VOLUNTARY CHILDLESSNESS IN THE UNITED STATES: RECENT TRENDS BY COHORT AND PERIOD

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Arts

in

The Department of Sociology

by
Laurie Chancey
B.A., McNeese State University, 2001
May 2006

ACKNOWLEDGMENTS

I thank my advisor, Mariano Sana, for his thoughtful, attentive, and enthusiastic guidance throughout the production of this thesis. I also thank Susan A. Dumais and Joachim Singelmann for their support and service on my committee. The three of you have made numerous valuable contributions to my continuing development as a professional sociologist.

I am grateful to many others I have met in the LSU Sociology Department for random acts of friendship that have helped make me feel at home here over the past two years. I am especially thankful to my parents, Wyatt Chancey and Valerie Fitzenreiter, for their ever-present and unconditional love and encouragement.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Most large-scale studies on voluntary childlessness since the waning of the baby boom provide cross-sectional estimates for a single time period. They cannot be synthesized to estimate change because of the varied definitions used to operationalize voluntary childlessness. In this study, I use data from the 1973-2002 cycles of the National Survey of Family Growth (NSFG) to estimate change in voluntary childlessness using a consistent definition by period and birth cohort. I find that voluntary childlessness stayed relatively constant through the seventies and eighties, but showed a large increase from the mid-nineties to 2002. I show that voluntary childlessness increased in recent years because baby-boomers postponed childbearing until they no longer desired it, and younger women born in the seventies are now deciding to remain childless earlier. I discuss the role of these younger women in establishing a ceiling for voluntary childlessness. I also provide initial results supporting the theory that voluntary childlessness is diffusing among women of lower education and higher religiosity.

INTRODUCTION

As fertility fell steeply after the baby boom, and the second wave of feminism and the economic recession of the 1970s helped change women's roles, social scientists began to publish research on the growing phenomenon of voluntary childlessness. Qualitative work with small samples found that some women chose to opt out of motherhood entirely. They tended to be white, nonreligious, and highly educated; many said that they had no desire for children, or felt that the opportunity costs of having children would be too great (e.g., Veevers 1973). Some defined themselves as "childfree" in favor of "childless," because they felt liberated of children rather than lacking children. Although the pronatalism of the post-World War II period had waned somewhat, such attitudes toward childrearing were still controversial, and the voluntarily childless found stigma management to be a fairly regular chore (May 1995; Veevers 1975).

The quantitative research offers a much less consistent picture. Studies from various sources of nationally representative data have shown voluntary childlessness to occur at significantly different rates. Sources for the 1980s alone vary between 1.8 percent and 6.4 percent in their estimates of voluntary childlessness in the United States. Since it can be difficult to operationally define voluntary childlessness, strategies for doing so tend to differ widely between sources and researchers, hence the variation in these percentages.

The academic literature on voluntary childlessness has been growing, albeit relatively slowly, for the past thirty years. The demographic profile of voluntary childlessness has seemingly not changed, but it is less evident whether its prevalence

has changed. Although highly effective contraception (e.g., the pill, intra-uterine devices, transabdominal sterilization) has been constantly available for the past thirty years, more recent innovations in contraceptive technology (e.g., injectables, implants, hysteroscopic sterilization) have left women with more choices, and presumably with more success in remaining childless if they wish to do so. The childless-by-choice at the turn of the twenty-first century still face stigma and deal with it in ways strikingly similar to thirty years before (Veevers 1975; Park 2002), but can find camaraderie in online support groups. Undergraduate textbooks of marriage and family increasingly include voluntary childlessness as a legitimate lifestyle option (Chancey and Dumais 2006), and popular literature supporting it has recently been published not only in the social science and personal growth genres (Burkett 2000; Cain 2001), but also in humor and fiction (Metter 2001; Tonkunaga 2000). Given these developments, it is reasonable to assume that voluntary childlessness is increasing, that society is more accepting of it, or a combination of both.

The central goal of this thesis is to describe trends of voluntary childlessness in the United States since the end of the baby boom. The use of consistent measures applied to data from the same nationally representative repeated cross-sectional survey will provide the best evidence of change in voluntary childlessness over the past thirty years. Trends in total childlessness, voluntary childlessness, and the ratio of the latter to the former will be shown by cohort and period. Trends in relative pregnancy risk by birth control method for the voluntary childless compared to selected other categories of women will also be shown. This thesis will establish that voluntary childlessness has risen dramatically in the past few years, and present preliminary evidence supporting the idea that the increase is partially due to the diffusion of innovations. The expected

future growth of voluntary childlessness and its implications will be discussed, along with directions for future research.

BACKGROUND

Theories of (Non) Parenthood

Children are no longer economic assets to households in developed countries. Quite the opposite—the cost of food, shelter, entertainment, and education over the lifetime of a child of a middle-class family is substantial. Some recent demographic research has focused on why families continue to have children regardless of their cost. Friedman, Hechter, and Kanazawa (1994) propose that having children can still be a rational choice (even if it is not an economically sound one) because it reduces the uncertainty in one's life. Although the perception of the parent role may differ between cultures, the role itself is universally known, and it is highly unlikely that a person has no expectation of what her or his life would be like as a parent. If women have low prospects for marriage, education, and/or a successful career, the uncertainty reduction hypothesis states that they are likely to become parents to add stability to their lives. Friedman et al. (1994) point out that this theory is one of the few that can explain why two radically different groups have children: disadvantaged unmarried black teenagers (for lack of other life choices) and the "old rich" (to maintain their dynasties). It follows theoretically that women with a low degree of uncertainty will not "need" to have children, and indeed, some mechanisms that reduce uncertainty in a woman's life (e.g., higher education) are also correlates of voluntary childlessness.

Schoen et al. (1997), using data from the 1987-88 National Survey of Families and Households, find that intentions to have children are related to viewing children as providers of social capital. A form of investment capital, children help their parents strengthen existing social ties (e.g., among grandparents) and create new ones (e.g.,

among other families with children). People who, for example, said that "giving my parents grandchildren" or "having someone to care for me when I am old" were valid reasons for childbearing were more likely to intend to reproduce. The analyses also predicted that single white women who attached high importance to their career and low importance to children as social resources were significantly likely to be voluntarily childless. In the concluding sentence of the article, Schoen et al. state that "[children] are seen as the threads from which the tapestry of life is woven" (1997:350). To adapt their metaphor, perhaps the voluntarily childless weave their tapestry with different material, to wit; a satisfying career and nongenerative forms of social gratification.

The Diffusion of Fertility Behavior

Diffusion of innovations theory (Rogers 2003) has been widely applied to fertility behavior. The theory explains how new ideas or practices spread throughout a population. Initially, a few people adopt a practice and, if others see this practice as beneficial, they adopt it as well. This chain results in rapid adoption of the practice until virtually everyone who would want to adopt it has done so. Often, the vanguard of such a movement is of high status or motivation, because they have access to the new information and can risk the possible social consequences of its application (Hirschman 1994). Fertility decline is often explained by diffusion of innovations theory, especially when the decline occurs independent of modernization (Rosero-Bixby and Casterline 1993). Both the idea that a smaller family could be desirable, and the contraceptive knowledge required to achieve a smaller family, can be diffused through various levels of social interaction (Bongaarts and Watkins 1996). Livi-Bacci (1986) uses data from the sixteenth to nineteenth century to show that fertility limitation was practiced first by the

aristocracy, then eventually spread to the populace. In a more recent example, Tolnay (1995) provides a model showing that diffusion was instrumental in lowering fertility in the mid-twentieth century American South.

If a preference for low fertility can diffuse, then certainly a preference for *no* fertility can diffuse, though the saturation point for voluntary childlessness would be much lower than the saturation point for a two-child family. It is more radical to transition from the norm of parenting to not parenting than it is to transition from the norm of four children to two children. Most of the population will always want children, whether this tendency is explained by the need for uncertainty reduction, social capital, or even by biological predispositions (Foster 2000; Friedman et al. 1994; Schoen et al. 1997). Also, voluntary childlessness could not diffuse too far, because mass adoption would result in a population implosion.

It is more likely that some small but significant proportion of the population would prefer to remain childless if it were considered a legitimate lifestyle choice. Many people may be ambivalent about childbearing but never have considered the idea that it was optional. Meeting a new friend who does not want children, or reading an article about voluntary childlessness, may provide the impetus needed for the ambivalent to become voluntarily childless themselves. Studies from the 1970s show voluntary childlessness to be prevalent among high-status groups that are likely to be influential to others (e.g., highly educated, white). If voluntary childlessness has increased since the seventies but is less associated with its usual predictors, then diffusion is a likely explanation.

Defining Voluntary Childlessness

Some believe that the voluntarily childless would be more aptly named "childfree" since the term "childless" may be construed negatively, implying a lack of something. Those who choose not to have children usually view themselves as liberated of parenthood, therefore childfree seems an appropriate label. I contend that both childless and childfree define a person in terms of her or his relationship to children, so childfree may not be as revolutionary a term as its proponents would wish, even though it is somewhat political. Rovi (1994) considers both terms to be based in ideology and therefore dissatisfactory, but settles for a combination ("childless/childfree") throughout her paper. Following some of the earliest research on the matter (Veevers 1973), the term "voluntarily childless" will be used throughout this thesis in reference to the subset of women who have never had children and who desire to remain in that category, without any underlying implication that they are advantaged or disadvantaged in relation to mothers.

Poston and Kramer (1983) provide a useful framework for defining voluntary childlessness based on a "cognitive" and "behavioral" approach. Cognitively defined, the childless are voluntarily so if they are physically *able* to have children, but state that they do not *intend* to have children. Infertile women may also state that they do not intend to have children, but that decision may be more likely to result from an acceptance of their infertility rather than an actual preference for no children. In recognition of the fact that voluntarily childless women may have been sterilized, women with no children whose sterilizations were performed for contraceptive reasons are also classified as voluntarily childless. Behaviorally, Poston and Kramer classify childless women as voluntarily childless if they state that they do intend to have children in the future, but

are using contraception. Poston and Kramer find that their different methods of classification produce vastly different results, but state that either could be used depending on the researcher's primary focus (1983:301).

Most studies follow the cognitive approach laid out above and restrict the age range roughly to women's reproductive years, starting in the late teens and ending in the forties. Rovi (1994) supported the cognitive approach without restrictions on fecundity status or certainty, because the act of simply stating that one does not intend to have children is difficult within a pronatalist social context, and is therefore enough to differentiate the voluntarily childless from the rest of the childless. If data on intentions are not present, the oldest childless women are presumed to be primarily childless for voluntary reasons (Poston and Trent 1982). This presumption makes sense if one categorizes childlessness into voluntary, involuntary, and temporary. The temporarily childless category disappears as women age and either become mothers, discover that they have fertility problems, or decide not to have children. Subfecundity affects a relatively small proportion of the population, and medical advances in reproductive assistance can alleviate these problems for many women. Therefore, childless women in their forties are assumed by many researchers to be mostly voluntarily childless.

Further restrictions are usually imposed based on marital status, though they vary widely depending on the researcher and data source; some use ever-married women (Mosher and Bachrach 1982; Poston and Trent 1982), some use currently married (Krishnan 1993; Ritchey and Stokes 1974; Rovi 1994), and some add cohabiting women (Krishnan 1993; Poston and Trent 1982). Other studies do not restrict the sample based on whether the women are fertile (Poston and Trent 1982; Ritchey and Stokes 1974; Rovi 1994; Stobert and Kemeny 2003). In this study I follow the majority

of the literature and use the cognitive approach to define voluntary childlessness, restricting the sample to ever-married or currently married women when appropriate.

Characteristics of the Voluntarily Childless

Sociodemographic characteristics that normally affect fertility rates also serve to distinguish the voluntarily childless from the rest of the population. The voluntarily childless tend to be older than the childless in general, for a variety of reasons. Most women do not have a child as soon as they become fecund, so many of their initial prime reproductive years are spent at zero parity. As they age, they are more likely to have children, so the age distribution of the childless is skewed toward the young. Most young women expect to have children eventually, and state such intentions in surveys. Women who state intentions to remain childless early are relatively rare—most arrive at voluntary childlessness through postponement of reproduction (Veevers 1973). Using longitudinal data, Heaton, Jacobson, and Holland (1999) also showed evidence of postponement, finding that more couples who want children change their intentions than voluntarily childless couples.

All studies find education to be high among the voluntarily childless, although Ritchey and Stokes (1974) find that education has no effect when accounting for postponed childbearing. Others find education to have significant positive effects (Krishnan 1993; Mosher and Bachrach 1982; Poston 1990; Rovi 1994). Religion plays a role as well, as Catholics, people in religiously homogamous marriages, and those who attend worship services more often have lower rates of voluntary childlessness (Krishnan 1993; Mosher and Bachrach 1982; Poston 1990). The childless-by-choice are often characterized by no religious affiliation (Mosher and Bachrach 1982; Rovi 1994)

and/or low to no church attendance, with the latter consistently proven to be the strongest religious variable to predict voluntary childlessness. Religious norms generally encourage high levels of fertility and traditional values, which can run counter to the values of a family with no children. The racial and ethnic makeup of the voluntarily childless is difficult to ascertain. Several studies include only whites (e.g., Poston & Kramer 1983), and the only study restricted to blacks included only doctorate holders (Mommsen 1975). Overall, it is known that childlessness in recent years is lower among blacks than whites because of higher levels of fertility among blacks (Boyd 1989; Veevers 1971). Studies that do include blacks and whites find a higher proportion of voluntary childlessness among whites (Mosher and Bachrach 1982).

Recent Childlessness Trends

It is difficult to synthesize the existing literature on trends of voluntary childlessness since the baby boom because of the widely differing operational definitions and data sources. With data from the late 1960s, Ritchey and Stokes (1974) predicted that 4.1 percent of married women would complete their fertility at zero parity, regardless of the reason for their childlessness. Just a few years later, Poston and Trent (1983) showed that the completed marital childlessness rate for Americans in 1970 was 11 percent. In the 1970s, estimates of voluntary childlessness in women ranged between 1.6 to 4.5 percent of North American women (Mosher and Bachrach 1982; Poston and Kramer 1983; Rovi 1994), and in the 1980s, they ranged from 1.8 to 6.4 percent (Krishnan 1993; Rovi 1994). Heaton et al. (1999) estimate that seven percent of the American population was consistently voluntarily childless from 1988 to 1994. In Canada in 2001, nine percent of singles and five percent of the currently-married

population aged 20 to 34 stated that they wished to remain childless permanently (Stobert and Kemeny 2003).

Thus far I have outlined a picture of voluntarily childless Americans. There is not a consensus on what they should be called, but they can be defined by their parity, fertility intentions, and/or contraceptive behavior. Current theories of the perceived benefits of parenthood (uncertainty reduction, social capital) to Americans can be extended to show why the voluntarily childless do not want children. These explanations mesh with the demographic profile of the voluntarily childless: older, white, educated, and nonreligious. However, this profile may be changing if a preference for no fertility has been diffusing between socioeconomic groups in recent years. There is reason to suspect that voluntary childlessness is growing: cross-sectional analyses for more recent years show higher percentages among the general population, and popular literature increasingly features the subject. So, is voluntary childlessness indeed a growing phenomenon? I explore this question with the above ideas in mind in the following analyses.

METHODOLOGY

Data

Data for this study come from the National Survey of Family Growth (NSFG), funded by the United States Department of Health and Human Services, conducted by the National Center for Health Statistics at six semi-regular intervals from 1973 to 2002. All survey data were collected through personal interviews. The universe of all six cycles included the noninstitutionalized population of women aged 15-44 living in the continental United States. In Cycles I (1973) and II (1976), only the ever-married or custodial parents were included. The sample of Cycle V (1995) was taken from households which were included in the National Health Interview Survey of 1993. Cycle VI (2002) included men as well as women. I restrict my analyses to women only. The number of women interviewed in each cycle was: Cycle I (1973), 9797; Cycle II (1976), 8611; Cycle III (1982), 7969; Cycle IV (1988), 8450; Cycle V (1995), 10847; Cycle VI (2002), 7643.

The NSFG is appropriate and preferred for the study of voluntary childlessness because it is focused on fertility rather than a large array of general topics and includes probes for uncertain answers, unlike the Current Population Survey (CPS) and General Social Survey (GSS), which have a high number of "undecided" responses to questions on fertility intentions (Hagewen and Morgan 2005; Mosher and Bachrach 1982).

The most obvious limitation of the NSFG is that it is a repeated cross-sectional survey, and longitudinal data may be the most appropriate for this type of study. A panel survey could follow a cohort of women over their lifetime and directly measure changes in fertility intentions. Heaton et al. (1999) show that small proportions of

couples entered and exited voluntary childlessness over a six-year period. I am also limited to a less precise operational definition of voluntary childlessness because my definition must be the same over all cycles of the NSFG. Cycles I-IV do not allow me to measure whether a woman is a biological mother but not a social mother, that is, she has had a live birth and is not raising her child. If a woman gave birth and put up her baby for adoption, I would prefer to classify her as voluntarily childless because she has elected not to fulfill the social role of mother. Nevertheless, in these data she will be classified as a mother. Likewise, women who are not biological mothers but are social mothers (e.g., of stepchildren or adopted children) will be classified as childless. Because of the restriction imposed by the sampling frames of cycles I and II, I can only include these cycles in my trend analyses if I restrict the sample to ever-married women.

Definitions

Age is the respondents' age at last birthday at the time of the interview, and is restricted by the sampling frame to range from 15 to 44, which I broke down into six five-year age categories. I divided the women into six birth cohorts: 1928-39, 1940-9, 1950-9, 1960-9, 1970-9, and 1980-8. Year refers to the year of the survey. I constructed two binary variables for marital status: ever married (1=formally married, divorced, separated, or widowed, 0=all others) and currently married (1=formally married, 0=all others). Race was either self-reported, or in the case of missing data, coded by the interviewers' observation, as black, white, or other. Respondents' highest grade completed was coded into three educational categories: less than high school, high school or some college, and college degree or more.

The literature is clear on the importance of religious variables in the study of voluntary childlessness. Catholicism, frequency of church attendance, and religious homogamy have all been found significant. All of these variables were available in the NSFG, but I chose to use only frequency of attendance at religious services. Attendance has consistently been strong in models predicting voluntary childlessness, and I reason that it is likely the most robust indicator of religiosity over time. For my purposes, I coded this variable only for the NSFG surveys from 1982 and 2002. In 1982, respondents were asked different questions about attendance based on their religion. If they answered that they had no religion (or were atheist, agnostic, etc.), then they were not asked how often they attended religious services. If they were Catholic, then they were asked how often they received communion. In 2002, all respondents were asked the frequency of their attendance at religious services. I classified these responses into three categories: Never attends/no religion, attends services/receives communion infrequently (a few times a month to less than once a year), and attends services/receives communion frequently (once a week or more).

Fertility Categories. Women were classified according to parity (children ever born) and future fertility intentions. I defined the childless as those with parity zero, and then divided them into voluntarily childless and other childless.

In the first five cycles of the NSFG, all nonsterile respondents were asked about their future reproductive intentions, or their and their husbands' or partners' joint reproductive intentions. Women who gave an uncertain response (e.g., "don't know" or up to God") or who disagreed with their significant others were probed by the interviewer to choose "the largest number of (additional) babies [they/they and their husbands] expect to have." I classified childless women who said that they did not

intend to have any children, or who answered "none" to the probe, as voluntarily childless. Only thirty-seven women over the first five cycles were classified as voluntarily childless by the probe. In the 2002 cycle of the NSFG, married or partnered women were also asked these questions on intentions and expectations, so I classified them in the same manner as the previous surveys. However, single women were first asked if they "*want*[*ed*] to have a(nother) baby" (emphasis mine), then only asked their intentions if they answered in the affirmative. Therefore, I classified single childless women who were surveyed in 2002 as voluntarily childless if they answered that they did not want to have any children. In all cycles, sterile childless women were not asked their reproductive intentions, but I classified them as voluntarily childless if they reported that their (or their husbands' or partners') sterilization was performed at least partially for contraceptive reasons.

For comparison, I created two other categories: mothers (parity ≥ 1) who intended no more births, and women (any parity) who intended (more) births.

Contraceptive Classification. Women were also classified according to the effectiveness of the birth control method they were using at the time they were surveyed.

There is much debate over the calculation of contraceptive failure rates (see Trussell and Kost 1987; Trussell et al. 1990). Determining the efficiency of a given birth control method in a given year is not simply a matter of whether source data can be obtained, but whether such data were analyzed with correct statistical methodology. There is no single source cataloging the evolution of contraceptive failure rates over the time period of interest, so any differences in rates from 1982 to 1995, for example, could possibly be attributed more to greater statistical precision than any real change in failure rates between those years. Abortion under-reporting, in particular, is

problematic for researchers attempting to determine contraceptive efficacy, since a respondent who had an abortion because her birth control failed is likely to answer in a survey that she was not pregnant at all, so that instance would not count as a contraceptive failure (Trussell and Vaughan 1999).

Since my interest is not to obtain precise contraceptive failure rates, but instead to determine respondents' risk of pregnancy, I decided to use the most recent, most authoritative source available: A summary table of contraceptive efficacy from *Contraceptive Technology, Eighteenth Revised Edition* (Trussell 2004). I classified respondents' current contraceptive status into three categories: 1) using no method/at high risk of pregnancy; 2) using a less effective method/at marginal risk of pregnancy; and 3) using a highly effective method/at little to no risk of pregnancy. A "less effective" method is one with a typical-use failure rate of 10 percent or more, and a "more effective" method is one with a rate of less than 10 percent. Ten percent is a logical threshold, because when imposed, sterilization and all hormonal methods (except the morning-after pill) of contraception fall into the "more effective" category, and all barrier methods and others (withdrawal, natural family planning) fall into the "less effective" category. Note that with theoretical "perfect" use, some of the barrier methods (e.g., the male condom with spermicide) would fall into the "more effective" category. Likewise, an ordinarily "more effective" method may be used very poorly (e.g., the pill with frequent missed doses), and should then fall into the "less effective" category. The rates used for my purposes are the average first-year typical-use failure rates.

I classified women into relative pregnancy risk categories based on their contraceptive status at the time of each survey. No method/high risk includes seeking

pregnancy, nonusers, abortion, and those who douche for cleanliness only. Less effective method/marginal risk includes post-partum (to account for the variable contraceptive efficacy of post-partum amenorrhea [Coale and Trussell 1996:473; Weeks 2002:175]), diaphragm, cervical cap, male and female condoms, foam/spermicide, rhythm/periodic abstinence/natural family planning, withdrawal, douche, sponge, insert/suppository, and other or unknown methods. Highly effective method/low to no risk of pregnancy includes sterilization (for any reason), the pill, implant, injectable, intra-uterine device (IUD), and abstinence, as well as being currently pregnant.

Analysis

I will present several tables and figures charting change over time in childlessness and voluntary childlessness. First, I compute descriptive statistics of these two groups by year and selected demographic variables. Second, I compute rates of childlessness and voluntary childlessness of ever-married women by year, age-standardized when appropriate. Next, I detail the change in childlessness, voluntary childlessness, and the latter as a percentage of the former over time by age and birth cohort. Finally, I calculate the relative pregnancy risk of three categories of currently married women: the voluntarily childless, mothers with completed fertility, and women who intend to have children, for each survey year.

RESULTS

Trends

It is evident from Table 1 that childlessness fluctuates, and has greatly increased in recent years among the higher age categories, especially in data from the 2002 NSFG. Women have been ending their reproductive years recently at the highest rates of childlessness in the past thirty years. Recent increases in voluntary childlessness are even more dramatic—percentages for women in the top three age groups approximately doubled from 1995 to 2002. Overall, 5.7 percent of ever-married women in 2002 were voluntarily childless—a figure that has nearly tripled since 1976. In Figure 1, I show period trends of childlessness and voluntary childlessness for ever-married women over all years of the NSFG, age-standardized to the distribution of all ever-married women in the 2002 cycle. Although overall childlessness has been increasing steadily since the 1970s, voluntary childlessness stayed relatively constant until the late eighties. Table 1 and Figure 1 show a surprisingly substantial and recent increase in voluntary childlessness.

In Figure 2, I present a cohort graph in the style of Poston and Gotard (1977) for ever-married childless women. All of the lines follow similar paths, with high childlessness found at lower ages and low childlessness found at higher ages. Four of the cohorts have reached the end of their reproductive lifespan, and their completed childlessness (at the last two age groups) is neatly ordered—the earlier the cohort, the lower the childlessness. These four cohorts have kept the same order in all age groups but the very youngest, when women born in the 1950s had higher childlessness than women born in the 1960s. Women in the 1970-9 cohort follow an interesting path,

Table 1: Percentages of Childlessness and Voluntary Childlessness in Ever-Married Women by Age and Year

	Age Category						
	15-19	20-24	25-29	30-34	35-39	40-44	ALL
Year	Childless (all)						
1973	47.2	31.6	17.5	7.3	6.1	7.3	15.2
1976	50.4	33.4	17.2	8.5	6.3	5.5	15.3
1982	42.5	34.2	19.0	11.3	10.2	7.9	16.4
1988	40.9	33.6	22.5	14.6	10.0	7.9	15.6
1995	38.5	34.4	25.4	14.8	11.8	11.2	16.3
2002	44.4	35.2	23.5	20.1	13.7	14.6	19.4
	Voluntarily Childless						
1973	1.4	1.8	1.9	1.9	2.5	2.9	2.2
1976	3.4	2.1	1.9	1.9	2.1	1.8	2.0
1982	-	1.4	1.8	2.4	2.6	2.3	2.1
1988	-	-	1.8	2.5	2.4	3.1	2.3
1995	-	-	2.9	2.0	3.9	5.0	3.3
2002	-	2.0	2.3	4.5	6.1	10.3	5.7

Note: Missing values in table are due to very small sample sizes in these categories.

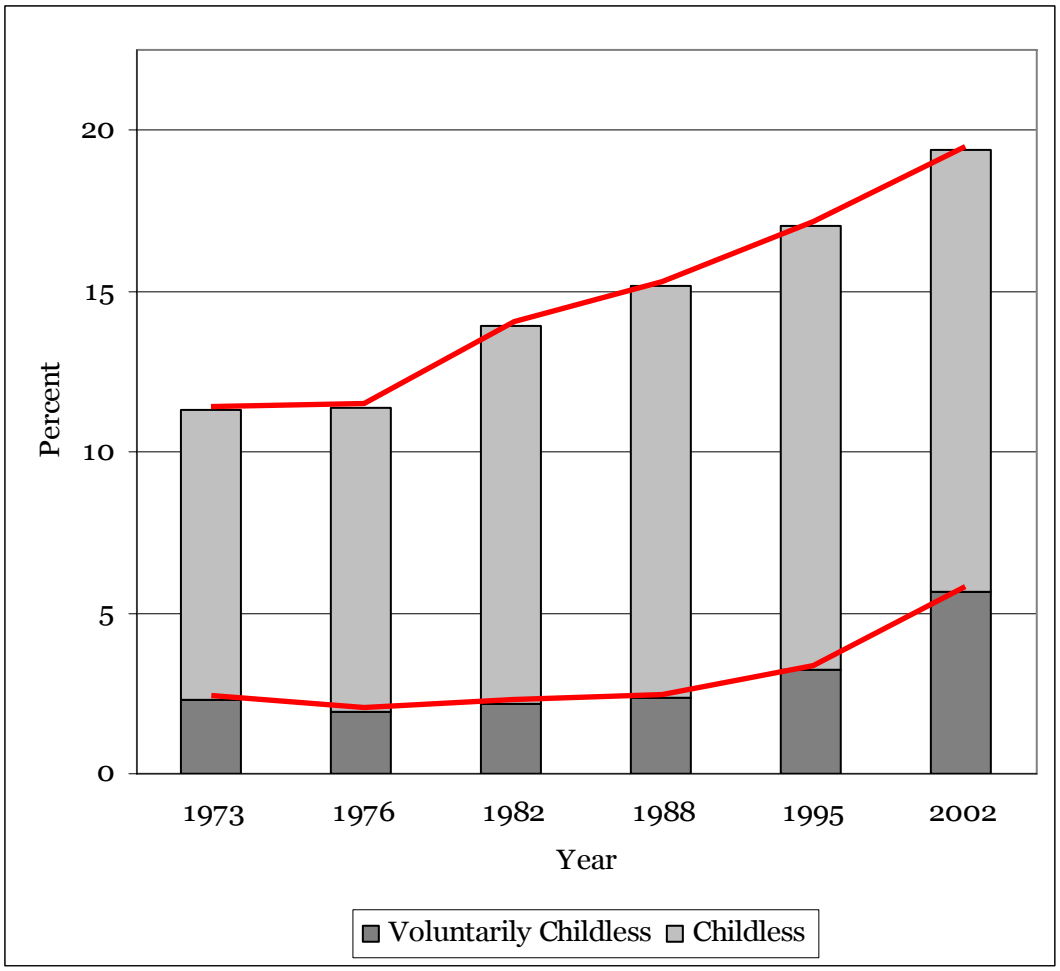

Figure 1: Age-Standardized Percentages of Ever-Married Childless and Voluntarily Childless Women by Year

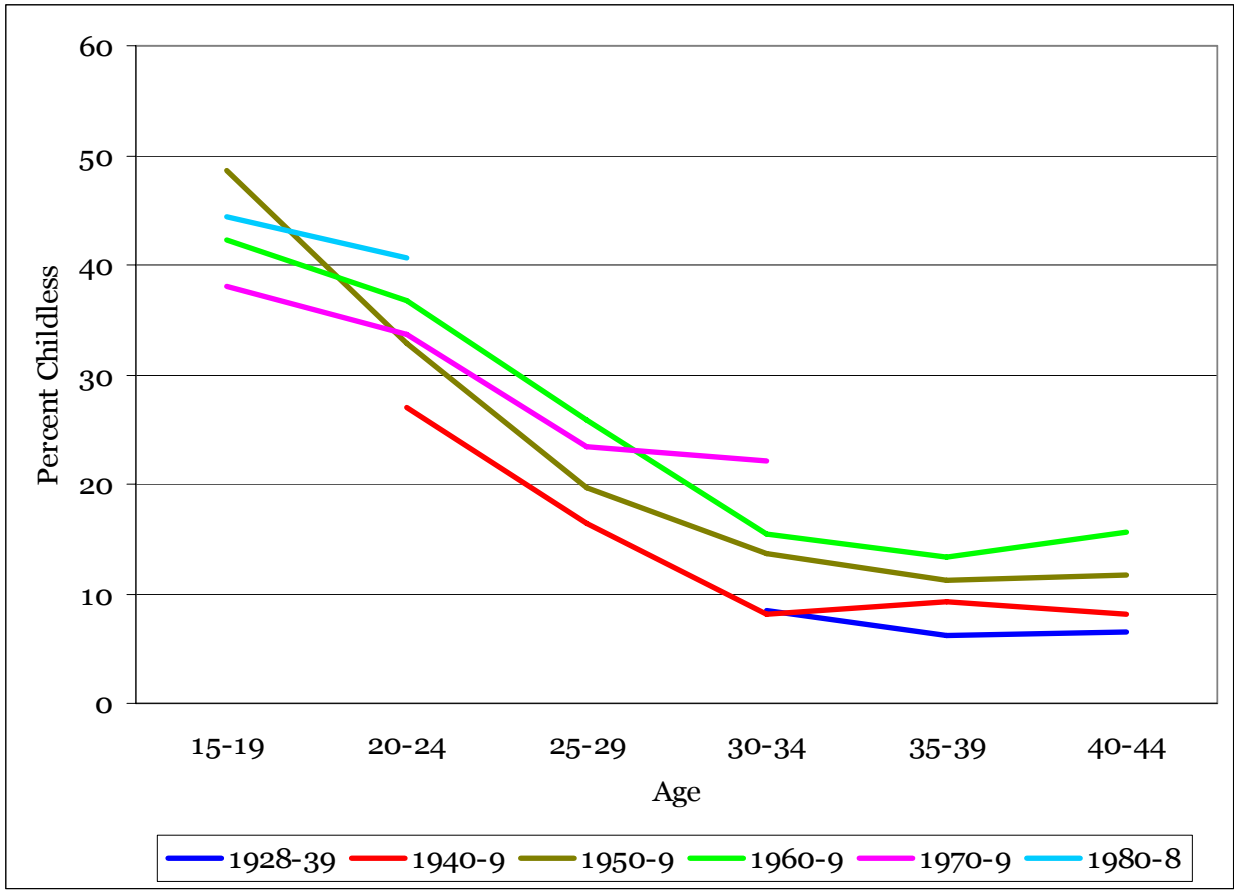

Figure 2: Percent of Ever-Married Childless Women by Age and Birth Cohort

beginning with the lowest rates of childlessness for the youngest age group, and ending with the highest of the early thirties age group. Time will reveal the full pattern of women born in the 1980s, who already showed the highest rate of childlessness among cohorts in their early twenties.

Figure 3 shows percentages of voluntary childlessness among cohorts of ever-married women. The cohort of women born in the 1980s and all teenage women were removed from the figure because of very small sample sizes among those groups. The pattern of voluntary childlessness is similar for the oldest four cohorts until the women reach their late thirties, then the cohorts of the 1950s and 1960s diverge sharply and significantly from the 1930s and 1940s. The two oldest cohorts of women did not vary much with age in the last three age groups. Most of these women entered their childbearing years during the baby boom (the others were the oldest of those born during the baby boom), and the steady pattern of low voluntary childlessness regardless of age may indicate that they permanently internalized the pronatalist values of that era.

95 percent confidence intervals (vertical bars with corresponding colors) show statistically significant differences between those born in 1928-49 and those born in 1950-69. Women born in the 1960s are significantly more likely to be voluntarily childless in their late thirties than women born a decade before, but the confidence intervals overlap in the last age group. The 1970-9 cohort already showed the highest percent of voluntary childlessness in their early thirties (the last age for which data was available). These trends suggest that women who want to remain childless are making that decision, and abiding by it, earlier in life the more recently they were born. If they follow the age pattern of women from the two previous decades, voluntary childlessness will continue to grow at an exponential rate. But note again that the differences between

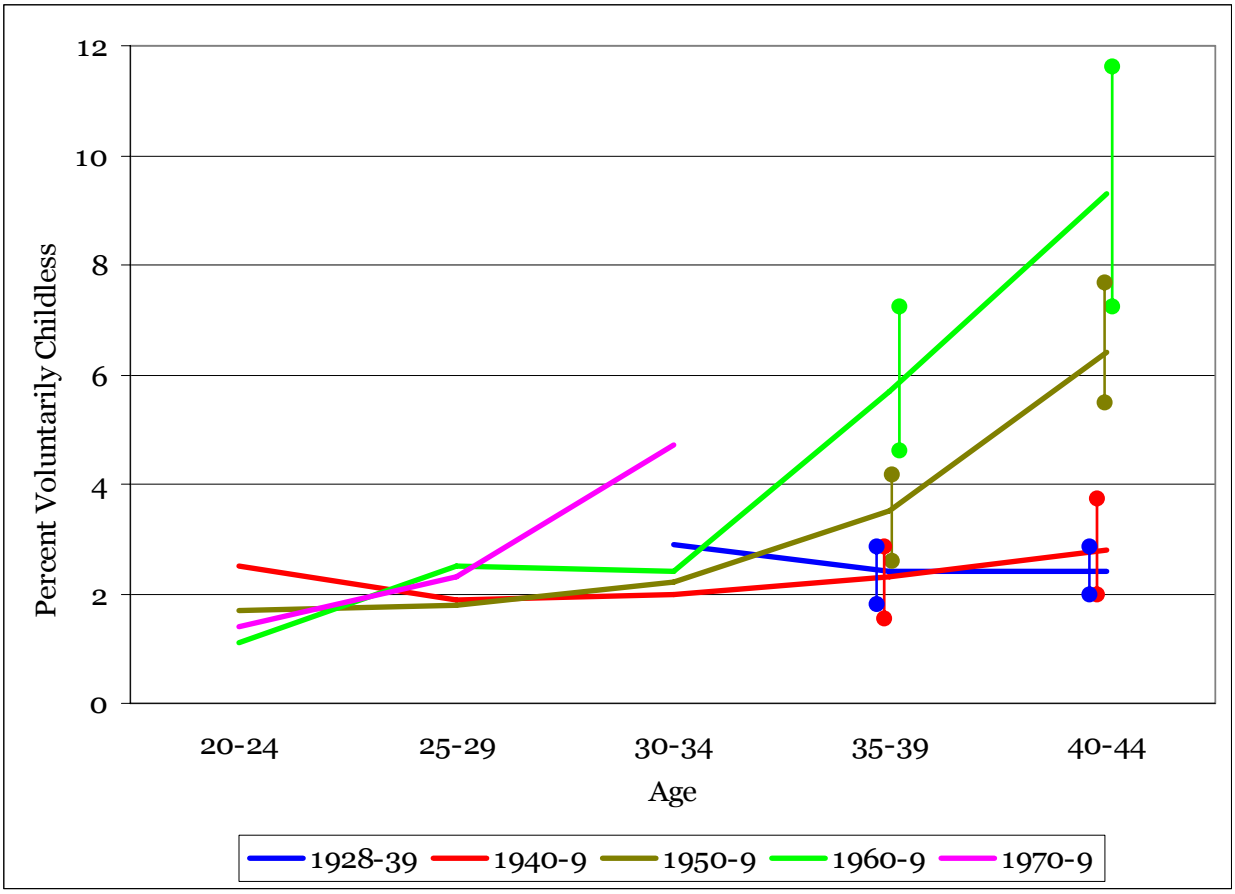

Figure 3: Percent of Ever-Married Voluntarily Childless Women by Age and Birth Cohort, with Confidence Intervals

the 50s and 60s cohorts may no longer be significant when the women have reached their forties. Women born in the 1970s may also converge with previous cohorts at later ages and eventually show us the ceiling of voluntary childlessness.

Figure 4 shows the proportion of voluntary childlessness to overall childlessness by age and cohort. The consistent upward trend shows that, indeed, voluntary childlessness composes an increasingly large percentage of overall childlessness as cohorts age. 95 percent confidence intervals show that, in the 35-39 age group, there is a significant difference between the 1940-9 cohort and the 1960-9 cohort, and intervals that only slightly overlap (e.g., 1928-39 and 1940-49) may also be statistically significant. In the next age group, however, there are significant differences between the 1928-49 cohorts and the 1950-69 cohorts. Again, there is a plateau of sorts in the two oldest cohorts for the top three age categories, but it is surprising that such a consistently high percentage is found in the 1928-39 cohort. I speculate that the divergence in trends among the 30s and 40s cohorts and the 50s and 60s cohorts is due to increases in voluntary childlessness through postponement among the younger cohorts. The older women came of age when fertility levels were much higher and age at first birth was much lower. These two factors, combined with low rates of postponement and low rates of overall childlessness, make for a relatively high proportion of voluntary childlessness because they separated women very early into those who had children and those who did not. Women who did not have children fairly early in life most likely came to terms with that fact early as well (since the upper age limit for childbearing was younger than current standards), and thus fell into the voluntary childless category.

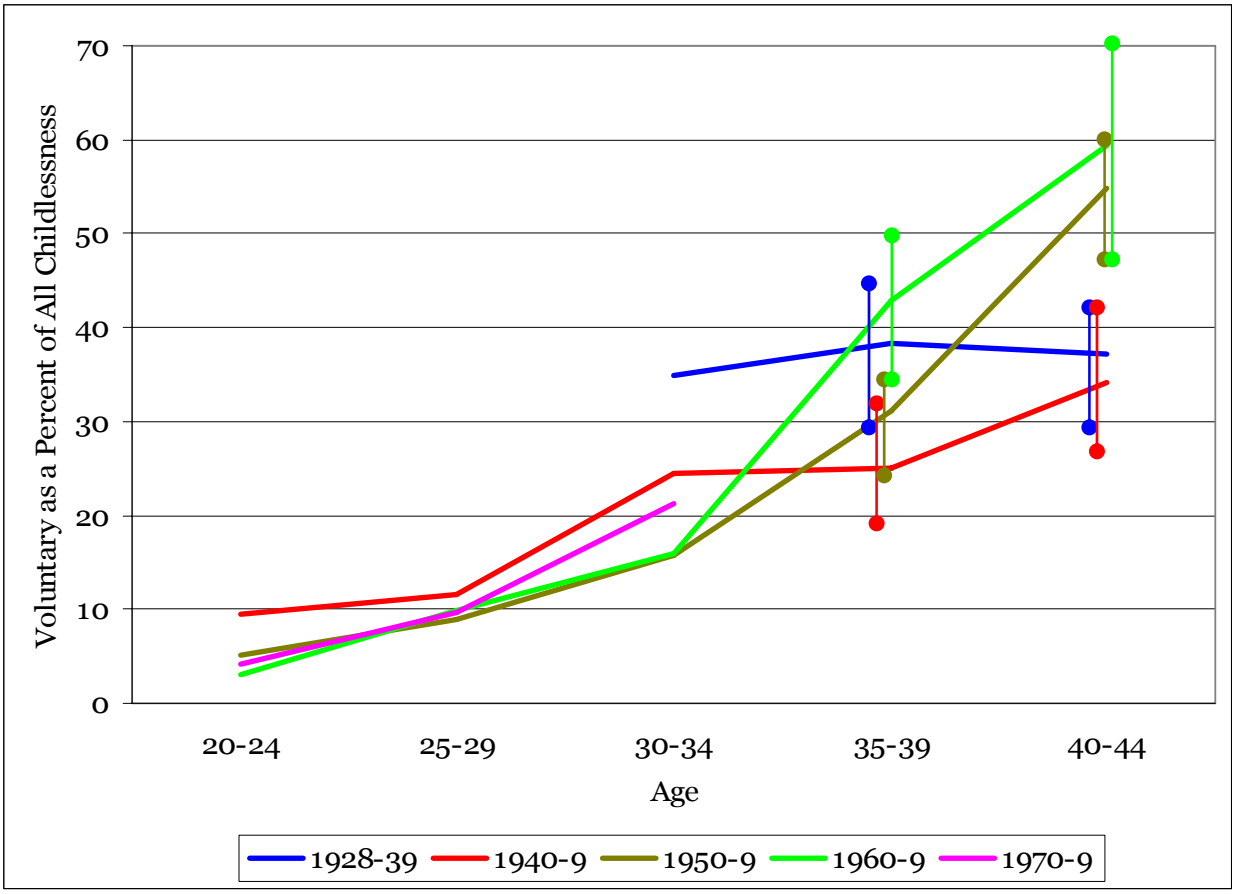

Figure 4: Voluntary Childlessness as a Percent of Overall Childlessness for Ever-Married Women by Age and Birth Cohort, with Confidence Intervals

In Figure 5, I show the efficacy of the birth control method used by three categories of women: the voluntarily childless, mothers who desire no more children, and women who want (more) children, with 95 percent confidence intervals. The majority of all women in all years are using birth control. Immediately evident are the higher proportions of birth control users in 2002 who are using highly effective methods. Among birth control users, the voluntarily childless put themselves at a greater pregnancy risk than mothers with completed fertility in nearly every year, though these differences are only significant for users of less effective methods in the seventies and nineties. This may be indicative of greater ambivalence among the voluntarily childless than among mothers who want no more children. Also striking is the similarity of the voluntarily childless to women who want more children among users of no method in the 1970s and 1980s. As Mosher and Bachrach (1982) suggest, voluntarily childless nonusers of contraception may soon become mothers despite their wishes. Likewise, due to the effects of postponement, some of the women who currently want children but are using birth control will drift into the voluntarily childless category (Heaton et al. 1999).

Preliminary Evidence for Diffusion

In Table 2, I present descriptive statistics for childless women by race, education, and religious service attendance for the 1982 and 2002 NSFG surveys. The former was a better choice than 1973 for comparison with 2002 because 1982 was the first year that the NSFG surveyed all women instead of only ever-married women or custodial mothers. Also, as evidenced in Table 1 and Figure 1, 1982 rates of voluntary childlessness did not differ much from the 1970s rates.

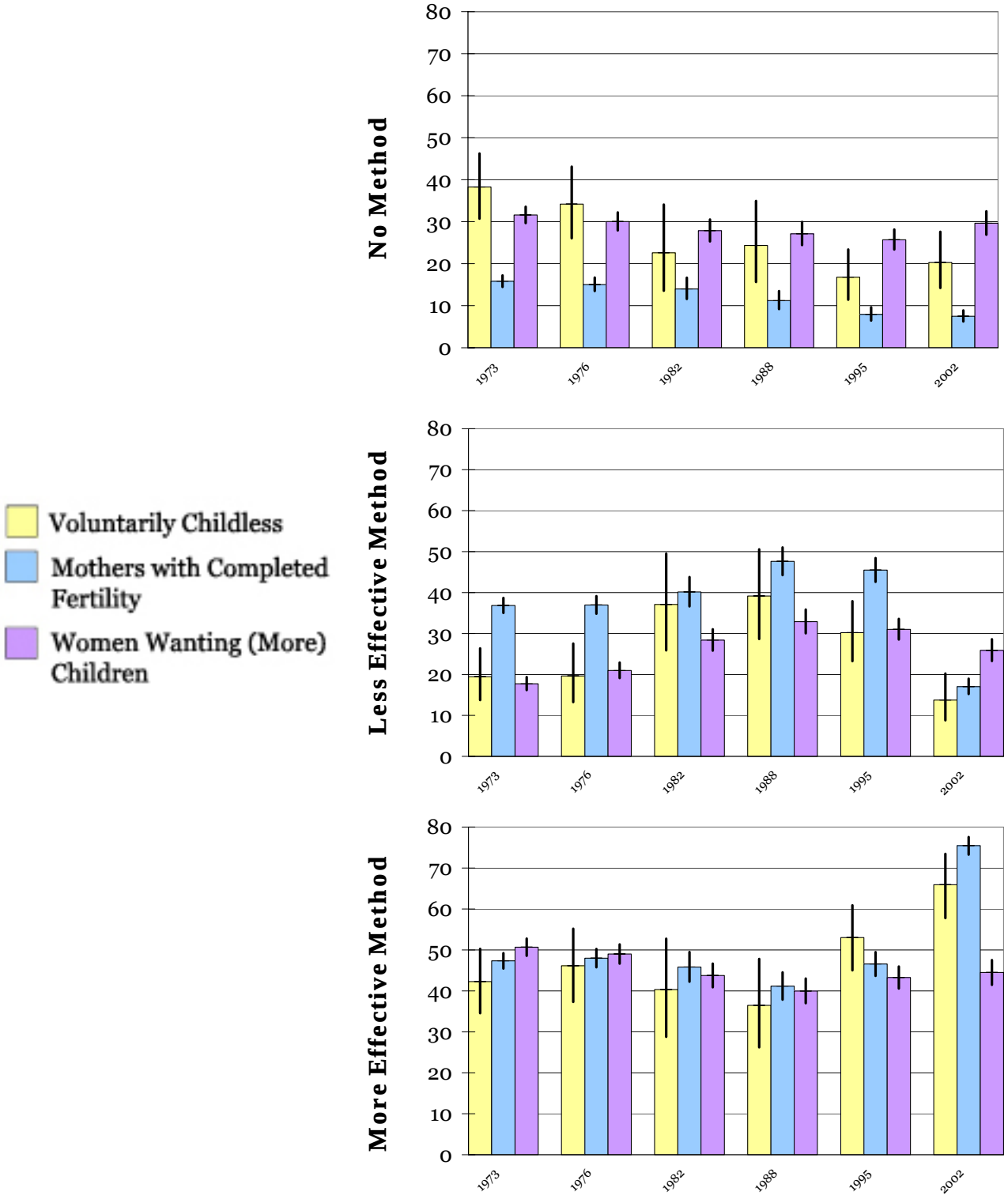

Figure 5: Percentages of Currently-Married Women in Three Fertility Categories by Efficacy of Contraceptive Method and Year, with Confidence Intervals

Table 2: Percent of Voluntarily Childless Women by Race, Education, and Religious Service Attendance, 1982 and 2002

	NSFG 1982		NSFG 2002	
	N childless	Percent voluntary childless	N childless	Percent voluntary childless
White				
With college degree				
Never attends/no religion	136	28.57	252	39.25
Attends services infrequently	253	19.09	587	24.84
Attends services frequently	193	6.25	440	14.45
High school or some college				
Never attends/no religion	543	15.41	672	31.86
Attends services infrequently	1345	7.37	1187	20.09
Attends services frequently	899	3.64	775	14.12
Less than high school				
Never attends/no religion	282	11.67	388	21.39
Attends services infrequently	543	5.30	533	15.00
Attends services frequently	361	5.43	432	7.34
Nonwhite				
With college degree				
Never attends/no religion	23	14.29	62	15.15
Attends services infrequently	153	14.75	166	17.95
Attends services frequently	119	16.22	177	14.71
High school or some college				
Never attends/no religion	176	11.67	195	29.33
Attends services infrequently	1076	11.22	545	18.97
Attends services frequently	706	11.11	480	18.30
Less than high school				
Never attends/no religion	172	14.29	154	26.23
Attends services infrequently	539	11.94	291	16.51
Attends services frequently	391	11.23	270	11.76

As seen in previous charts, greater percentages of voluntary childlessness appear in 2002 than in 1982. Interestingly, the correlates of voluntary childlessness that have repeatedly been confirmed by the literature appear to be fading somewhat in importance, lending support to the idea that voluntary childlessness is diffusing. In both 1982 and 2002, white college-educated nonreligious women had the highest percentage of voluntary childlessness, but the gap between this demographic category and others is narrowing in 2002. Among whites with a high school degree or some college in 1982, the proportion of voluntary childlessness to childlessness doubles (or halves) neatly at each level of religiosity. The lowest incidence of voluntary childlessness found in the table, 3.64 percent, occurs for these women at the highest level of religiosity. For whites in the middle educational category in 2002, the rates of voluntary childlessness for medium to no religiosity are very similar to 1982 rates for the highest educational category. In turn, white women with less than high school in 2002 are voluntarily childless at much higher rates than their 1982 high school graduate counterparts. These results show substantial diffusion across educational categories between 1982 and 2002. For high religiosity in 2002, the percent voluntarily childless is almost the same between high school graduates and college graduates, but is halved for women with less than high school.

Nonwhite women follow a much different pattern, which may be due to a faulty dichotomy of white/nonwhite. The nonwhite category could be too heterogenous, and its composition may have changed over time. College-educated nonwhite women are voluntarily childless at very similar rates for all levels of religiosity for both times surveyed. Among those with high school or some college, nonwhites increased quite a bit in percent voluntarily childless between 1982 and 2002, with 2002 percentages

closer to 1982 white college-educated percentages. Religiosity does affect voluntary childlessness for nonwhites in the middle educational category in 2002, although the frequency of religious service attendance does not matter—the difference here is between women who attend and who do not attend religious services. It is the nonwhites with less than high school in 2002 who most closely follow the white pattern of voluntary childlessness by religiosity, and actually show higher percentages than their white counterparts.

These basic statistics provide an overview of how voluntary childlessness has changed over a twenty-year period in the United States. The voluntarily childless are generally high on educational attainment, which is consistent with both previous research and with theoretical expectations derived from Friedman et al. (1994) and Schoen et al. (1997). Frequent attendance at religious services, a mark of traditional values, nearly always characterizes the lowest percentages of voluntary childlessness. Preliminary evidence is found to support the hypothesis that voluntary childlessness is spreading among whites by diffusion of innovations, but perhaps not for nonwhites. Further research should test this idea, and may find a parallel between the diffusion of cohabitation from highly educated nonreligious whites to a greater mix of the population (e.g., Wilhelm 1998).

SUMMARY AND CONCLUSIONS

This study intended to investigate whether and how voluntary childlessness changed in the United States in the last part of the twentieth century. I used a variety of measures to analyze the trends in negative fertility intentions of childless women, computing rates both by cohort and by period for overall childlessness, voluntary childlessness, and voluntary childlessness as a percentage of overall childlessness. I showed the changing relative pregnancy risks by the failure rate of the current contraceptive method of voluntary childless women compared to mothers with completed fertility and women with affirmative fertility intentions. I also compared 1982 and 2002 percentages of voluntary childlessness among women by race, education, and religiosity.

Previous studies provided estimates of voluntary childlessness scattered through the time period of interest, but they could not be used for evidence of real change because of varying data sources and operational definitions. The results of this study show that voluntary childlessness increased rapidly around the turn of the twenty-first century relative to the 1970s and 1980s, composing 5.7% of all ever-married American women in their reproductive years in 2002. Trends show that increases in voluntary childlessness have been due to baby boomers arriving in that category through postponement of fertility as they age, and to younger women deciding to remain childless earlier in life. Table 2 showed that as the incidence of voluntary childlessness increased in recent years, it has also spread among sociodemographic groups. It seems that white college-educated nonreligious women in 1982 represented the early adopters of voluntary childlessness. Twenty years later, while voluntary childlessness still varies

with education and religious service attendance, the practice is diffusing to white women in all educational and religious categories, along with nonwhite women in some categories. Thus, increases in voluntary childlessness may also be due to innovation and diffusion among groups.

How high can voluntary childlessness go? Women born in the 1970s will show us by the mid-2020s. I see two paths for them. One, they could maintain their upward trend following the women ten and twenty years older, and reach a historically high level of cohort voluntary childlessness around fifteen percent. Two, they could reach a convergence of sorts with the two next oldest birth cohorts, and establish the ceiling of voluntary childlessness at or just under ten percent.

It is hard to imagine that voluntary childlessness could compose much more than ten percent of the population without significant political battles. The voluntarily childless could possibly gain enough political clout with their numbers to affect "family-friendly" policies that are increasingly alienating to them (Burkett 2000). Such policies appear frequently in the workplace, which is a place of especially high importance to the career-oriented voluntarily childless. Proposed by the World Childfree Association is the Australian Childfree Party, which lists diverse goals related to taxation and housing relating to "promotion of the childfree lifestyle as opposed to promotion of the family lifestyle" (2006).

Although modern voluntary childlessness emerged in the early 1970s, it has begun to spread and change rapidly in recent years. Most research has centered on the description, prediction, and social consequences of a choice to remain childless. Future research should move beyond this by incorporating the knowledge that voluntary childlessness has changed over time. The hypothesis that voluntary childlessness is

growing through a process of innovation and diffusion should be explicitly tested. As the age at marriage and first birth increase over time, so do the number of potential adopters of voluntary childlessness—ergo, dynamic diffusion models will be necessary (Mahajan and Peterson 1985). Overall trends should be continually monitored as new data are released. As voluntary childlessness becomes more prevalent, research should show that the corresponding social consequences may be lessening. Racial and ethnic differences among the voluntarily childless should be more carefully studied—models should not control for race by excluding blacks, and the role of Hispanic origin should be analyzed. Finally, given that fertility intentions can be reversed, longitudinal data would be most useful for future research on voluntary childlessness.

REFERENCES

Bongaarts, John and Susan Cotts Watkins. 1996. "Social Interactions and Contemporary Fertility Transitions." *Population and Development Review* 22:639-82.

Boyd, Robert L. 1989. "Racial Differences in Childlessness: A Centennial Review." *Sociological Perspectives* 32:183-99.

Burkett, Elinor. 2000. *The Baby Boon*. New York, NY: The Free Press.

Cain, Madelyn. 2001. *The Childless Revolution: What it Means to be Childless Today*. Cambridge, MA: Perseus Publishing.

Chancey, Laurie and Susan A. Dumais. 2006. "Portrayals of Alternative Family Types: An Examination of Marriage and Family Textbooks, 1950-2000." Paper presented at the 69th annual meeting of the Southern Sociological Society, New Orleans, LA. March 22-26.

Coale, Ansley and James Trussell. 1996. "The Development and Use of Demographic Models." *Population Studies* 50:469-84.

Foster, Caroline. 2000. "The Limits to Low Fertility: A Biosocial Approach." *Population and Development Review* 26:209-34.

Friedman, Debra, Michael Hechter, and Satoshi Kanazawa. 1994. "A Theory on the Value of Children." *Demography* 31:375-401.

Hagewen, Kellie J. and S. Philip Morgan. 2005. "Intended and Ideal Family Size in the United States, 1970-2002." *Population and Development Review* 31:507-27.

Hastings, Donald W. and J. Gregory Robinson. 1975. "Incidence of Childlessness for United States Women, Cohorts Born 1891-1945." *Social Biology* 21:178-84.

Heaton, Tim B., Cardell K. Jacobson, and Kimberlee Holland. 1999. "Persistence and Change in Decisions to Remain Childless." *Journal of Marriage and the Family* 61:531-9.

Hirschman, Charles. 1994. "Why Fertility Changes." *Annual Review of Sociology* 20:203-33.

Jacobson, Cardell K., Tim B. Heaton, and Karen M. Taylor. 1988. "Childlessness among American Women." *Social Biology* 35:186-97.

Krishnan, Vijaya. 1993. "Religious Homogamy and Voluntary Childlessness in Canada." *Sociological Perspectives* 36:83-93.

Livi-Bacci, Massimo. 1986. "Social-Group Forerunners of Fertility Control in Europe." Pp. 182-200 in *The Decline of Fertility in Europe*, edited by Ansley J. Coale and Susan Cotts Watkins. Princeton, NJ: Princeton University Press.

Mahajan, Vijay and Robert A. Peterson. 1985. *Models for Innovation Diffusion* (Sage University Paper Series on Quantitative Applications in the Social Sciences). Newbury Park, CA: Sage.

May, Elaine Tyler. 1997. *Barren in the Promised Land: Childless Americans and the Pursuit of Happiness*. Cambridge, MA: Harvard University Press.

Metter, Ellen. 2001. *Cheerfully Childless: The Humor Book for Those Who Hesitate to Procreate*. Denver, CO: Browser Press.

Mommsen, Kent G. 1975. "Differentials in Fertility among Black Doctorates." *Social Biology* 20:20-29.

Mosher, William D. and Christine A. Bachrach. 1982. "Childlessness in the United States: Estimates from the National Survey of Family Growth." *Journal of Family Issues* 3:517-43.

Park, Kristin. 2002. "Stigma Management among the Voluntarily Childless." *Sociological Perspectives* 45:21-45.

Poston, Jr., Dudley L. 1990. "Voluntary and Involuntary Childlessness among Catholic and Non-Catholic Women: Are the Patterns Converging?" *Social Biology* 37:251-65.

Poston, Jr., Dudley L. and Erin Gotard. 1977. "Trends in Childlessness in the United States, 1910-1975." *Social Biology* 24:212-24.

Poston, Jr., Dudley L. and Kathryn B. Kramer. 1983. "Voluntary and Involuntary Childlessness in the United States, 1955-1973." *Social Biology* 30:290-306.

Poston, Jr., Dudley L. and Katherine Trent. 1982. "International Variability in Childlessness: A Descriptive and Analytical Study." *Journal of Family Issues* 3:473-91.

Ritchey, P. Neal and C. Shannon Stokes. 1974. "Correlates of Childlessness and Expectations to Remain Childless: U.S. 1967." *Social Forces* 52:349-56.

Rogers, Everett M. 2003. *Diffusion of Innovations*, 5th ed. New York, NY: The Free Press.

Rosero-Bixby, Luis and John B. Casterline. 1993. "Modelling Diffusion Effects in Fertility Transition." *Population Studies* 47:147-67.

Rovi, Susan L.D. 1994. "Taking No for an Answer: Using Negative Reproductive Intentions to Study the Childless/Childfree." *Population Research and Policy Review* 13:343-65.

Rowland, Donald T. 1998. "Cross-National Trends in Childlessness." Working Papers in Demography No. 73, The Australian National University, Canberra, ACT. Retrieved March 20, 2006 (http://demography.anu.edu.au/Publications/WorkingPapers/73.pdf).

Schoen, Robert, Young J. Kim, Constance A. Nathanson, Jason Fields, and Nan Marie Astone. 1997. "Why Do Americans Want Children?" *Population and Development Review* 23:333-58.

Stobert, Susan and Anna Kemeny. 2003. "Childfree by Choice." *Canadian Social Trends* 69:7-10.

Tolnay, Stewart E. 1995. "The Spatial Diffusion of Fertility: A Cross-Sectional Analysis of Counties in the American South, 1940." *American Sociological Review* 60:299-308.

Tonkunaga, Wendy. 2000. *No Kidding: A Novel*. Lincoln, NE: iUniverse.com.

Trussell, James. 2004. "Contraceptive Efficacy." In Hatcher, Robert A., James Trussell, Felicia Stewart, Anita L. Nelson, Willard Cates, Felicia Guest, Deborah Kowal. *Contraceptive Technology: Eighteenth Revised Edition*. New York, NY: Ardent Media. Summary table retrieved March 20, 2006 (http://www.contraceptivetechnology.org/table.html).

Trussell, James, Robert A. Hatcher, Willard Cates, Jr., Felicia Hance Stewart, and Kathryn Kost. 1990. "Contraceptive Failure in the United States: An Update." *Studies in Family Planning* 21:51-4.

Trussell, James and Kathryn Kost. 1987. "Contraceptive Failure in the United States: A Critical Review of the Literature." *Studies in Family Planning* 18:237-83.

Trussell, James and Barbara Vaughan. 1999. "Contraceptive Failure, Method-Related Discontinuation and Resumption of Use: Results from the 1995 National Survey of Family Growth." *Family Planning Perspectives* 31:64-72+93.

U.S. Dept. of Health and Human Service, National Center for Health Statistics. NATIONAL SURVEY OF FAMILY GROWTH, CYCLE I, 1973 [Computer file]. ICPSR version. Washington, DC: U.S. Dept. of Health and Human Services, National Center for Health Statistics [producer], 1977. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000.

_____. NATIONAL SURVEY OF FAMILY GROWTH, CYCLE II, 1976: COUPLE FILE [Computer file]. ICPSR version. Hyattsville, MD: U.S. Dept. of Health and Human Services, National Center for Health Statistics [producer], 1978. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000.

_____. NATIONAL SURVEY OF FAMILY GROWTH, CYCLE III, 1982 [Computer file]. ICPSR version. Hyattsville, MD: U.S. Dept. of Health and Human Services, National Center for Health Statistics [producer], 1984. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000.

_____. NATIONAL SURVEY OF FAMILY GROWTH, CYCLE IV, 1988 [Computer file]. ICPSR version. Hyattsville, MD: U.S. Dept. of Health and Human Services, National Center for Health Statistics [producer], 1990. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000.

_____. NATIONAL SURVEY OF FAMILY GROWTH, CYCLE V, 1995 [Computer file]. ICPSR version. Hyattsville, MD: U.S. Dept. of Health and Human Services, National Center for Health Statistics [producer], 1997. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000.

_____. NATIONAL SURVEY OF FAMILY GROWTH, CYCLE VI, 2002 [Computer file]. Hyattsville, MD: U.S. Dept. of Health and Human Services, National Center for Health Statistics [producer and distributor], 2004.

Veevers, Jean E. 1971. "Differential Childlessness by Color: A Further Examination." *Social Biology* 18:285-91.

_____. 1973. "Voluntary Childless Wives: An Exploratory Study." *Sociology and Social Research* 57:356-66.

_____. 1975. "The Moral Careers of Voluntarily Childless Wives: Notes on the Defense of a Variant Moral View." *The Family Coordinator* 24:473-87.

Weeks, John R. 2002. *Population: An Introduction to Concepts and Issues*. Belmont, CA: Wadsworth Publishing Co.

Wilhelm, Brenda. 1998. "Changes in Cohabitation across Cohorts: The Influence of Political Activism." *Social Forces* 77:289-310.

World Childfree Association, Inc. 2006. "Childfree Political Party." Retrieved March 20, 2006. (http://www.worldchildfree.org/projects/politicalparty/acfp.shtml).

VITA

Laurie Chancey was born in Lake Charles, Louisiana, on April 9, 1980. She was unschooled until entering college at age eighteen. In December of 2001, Laurie graduated *summa cum laude* from McNeese State University with a Bachelor of Arts in sociology and a concentration in women's studies. After a few more years of work and study, she enrolled in the sociology graduate program at Louisiana State University in August 2004. Laurie will receive a Master of Arts degree at the May 2006 commencement ceremony and begin her doctoral studies at LSU immediately thereafter.