CONTRACEPTIVE USE AMONG AMERICAN JEWISH FAMILIES[1]

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Introduction

Over the last several decades, research in the United States has demonstrated that Jews have lower fertility than the American population as a whole or other ethnic groups. Major fertility surveys, data from official government sources, national and local Jewish community studies have confirmed this observation consistently for a wide range of fertility and fertility-related measures. Indicators of fertility norms, desires, expectations, actual family size, annual birth and reproduction rates all point in the same direction: American Jewish couples want, plan, and have small families. Fertility among Jews is low in absolute level as well as relative to other religious, ethnic, and racial groups in the United States (see Goldscheider, 1982; Goldstein, 1981; DellaPergola, 1980).

These findings are neither new not unexpected, given the general socioeconomic, family, and residential characteristics of American Jews. Some have argued that particular features of the Jewish community play some role in accounting for low fertility beyond socioeconomic characteristics. There is no clear consensus among social scientists as to what are these particular features and there has never been a systematic test of alternative theories explaining Jewish fertility.

There are related issues involved that have received far less attention, primarily because of the absence of readily available data. One of these issues is to specify the intermediate mechanisms linking fertility to Jewish social structure. Generally, the assertion has been that Jews want small families and have them by using contraceptives efficiently. Some evidence supporting this assertion has been reported in the literature and some analyses of other intermediate mechanisms (particularly nuptiality patterns) have been carried out. Yet a careful examination of this literature reveals that much more systematic research needs to be undertaken to clarify the nature of these mechanisms and to specify their links to fertility and to Jewish social structure.

The objective of this paper is to explore one of the mechanisms involved in American Jewish fertility that has not hithertofore been examined in any depth -- contraceptive usage. National surveys of family planning and fertility have identified the high level of contraceptive use among American Jewish women and their efficient use of the most efficient methods to attain their desired family size. Nevertheless, the small number of Jewish women included in these surveys has limited the analysis

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of these data. In particular, two major analytic issues have not been addressed: (1) what are the variations in the type of contraception used among American women; (2) to what extent are Jewish-non-Jewish differences in contraceptive usage related to socioeconomic factors or to other uniquely Jewish characteristics.

Previous Research and Data Source

The analysis of contraceptive practices among American Jews suffers from the same data limitations associated with the study of American Jewish fertility (see Goldscheider, 1982). However, whereas the study of the fertility patterns of American Jews has been enriched by data collected in national and local Jewish community surveys, hithertofore, no Jewish community study has included questions on contraceptive practices nor was this information collected in the National Jewish Population Survey. What has been known about contraceptive practices among American Jews is very limited and only a very general portrait can be pieced together from previous research.

The first sets of data relating to the question of contraceptive use in the United States were based on clinical and hospital records and have serious methodological limitations. Nevertheless, the findings reported are suggestive and of historical interest. In New York City, for example, an investigation of the records of a birth control clinic, 1931-32, showed that a higher proportion of Jewish couples used more effective birth control methods and began their use earlier in marriage than non-Jewish couples (Stix and Notestein, 1940). A more extensive survey of family planning practices in urban hospitals east of the Mississippi in the early 1930's included almost 3,000 Jewish women in the sample. The analysis of those data revealed that Jewish women were exceptional in their contraceptive practices. The author notes:

> The most striking and significant result that emerges from the data...is the much higher proportion of contraceptive effort among the Jews than among the women of any other religious class...the Jewish women far outranked all other classes in the proportion of contraceptors to all women (Pearl, 1939, p. 242).

This same theme was echoed in greater detail in the first national survey of family planning undertaken in the United States. In the 1955 Growth of American Families study, the proportion contraceptive users was highest among Jews; 95 percent of all fecund couples were "users" of contraception. Moreover, almost three-fourths of the Jewish women used only the most efficient contraceptives compared to 14 percent of the Catholics and 45 percent of the Protestants (Freedman, Whelpton, and Campbell, 1959, p. 104 and p. 181, Table 6-3). When the sample of Jewish women was precision-matched with Protestants and Catholics on a variety of socioeconomic and other background variables, Jews continued to differ in their contraceptive usage patterns (Freedman, Whelpton and

Smit, 1961, Table 1, p. 610).

At about the same time, the first phase of the Princeton longitudinal fertility study interviewed couples who had a second child in 1956. In examining the small number of Jewish couples included, the authors conclude:

> The degree to which Jewish couples practice more effective contraception than either Protestants or Catholics both in the periods preceding and following first pregnancy strains credulity. Not only do the Jewish couples of this sample rely more exclusively on the most effective methods, but they apparently manage these methods with unusual efficiency (Westoff, et al, 1961, p. 102).

The pattern of high levels of contraceptive usage, efficiency in use, and low proportions of "unwanted" births continued to be reported throughout the 1960's and 1970's. But the small number of cases in national studies precluded the detailed analysis of contraceptive use among Jews and added little substantive information. Indeed, the 1965 and 1970 National Fertility Surveys in the United States noted the small sample size of Jews included and the unreliability of the estimates. Hence, Jews were lumped together with other non-Catholics and no data on contraceptive usage were presented (Ryder and Westoff, 1971, p. 70; Westoff and Ryder, 1977, p. 282).

Against this background of limited national contraceptive usage data among U.S. Jews, there is an absence of questions on contraception included in national and local Jewish community studies. In this regard, the Boston Survey of 1975 is unique. It included a question on contraceptive usage for both the Jewish and general samples. The specific question related to the contraceptive method usually used by the respondent (and/or spouse) and was addressed only to currently married women born after June 30, 1930, living with spouse. There were 246 eligible Jewish respondents and 271 eligible non-Jewish respondents.

There is no need to elaborate on the methodology of the Boston survey of 1975 since this has already been published (Fowler, 1977). It is sufficient to note that the surveys covered the Jewish and general populations resident in the Boston metropolitan area as of 1975. The Jewish sample consisted of two segments: (1) a random selection from lists of Jewish households known to the Combined Jewish Philanthropies of Greater Boston (the organized institutional unit of the Jewish community) and (2) a general sample of almost 4,000 households in the Standard Metropolitan Statistical Area (SMSA) of Boston from which an additional sample of Jewish (and non-Jewish) households was obtained. A weighting procedure was used which allowed for the combination of these two sources to yield an unbiased sample of the Jewish population. A sample of the general population of the Boston SMSA was also inter-

viewed. The data reported in this paper are based on subsets of the Jewish and general samples which meet the criteria of eligibility noted earlier.

The major limitation of these data is the relatively small number of cases available for detailed analysis. Nevertheless, the absence of prior research on type of contraceptives used for an American Jewish community and a comparable non-Jewish sample argued for the exploitation of this unique data source. The detailed background data, particularly on education, income and religiosity further enhance the quality of these data.

Contraceptive Use: Overall Pattern

The first issue that can be addressed with these data relates to the extent of contraceptive usage among Jewish and non-Jewish couples. Consistent with the previous literature, only six percent of eligible Jews responded that they usually did not use contraceptives. This compares to 21 percent among non-Jewish couples. Part of this difference reflects the differential onset of contraceptive use and the desire among selected parts of the sample to have children. Nevertheless, the fact that 94 percent of the Jews usually use some contraception to plan and space pregnancies implies the very high degree of "family planning" among Jewish couples.

The more detailed data on type of contraceptive usually used are more instructive. Data in Table 1 show the distribution of contraceptive usage for various religious groups. Among women, aged 18-45, Jews differ from non-Jews in two conspicuous ways: first, a smaller percentage of Jews use the Pill or an intra-uterine device (IUD) than non-Jews. Second, a significantly higher proportion of Jews are sterilized(2) when compared to homogamously married Protestants and Catholics or the total non-Jewish sample. Details not shown in the table reveal that of the sterilized Jews, 44 percent represented vasectomies, compared to 53 percent among non-Jews. The fact that over one out of five Jews was sterilized compared to one out of ten Catholics and one out of eight Protestant is a significant indication of the extent of family size control exercised by Jews. These percentages vary by duration of marriage and age but the basic finding is not solely accountable by duration and age differences among religious groups.

If we add together the most effective methods of contraception (Pill-IUD-sterilization), no differences appear among the various religious groups -- a little over 60 percent of couples in 1975 usually use effective means of contraception. This overall sameness for Jews and

(2) Sterilization includes vasectomies and tubal ligations and refers to a voluntary contraceptive method reported by the respondent. There is no way in these data to separate out sterilization for non-contraceptive purposes.

Table 1. Type of Contraceptive Used by Religion: Boston Metropolitan Area, 1975

Religion	N	Total percent	Pill	IUD	Condom	Diaphragm	Sterilization[a]	Natural[b]
Jewish	231	100	39		18	17	22	5
Catholic	113	100	50		18	9	11	13
Protestant	60	100	50		12	18	13	7
Mixed Jewish	26	100	46		19	11	19	4
Mixed Non-Jewish	37	100	46		19	3	24	8
Total Non-Jewish	215	100	49		16	11	13	10

(a) Sterilization includes vasectomy or tubal ligation.
(b) Natural methods include rhythm or withdrawal.

Table 2. Type of Contraceptive Used by Religion and Marriage Cohort: Boston Metropolitan Area, 1975

Cohort and Religion	N	Total percent	Pill	IUD	Condom	Diaphragm	Sterilization	Natural
Married 1949-59								
Jewish[a]	96	100	26		22	12	38	3
Catholic	22	100	18		41	0	9	32
Total Non-Jewish	39	100	15		33	10	21	21
Married 1960-65								
Jewish[a]	67	100	42		12	18	22	6
Catholic	23	100	61		9	4	13	13
Total Non-Jewish	36	100	47		8	8	22	14
Married 1966-75								
Jewish[a]	98	100	53		18	19	4	5
Catholic	68	100	56		13	13	10	7
Total Non-Jewish	139	100	60		14	12	9	6

(a) Includes a small number of mixed-Jewish couples. The basic pattern remains the same for couples where both spouses are Jewish.

non-Jews obscures the particular emphasis of Jews on sterilization, with the greater reliance on the Pill and IUD among non-Jewish couples. Among non-Jews, as might be expected, Catholic couples are more likely than other religious groups to use "natural" methods of contraception -- particularly rhythm. A final point emerging from these overall data suggests that mixed Jewish couples (i.e., couples where only one partner is Jewish) are more similar in their contraceptive usage patterns to mixed non-Jewish couples (Protestants married to Catholics) or to homogamously married Protestants or Catholics than to homogamously married Jews. The small number of cases precludes more detailed analysis of this group.

Although the level of sterilization among Jewish couples is relatively high compared to non-Jewish couples in the Boston area in 1975, the level appears to be lower than among the white population of the total United States in 1975. The National Fertility Study in the United States in 1975 estimated that over 25 percent of continuously married white couples was sterilized (Westoff and Jones, 1977, Table 5). A somewhat higher figure for currently married white women aged 15-44 was reported in the National Survey of Family Growth of 1976 (Ford, 1978, Table 2). While some may argue that these comparisons show that Boston's population is unique, more data would be necessary before we accept that conclusion uncritically. There are many differences between the Boston and the national surveys. These include the wording of the contraceptive question (in the Boston sample the question was on contraceptives *usually* used; in the national surveys the question related to *current* use), the sub-population addressed (currently versus continuously married and with different age-duration specification), and the context of the questionnaire (a single question on contraception in the context of health and religion in contrast to a battery of questions in the context of fertility and reproductive histories). The lesson to be learned is not necessarily that the Boston population is unique but that comparisons of disparate data sets are most problematic. More positively, it argues strongly for the exceptional value of the Boston data, since direct comparisons may be made with identical data sets addressed to the Jewish and non-Jewish populations -- in the same community context, at the same time, with the identical questions, and similar staff and processing procedures.

Clearly, contraceptive usage varies by duration of marriage and age. To examine the issue of religious differences in the use of contraceptives and to analyze the impact of marriage duration and age of women on contraceptive usage among religious groups, we turn to the data in Table 2. For couples married in the 1966-75 period, over half use the Pill or IUD as contraceptives. Jews of this marriage cohort differ only slightly from non-Jews in their greater use of the diaphragm and condoms but the overwhelming similarity among religious groups is most striking. The greater use of the diaphragm and condoms among Jews also

characterized the 1960-65 cohort. The most striking difference in contraceptive usage among religious groups characterizes the 1949-59 cohort.-- fully 38 percent of Jews in that cohort are sterilized compared to 21 percent of the non-Jews (9 percent of the Catholics). In addition, over one-fourth of the Jews usually use the Pill or IUD. Thus, almost two-thirds of the Jewish couples of the 1949-59 cohort use the most efficient contraceptive methods compared to 27 percent of the Catholics and 36 percent of the total non-Jewish sample. Considering that 32 percent of the Catholics (and 21 percent of the total non-Jewish sample) use "natural" methods of contraception compared to only 3 percent of the Jewish couples of this marriage cohort, it is not surprising that effective family planning is so much higher among Jews.

When the cohort comparisons are made within religious groups, patterns of change may be inferred. The more recent marriage cohorts of Jews are much more likely to use the Pill or IUD than older marriage cohorts (53 percent of those married 1966-75 compared to 42 percent of those married 1960-65 and 26 percent of those married 1949-59). The reverse characterizes patterns of sterilization -- 38 percent of Jews married 1949-59 is sterilized compared to 22 percent of the 1960-65 cohort and 4 percent of the most recent cohort. Hence, the trade-off by duration for Jews seems to be between the Pill-IUD for shorter marriage durations to sterilization for the longer marriage durations. No significant variation in sterilization patterns characterized the non-Jewish marriage cohorts 1949-59 and 1960-65, although a higher proportion of the 1960-65 cohort use the Pill or IUD than the 1949-59 cohort.

These data by marriage cohort are reinforced by similar patterns in Table 3 by age of women. Fully 40 percent of Jewish women aged 40-45 are sterilized (or their spouses are sterilized), a significant increase over women aged 30-40 and higher than for non-Jewish women. Similarly there is a sharp decline by age among Jewish and non-Jewish women in the use of the Pill or IUD (among Jews the decline is from 56 percent to 20 percent from the youngest to the oldest ages; and from 65 percent to 14 percent for non-Jewish women).

Taken together, these data suggest that the distinctive contraceptive usage patterns characteristic of the older marriage cohorts of Jews do not characterize the more recent marriage cohorts. For a variety of reasons it appears that sterilization is becoming the most popular method for those who have completed their desired family size, substituting for the effective use of the Pill or IUD among younger women of shorter marriage durations (cf. Westoff and Ryder, 1977 for similar conclusions for the total U.S. population).

In addition, Jews appear to have represented the model of efficient contraceptive usage for non-Jews. But that has characterized the past and older cohorts. Few systematic differences in contraceptive usage among religious groups emerge for the recent cohorts and for younger wo-

men. In this sense, Jews foreshadowed the contraceptive practices of Protestants and Catholics, but couples married in the mid-1960's have "caught-up" to the Jewish model (cf. Westoff and Jones, 1980 for a similar argument about Catholic fertility convergences).

A note of caution needs to be added: whether these data by marriage cohort and age show patterns of change or life cycle effects cannot be determined. Nor can we know whether the younger, more recently married, generation will continue to exhibit similarities in contraceptive usage as they age and their marriage durations increase. Nevertheless, the evidence points to the fact that the older pattern of reliance on "natural" methods has changed among non-Jews and the emphasis among all couples married in the late 1960's and the mid 1970's is to use efficient methods of contraceptive, to plan the number of children, and space efficiently between children. To the extent that differences among religious groups remain, they should be sought in the number of children desired and the timing of contraceptive use and childbearing. The data presented suggest that differences in the type of contraceptive used (i.e., in the specific means and techniques used to attain desired family size and spacing) have become less important. Religious differences in fertility in the 1970's (in contrast to earlier periods) seem to be less reflective of differential desires for specific family size targets. In this sense, if American Jews have smaller families than non-Jews it is because they want small families not because they are more efficient contraceptors than non-Jews. Hence, our analytic question must focus on the determinants of those family size desires not on the differential level of "unwanted" children among Jews and non-Jews.

Variation in Contraceptive Use Among Jews

The revolutionary changes in contraceptive usage toward relatively similar levels of use of efficient methods for all religious groups and the relatively high level of sterilization among the longer duration cohorts of Jews raise the question about variation in contraceptive use among Jewish families. To my knowledge, no previous study has addressed this issue. We shall examine briefly data on variation in contraceptive use by religious denomination, education, and income.

Religiosity

Traditional Judaism has emphasized large family size norms and has limited the permissability of mechanical contraception to reasons of health, broadly defined. If judged by the overall low levels of fertility and efficient use of contraception for family size planning and spacing among American Jews, these traditional norms have been largely ignored. Until recently, there had been no reason to postulate that the religious elites of the American Jewish community have viewed is-

Table 3. Type of Contraceptive Used by Religion and Age of Women: Boston Metropolitan Area, 1975

Age of women	N	Total percent	Pill IUD	Condom	Diaphragm	Sterili-zation	Natural
			Jewish Women				
40-45	77	100	20	22	12	40	5
31-39	106	100	43	15	16	23	3
18-30	78	100	56	18	19	0	6
			Non-Jewish Women				
40-45	37	100	14	35	0	30	22
31-39	74	100	38	16	15	20	11
18-30	128	100	65	11	11	8	6

Table 4. Type of Contraceptive Used by Religious Denomination and Marriage Cohort: Jewish Population of Boston, 1975

	N	Total percent	Pill IUD	Condom	Diaphragm	Sterili-zation	Natural
All durations							
Conservative	95	100	34	22	16	23	5
Reform	111	100	42	17	17	21	3
None	48	100	44	15	17	19	6
Married 1949-59							
Conservative	38	100	32	21	8	37	3
Reform	45	100	24	22	11	38	4
None	12	100	8	25	25	42	0
Married 1960-65							
Conservative	27	100	44	19	7	22	7
Reform	26	100	35	8	39	19	0
None	11	100	45	9	0	36	9
Married 1966-75							
Conservative	30	100	27	27	33	7	7
Reform	40	100	68	18	10	2	2
None	25	100	60	12	20	0	8

sues of family size or family planning as high priority. Scattered evidence indicates that American Jews are not aware of these norms or prohibitions. Nor is there any clear fertility ideology or theology in Reform or Conservative Judaism that has been conveyed to those identifying with these denominations (cf. Goldscheider, 1965).

Research carried out in the late 1960's suggests that the relationship between religiosity, defined in a variety of ways, and Jewish fertility is complex. For the older foreign born generation, there seems to be a positive relationship -- the higher the religiosity, the larger the family size. This pattern did not characterize the younger, American born generations. Most importantly, the detailed evidence reveals that when socioeconomic status and social class factors were controlled, family size differences among those identifying with various religious divisions within Judaism narrowed considerably (Goldscheider, 1965). More recent research has confirmed this finding for the specific role of Judaism in fertility behavior and norms but has raised broader questions about Jewish identity and commitments in an ethnic-community context. While the secular nature of religion for modern Jews implies that Judaism as a religion plays a minor role in determining fertility patterns, commitments to the Jewish community and strong Jewish identification may have some influence on childbearing and family roles (Goldscheider, 1982; Goldscheider, 1978; Cohen and Ritterband, 1981; Ritterband and Cohen, 1979; Lazerwitz, 1973; Cheskis, 1980). There is however little or no basis for arguing that such commitments would have an impact on contraceptive usage.

There has been no previous attempt to examine empirically the relationship between religiosity and contraceptive use. Given the weak and unclear empirical relationship between religiosity and fertility behavior and the absence of known theological constraints on contraceptive use for most Jews (exclusive of the more committed and segregated Orthodox), there is little to base hypothesized expectations. In the sample subset that we are focusing on, only six Jews identified themselves as Orthodox -- five usually use the Pill or IUD and the other is sterilized. However, the more detailed data allow us to examine whether contraceptive use varies between Conservative and Reform Jews and whether any distinctive patterns characterizes those who do not identify with any of the three religious subdivisions within Judaism. These data are presented in Table 4.

The non-affiliated are more concentrated among the more recently married and hence the pattern for all marriage durations is distorting. While the proportion sterilized for all marriage durations combined is about the same for Conservative, Reform, and non-affiliated Jews, it is somewhat higher for the non-affiliated among the two older marriage cohorts. Almost 40 percent of those marrying 1949-65 who do not currently identify with one of the religious divisions within Judaism is sterilized compared to 31 percent among Reform and Conservative Jews. The Reform

and non-affiliated are similar in their contraceptive use pattern among the more recently married, while Conservative Jews are more likely to use the condom and diaphragm than the Pill or IUD.

Overall there are no outstanding patterns and the numbers are relatively small in particular cells. Even without controlling for socioeconomic status, it seems fair to conclude that few systematic patterns emerge that require explanation.

Education and Family Income

In general, the more educated use more efficient methods of contraception. This is particularly true for the use of the Pill and IUD. With regard to sterilization, there tends to be an inverse relationship to educational level -- the least educated have the highest proportion sterilized, and this is especially the case for tubal ligations. In this view, sterilization is more characteristic of non-effective contraceptors, the last resort for less educated women (see Westoff and Ryder, 1977, p. 121; Bumpass and Presser, 1973).

These patterns characterize the Jewish population as well (Table 5). Overall, college educated women are more likely to use the Pill and IUD (47 percent) while the least educated women are least likely (26 percent). Similar contrasts describe the relative use of the diaphragm (more educated) compared to the condom (less educated). Consistent with the general literature, and striking in its empirical confirmation, is the relationship between sterilization and education among Jewish women. Fully 38 percent of the Jewish women with only a high school education is sterilized compared to 9 percent of those with at least some graduate school education. Part of this sharp educational difference in sterilization levels reflects marriage duration differences but even within marriage duration categories the relationship may be observed and the differences are quite large: over half of the least educated women married 1949-59 are sterilized compared to 27 percent of those with a graduate school education; 23 percent of the high school educated women married 1966-75 is sterilized while none of the more educated is sterilized.

Among the recent marriage cohort (1966-75) 75-85 percent of the more educated Jewish women use the Pill, IUD or diaphragm, while the less educated are more likely to use the Pill-IUD or use the condom.

A final contrast relates to contraceptive use among Jewish and non-Jewish women within educational categories. The data show that contraceptive differences remain when differential educational and duration of marriage patterns are controlled. The level of sterilization remains higher among Jews at all educational levels, while the use of natural methods of contraception among non-Jews is largely an older cohort pattern among less educated women. For the most recently married cohort (1966-75), differences in contraceptive use between Jews and non-Jews

Table 5. Type of Contraceptive Used by Religion, Women's Education, and Marriage Cohort: Boston Metropolitan Area, 1975

Education	N	Total percent	Pill	IUD	Condom	Diaphragm	Sterilization	Natural
					Jewish Women			
All Durations								
High School	50	100	26	20	8	38	8	
Some College	59	100	39	25	12	22	2	
College Grad.	95	100	44	15	17	19	5	
Grad. School	57	100	47	14	26	9	4	
Married 1949-59								
High School	27	100	22	11	11	52	4	
Some College	24	100	25	42	4	29	0	
College Grad.	30	100	27	17	17	37	3	
Grad. School	15	100	33	20	13	27	7	
Married 1960-65								
High School	10	100	20	30	10	20	20	
Some College	20	100	35	10	25	30	0	
College Grad.	22	100	45	5	14	27	9	
Grad. School	15	100	60	13	20	7	0	
Married 1966-75								
High School	13	100	38	31	0	23	8	
Some College	15	100	67	20	7	0	7	
College Grad.	43	100	56	19	19	2	5	
Grad. School	27	100	48	11	37	0	4	
					Non-Jewish Women			
All Durations								
High School	124	100	44	22	5	15	14	
Some College	55	100	42	11	15	24	9	
College Grad.	41	100	63	7	17	10	2	
Grad. School	19	100	58	16	21	0	5	
Married 1949-59								
High School (a)	32	100	16	28	3	28	25	
Some College	13	100	8	38	23	23	8	
Married 1960-65								
High School (a)	25	100	44	16	4	16	20	
Some College	17	100	47	0	12	41	0	
Married 1966-75								
High School	67	100	58	21	6	9	6	
Some College	37	100	54	11	16	8	11	
College Grad.	34	100	65	9	15	9	3	
Grad. School	13	100	69	0	23	0	8	

(a) Some college and over.

remain within educational levels but specific patterns are not clear. For example, among women who graduated from college, Jews are less likely than non-Jews to use the Pill or IUD and are more likely to use the diaphragm or condom.

The relationship of contraceptive usage to family income is not clear either in the general literature or in the Boston data. Most studies of contraceptive use and income focus on the practices of low income or poverty-level women (e.g., Ford, 1978). The basic finding, consistent with educational differentials, is the lower contraceptive use of low income women.. For the Jewish sample, the level of "low income" is relatively high -- annual income of about $20,000 per year (in 1975) was the "low income" category (Table 6). Given the very high proportion of contraceptive users among Jews, the issue is clearly not "ignorance" of contraceptive methods, inaccessible contraceptives, or the degree to which Jews can afford the costs of contraceptives.

Overall, there is little variation in contraceptive usage among the three income levels. The most outstanding finding is the direct relationship between income and sterilization.-- 28 percent of the high income families is sterilized compared to 6 percent of the low income families. This pattern characterizes each of the marriage duration categories. Part of this may reflect the greater ease with which Jews with higher income have greater access to (i.e., are willing to afford) medical facilities for sterilization. It is clear that sterilization for Jews does not function in the same way as for the general population -- sterilization is not a last resort for poor contraceptors. Indeed, the comparable data for the non-Jewish population show that sterilization is higher among lower income families within each marriage cohort.

The specific explanation of the direct relationship between sterilization and family income among Jews remains unclear. One possibility relates to the positive relationship hypothesized generally between income and contraceptive use among those who control their fertility effectively. This is an attractive economic argument and requires further testing.

This hypothesis, however, does not fit well with the educational differentials described earlier. Indeed, those findings suggest a second hypothesis. The data on education and income point to the conclusion that sterilization is highest among the relatively less educated and higher income families. It may be that among Jews in a "status inconsistent" position, the pressure to control fertility effectively is most pronounced. Hence, for those who have "made-it" economically but through paths other than education, sterilization offers the most efficient and effective method of ending childbearing. The available data do not allow the test of this or alternative hypothesis.

Table 6. Type of Contraceptive Used by Family Income[a] and Marriage Cohort: Jewish and Non-Jewish Population, Boston Metropolitan Area, 1975

Family income	N	Total percent	Pill IUD	Condom	Diaphragm	Sterili-zation	Natural
			Jewish Women				
All Durations							
Low	64	100	44	22	16	6	13
Medium	82	100	39	13	23	21	4
High	72	100	43	17	13	28	0
Married 1949-59							
Low	10	100	30	30	10	20	10
Medium	33	100	24	21	15	33	6
High	29	100	28	21	10	41	0
Married 1960-65							
Low	13	100	31	23	15	8	23
Medium	18	100	56	0	17	28	0
High	25	100	48	8	20	24	0
Married 1966-75							
Low	41	100	51	20	17	2	10
Medium	31	100	45	13	36	3	3
High	18	100	61	22	6	11	0
			Non-Jewish Women				
All Durations							
Low	157	100	48	17	10	14	11
Medium	53	100	51	19	11	9	9
High	15	100	47	7	20	20	7
Married 1949-59							
Low	24	100	21	29	4	21	25
Medium	11	100	0	46	9	18	27
Married 1960-65							
Low	28	100	43	11	4	25	18
Medium	8	100	50	13	25	13	0
Married 1966-75							
Low	104	100	57	16	13	9	6
Medium	34	100	68	12	9	6	6

(a) Low income = annual family income less than $20,000 per year;
Medium income = $20,000 - $35,000 per year;
High income = $35,000 per year and higher.

Conclusions

The examination of contraceptive use among Jewish families has, in the past, been limited to a few overall empirical observations from general fertility surveys, where the number of Jewish respondents have been too small for detailed analysis. This paper has focused on a unique data source that included Jewish and non-Jewish sampling components and allowed for an investigation of contraceptive usage among Jews and non-Jews as well as variations in contraceptive use among Jews.

Several major conclusions emerge from the data presented:

(1) Contraceptive use patterns among Jewish families continue to be different than among non-Jewish families. Part of this difference reflects the different socioeconomic characteristics of Jews. However, the evidence suggests that within educational, income, and marriage duration categories, Jews and non-Jews have different contraceptive use patterns. The cohort data indicate further that the distinctive Jewish pattern is more characteristic of the older cohorts and less characteristic of more recently married couples. This implies that the non-Jewish pattern has "caught-up" to the Jewish model of efficient use of effective contraceptives. In a real sense, Jews have foreshadowed what has come to characterize the larger (white) population of America. The key differences between Jews and non-Jews remain in the number of children wanted and the timing of childbearing. Efficient contraceptive usage simply allows couples to plan the timing of childbearing and attain the family size they desire.

(2) The 1970 National Fertility Study in the United States documented the dramatic increase in sterilization. Voluntary sterilization had become the most popular method of contraception among couples where the wife was aged 30-44 (Bumpass and Presser, 1973). We have been able to document that revolutionary change for Jews. There is no reason to believe that Boston Jewry is unique in this regard. The higher rate of sterilization among Jews appears to represent a radical break from the recent past where voluntary sterilization was disapproved of as a method of birth control and occurred infrequently. The life cycle contraceptive use pattern for Jews tends to be the Pill and IUD for the first period of married life until couples have the number of children they want and then male or female sterilization to end reproduction. Sterilization is the most rational contraceptive for couples who have no desire for additional children. Sterilization should be viewed, therefore, as part of the more general revolution in fertility control that has characterized the American Jewish population during the last half century.

(3) Variation in contraceptive usage within the Jewish population seems relatively minor. As expected, there are age and marriage duration variations in contraceptive use but it is not possible to disentangle life cycle patterns from cohort changes. The number of Orthodox

Jews included in the sample was too small for analysis and few differences in contraceptive patterns among the non-Orthodox emerge. The higher rates of sterilization among the non-denominationally affiliated require further specification. The interesting finding of higher sterilization among the least educated and those with higher income should be investigated further. Nevertheless, the overwhelming impression that emerges is the absence of wide differences in contraceptive use among Jews and their relative efficient use among most segments of the American Jewish community. Again it should be emphasized that special studies need to be carried out among the more segregated and less acculturated segments of American Jewry. They may represent a small proportion of the total American Jewish community but they undoubtedly contribute a disproportionate number of births. There is every reason to hypothesize that their contraceptive patterns are unique as well.

(4) A final conclusion relates to methodological rather than substantive issues. There is undoubtedly a need for longitudinal and/or time series data in order to clarify the processes involved in contraceptive usage and to link these processes to fertility patterns and Jewish social structure. It is not reasonable to expect that national fertility studies will include enough Jewish families for detailed analysis. We shall, as in the past, have to depend on Jewish community studies in America for our data source. Only rarely have such surveys been designed for social scientific purposes and included comparable samples of non-Jewish households. The argument for obtaining both Jewish and general samples have almost always been made on sampling grounds -- it is difficult to obtain a representative sample of Jews for most American communities based solely on Jewish organizational lists. That is true. But I would stress the need for a comparable general household survey on analytic grounds as well. The value of the Boston Jewish survey is enhanced enormously by the inclusion of the general survey. No comparison with alternative data sets substitutes for the systematic analysis of Jewish and non-Jewish patterns within the same community, at the same time, with the same questionnaire, administered in the same context. The secondary analysis of the Boston data presented in this paper was enhanced by such comparisons but more importantly, comparisons to other data sets would have become so problematic and qualified as to have been meaningless. Indeed, had such comparisons been made (to the National Fertility Study, for example) we would have ended up trying to explain why sterilization among Jews was lower than among non-Jews. That clearly would have been the wrong question to ask.

It is not clear what implications these contraceptive usage patterns among American Jews have for demographic processes. It has been noted in a general context that the revolution in voluntary sterilization in America has but minor demographic implications for those who effectively control their fertility (Bumpass and Presser, 1973). American Jews have the number of children they want and contraceptives of all types are used efficiently and effectively. In that context, it

does not matter whether Jews use the Pill or IUD or are sterilized. There are however two broad implications of the sterilization patterns noted. First, sterilization is relatively final in ending reproduction. Decisions taken at one point in the life cycle to end childbearing cannot be reversed as new circumstances arise. Second, sterilization patterns may have links to changing sex norms and family-marriage patterns that are emerging among American Jews in the 1980's. These links require systematic investigation and their analysis represents an important part of the relationship between the social structure of the American Jewish community and patterns of reproduction.

References

BUMPASS, L. and H. PRESSER. "The Increasing Acceptance of Sterilization and Abortion," in C. Westoff (ed.) *Toward the End of Growth*, Prentice-Hall, 1973.

CHESKIS, R., "Jewish Identification and Fertility: An Analysis of Subgroup Fertility Differentials," unpublished M.A. Thesis, Brown University, 1980.

COHEN, S.M. and P. RITTERBAND, "Why Contemporary American Jews Want Small Families," in P. Ritterband (ed.) *Modern Jewish Fertility*, Leiden: Brill, 1981.

DELLAPERGOLA, SERGIO, "Patterns of American Jewish Fertility," *Demography* 17 (August, 1980), pp. 261-73.

FORD, K., "Contraceptive Use in the United States, 1973-76," *Family Planning Perspectives* 10:5 (September/October, 1978), pp. 264-69.

FOWLER, F.J., *1975 Community Survey: A Study of the Jewish Population of Greater Boston*, Combined Jewish Philanthropies of Greater Boston, 1977.

FREEDMAN, R., P.K. WHELPTON, and J. SMIT, "Socio-Economic Factors in Religious Differentials in Fertility," *American Sociological Review* 26 (August, 1961), pp. 608-10.

GOLDSCHEIDER, C., "Ideological Factors in Jewish Fertility Differentials," *The Jewish Journal of Sociology* 7 (June, 1965), pp. 92-105.

GOLDSCHEIDER, C., "Fertility of the Jews," *Demography* 4(1967), pp. 196-209.

GOLDSCHEIDER, C., "Demography and American Jewish Survival," in M. Himmelfarb and V. Baras (eds.) *Zero Population Growth - For Whom?*, Greenwood Press, 1978, pp. 119-147.

GOLDSCHEIDER, C., "The Demography of Jewish Americans: Research Findings, Issues and Challenges," in M. Sklare (ed.) *Understanding American Jewry*, Transaction Books, 1982.

GOLDSTEIN, S., "Jewish Fertility in Contemporary America," in P. Ritterband (ed.) *Modern Jewish Fertility*, Leiden: Brill, 1981.

PEARL, R., *The Natural History of Population*, N.Y.: Oxford University Press, 1939.

RITTERBAND, PAUL and S.M. COHEN, "Religion, Religiosity, and Fertility Desires," in O. Schmelz, et al, *Papers in Jewish Demography 1977*, Institute of Contemporary Jewry, The Hebrew University, Jerusalem, 1979.

RYDER, N. and C. WESTOFF, *Reproduction in the United States: 1965*, Princeton University Press, 1971.

STIX, R.K. and F. NOTESTEIN, *Controlled Fertility*, Baltimore: Williams and Wikins Co., 1940.

WESTOFF, C. and E. JONES, "Contraception and Sterilization in the United States, 1965-75," *Family Planning Perspectives* 9:4 (July/August, 1977), pp. 153-57.

WESTOFF, C., "The End of 'Catholic' Fertility," *Demography* 16 (May, 1979), pp. 209-217.

WESTOFF, C., R. POTTER, P. SAGI and E. MISHLER, *Family Growth in Metropolitan America*, Princeton University Press, 1961.

WESTOFF, C. and N. RYDER, *The Contraceptive Revolution*, Princeton University Press, 1977.