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# Comparing Current, Former and Never Users of Natural Family Planning: An Analysis of Demographic, Socioeconomic and Attitudinal Variables

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Comparing Current, Former and Never Users of Natural Family Planning:
An Analysis of Demographic, Socioeconomic and Attitudinal Variables
by

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and

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**Abstract**

This project examines how women who currently use Natural Family Planning (NFP), those who formerly used NFP, and those who have never used NFP compare along demographic, socioeconomic and attitudinal variables. Bivariate analyses of data from the National Survey of Family Growth 2006-2010 (N=10,598 female respondents) suggest that current NFP users varied socioeconomically and demographically from former NFP users, but differences were more prominent between current NFP users and never NFP users. In many cases, there was little variation between former NFP users and never NFP users. Current NFP users were less likely to be black and more likely to be Hispanic or other race, married, Catholic or other religion, have a Bachelor's degree, and earn higher income than the other two groups. Understanding how current NFP users differ from those who formerly used NFP and those who have never tried NFP provides important clues about which populations to target for promotional efforts.

**Introduction**

Researchers have documented many benefits associated with the use of Natural Family Planning (NFP), including greater marital communication and respect, enriched spirituality, low cost, and increased awareness of the woman's body.[1,2] Most notably, NFP has no negative health side effects though it has similar effectiveness rates as oral contraception.[2,3] Despite these advantages, only 1.6% of women in the United States currently use any form of periodic abstinence, and just 18.8% have ever tried it.[4] While it seems probable that users of such a unique method might differ from non-users, very few researchers have tried to identify their characteristics. Currently in circulation are studies that make notable contributions, but do not focus on comparing NFP users to non-NFP users. Much of the research on Natural Family Planning examines what health care providers know about NFP and how much they discuss NFP with patients, [5,6,7] factors that encourage or inhibit women from using or continuing NFP, [2,8,9] the relationship between religion and contraceptive practices [10] and international use of NFP. [7,11,12] Those that address demographics of users are decades old,[13] rely on unrepresentative samples[14,15] or focus on contraception use in general, rather than NFP in particular. [10]

To date, there exists no extensive analysis employing a large, nationally representative sample that describes NFP users and compares them to non-users. This project seeks to fill that gap by using the National Survey of Family Growth 2006-2010 [4] to examine how demographic, socioeconomic and attitudinal characteristics of women who currently use Natural Family Planning compare to those of former NFP users and women who have never used the method. Understanding how current NFP users differ from those who formerly used NFP and those who have never tried NFP will provide important clues about which populations to target for promotional efforts.

**Method**

**Research Question**

This project asks one main question: How do the demographic, socioeconomic and attitudinal characteristics of women who currently use NFP compare to those of former NFP users and women who have never used the NFP?

**Data and Sample**

The data for this project come from the 2006-2010 National Survey of Family Growth (NSFG), a cross-sectional survey using a nationally representative, stratified, and randomly selected sample of 12,279 women and 10,403 men ages 15-44 in the United States. The 2006–2010 NSFG was conducted by the University of Michigan Institute for Social Research under contract and in collaboration with the National Center for Health Statistics. It used a continuous design that resulted in interviewing for 48 weeks of every year between 2006 and 2010. Data were collected through in-person, face-to-face interviews conducted by female interviewers using laptop computers, a technique called computer-assisted personal interviewing (CAPI). The response rate was 77% (78% for women and 75% for men).[16] The research presented here focuses on the 10,598 female respondents who answered the questions of whether they had ever used Natural Family Planning or Rhythm.

**Variables**

*Current NFP Users, Former NFP Users, and Never NFP Users.* The variable used to compare current NFP users (n=175), former NFP users (n=1,816) and never NFP users (n=8,607) combined two variables: "ever used natural family planning or safe period by temperature or cervical mucus" and "ever used rhythm or safe period by calendar". Rhythm users were included for two reasons. First, because the linguistic distinction between rhythm and NFP is often inexact, some women categorized as using rhythm may have indeed relied on

symptoms, and those categorized as NFP users may have primarily relied on the calendar. Second, the sample size of current NFP users was so small that the analysis benefited from capturing the extra cases.

Never users were simply those who had never used NFP or rhythm. Current and former NFP users were delineated by using a third variable: "safe period by temperature or cervical mucus test, natural family planning" or "rhythm or safe period by calendar" as "birth control method used in month prior to the interview".[17] Women were allowed to offer a maximum of four methods that they used in the month prior to the interview, which the NSFG inputted into four separate variables. The four variables were collapsed into one to include anyone who stated they used NFP or Rhythm in any of the four variables, and those who did not. This technique captured more cases of NFP, but also permitted three women who used condoms, two women who used diaphragms and jelly, and several who employed withdrawal in addition to NFP. It is unlikely that these few additions affected the outcomes of the variable. Thus, current NFP users were those who claimed to have used NFP or Rhythm in month prior to interview, while former NFP users were those who claimed to have used NFP or Rhythm at least once, but not in the month prior to the interview.

*Demographic Variables.* The demographic variables included race, age, age at first live birth, age at first marriage, age at first intercourse, marital status and number of children. Race was categorized as non-Hispanic white, Hispanic, non-Hispanic black, and non-Hispanic other. The age variables were continuous and reported in years. Marital status was divided into four categories including: currently married; cohabitating; divorced, separated or widowed; and never been married. Number of children was categorized as a continuous variable in Table 2, and as a categorical variable that combined three or more children in Table 1.

*Socioeconomic Variables*. The socioeconomic variables included income and education. Income was measured as a percentage of the federal poverty threshold, based on family size and household income. Scores greater than 100% are above the poverty line and scores less than 100% are below the poverty line. A score of 200%, for example, means that the household earned two times the poverty level income. Education was labeled as high school diploma, General Educational Development test (GED), or less, some college or Associate's degree, and Bachelor's degree or more.

*Religion and Abortion*. The religious affiliation categories included Catholic, Protestant, other religion, and no religion. Importance of religion was measured as "very important", "somewhat important", and "not important". Two variables that measured abortive activity were included in the analysis. One asked whether the woman had ever had an abortion (yes or no) (see Table 1), and the other was a continuous variable that measured number of abortions (see Table 2). For the purposes of this research, the number of abortions variable was limited to those who had at least one abortion.

*Attitudinal and Opinion Variables*. Opinion scales were created from several questions, ranging from "strongly agree" to "strongly disagree". Questions that composed the *sexual relations scale* were: "Sexual relations between two same-sex adults is okay"; "Any sexual act between consenting adults is okay"; "It is okay if unmarried 18 year olds have sex"; and "It is okay if unmarried 16 year olds have sex". Questions that composed the *raising children* scale were: "People can't be really happy unless they have children"; "Rewards of being a parent are worth it despite the costs"; "Gay adults should have the right to adopt"; "It is okay for unmarried female to have a child"; "Working mom can establish secure relationship with child"; and "It is okay for cohabiting couple to have and raise children". Finally, questions that composed the

*marriage and cohabitation scale* were: "Living together is good for couples to make sure they

get along"; "Living together before marriage may prevent divorce"; "A young couple should not

live together unless married"; "Marriage has not worked out for most people"; "It is better to get

married than to stay single"; "Divorce is best solution when can't work out marriage problems";

"It is better if man earns main living and woman stays at home"; and "It is important for man to

spend time w/ family vs. career success".

The scores of each question, ordered from most liberal (score=1) to most conservative

(score=4), were added together and divided by the greatest possible score (4 x number of

questions) to create a scale that ranged from 0 to 1.  Scores closer to 0 indicated more liberal

opinions and scores closer to 1 indicated more conservative opinions.  In addition to these

opinion scales, two questions about hypothetical childbearing outcomes are reported on Table 1.

**Analysis**

Several bivariate tests were run to compare the characteristics of current, former and

never NFP users.  For categorical variables (education, race, marital status, religious affiliation,

importance of religion, abortion, feel about getting pregnant now, bothered if did not have

children, and number of children), cross tabulations were constructed and Chi-square was

computed to determine statistical significance.  Table 1 displays column percentages within each

characteristic listed and significance derived from Chi-square.  Continuous variables (income,

age, age at first live birth, age at first marriage, age at first intercourse, number of children,

number of marriages, number of abortions, sexual relations scale, raising children scale, marriage

and cohabitation scale) were analyzed using the Kruskal-Wallis test, a non-parametric statistic.

Table 2 reports means, standard deviations, and significance derived from the Kruskal-Wallis

tests.

**Results**

**Education and Income**

Current NFP users generally had higher levels of education and income than former NFP users, and former NFP users had slightly higher levels of education and income than those who had never used the method. For example, 42.3% of current NFP users had a Bachelor's degree compared to 27.7% of former NFP users and 20.9% of never NFP users (see Table 1). Similarly, the average income of current NFP users was 266.6% of the federal poverty level compared to 231.1% for former NFP users and 216.5% for never NFP users (see Table 2).

**Race and Marital Status**

Current NFP users were more likely to be Hispanic and non-Hispanic other, and less likely to be non-Hispanic black than former NFP users and never NFP users (see Table 1). Over 13% of NFP users were non-Hispanic other and 29.1% were Hispanic, compared to only 9.8% and 20.5% of former NFP users, and 7% and 22.4% of never users respectively. On the other hand, only 8% of current NFP users were non-Hispanic black compared to 21.9% of former NFP users and 20.2% of never NFP users. Current, former and never NFP users were all approximately 50% non-Hispanic white.

Current NFP users were more likely to have married and to be currently married than the other groups. Only 16% of current NFP users had never been married compared to 32.9% of former NFP users and 38.4% of never users. Similarly, 68.6% of current NFP users were married at the time of the interview compared to 43.9% of former NFP users and 35.4% of never NFP users. However, among women who had been married at least once, the average number of marriages among current NFP users (1.1), former NFP users (1.1) and never NFP users (1.2) were virtually equal (see Table 2).

**Current Age, Age at Various Life Events and Number of Children**

On average, current NFP users were older than former and never NFP users, and were also older at first intercourse, first marriage, and first birth. Current NFP users were, on average, 33.1 years old, 26 years old at first live birth, 24.7 years old at first marriage and 19.1 years old at first intercourse. Former NFP users were, on average, just over one year younger at the time of the interview, and two years younger at first birth and at first intercourse. Both groups were approximately 24 years old at first marriage. Never NFP users were more than three years younger than current NFP users at the time of the interview, three and a half years younger at first live birth, one and a half years younger at first marriage and two years younger at first intercourse. Both former and never users of NFP were approximately 17 years old at first intercourse.

The average number of babies born to current NFP users (1.6) was only slightly greater than those born to former NFP users (1.5) and never NFP users (1.3). However, never NFP users (38.4%) were more likely than former NFP users (31.2%) or current NFP users (26.9%) to have no children and less likely to have three or more kids (19.3%) (see Table 1).

**Religion and Abortion**

The religious affiliations of current, former and never NFP users differed by nearly 13%, with current NFP users more likely to be Catholic or other religion and less likely to be Protestant or claim no religion. For example, 37.1% of current NFP users were Catholic and 13.1% were other religions compared to 26.2% and 8.4% of former NFP users and 24.6% and 7.5% of never NFP users respectively. Similarly, only 14.3% of current NFP users claimed no religion compared to 20.4% of never NFP users. Importance of religion was weaker than the relationship between NFP use and religious affiliation, especially between current and former NFP users. There was 10% difference between current NFP users (68%) and never NFP users

(57.7%) who said that religion was "very important", and only 2% of current NFP users said that religion was "not important" compared to 6.5% of never NFP users.

In regards to abortive behavior, former NFP users (25.6%) were more likely to have an abortion than current NFP users (23.9%) or never NFP users (20.6%). Of those who had at least one abortion, current, former, and never NFP users averaged 1.4-1.6 abortions (see Table 2).

**Attitudes and Opinions**

The attitudes and opinions of current, former and never NFP users showed little variation for all variables except one. Notably, only 11.6% of current NFP users said they would be "very upset" if they "got pregnant right now" compared to 28.7% of former NFP users and 30.3% of never NFP users. Also, fewer current NFP users (12.8%) would be "not at all bothered" if they "did not have children" than the other groups, though this relationship was not statistically significant. Current, former and never NFP users scored similarly on all other attitudinal questions. For example, the mean scores on the attitudinal scales of all three groups varied by just .02-.04 (see Table 2). Current, former and never NFP users scored in the moderate range on all scales (.55 to .66), with slightly more liberal responses to questions about children.

## Conclusion

Overall, current NFP users varied socioeconomically and demographically from former NFP users, but differences were more prominent between current NFP users and never NFP users. In many cases, there was little variation between former NFP users and never NFP users. Current NFP users were much less likely to be black and more likely to be Hispanic or other race, married, Catholic or other religion, have a Bachelor's degree, and earn higher income than the other two groups. Compared to never NFP users, current NFP users were less likely to be

childless and more likely to describe religion as very important. They were also older, and older at first marriage, first intercourse and first live birth than former and never users of NFP.

However, the responses of current NFP users, former NFP users and never NFP users varied little on questions regarding attitudes and opinions with the exception that NFP users were more open to getting pregnant "right now" than women in the other groups. All three groups also had similar rates of abortion, with former NFP users slightly more likely to have had an abortion, followed by current NFP users, then never NFP users. The general lack of variation between former NFP users and never NFP users suggests that former users were socioeconomically, demographically and attitudinally similar to the general population of women in the United States.

## Discussion

Comparing ever use of NFP to ever use of other methods suggests that relatively few women ever try Natural Family Planning. For example, 18.8% of women have ever used NFP, while 22.9% have used Depo Provera, 70.4% have used the pill, and 92.9% have used condoms (analysis not shown). In addition, retention of NFP users is lower than other methods. Only 8% of women who have ever tried NFP are current users, compared to 16.7% of Depo Provera ever-users, 22% of condom ever-users, and 23% of oral contraception ever-users. Understanding the characteristics of these rare women who try Natural Family Planning, those who continue with it, and those who have never tried the method can assist NFP-promotion efforts by illustrating which groups should be targeted for initial recruitment and which groups may need more support for retention.

The research presented here suggests that nearly every kind of woman tries Natural Family Planning at one time or another. However, only certain women tend to stick with it,

namely women of higher socioeconomic status, older women, Hispanics and other races, Catholics, and those who are married. These data have three important implications for recruitment efforts and research-based advocacy.

First, the low rates of ever use suggest that promoting the method widely among those who have never tried NFP is warranted. Because the demographics of former NFP users and never NFP users are similar, no specific group needs to be especially targeted. Rather, a broad effort across the population might be effective.

In addition, the generally low retention rate indicates that more effort needs to be made to support and educate people who try Natural Family Planning. In particular, the loss of women who are black, younger, Protestant, and those who have lower education and income levels suggests that NFP promoters should provide special attention and encouragement for these women to continue practicing NFP.

Finally, because current NFP users differ socioeconomically and demographically from the US population, there is a need for more diverse samples in NFP research. Many studies have focused on samples that include primarily white, middle-class, well-educated, and Catholic women.[14, 15] However, since retention is particularly low among women who are black and of lower socioeconomic status and retention is disproportionately high among women who are Catholic, white and of higher socioeconomic status, researchers should make extra effort to collect diverse samples to better understand factors that affect recruitment and retention among all groups.

There are two primary limitations of this study. First, many of the variables that were examined using bivariate analysis are likely related. Due to the small sample size of current NFP users and the multiple variables in the analysis, accurate and adequate multivariate analysis was

nearly impossible to compute. Thus, this research lacks the benefit of controlling variables to understand the unique effect of each. Second, these data cannot explain why particular groups try and/or continue using NFP and the causal direction is difficult to ascertain for many of the variables examined, especially importance of religion, openness to pregnancy, and even abortive behavior. These limitations suggest the need for further research, particularly multivariate analyses that examine diverse and representative samples.

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