, 1996), in order to discover common social features and patterns in their choices. I find three

distinct types or situations in which women choose abortion, related to issues of career, relationship and family size. I then apply this knowledge to illustrate how it helps clarify our understanding of the influence on abortion decisions of such social factors as age, education, race, income and marital status.

DATA AND METHODS

Data

Data for this study are derived from two national surveys of abortion patients conducted by the Alan Guttmacher Institute in 1987 and 1995 (AGI 87 and AGI 95 respectively) and from the 1995 National Survey of Family Growth (NSFG). These three surveys comprise the only nationally representative sources of information about the characteristics of women having abortion. 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, in 1995 the 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 which 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. Nonresponse 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,

E7-1)," and as noted above both have been used by their author to report characteristics of women having abortions (Henshaw and Silverman1988, 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 (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. The current study avoids doing this in two ways. First, no attempt is made to extend the findings of this study in any direct way to the numerical frequency of abortions. This study assumes--based on evidence--a lack of strong bias in the pattern of cause and effect regarding abortions on the NSFG 95, but does not require that the number of abortions involved in such patterns are accurate. Therefore under-reporting per se is not a problem. Second, the unit of analysis of this study is not all abortions but only the most recent abortion. This number is obviously coterminous with abort*ers*, that is, women who have had abortions;[2] and the undercount of aborters on the NSFG is much less than that of abortions. This follows from the fact that forty-two percent of women on

AGI 95 report at least one previous abortion; mean lifetime abortions reported there is 1.7. If the probability of failing to report were equal for any abortion during a woman's lifetime, then a 38% under-report of abortions represents only a 22% under-report of aborters. If 62 percent of abortions are reported, then 78 percent of aborters are identified, on the NSFG.

Moreover, because abortion tends to be under-reported, this proportion is almost certainly too low. While current abortion is by definition not under-reported on the AGI surveys, there is no assurance that previous abortions are accurately reported. Given the propensity to under-report abortions on every other extant survey, it is likely that they are under-reported here as well, though perhaps to a lesser extent. It is certainly unlikely that previous abortions are over-reported. The true number of mean abortions, then, is most likely somewhat higher than 1.7, which implies that the true under-report of aborters is probably somewhat lower than 22%. Thus the proportion of aborters identified on the NSFG is most likely somewhat higher than 78 percent.

NSFG 95 itself contains independent data that strongly confirm this estimate. A unique feature of the NSFG in 1995 was the augmentation of computer-assisted personal interview (CAPI) with audio computer-assisted self-interviewing (A-CASI) in an attempt "to improve the reporting of abortion and other sensitive topics (Mosher and Bachrach 1996)." In the A-CASI procedure respondents were given greater assurance of anonymity by entering answers to questions they received via audiotape headphones directly into a computer with no interviewer present. This strategy increased the inferred level of abortions reported by 14 percent, from 45 percent in the main interview to 59 percent adding the A-CASI reports (Fu et al. 1998). However, the increase in the proportion of women reporting abortions was much smaller, at only 3.7 percent. Only 4.4 percent of those who reported no abortion in the main interview reported having one or more abortions using A-CASI. Over half (52 percent) of the *increase* in reported abortions resulted from women who reported at least one abortion in the main interview but revised that

number upward in the A-CASI portion. If this pattern is suggestive of the distribution of the remaining unreported abortions, then the proportion of aborters who remain to be identified on the NSFG is about half the proportion of unreported abortions, or about 19 percent. This is precisely consistent with the 22 percent upper limit predicted by AGI 95. Thus, although it is not possible to know for sure, there is good reason for confidence that the NSFG captures about 80 percent of women who have 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. In order to address this problem the initial analyses of this study employ the two AGI datasets, which have no under-report. As we shall see, the resulting data structures are observed to be substantially free of bias by non-response, and in fact minimize under-reporting. The actual distribution of non-reporting of abortions is of course unknown.

Methods

This research, exploratory in nature, proceeded without positing substantive hypotheses *a priori* (that I know of). Two hypotheses can be recognized as implicit in my method:

- H1. *There exist differentiable "types", that is, distinguishable patterns of variation, of abortion choices or situations.* Since choosing abortion is a human activity, it is reasonable to expect that it will be amenable to the kind of variation and stratification that is typical of most "voluntary" human behavior. On the other hand, some previous research has suggested that abortion choices are highly multifactorial, which would imply that they cannot be clearly categorized. However, this research has dealt with self-reported motivations for abortion, not sociological correlates. Nonetheless, it is possible that the sociological variation in abortion choices is not sufficiently ordered so as to be able to distinguish types among them.

- H2. *The ordered variation in abortion choices will not be substantially biased by nonresponse.* The AGI datasets report on women who are currently aborting and cannot be extended to the general population. The NSFG sample represents the general population of childbearing-age women and contains only retrospective reports of abortion. This hypothesis proposes, in effect, that any "types" discovered on the AGI 87 and AGI 95 will also be discernable on the NSFG. If this is not true then my plan to explore other correlates of abortion choices using the wider set of variables on the NSFG will not be plausible.

To test these hypotheses, and explore the resulting variation if they were found to be true, I first engaged in exploratory factor analysis using AGI 87 and AGI 95 to discern possible patterns of variation among women's characteristics at the time of having an abortion. Since all women in these samples are aborters, the result was a "pure" profile of the types and determinants of abortion choices among U.S. women. This profile was then be tested using confirmatory factor analysis on the NSFG 95, following which it was used as a classification rule to derive categories of abortion choices. The usefulness of these categories for understanding abortion behavior is then be elaborated with reference to a range of social correlates and questions about abortion.

ANALYSIS

Exploratory factor analysis was employed to uncover latent dimensions affecting abortion choices. Since the goal was to derive generic, sociological types of abortion choices, variables considered for initial inclusion in the analysis were required to be antecedent "background" variables not directly associated with choices regarding the particular pregnancy in question. Thus, variables such as those about contraceptive use or religious affiliation were ruled out. In addition, variables that were redundant or highly correlated with other variables were dropped or combined. Finally, a comparable measurement of the variable had to exist on all three datasets. Eventually, nine variables were retained in the analysis: number of prior births; number of prior

abortions; age, in years; income, expressed as percent of the Federal poverty level; education, expressed in years attained; and four dichotomous measures of employment status (working full-time vs. not), previous pregnancy, marital status (currently married vs. not), and cohabitation (whether the respondent was currently living with a man to whom she was not married).

For the AGI surveys these variables reflect the current conditions of the respondent as an abortion patient. For NSFG 95, variables were coded so as to be true of the respondent at the time of her most recent abortion, with the exception of the Income variable. The NSFG did not ask about income at the time of each pregnancy, or pregnancy outcome, so I used respondent's current income as the best indicator available. Since over 90% of most recent abortions had occurred within the previous ten years, current income is likely to be an accurate indicator in most cases. For the same reason, the NSFG composite of most recent abortions is fairly synchronous with the two "waves" of the AGI surveys.

Successive factor analyses of the three datasets employed principal components extraction with an orthogonal varimax rotation (although the unrotated solution was very similar) and the commonly accepted criteria for assessing an acceptable solution: for each factor an eigenvalue greater than 1, and for each variable a significant interpretable loading (> .5) on only one factor . Table 1 shows the various models.

Table 1 About Here

In Table 1 factor loadings below .30 are not shown, and those above .50 are in boldface. The order of the analysis reads from left to right. The solutions of the middle two panels (AGI 87 and NSFG 95) employed confirmatory factor analysis to confirm the solution derived in the leftmost panel (AGI 95). In fact the Kaiser criterion extracted the same solution in each dataset without further specification. This was a three-factor solution that explained about 60 percent of the total variance of the nine participating variables.

Factor 1 comprises items that indicate high previous fertility; it loads highly on all of prior births, prior pregnancies and age. This suggests a situation in which children are already present, and abortion is being contemplated as a means of limiting further fertility. A meaningful short label for this factor might be "Family Size" or even "Had Enough Children". Factor 2 loads highly on items that have to do with occupational attainment: employment, education and income. This is clearly a "Career" factor in abortion choices. Factor 3 captures the state of being unmarried and/or not living with the father involved in the pregnancy. These suggest issues of instability or lack of conformity in the relationship that produced the pregnancy. This might be termed a "Relationship" factor.

Despite the differences among these datasets, this solution was highly robust. The patterns of loadings is exactly the same for all three datasets, and the total variance explained varied by less than one percent. Even the strengths of the loadings are strikingly similar. The largest divergence in loading strength between AGI 95 and AGI 87 is only .03 (for cohabitation). Since these two similar samples were drawn eight years apart, this suggests that the factor structure derived is highly stable over time. The largest divergence in loading strength of NSFG 95 from the other two datasets is for Income; as explained above, this variable could not be exactly replicated on the NSFG; nonetheless, the difference is only 1.4.

These three factors appear to define clear and persistent patterns of variance in the background characteristics of women at the time of choosing an abortion. In doing so they provide strong empirical evidence in support of both of the implicit hypotheses of this research. Each variable loads significantly on only one factor, providing direct support for H1. As predicted by H2, the factor structure derived is the same on all three datasets. Both of the theoretical questions about the possibility of carrying out the research project of this study have been answered in the affirmative.

The congruence of these factor solutions also provides confidence that the NSFG 95 under-reporting does not contain significant bias with respect to these correlates of abortion. While fewer aborters (or most recent abortions) are reported in this survey than are known to exist, the patterns of variance in abortion-related circumstances are observed to be identical to on the AGI surveys, which are known to have no nonresponse. Thus we can have a high degree of assurance that the patterns of association involving these factors on the NSFG 95 represents those in the population without significant bias.

The rightmost panel of Table 1 presents a slightly enhanced factor solution on the NSFG 95. While the AGI surveys only asked abortion patients if they had ever been pregnant before, the NSFG contains a full history of previous pregnancies. In this solution the prior pregnancies variable is recoded from dichotomous to interval to take account of this increased information. The result increases total variance explained by 2.6 percent while not altering the basic factor structure extracted.

Classification of Factors

To facilitate further comparisons the factor scores from this model were used to sort cases on the NSFG into three categories corresponding to the three factors of abortion choices. The scores used were those of the final, enhanced solution, although using scores from the third, unenhanced NSFG solution resulted in a nearly identical classification. Cases were classified using the following procedure: Cases were assigned to the group corresponding to the highest positive score on the three factors. If there was no positive score, the case was not assigned. The highest 5% of close assignments (in which there was more than one high positive score) were then disassigned.

Consistent with the known underreporting of abortion in this file, the purpose of this procedure was not to produce an exhaustive grouping of cases by abortion circumstances, but to

identify "pure" types of cases suitable for comparison. Nonetheless, by this method 64% of eligible abortion situations were clearly classified as exemplifying one of the three factors; moreover, the cases were divided fairly evenly among the three groups. Table 2 presents the frequencies. While it cannot be known with precision how comprehensive this classification is, clearly it covers the majority of women who have abortions. It should be borne in mind that this is not a classification of abortions but of aborters, specifically of the circumstances of women at the time of their most recent abortion.

Table 2 About Here

This categorization of abortion types produced a possible unexpected benefit. It appears that the level of under-reporting may be much lower for those abortions that can be classified into one of the three factor groups than for those that remain unclassified. Table 3 compares, for each abortion type, the mean number of total abortions reported using CAPI and A-CASI. As noted above, the NSFG respondents reported 78 percent as many abortions in the CAPI interview as they reported using A-CASI. However, for those whose latest abortion was one of the three classifiable types this proportion was much higher, ranging from 89 to 95 percent. Those whose latest abortion remained unclassified under-reported by 52% from CAPI to A-CASI. Those with a more common reason or an interpretable situation appear to be less likely to under-report an abortion.[3]

Table 3 About Here

Explication of Types

Table 4 presents mean and percentage distributions on selected variables of the three aborter/abortion types, all aborting women, and women who had no abortion. All of these variables are associated with the variables analyzed to produce the typology, and for the most part they vary in ways consistent with the factors derived. The figures for aborters are true as of the time of their most recent abortion; the figures for non-aborters are true at the time of the survey

interview.   Each of these variables exemplifies the contrasting distinctions and increased effects of social factors on abortion choices that this categorization brings to light. Taken together they allow us to describe more thoroughly the characteristics of the different types of abortion choices.

Table 4 About Here

Choices to limit family size by abortion are made, on average, by women who are older than other aborters, have been pregnant twice as often and already have at least two children, are more likely to be in poverty and much more likely to be married, and have already had at least one previous abortion. Career-related abortion choices involve women primarily in their early 20s (not shown) who, on average, are less likely than other aborters to already have a child or have had an abortion before, and have much higher levels of education and income than other women, both aborters and non-aborters. What I have termed Relationship abortions tend to be chosen exclusively by unmarried women who are younger, less educated, more likely working full-time but also more likely to be poor than other aborters. Those familiar with the "hard" and "soft" reasons for abortion described on public opinion polls (for a full discussion see Cook et al. 1992; Sullins 1999; but see Bumpass 1997 for an alternative interpretation) will recognize that two of these types correspond to the "soft" reasons typically given as opinion options. The General Social Survey, for example, asks respondents whether a woman should have access to legal abortion in three "soft" scenarios: ". . .if she is not married and does not want to marry the man?", a situation which corresponds closely to the Relationship type; and ". . .if she is married and does not want any more children?", which generally corresponds to the Family Size type; and ". . .if the family has a very low income and cannot afford any more children?", which is a factor in both Relationship and Family Size abortions.

Interestingly, Career abortions have not been conceived as a likely abortion choice scenario on any public opinion poll to date. This type departs in a number of ways from common

stereotypes or perceptions of abortion choices. Career abortions do not appear to respond to distress so much as protect advantage. Women who choose abortion for career reasons have, on average, already postponed marriage in favor of education and a high-income occupation; they report a higher level of general happiness than other aborters (not shown). The majority who are not married, moreover, have chosen a lower level of relationship with men in general. Of the 82% of career aborters who are not married, none of them are cohabiting; by contrast, 20% of relationship aborters, none of whom are married, are cohabiting (not shown). Pregnancy for them presents not an actual but a potential problem, and is part of a larger deferral of personal life to career success. Thus Career abortions are much more likely to precede children and to involve a woman's first rather than a subsequent pregnancy (not shown).

It is worth repeating that these types should be considered an ideal construct in the Weberian sense, not a numerical assignment of the range of actual abortion choices. Their intended purpose is to reveal distinctions and linkages in the social behavior of making abortion choices. The implied motivations ascribed to each type are obviously more "pure" than exist in real life, and there is some overlapping of effects, but the discrimination of social factors is on the whole quite strong. This classification, moreover, only typifies the most recent abortion. Since most aborters report more than one abortion, it is possible, indeed likely, that any given aborter will have had more than one type of abortion at different points in her life.

The following paragraphs examine in turn, in light of this new categorization, some sets of social factors of interest in previous research in this area--age, education, race, and marital status. The purpose of doing so is to suggest both continuities with that research and new insights stimulated by a more multi-faceted understanding of abortion decisions. The general form of these examinations is to show that a weak or apparent summary effect on all abortion decisions discovered by previous research can be specified into much stronger or quite different effects on

different types of abortion decisions. Each of these topics, of course, involves other complicating factors that must be truncated in a brief discussion such as this, and none of these examinations should be considered in any way exhaustive.

Age

The average age at the time of the most recent abortion is 22.5 years. Previous research has consistently found that about half of all (most recent) abortions are chosen by women in their twenties, with one-third of abortions occurring at age 20-24. This is also true in these data, but the distribution varies greatly by abortion type. As one would expect, the mean age for Family Size abortions is much higher than average, at 28 years, and that for Relationship abortions is much lower, at only 20 years. Figure 1 specifies these distributions further. As one would expect, virtually no Family Size abortions occur to women in their teens; such a choice presumes previous children and pregnancies, which is much less likely to be the case for younger women. 30 percent of these abortions are chosen by older women in their 30s and 40s. By contrast, over half of all abortions associated with problem relationship factors are chosen by women under age 20, and only 2 percent by women over age 30. Presumably problem relationships tend to be resolved or dissolved as women get older. Since the proportion of each abortion type is roughly similar, Figure 1 suggests generally that, among the three classified types, women in their teens are most likely to choose abortions due to relationship factors, somewhat less likely because of career factors, and almost never in order to limit family size. The opposite sequence of probabilities applies to women over age 30. The lines connecting related bars on Figure 1 illustrate these effects. These effects should only be considered suggestive due to the under-reporting of abortion incidence in these data. The distribution of the unclassified abortions suggests that the diversity of motivations for abortion is much larger for younger women than for older ones. It also suggests

that these abortions, like Relationship abortions, are largely chosen in response to problematic circumstances that diminish in likelihood as women age and mature.

Figure 1 About Here

Education

Previous research has found a weak positive effect of education on the tendency to have an abortion. Henshaw and Kost (1996) found, for example, that the age-standardized index of abortion incidence increased from .84 for those not completing 8th grade to .93 for college graduates. In the corresponding 1988 study educational effects were not even reported. Similarly, the single-order correlation of years of education with abortion rate on the NSFG is .11. Mean years of education for aborters, at 13.0, is slightly higher than for non-aborters, at 12.3. 14.2 percent of non-aborters, compared to 14.8 percent of aborters, have attained college degrees.[4] Like many educational effects, much of this slight variation is captured in the attainment of degrees. On the NSFG fifteen percent of those who have not completed high school have had an abortion. This jumps to 22 percent of those who have completed high school or college (but no higher degree), then rises further to 29 percent of those attaining the PhD. These overall differences, however, vary dramatically by abortion type.

Table 4 illustrates these differences with figures on college attainment. The percentages shown are the proportion of each type whose highest educational attainment is the B.A. or equivalent degree. Not surprisingly, career aborters have much higher attainment on this measure than the other two types. The relationship of education to abortion is actually much more complicated than this, or than is generally acknowledged, since it is conflated with the tendency of women in school to delay pregnancy and marriage. Its effect appears much weaker than presented here when standardized for age, but much stronger when standardized for pregnancy. A full analysis of this interaction lies beyond the scope of this paper; my purpose here is simply to show

that a consideration of type of abortion strongly specifies an otherwise apparently weak effect of education on abortion choice.

Race

It has been commonly noted that a higher proportion (29%) of blacks have had an abortion than of hispanics or whites, at 20 percent and 19 percent respectively. But the types of abortions that hispanics have are more similar to those of blacks than of whites. A quarter of hispanic and black aborters, but only 15% of white ones, had their most recent abortion due to Family Size. By contrast, for thirty-one percent of whites, but only 15% of blacks and 12% of hispanics, the last abortion was due to career issues. The proportion of Relationship abortions is roughly similar for all three racial groups.   Hispanics who do abort report an average of 1.7 abortions each, the same number as blacks, but substantially higher than the corresponding number for whites (1.4). These averages may reflect differences in reporting rather than having abortions. Likewise, the number of prior births (1.2) and pregnancies (2.2) at the time of the last abortion reported by blacks and hispanics is identical, and significantly higher than those reported by whites (at .6 and 1.6 respectively). Except for the summary incidence of abortion, then, the abortion behavior of hispanic women is much more like that of blacks than whites.

Marital Status

Table 4 reports that 15.3 percent of aborters are married. This finding is consistent with prior research using the AGI data, which finds that married women account for about 18 percent of abortion patients (Henshaw and Silverman 1988; Henshaw and Kost 1996). This is much less than in the general population, and is interpreted to mean that marriage decreases the likelihood of abortion.   Considering the different types of abortion and marriage behavior subsequent to abortion, however, reveals that the relationship of abortion to marriage patterns is much more complicated and interesting. While marriage may decrease the likelihood of abortion, abortion has

no overall effect on the likelihood of marriage: thirty-one percent of both aborters and non-aborters (not shown) report that they have never married. Figure 2 compares the percentage, for each abortion type, of those who were married at the time of the last abortion, who are currently married, and who are currently never married. The marital history is very different for each abortion type. Although only 18 percent of career aborters, less than half the proportion of family size aborters, were married at the time of their most recent abortion, a higher proportion of them are currently married (61%) than of any of the other abortion types, or, in fact, of those who have never had an abortion (55%, not shown). In the case of career aborters it is more accurate to say that abortion has a positive effect on marriage than that marriage has a negative effect on abortion. As noted above, career abortions appear to be chosen in order to enhance already high social capital. Both family size and career abortions, moreover, reduce the probability of never having married. The same is emphatically not true for those aborting for relationship reasons. Although nearly 40 percent of them have married subsequent to their last abortion, an even higher proportion (44 %), half again higher than that overall, have remained unmarried. Like the other effect examined, marriage patterns vary significantly and in interpretable ways by the three abortion types.

Figure 2 About Here

Other Factors

A point sometimes argued in prior research is the apparently pro-natal effect of having abortions. It is noted that women who have had abortions tend to eventually bear more children(?), or that "women who have had a live birth are more likely to have an abortion than are those who have never had children" (Henshaw and Kost 1996). On the whole, the findings in Table 4 confirm that aborters do have slightly more children (.9) on average than non-aborters (.8). However, again on the whole, aborters have more than three times as many pregnancies as those

who have never had an abortion. The majority of both the increased births and pregnancies is concentrated among Family Size aborters. These women, who are more advanced in their fertility, have had on average over twice as many pregnancies, births, and abortions as all other women who have abortions. Ninety-eight percent of them (vs. 48% of career and 63% of relationship aborters) have more than 2 pregnancies. All other classes of aborters have much lower natality than non-aborters. The slight overall increase in natality among aborters, then, is due to greatly increased fertility among a minority of aborters.

Overall, the percentage of aborters who are employed (70%) is more than double that of non-aborters (33%). Significantly, a higher proportion of Relationship aborters were employed at the time of their most recent abortion than were Career aborters, and more than average were in poverty. On the other hand, Family Size aborters, more of whom were in poverty, were much less likely to be employed. In contrast to the other variables examined in this study, and while there is some variation, the effects of employment remain persistent and strong regardless of abortion type.

Prior research has also found at best a weak negative relationship of income with abortion rates. Henshaw and Kost (1996) found an elevated likelihood of abortion among the very poorest women, augmented by participation in Medicaid. High income reduced the probability of abortion by half. On a more macro level Mathews et al. (1997) found that "economic factors showed no consistent relationship with abortion rates." The analysis here, limited by the inaccuracy of the income measure, also suggests that the overall relationship of abortion and income is very slight. However, the effect is split among abortion types, at least on the lower end of the income scale. While increased probability of poverty status is associated with Family Size and Relationship abortion choices, higher income is a positive factor in Career abortions.

Conclusion

      In service of developing a sociological understanding of abortion, this paper seeks to advance a very simple idea: not all abortion choices are the same. If reproductive choice is truly choice, then having an induced abortion cannot be seen simply as a demographic component of fertility. As any other human choice, it must partake of the complexity and variety, as well as the regularity and predictability, of all voluntary human behavior. In order to properly understand the influence of social forces on this area of human choice, then, we must endeavor to discern the diversity as well as similarity of those choices that result in abortion. Only then can we begin to make sense of the social circumstances that influence the choosing of abortion in America.

      This research has demonstrated that there are at least three types of abortion choices or circumstances, which vary significantly by typical social indicators, and which specify the variation of such indicators on abortion choices in interpretable ways. While abortions to limit the size of larger families and in the context of unstable relationships are not new ideas, abortions chosen not to impede the course of upwardly mobile careers have not been widely acknowledged. In many ways career aborters do not fit the typical profile of women who experience unwanted pregnancy. Closer examination of all the abortion types, but particularly the career aborters, is likely to stimulate new thinking about how and in what context abortion choices are made.

      The findings of this study are also limited by the lack of any consideration of the relations among the determinants of abortion decisions. A multivariate analysis of the characteristics of aborters, which attempts to derive a general sociological model of abortion decisions, would significantly advance the state of research in this area. The present study is conceived as a necessary preliminary to that attempt.

      It is my hope that the specific abortion typology developed in this study will superseded by further research. Such a development would affirm the more important theoretical insight that

abortion choices vary sociologically in important ways. The particular pattern of such variation observed in this study is less likely to persist in the face of clearer and more extensive analyses than could be provided here. Likewise those social circumstances examined in this study were necessarily very limited in scope and depth of analysis. The increased variation and specification of overall effects that were observed in connection with all of them serves primarily to suggest that further investigation along the same general lines, that is, by making such distinctions, is likely to be fruitful. This is particularly true, in my opinion, with regard to education, religion and family background.

The findings of this study also suggest that a life cycle or life history approach to abortion choices in future research will be productive. The variety of fertility patterns among abortion types suggests that pregnancy-specific analyses of abortion choices or (alternatively) type-specific analyses of fertility history are likely to be fruitful strategies to increase our understanding of abortion choices further. Both of these approaches, moreover, would move in the direction of comprehending abortion choices not as unique, emergent occasions but as part of a (conscious or unconscious) life strategy of family formation on the part of each fertile woman.

NOTES

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[1] The journals, searched electronically by JSTOR in June 2000, are : *American Journal of Sociology*, *American Sociological Review*, *Journal of Black Studies*, *Journal of Health and Social Behavior*, *Public Opinion Quarterly*, *Sociology of Education*, *Sociometry*, *Contemporary Sociology*, *Journal of Health and Human Behavior*, *Social Psychology*, *Social Psychology Quarterly*, *Annual Review of Sociology*, and *Journal of Educational Sociology*.

[2] Throughout this paper I refer to women who have had abortions as "aborters" and those who haven't as "non-aborters". The purpose of this is simply to increase clarity by avoiding the endless awkward constructions and stylistic entanglements involved in using longer circumlocutions to refer to these groups in repeated comparisons. Since there is a one-to-one relationship of most recent abortions to aborters, in comparing types I may also use these concepts interchangeably.

[3] It is also possible that they are simply more persistent in their under-reporting. This interpretation, however, is unlikely given the congruence of the underlying factor structure with those datasets in which there was no under-report.

[4] These small differences are all statistically significant at .01 with 2-tailed tests.

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TABLE 1

VARIMAX ROTATED SOLUTIONS FOR NINE SES VARIABLES IN THREE DATASETS OF WOMEN HAVING ABORTIONS

Dataset	AGI 95			AGI 87			NSFG 95			NSFG 95*		
Percent variance explained	(59.8)			(59.8)			(59.2)			(61.8)		
Variables	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
Ever pregnant before?	**.82**			**.84**			**.83**			**.91**		
Number of prior births	**.76**			**.77**			**.72**			**.76**	-.37	
Age	**.72**	.36		**.71**	.40		**.79**			**.77**		
Number of prior abortions	**.63**			**.63**			**.57**		.33	**.62**		.35
Income		**.65**			**.65**			**.79**			**.78**	
Education		**.78**			**.78**			**.75**			**.75**	
Employment status		**.68**			**.65**			**.56**			**.57**	
Cohabiting with the father?			**-.77**			**-.74**			**-.72**			**-.69**
Marital status	.32		**-.75**	.38		**-.74**	.45		**-.64**	.41		**-.66**

Table 2

Types of abortion choices

		Frequency	Percent
Valid	Family Size	423	18.6
	Career issues	530	23.3
	Relationship issues	511	22.5
	Unclassified	812	35.7
	Total	2276	100.0

Source: NSFG 1995

TABLE 3

UNDER-REPORTING OF TOTAL ABORTIONS BY (LATEST) ABORTION TYPE

Type of (latest) abortion	Mean total abortions (CAPI)	Mean total abortions (A-CASI)	CAPI to A-CASI under-report (%)
Family size limit	1.94	2.15	.90
Career issues	1.23	1.30	.95
Relationship issues	1.44	1.62	.89
Unclassified	.72	1.39	.52
All	1.23	1.56	.78

TABLE 4

Selected Characteristics at Most Recent Abortion, by Abortion Type
(shows mean unless indicated)

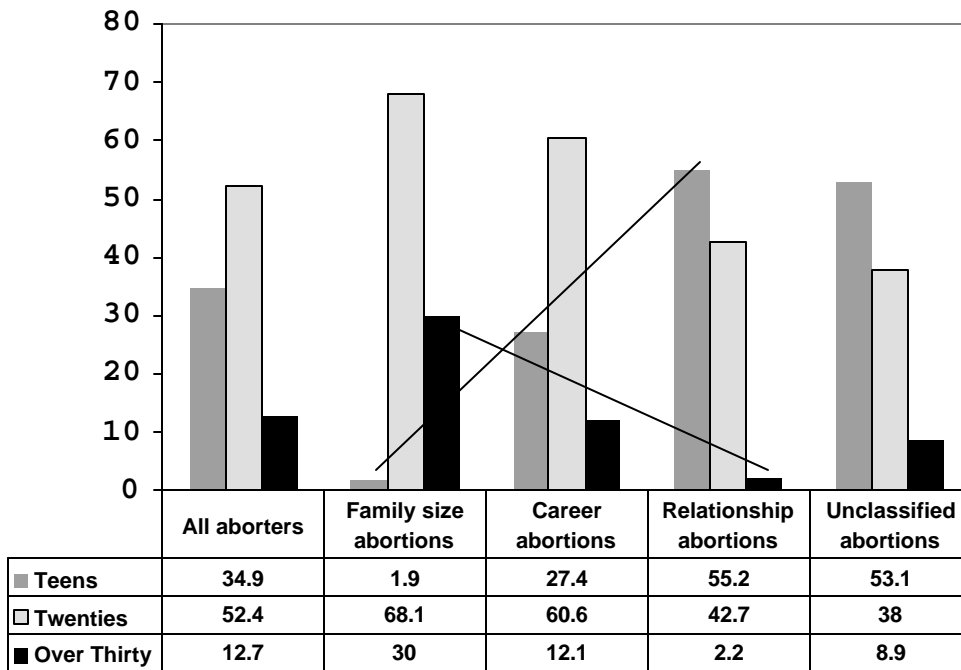| Characteristic	No abortion	All aborters	Family Size	Career	Relationship	Unclassified
Age	--	22.5	27.2	23.0	19.7	20.7
Prior Abortions	0	.6	1.2	.3	.6	.4
Prior Births	.8	.9	2.1	.2	.3	1.1
Prior Pregnancies	.6	1.9	4.4	1.4	1.8	1.0
Employed (%)	33.0	70.0	53.0	87.7	89.2	41.1
Poverty (%)	17.0	17.1	27.0	3.0	19.2	19.8
B.A. degree (%)	14.2	14.8	7.6	33.8	4.1	12.9
Married (%)	54.8	15.3	46.8	17.7	0.2	6.9

Source: NSFG 1995.
"--" indicates the item does not apply.
The "No Abortion" column shows data at time of most recent pregnancy.
The "Poverty" row shows data at time of interview.

Figure 1
Age Distribution by Abortion Type

	All aborters	Family size abortions	Career abortions	Relationship abortions	Unclassified abortions
■ Teens	34.9	1.9	27.4	55.2	53.1
□ Twenties	52.4	68.1	60.6	42.7	38
■ Over Thirty	12.7	30	12.1	2.2	8.9

■ Teens □ Twenties ■ Over Thirty

Figure 2
Marital Status at Abortion and Current Marital Status,
by Abortion Type (in percent)

	All aborters	Family size abortions	Career abortions	Relationship abortions	Unclassified abortions
■ Married at abortion	15.3	46.8	17.7	0.2	12.9
□ Currently married	48.7	44.7	61.1	39.5	48.5
■ Currently never married	31.1	19.4	23.8	44.4	33.6
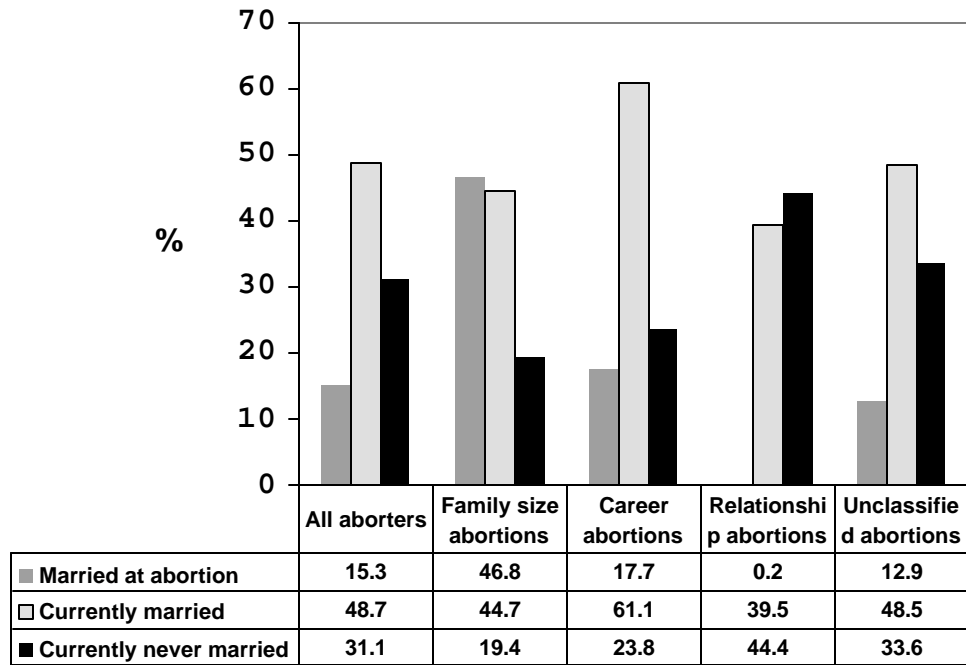
■ Married at abortion □ Currently married ■ Currently never married

TABLE 4

Selected Characteristics at Most Recent Abortion, by Abortion Type
(shows mean unless indicated)

Characteristic	No abortion	All aborters	Family Size	Career	Relationship	Unclassified
Age	--	22.5	27.2	23.0	19.7	20.7
Prior Abortions	0	.5	1.0	.2	.5	.4
Prior Births	.8	.7	2.0	.2	.3	.4
Prior Pregnancies	.6	1.3	3.4	.5	.8	.9
Employed (%)	33.0	70.0	53.0	87.7	89.2	41.1
Poverty (%)	17.0	17.1	27.0	3.0	19.2	19.8
B.A. degree (%)	14.2	14.8	7.6	33.8	4.1	12.9
Married (%)	54.8	15.3	46.8	17.7	0.2	6.9

Source: NSFG 1995.
"--" indicates the item does not apply.
The "No Abortion" column shows data at time of most recent pregnancy.
The "Poverty" row shows data at time of interview.