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BIRTH CONTROL KNOWLEDGE, ATTITUDES AND PRACTICE:
A COMPARISON OF WORKING AND MIDDLE CLASS
PUERTO RICAN AND WHITE AMERICAN WOMEN

A Dissertation Presented

by

Vickie A. Borrás

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

September 1984

Psychology

Vickie A. Borrás

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BIRTH CONTROL KNOWLEDGE, ATTITUDES AND PRACTICE:
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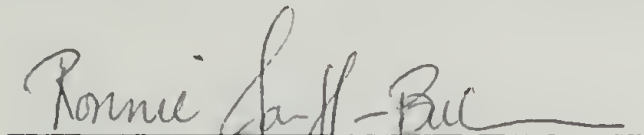
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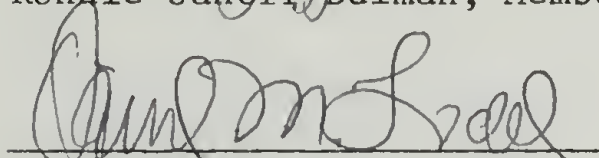
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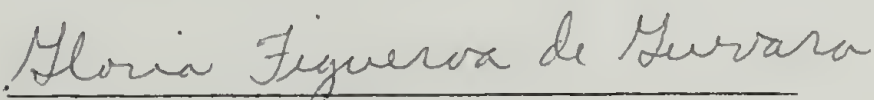
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DEDICATION

To my husband, José Pedro Redondo

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I want to express my gratitude to the members of the dissertation committee, Dr. Castellano B. Turner, Dr. Ronnie Janoff-Bulman, Dr. David M. Todd, and Dr. Gloria Figueroa de Guevara, whose guidance facilitated the completion of my work. Especially I wish to acknowledge Professor Turner's orientation and encouragement throughout the process of completing this research.

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ABSTRACT

Birth Control Knowledge, Attitudes and Practice:

A Comparison of Working and Middle Class

Puerto Rican and White American Women

September, 1984

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This investigation compared birth control knowledge, attitudes, and practices of Puerto Rican (migrants) and White American women of working class and middle class backgrounds. The sample included a total of 120 women of childbearing ages (16 to 48) who were living in Greater Boston or Worcester, Massachusetts. It was divided into four social class/ethnic subgroups of 30: 1) working class Puerto Ricans; 2) middle class Puerto Ricans; 3) working class White Americans; and 4) middle class White Americans.

Participants were individually interviewed using a modified version of Darity, Turner and Thieboux's (1972) questionnaire. All birth control methods were covered.

Major findings included the following: 1) middle class women had greater general knowledge and acceptability of birth control methods than working class women; differences regarding use were not as marked; 2) contrary to prior research, the working class women had a more positive

attitude towards sterilization than the middle class; 3) White American women showed greater general knowledge of birth control methods than Puerto Rican women; differences regarding general acceptability and general use were not significant; 4) Puerto Rican women had a significantly higher incidence of tubal ligation, as opposed to hysterectomy, than White American women; 5) concerning the interaction of social class and ethnicity, the general pattern that emerged was one of very strong social class differences among the Puerto Ricans and very few differences among the White Americans; 6) working class Puerto Ricans appeared to be the least knowledgeable, while the middle class Puerto Ricans knew at least as much or more about birth control methods than any other group, including the White Americans; 7) Puerto Rican middle class women stood out as the group being more accepting of birth control methods in general for their personal use than any other subgroup; 8) working class Puerto Ricans were least accepting of abortion, while middle class Puerto Ricans were most accepting of abortion than any other group; and 9) there was evidence of fears of genocide among middle class but not working class Puerto Ricans.

Implications for birth control programs and future research are discussed.

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C H A P T E R I

INTRODUCTION

Social class (cf. Crader & Belcher, 1975) and ethnicity (cf. Turner & Darity, 1980; 1980-81) are two socio-demographic factors that have been shown to be associated with important differences in birth control knowledge, attitudes and practice. However, the literature that focuses on social class or ethnicity and examines knowledge and attitudes toward controlling births and the practice of birth control suffers from a number of limitations. A first is simply the scarcity of studies available, particularly recent ones (cf. Linn, Carlmichael, Klitenick, Webb & Gurel, 1978; Pohlman, 1973; Crawford, Heredia & Stocker, 1970; Fawcett, 1970). The second is a research design limitation; that is, since with some exceptions (e.g., Rainwater, 1965; Westoff & Ryder, 1977), ethnicity and social class have not been simultaneously studied, it has not been possible to begin to differentiate the impact of each on birth control. A third common limitation of this work is that the population samples have been drawn almost exclusively from the lower end of the social class spectrum. Relatively little is known about middle class groups. Finally, ethnic comparisons have concerned mostly Blacks and White Americans. Studies comparing ethnic Puerto Ricans and White Americans, in particular, are quite rare. In line with these research needs, the purpose of the present study is to examine and contrast the knowledge, attitudes, and practices regarding birth control among Puerto Rican and White American women of working and middle class backgrounds. Given the prevalence of sterilization among Puerto Rican

women (Gonzalez, Barrera, Guarnaccia & Schensul, 1980; Vazquez-Calzada, 1973; Scrimshaw & Pasquariella, 1971), special emphasis is given to that method of birth control in this study.

The present research builds mainly on earlier work done by this author (Borras, 1981). That prior study considered birth control with a sample of Puerto Rican women. In that study, as shall be elaborated later, social class emerged as a significant determinant of differences in the knowledge, acceptability and usage of birth control methods among Puerto Ricans. Going beyond the 1981 study, and using a considerably larger sample, the current research has taken account also of the factor of ethnicity by including not only Puerto Rican, but also White American women.

Relevant to this investigation is the literature on the influence of social class and ethnicity on birth control with both the White American and Puerto Rican groups.

Social Class and Birth Control

Studies with White Americans

Methods in general. The literature that contrasts working and middle class White American women on the issue of birth control is surprisingly scarce. Almost all of the available studies control for social class and select solely from the working class population, to the exclusion of middle class women. One can, however, begin to glean some class differences on the basis of the separate available information on lower or on middle class groups and on the few comparative studies conducted up to now.

It seems that social scientist's interest in social class comparisons regarding the practice of contraception and the knowledge and attitudinal factors associated with it was relatively higher in the 1940's, early 1950's and 1980's. Current data addressing specifically the social class differences in this area of birth control among White American women is needed.

A well-known early large research, the Indianapolis Study of social and psychological factors affecting fertility, was conducted in 1941. It concluded that for the White middle class: "the belief that a method offered 'reliability' is the chief reason for using a method and for changing from one method to another" (Westoff, Herrera & Whelpton, 1953, pp. 348-349).

Another early research collected data from a matched sample of working and middle class Whites in 1946 (Koos, 1947). It revealed important differences in attitudes towards and usage of birth control methods. The following is a comparative list of its major findings.

The White American working class showed:

- more dissatisfaction with all the methods used
- used methods with irregularity (i.e., not always)
- the need to keep a small family was the main reason for using contraceptives
- selected the most affordable methods; that is, withdrawal and condoms
- condoms were often re-used

In contrast, the White American middle class showed:

- less dissatisfaction with all the methods used
- used methods with regularity
- child spacing was the main reason for using contraceptives
- selected more costly methods; that is, suppositories, jellies and diaphragm
- those using condoms tended to discard them after use

Interest in social class comparisons on birth control re-emerged in the sixties with the studies by Rainwater (1965) and by Whelpton, Campbell & Patterson (1966) actually sampling from both the working and middle classes. In these studies, social class was found to be a significant determinant of family size, knowledge of birth control methods and attitudinal differences among White Americans.

As far as family size, the research by Whelpton and colleagues (1966) found that education, rather than income, was the predicting factor. In their sample, as educational levels increased, the family had fewer children. The study by Rainwater (1965) found that differences in the conception of the ideal family size among White Americans depended on social class. For the middle class, to have three children was ideal, while the working class believed that ideally a family should have four children. In line with these ideal family conceptions, social class differences were found with respect to the number of children actually wanted at the time. The middle class people desired to have three children and their working class counterparts desired four or more on the average.

Social class differences were established with respect to knowledge of birth control methods in the study by Rainwater (1965). Specifically, measuring awareness by the number of birth control methods mentioned spontaneously, he found that the number was higher as class status increased. Rainwater's (1965) qualitative data further indicate that the higher classes had a better "social knowledge" (that a method exists and is used routinely and effectively by others) and "psychological

knowledge" (that the method is emotionally acceptable and within one's ability to use successfully) of birth control methods.

Rainwater (1965) also reported social class differences as far as methods used to control births. The higher classes tended to use more frequently rhythm, condom, diaphragm and the pill. The lower classes were more likely to employ instead folk methods (e.g., withdrawal) and condoms.

With respect to attitudinal differences, the middle class in Rainwater's (1965) sample felt that the condom, diaphragm and the pill were the most reliable methods. For their part, the lower classes tended not to make substantial distinctions between reliable and unreliable methods. They tended to consider all methods as unreliable, but were relatively more accepting of the douche and withdrawal methods (Rainwater, 1965).

More recent data regarding attitudes towards birth control methods of White American middle class women was provided by Linn, Carlmichael, Klitenick, Webb & Gurel, (1978). In their study, middle class White Protestant mothers were compared to their counterparts in four minority groups (Blacks, Chicanos, American Indians and Cubans), all of whom were from a lower socio-economic background. They found that compared to the other groups, the White middle class group had significantly less negative attitudes towards birth control in general, and abortion specifically. Middle class White American mothers also were able to name a significantly larger number of birth control methods than any other group. A problem in interpreting these findings of Linn and her

colleagues (1978) is that the sample did not include a working class White American group. Thus, the influence of social class and ethnicity are confounded.

With respect to ideal family size, the study of Linn and others (1978) found that middle class White women who had large families (those with five or more children) expressed the desire to have fewer children than they actually had. Thus, the evidence seems to be pointing to social class differences in family size preference.

Sterilization in particular. In 1970, the National Fertility Study (NFS) revealed that attitudes towards sterilization among White Americans were affected by education as well as income. There was a positive relationship between education and approval of sterilization; and between income and approval of this method. However, regarding current use, it was the less educated women (less than high school) who were more likely to have undergone tubal ligation (14%) than the higher educated ones (college; 6%). This relationship was true for both White and Black Americans, although among Black women with less than high school education, contraceptive sterilization was more widely practiced (32%).

Studies with Puerto Ricans

Methods in general. As noted before, a prior exploratory study of birth control among Puerto Rican women of working and middle class backgrounds was conducted by the present author (Borras, 1981). A main finding of the earlier study was that there was a positive correlation

between education -- a social class index -- and knowledge of birth control methods. The higher educated Puerto Rican women were significantly more knowledgeable on this matter than their less educated, working class counterparts. Knowledge had been measured by ascertaining the number of birth control methods the women could name upon questioning as well as recognize from a given list. Qualitative data also gave the impression that higher educated women had more thorough knowledge of birth control methods than just their names. Better educated women, for example, seemed to be more aware that there was a higher risk of pregnancy with the rhythm method, and that the effectiveness of this birth control approach depended on such variables as personal discipline and the regularity of a woman's menstrual cycle.

Earlier studies on fertility related attitudes of Puerto Ricans showed that despite high fertility rates in the island of Puerto Rico, there was a widespread favorable attitude towards family planning (Hatt, 1952; Stycos, 1955). In P.K. Hatt's (1952) study, favorable attitudes were defined as:

- 1) A statement that the ideal family should contain few children
- 2) A desire that a daughter should have few children
- 3) Disapproval of the consensual unions
- 4) Approval of employment of women outside the home
- 5) The acceptability of the right of parents to limit the size of their own family
- 6) Approval of older, rather than younger, age at marriage (p. 457).

These favorable attitudes toward family planning were more predominant among the higher income, educated, urban Puerto Rican as opposed to the

lower class, poorly educated rural one; and among females as opposed to males.

Sterilization in particular. Social class comparisons regarding sterilization practices of Puerto Rican women have undergone substantial transformations from the decades of the forties, when the first reports appeared, to the present time. In one of the major fertility studies conducted in the island of Puerto Rico between 1947 and 1948, sterilization was found to be more widely practiced among the urban, higher income women (Hatt, 1952). Years later, Presser (1969) and Vazquez-Calzada (1973) identified a number of factors which seemed to be associated with a higher incidence of sterilization and which represented a big change from Hatt's (1952) findings. Such factors were: low income, low educational level, middle to late 20's in age, having had from three to four children, less knowledge about contraceptives, and less experiences with other methods of birth control. Factors such as low income and lower educational levels associated with high rates of sterilization were confirmed in this investigator's previous study (Borras, 1981). In that study it was usually the lower income women who were the ones most accepting of sterilization and also less concerned and aware of its consequences. In sum, sterilization, which was a popular method of the higher social class women in the forties, became a preferred method of the masses of working class women in more recent years.

Ethnicity and Birth Control

Studies with White Americans

Methods in general. The evidence suggests clearly that White Americans have a favorable attitude towards fertility control. Of the White American group studied by Whelpton et al. (1966), 80% favored it. White women in Blake and colleagues' study (1969) expressed positive attitudes regarding non-procreative sex. This was later confirmed in the study by Linn and colleagues (1978). The women in the study by Blake and others (1969) were also reported to value and to have positive attitudes towards the following: the employment of the wife outside the home, social activities in the community, a well-adjusted family, and a happy marriage. Blake and others (1969) interpreted these attitudes as suggesting that family planning was welcome and that its practice would be reinforced by them.

A study conducted in 1960 by Whelpton et al. (1966) revealed differences between White and Black American couples on ideal and desired family size and on number of births had and of additional children wanted. Overall, averages for Black Americans were slightly higher than for Whites. On ideal family size, White wives considered an average maximum of 3.5 and an average minimum of 3.4 children. Averages for desired family size remained the same for the maximum number of children considered, but changed to a 3.1 percent for the minimum. At the time the interviews in 1960 were conducted, White wives had given birth to an average of 2.3 children and wanted an additional

most likely average of .8.

Linn and colleagues (1978) were interested in comparing large and small families across five ethnic groups and reported on observations regarding attitudes towards family size. The larger families in the White mothers group had a mean number of 5.8 children as opposed to 7.3 for the Chicanos, 7.2 for the Blacks, 6.6 for the Indians, and 5.9 for the Cubans. Not only did the large family White mothers averaged fewer children, but they also expressed a desire for fewer children than what they had. These findings point to the White group's tendency towards having smaller families.

Regarding the practice of contraception, a report of the 1970 National Fertility Study showed that 66% of the White American population sampled (n = 4,972) were using contraception (Westoff & Ryder, 1977). This figure represented only a slight increase for the NFS study of 1965, where a total of 65% of White Americans were employing contraceptives. However, significant changes in the methods used were found to have taken place in the period between the two studies. Contraceptive sterilization, the use of the pill, and the IUD increased. Usage of the foam stayed the same. All other methods decreased in use. In the 1970 study, the pill was by far the most popular method used among American couples (34% of 7,620 users, which included Blacks and non-Whites). Closest to the pill was sterilization, with a 16% usage rate. The IUD increased from a 1% of all wives practicing contraception in 1965 to a 7% in 1970. Usage of the IUD among Whites as compared with Blacks was about the same. There were, however, age related

differences in the use of the IUD, with the 9% of those under 30 years old electing it as compared to 6% of those between 30 and 44 years old.

A study about the perceived consequences of family planning revealed that White women's use of reliable methods of birth control is strongly related to the perception of more positive than negative effects of birth control (Crawford et al., 1970). It seems that among White women, perception of birth control as instrumental in attaining and blocking important consequences tends to create favorable attitudes toward birth control. These findings confirm those by Blake and others (1969) who reported that White women believed that birth control facilitated the "attainment of middle-class values and a higher standard of living" (p. 21).

Westoff & Ryder (1977) also compared attitudes towards abortion between Blacks and Whites, and over a period of five years, collecting their data in 1965 and again in 1970. On both occasions, White American women gave more favorable responses about abortion than Black women. Religion and education made for differences. More White non-Catholics were in favor of the practice of abortion. A higher education was positively related to favorable attitudes towards abortion among Whites, as well as Blacks.

Sterilization in particular. Among the White American population, sterilization has become an increasingly favored method of birth control since the 1970's (National Lawyers Guild, 1970; Westoff & Ryder, 1977; Carasa, 1979). Some statistics show a 350% increase of

female sterilization in the United States during the period 1970 to 1975. A recent estimate of annual sterilizations performed in this country is two million per year (National Lawyers Guild, 1979; Carasa, 1979). An indication of this trend was observed by Buckout (1972) when he interviewed unmarried college students. The group of White students demonstrated the most favorable attitudes towards the use of sterilization as a contraceptive measure. For the White American population, male sterilization is as favored, and sometimes even more, than female sterilization (Presser, 1978).

Still, sterilization rates for the White population are not as high as for minority group women (Serrano-Sewell, 1980). Carasa (1979) reported that in New York City, for example, in comparison to White women, twice as many Black women and six times as many Hispanic women are getting sterilized in municipal hospitals.

The feminist literature has suggested that the acceptability of sterilization by the American women has resulted from a minimization of its seriousness by physicians who reportedly refer to it as "bandaid surgery" or a "stitch" (Caress, 1975; National Lawyers Guild, 1975; Serrano-Sewell, 1980). It has been observed that for the American woman the procedure is more acceptable if the term "operation" is not employed (Caress, 1975).

Studies with Puerto Ricans

Methods in general. Puerto Rican women have been reported to have a history of inconsistent use of birth control methods (Stycos, 1955; Hill, Stycos & Back, 1959; Satterthwaite, 1965; Scott, 1975). Sporadic use and in many cases the lack of information about contraceptives in general have accounted for much of the methods' failure to effectively limit the family size among this group.

Puerto Ricans have been exposed to a wide range of birth control methods since the 1930's. In fact, the island of Puerto Rico has been and still is a testing ground for many new contraceptives before they become acceptable and safe for use by the general population in the United States (Mass, 1977; Satterthwaite, 1965). It has been suggested that the introduction of methods to a very uninformed population where any talk about sexual relations is highly tabooed in great part accounts for the reported contraceptive failures (Stycos, 1955; Hill et al., 1959). But the massive introduction of experimental contraceptive methods and their concomitant side effects serves as another explanation of contraceptive failure among Puerto Ricans; one that has not received much attention in the literature. Faced with side effects of experimental contraceptives, it seems probable that some of these women might have rejected birth control methods altogether, while others might have become fearful of using them regularly.

Studies conducted in the fifties reported on a number of prejudices and fears associated with many birth control methods among Puerto Rican women residing in the island of Puerto Rico. Stycos (1955), in his

classic study of contraception in Puerto Ricans, cites many examples of such fears: the douche weakens the uterus and can cause loss in weight; mechanical devices, like condoms and diaphragms, stay inside the woman's womb requiring the intervention of doctors to pull them out. Fears of developing cancer and tuberculosis seemed to be generalized to all methods (Stycos, 1955).

Similar instances of prejudices and fears towards various contraceptives were reported in studies of migrant Puerto Rican women who resided in the United States. Berle (1957) found that women feared the diaphragm because it may cause infection or cancer. Women in Padilla's (1958) study believed that diaphragms and condoms were dangerous in that pieces may detach and stay in the womb causing cancer. Looking at the relationship between beliefs about the menstrual flow and choice of contraceptive within five ethnic groups, Scott (1975) found that Puerto Rican women, as well as women in all of the other ethnic groups, believed that menstruation is an extremely important aspect of their health. Consequently, contraceptives such as the IUD and the pill which tend to affect the menstrual flow were disliked and refused when given at health clinics. In a study with U.S. mainland Puerto Ricans, this author found that the IUD and the pill, in particular, were the methods most frequently implicated in concerns such as developing cancer, bleeding, infections, pain, and even causing the spouse to suspect infidelity (Borras, 1981).

In evaluating the value of these fears and concerns, it is critical to distinguish between the unfounded and the realistic. The history of

contraceptives shows that both may occur. Take as an example the fear of cancer in using the pill. Early researchers on birth control have looked upon the fear of cancer from the pill as the unfounded worries of the ignorant. However, more recent medical evidence is conclusively linking certain birth control pills to cancer (Pike et al., 1983; Vessey et al., 1983). Indeed, some of the poor women on which early research was done, including the Puerto Ricans, might have been intuitively anticipating from their own life experiences what later has become scientific fact.

Apart from specific beliefs, there is information available on attitudes towards the use of contraceptives among Puerto Ricans. According to Stycos (1955) -- who used data from the island of Puerto Rico -- the condom was frequently objected to by men because its use had been associated with prostitutes. At the same time, as observed by Berle (1957) with Puerto Ricans in the U.S. mainland, some men attributed a positive value to the use of condoms. These men seemed to be satisfied with using condoms because of the high personal degree of control that it gave them over conception. In Berle's (1957) study, aside from sterilization, suppositories and jellies were mentioned as preferred methods; most often the reason for this preference among women was that husbands were less aware that these methods were being used. Among the U.S. mainland Puerto Rican women in Padilla's (1958) sample, favorable attitudes were associated with the use of abstinence or the withdrawal method, even when this latter method was considered by some women to be "bad" for the men. A study by

Satterthwaite (1965) found a low acceptance of the pill among Puerto Rican women in the island was interpreted to stem from a lack of self-discipline and consistency. By the same token, the IUD was thought to be more acceptable because the responsibility and control rested on a third person, the doctor or nurse who put it in, and not the couple. A problem with the study by Satterthwaite (1965) is that it failed to take account of the women's prior experiences and cultural beliefs when reaching these conclusions.

Puerto Rican women in general seem to be most conflicted about their attitudes toward abortion. Relative to other methods, the incidence of induced abortion in Puerto Rico has been said to be insignificant (Stycos, 1955; Hill et al., 1959). However, some have suggested that the incidence of abortion is somewhat higher than reported, as researchers run into a good deal of secrecy and reluctance from Puerto Ricans who are inquired about this topic (Berle, 1957; Padilla, 1959; Hill et al., 1959). This secrecy and reluctance is itself a sign of the conflicting views of many Puerto Ricans regarding abortion. Recent data revealed very negative attitudes from Puerto Ricans towards induced abortion, which was often dismissed as a sin (Borras, 1981).

Stycos (1955; 1968), in his analysis of Puerto Rican fertility, identified a "fertility belief system" to describe the Puerto Ricans' way of thinking about having a family. According to Stycos (1968), Puerto Ricans believe that children will help parents when they get old, so that children are regarded as a kind of social security.

Having a first child as soon as possible after marriage is believed to be important in order to show people that the men are not sterile. The practice of birth control is believed to be important in order to insure the family's financial well-being regardless of church prohibitions. However, Stycos (1968) adds, Puerto Ricans often raise serious objections to the use of methods, the most common of which is that contraceptives are detrimental to health.

It became clear early on in the practice of family planning in the island that Puerto Ricans favored a smaller family. For example, in the Stycos (1955) study, it was reported that the ideal was to have four or less children. However, these supposedly favorable attitudes towards smaller families are not being reflected on actual fertility rates. Stycos (1955) investigated the psychological factors behind this discrepancy between ideal and actual fertility. He found a number of impediments to reducing births which he classified into motivational and actional. The instability of consensual unions, early age at marriage, and machismo or showing off male virility comprised the motivational impediments. The actional impediments included male dominance, poor communication between spouses about desirable family size, female modesty against being examined at clinics and misinformation.

Sterilization in particular. Sterilization is a very favored method of contraception among Puerto Ricans. The Puerto Rican group stands out as the ethnic group with the highest incidence of sterilization in the world (Vazquez-Calzada, 1973). One-third of Puerto Rican

women in reproductive ages have been sterilized (Mass, 1977; Vazquez-Calzada, 1973). Unconfirmed reports indicate that figures have increased to a 40% rate of sterilization (Ajjan, 1982). Notably, the earlier studies that collected data in the 1940's on birth control among White American women do not even make reference to sterilization (Koos, 1947; Westoff et al., 1953). In marked contrast, the corresponding study with Puerto Rican women of that early period was already reporting that sterilization was the most popular method (Hatt, 1952). Research has shown the popularity of sterilization among Puerto Rican women to be consistently quite high decade after decade as shown in Table 1.

Contrasting the contraceptive preferences of Puerto Rican and White American women, Berle (1975) observed:

(Sterilization) entered into the calculations of (Puerto Rican) women who were thinking of limiting the size of their families much the same way as mechanical means of contraception form a part of the mental furniture of the average middle class American woman (pp. 139-141).

The dissemination of information about sterilization seems to have become an integral part of the socialization practices among Puerto Rican women. It has been suggested that Puerto Rican girls begin to learn about sterilization as early as the age of ten (Borras, 1981), and that for many it is probably the only method known before marriage (Hill et al., 1959).

There are two key beliefs which have been commonly linked to the practice of sterilization. One is that it is the only way to safely

Table 1

Trends in Female Sterilization in Puerto Rico

Year	Author of study	Age	Percent sterilized
1947-48	Hatt	15 yrs. or more	6.6
1948	Cofresi	N.A.	6.9
1953-54	Hill et al	20 yrs. or more	16.5
1965	Presser	20-49 yrs.	34.0
1968	Vazquez	20-49 yrs.	35.3

SOURCE: Vazquez-Calzada, 1973, p. 284

avoid pregnancy. The other belief is that it is possible to reverse the side effects of sterilization almost as easy as it is to perform a sterilization operation (Scrimshaw & Pasquariella, 1971; Borrás, 1981).

Attitudes towards the sterilization method are overwhelmingly positive among migrant Puerto Ricans. Puerto Rican migrants have been reported to travel back to the island to be sterilized (Berle, 1975; Scrimshaw & Pasquariella, 1971). However, among second generation Puerto Ricans in the U.S. mainland, it seems that the practice of sterilization is not as favored, nor is it procured as intensely as recent migrants (Padilla, 1958; Berle, 1975).

A number of explanations for the Puerto Ricans' preference of sterilization have been proposed. Stycos (1968) was the first to suggest that such positive attitudes were probably culturally based. Stycos argued that the very large number of sterilizations being performed in the island since 1950 and the easy accessibility of sterilization when women delivered in hospitals made sterilization a culturally acceptable procedure. Following the same reasoning regarding the cultural influence, it has been suggested that since induced abortion is censured by society, sterilization becomes a desirable means of contraception (Berle, 1957). Some additional explanations for the popularity of this practice are: that the use of the term "la operacion" (the operation) implies neutrality regarding any reference to sex and makes it an acceptable topic of conversation

(Hill et al., 1959): that physicians in Puerto Rico advocate for sterilization (Hill et al., 1959); and that by opting for sterilization, the responsibility for limiting the family size is placed on someone other than the couple (i.e., a doctor or nurse) (Satterthwaite, 1965). One can speculate that the situation previously discussed concerning physical side effects experienced by these women might have contributed to the increasing numbers of Puerto Rican women turning to sterilization.

This cursory review of the literature highlights the need to study comparatively the practice, knowledge and attitudes regarding birth control of the present day Puerto Rican and White American women of diverse social class backgrounds. Our knowledge of the subject at this point is based on information that is too fragmented and, worse, that is often outdated. The present study attempted to address this much needed research area.

C H A P T E R I I

METHOD

Subjects

The sample consists of 120 Puerto Rican and White American women of childbearing age (16 to 48 years) who were living in Greater Boston or Worcester, Massachusetts. It is divided into four subgroups of 30 participants each: 1) working class Puerto Ricans; 2) middle class Puerto Ricans; 3) working class White Americans; and 4) middle class White Americans. The main demographic characteristics of the women in the sample are given in a series of three tables to be presented next.

Table 2 provides ethnicity data on the study participants. This includes their place of birth, the average number of years that they had been residing in the United States (included as an index of the women's cultural/ethnic experience) and their ethnic affiliation.

The Puerto Rican women in the sample were all migrants to the U.S. who had been born and/or raised in the island of Puerto Rico. As observed in Table 2, all but seven of these women were born in Puerto Rico. Those that were not born in the island were raised there at least between the ages of 4 to 16; their parents had been born in Puerto Rico. Without exception, they identified themselves as Puerto Rican. Both the working and the middle class subgroups of these migrant Puerto Ricans had lived in the U.S. about eight years on the average. Data in this table also indicates that almost three-fourths of the working class subgroup was born in a rural area (population less than 80,000);

Table 2

Demographic Characteristics of the Sample's Subgroups:
Ethnicity Data

Ethnicity data	Subgroups (total N=120)			
	Puerto Rican working class n=30	Puerto Rican middle class n=30	White American working class n=30	White American middle class n=30
Place of birth				
Puerto Rico	96.7%(29)	80.0%(24)	0.0%	0.0%
USA	3.3%(1)	20.0%(6)	100.0%(30)	100.0%(30)
Rural	73.3%(22)	26.7%(8)	26.7%(8)	33.3%(10)
Urban (80,000+)	26.7%(8)	73.3%(22)	73.3%(22)	66.7%(20)
Average yrs in USA	8.6	8.0	27.0	31.0
Ethnic Affiliation				
Puerto Rican	100.0%(30)	100.0%(30)	--	--
White American				
Wh. Amer. only	--	--	63.3%(19)	76.7%(23)
Irish	--	--	10.0%(3)	3.3%(1)
Italian	--	--	--	6.7%(2)
Polish	--	--	3.3%(1)	3.3%(1)
Other ethnic American	--	--	23.7%(7)	10.0%(3)

Note. Numbers in parentheses indicate the number of subjects in each category.

whereas, the exact opposite was true for the middle class. Mainland born and raised Puerto Rican women were explicitly excluded from the sample as it is felt that they constitute a separate subgroup within the Puerto Rican ethnic group.

All White American women, as shown in Table 2 , had been born and raised in the United States. Actually, with two exceptions, these women had never lived outside the U.S.A. Thus, they had spent their lifetime in this country. No less than two-thirds of both of these working and middle class women had been born in an urban area of the United States.

A majority of the White American women (70%), as shown in Table 2 , considered themselves as American and did not report any other ethnic group background. The 30% that did identify with a particular ethnic background -- combining racial class subgroups -- reported an affiliation with the following groups: 6.7% Irish, 3.3% Italian, 3.3% Polish, and 16.7% other groups.

Table 3 provides social class data on the sample. Included are a social class index, educational data, and family income. The social class index of participants was determined following the Index of Status Characteristics (I.S.C.) system proposed by Warner, Meeker and Eells (1949). Using this system, the individual participant's source of income, occupation, house type and dwelling area were weighed into a single social class index score. Combining some of the social class categories given by Warner, Meeker and Eells (1949), the following definitions were adopted when classifying participants into

Table 3

Demographic Characteristics of the Sample's Subgroups:
Social Class Data

Social Class Data	Subgroups (total N=120)			White American middle class n=30
	Puerto Rican working class n=30	Puerto Rican middle class n=30	White American working class n=30	
Average social class index ¹	68.3	39.3	62.6	38.7
Education				
Less than High School	100.0%(30)	0.0%	26.7%(8)	3.3%(1)
High School degree	0.0%	3.3%(1)	46.7%(14)	33.3%(10)
Some college or post H.S.	0.0%	13.3%(4)	26.7%(8)	26.7%(8)
College degree or more	0.0%	83.3%(25)	0.0%	36.7%(11)
Yearly family income ²				
\$10,000 or less	83.3%(25)	3.3%(1)	51.9%(14)	0.0%
\$11,000 - 15,999	16.7%(5)	3.3%(1)	14.8%(4)	7.4%(2)
\$16,000 - 20,999	0.0%	40.0%(12)	11.1%(3)	11.1%(3)
\$21,000 - 30,999	0.0%	33.3%(10)	14.8%(4)	29.6%(8)
\$31,000 - 40,999	0.0%	10.0%(3)	7.4%(2)	18.5%(5)
\$41,000 - 50,999	0.0%	3.3%(1)	0.0%	11.1%(3)
\$51,000 or more	0.0%	6.7%(2)	0.0%	22.2%(6)

Note. Numbers in parentheses indicate the number of subjects in each category.

¹Using the Index of Status Characteristics (I.S.C.) by Warner, Meeker and Eells (1949). In the present study, scores of 52 to 84 = working class; 51 or lower = middle class.

²Due to missing values, in this item n=27 each for the White American working class and middle class subgroups.

social class subgroups: a score of 51 or lower for the middle class and a score of 52-84 for the working class.

By design, as shown in Table 3, the social class index of the working and middle class subgroups fell within the given definitions. The mean scores of the Puerto Rican and White American working class subgroups were in the 60's, while the average score of the corresponding middle class subgroups were in the 30's.

Data given in Table 3 show a trend for the working class subgroups to be less educated than the middle class ones. None of the working class Puerto Ricans had completed high school and 73.3% of the working class White Americans had a high school education or less. In contrast, almost all (83.3%) of the middle class Puerto Ricans had completed college or had more post-graduate education, while a majority (63.3%) of their White American social class counterparts either had some college or post-high school education, or had already completed college or gone beyond it.

A similar trend is evident in Table 3 with respect to family income. A total of 100% of the Puerto Rican working class and 66.7% of the White American working class had a family income of \$15,000 or less per year. Whereas, 83.3% of the Puerto Rican middle class and 59.2% of the White American middle class earned between \$16,000 and \$40,000 per year.

Table 4 presents a number of other demographic characteristics of the sample. These are marital status, current religious affiliation, and current church attendance of participants.

Table 4

Demographic Characteristics of the Sample's Subgroups:
Other Data

	Subgroups (total N=120)			
	Puerto Rican working class n=30	Puerto Rican middle class n=30	White American working class n=30	White American middle class n=30
Other Data				
Marital Status				
Single, never married	0.0%	20.0%(6)	16.7%(5)	30.0%(9)
Living w/partner (legal or consensual)	63.3%(19)	46.7%(14)	46.7%(14)	60.0%(18)
Living w/out partner (legal or consensual divorce or separation)	36.7%(11)	33.3%(10)	36.7%(11)	10.0%(3)
Current Religious Affiliation				
Catholic	43.3%(13)	43.3%(13)	56.7%(17)	56.7%(17)
Protestant	33.3%(10)	6.7%(2)	30.0%(9)	33.3%(10)
Other	3.3%(1)	10.0%(3)	6.7%(2)	3.3%(1)
None	20.0%(6)	40.0%(12)	6.7%(2)	6.7%(2)
Current Church Attendance				
None	6.7%(2)	30.0%(9)	20.0%(6)	10.0%(3)
Once a year	3.3%(1)	13.3%(4)	16.7%(5)	13.3%(4)
1-5 times every 6 mos.	20.0%(6)	16.7%(5)	20.0%(6)	16.7%(5)
1-3 times in a month	6.7%(2)	20.0%(6)	16.7%(5)	20.0%(6)
1 or more times each wk.	63.3%(19)	20.0%(6)	26.7%(8)	40.0%(12)

Note. Numbers in parentheses indicate the number of subjects in each category.

As seen in Table 4 , a majority (82.5%) of the women in the total sample has been married, legally or consensually, at one point or another. Of all the women, 54.2% were living with their legal or consensual partners at the time.

Finally, the data presented in Table 4 show that exactly half of all the women in the sample were affiliated with the Catholic church. A total of 43.3% of the Puerto Ricans said they were Catholic and 56.7% of the White American women said the same. A fourth of the total sample (25.8%) reported they were of various Protestant denominations such as Pentecostal, Episcopalian, Baptist, Jehovah's Witness, etc. A considerable number, 18.3% of the sample, did not identify with any religious group. Non-affiliation with a religious group was particularly high among the Puerto Rican middle class (40% of this subgroup). Church attendance of once a week or more was reported by over a third (37.5%) of the total sample, but was especially frequent among working class Puerto Ricans (63.3% of this subgroup). A total of 83.3% of the entire sample of women reported they attended church at least once a year.

Interview schedule

The interview schedule designed and used by Darity, Turner and Thieboux (1972) was adapted for use in this investigation. The following two modifications were made: a) addition of some new items in conformity with the goals of the study (e.g., questions about sterilization) and b) elimination of a number of items judged to be irrelevant to the present study (e.g., questions about Black genocide). The items

in the interview schedule covered demographic information, decision-making, knowledge of family planning methods, attitudes toward family planning and family planning programs, and birth control practices, as well as items dealing specifically with sterilization (attitudes, beliefs, information and decision-making concerning this method). A copy of the interview schedule is included in Appendix C.

Procedure

Volunteer participants were obtained through two main sources in Worcester, Massachusetts: The Family Health and Social Services Center and the Adult Primary Care Unit of the University of Massachusetts Medical School. Given their relative scarcity, many additional middle class Puerto Rican participants were obtained in Greater Boston through the local chapter of the National Conference of Puerto Rican Women (NACOPRW).

The Family Health and Social Services Center is a multiservice agency. Their largest department is medical, which emphasizes the practice of family medicine. They also offer laboratory and dental services. Their second largest department is social services, which includes community advocacy, referral and counseling. The Center serves primarily a working class population roughly equally divided into White Americans and Puerto Ricans. This is probably the health agency in Worcester which provides services to the largest number of Puerto Ricans. All of the Puerto Rican working class, many of the White American working class, as well as some middle class participants were interviewed at the Center.

The Adult Primary Care Unit of the University of Massachusetts Medical School serves a multi-ethnic population of all social class levels. The Unit provides internal medicine health care as part of a large, modern teaching hospital. Most of the White American middle class, and many of the White American working class participants were interviewed there.

NACOPRW is a nationwide non-profit organization of Puerto Rican women. It aims to promote the development of Puerto Rican women in society. The local Greater Boston chapter was helpful in locating potential volunteers for the study. Most of the Puerto Rican middle class participants were interviewed at their homes, their names being provided by NACOPRW.

To collect the data at the Family Health and Social Service Center and at the University of Massachusetts Medical School, this investigator was present there during regular working hours for a period of about six weeks at each of the two settings. Sharing a space at the appointment desk area, this author was ready to interview any potential subject who volunteered for the research. Every time a potential subject came by the appointment desk, the appointment coordinator, who often knew the patient, introduced the idea of this research and asked the person if she would participate, and personally introduced the investigator. It was also fairly common that a woman would come accompanying another patient and there was a steady flow of people who came to take care of some small business (to pick up prescriptions or to have the doctor sign some form, to ask a medically-related question, to make

an appointment, etc.) If they met the subject selection criteria (age 16-48, Puerto Rican or White American, working or middle class), they were asked about being interviewed. With few exceptions (one Puerto Rican and 10 White Americans), the women approached who had the time available were willing to participate.

All participants, those interviewed in the health centers or at their homes (many middle class Puerto Ricans), were given a general description of the research and procedures and were asked to sign a consent form (see Appendix A --for the general consent form -- and Appendix B -- the one modified for use at the University of Massachusetts Medical School). Participants were told that the study involved the theme of birth control, that they would be asked a series of questions for 30 or 40 minutes to elicit their opinions on this topic, that the study was being done in connection with the University of Massachusetts, Amherst, and that the information provided would be kept confidential. Then they were told that the usual procedure was to have the person sign a form (written in both English and Spanish) indicating that they agreed to participate; they were handed the consent form to read, examine and sign; and finally they were encouraged to ask any questions. The actual data collection commenced as soon as the subject signed the consent form.

All interviews were conducted in the language preferred by the interviewee, English or Spanish. As might be expected, with very few exceptions, Puerto Rican participants chose to be interviewed in Spanish.

The interviewee was always of the same sex as the participants. To have a woman interviewing the women participants was particularly important since the topic involved was birth control.

Some of the interviews employed in the present study are archival data taken from an earlier work (Borras, 1981). Specifically, the 30 participants in the Puerto Rican working class subgroup and 3 participants in the Puerto Rican middle class subgroup are from that prior research. These data had been collected employing the procedures just described.

C H A P T E R I I I

RESULTS

The findings of the study are presented in three main sections. The first and principal section consists of comparisons of the knowledge, attitudes and birth control practices of working and middle class Puerto Rican and White American groups. This section covers all birth control methods studied including sterilization, as well as the pill, abortion, IUD, diaphragm, spermicides, condom, rhythm, douche, and coitus interruptus. A second section contains additional analyses specifically on the issue of sterilization. This involves comparisons of the group of sterilized and non-sterilized women. The third section briefly presents some data on the issue of fear of genocide among Puerto Ricans.

As presented next, major social class and ethnic group differences were found in virtually all areas of birth control studied. When comparing social class, working class and middle class women were found to differ in fundamental aspects of their birth control knowledge, attitudes, and practice. As might be expected, social class was found to be the stronger variable relative to ethnicity. However, when contrasting ethnicity, Puerto Rican and White American women were also found to differ. Ethnicity by itself or, more often, in interaction with social class showed also to account for significant differences in birth control.

Social Class, Ethnicity and Birth
Control in General

Knowledge

As shown in the ANOVA of Table 5, social class, ethnicity and their interaction all proved to be significant with respect to general knowledge of birth control methods. General knowledge refers to level of awareness of all ten birth control methods studied (sterilization, abortion, IUD, contraceptive pill, diaphragm, spermicides, condom, rhythm, douche, and coitus interruptus). The scores used in this ANOVA were the participants' responses to the questions of which birth control methods they had heard of. For each method mentioned spontaneously, a score of 1 was given. If they did not mention certain methods, but were able to recognize them from a list, 2 was the score given. Finally, those methods unknown by the participants were scored as 3. Since there were ten methods under consideration, for the combined data in Table 5 the greatest possible general knowledge score was a 10 (spontaneously mentioning all methods) and the score indicative of the least knowledge was a 30 (all methods unknown).

The results obtained from the ANOVA in Table 5 indicates that middle class women ($M = 15.8$) had significantly greater knowledge of birth control methods in general than working class women ($M = 17.7$). They also indicate that White American women ($M = 16.0$) had a significantly greater general knowledge of contraceptives than Puerto Rican women ($M = 17.4$). Further, there was a significant interaction effect which is analyzed in greater detail with the t-tests, means and standard

Table 5

General Knowledge of Birth Control Methods:
By Social Class and Ethnicity

F-test

Source	df	MS	F	p
Social class (SC)	1	108.3	32.6	.001
Ethnicity (E)	1	56.0	16.8	.001
SC x E	1	168.0	50.5	.001
Error	116	3.3		

deviations presented in Table 6.

As shown in the t-tests of Table 6, working class Puerto Ricans have significantly less general knowledge of birth control methods than all others -- the White American working and middle class groups, as well as the Puerto Rican middle class. No significant differences in general knowledge are evident when the White American working and middle classes are compared. Middle class Puerto Ricans have significantly greater knowledge of birth control methods than their counterparts, the White American middle class.

The series of ANOVAS presented in Table 7 shows that there are significant social class, ethnic group and interaction differences with respect of knowledge of various specific birth control methods. The data used in these analyses are the participants' level of knowledge of each specific birth control method, scored as described above.

Results in Table 7 indicate that the middle class women have significantly greater birth control knowledge than working class women with respect to the following methods: sterilization (working class, $M = 1.9$; middle class, $M = 1.6$), diaphragm (working class, $M = 1.8$; middle class, $M = 1.3$), spermicides (working class, $M = 1.5$; middle class, $M = 1.3$), condom (working class, $M = 1.5$; middle class, $M = 1.3$); rhythm (working class, $M = 2.2$; middle class, $M = 1.6$), and coitus interruptus (working class, $M = 2.4$; middle class, $M = 2.0$).

Only in the case of the IUD (see Table 7) the reverse situation took place; that is, the middle class women ($M = 1.3$) were found to have significantly less knowledge than the working class ($M = 1.2$).

Table 6

General Knowledge of Birth Control Methods: Means,
Standard Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	19.5	1.9	-	-	-	8.1**	-	-	8.0**	-	-	7.1**
PR MC				13.1	2.1	-	-	-	NS	-	-	2.1*
WA WC							15.8	1.6	-	-	-	NS
WA MC										16.3	1.6	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p < .05; **p < .001

Table 7

Knowledge of Various Birth Control Methods:
By Social Class and Ethnicity

F-test

Method	Source	df	MS	F
Sterilization	Social Class (SC)	1	2.4	13.2***
	Ethnicity (E)	1	.4	2.2
	SC x E	1	.0	.0
	Error	116	.2	
IUD	Social Class (SC)	1	.8	4.0*
	Ethnicity (E)	1	.0	.2
	SC x E	1	.5	2.6
	Error	116	.2	
Diaphragm	Social Class (SC)	1	9.1	34.7***
	Ethnicity (E)	1	8.0	30.7***
	SC x E	1	18.4	70.5***
	Error	116	.3	
Spermicides	Social Class (SC)	1	1.2	4.2*
	Ethnicity (E)	1	.0	.1
	SC x E	1	2.7	9.5**
	Error	116	.3	
Condom	Social Class (SC)	1	1.0	4.1*
	Ethnicity (E)	1	.2	.8
	SC x E	1	1.0	4.1*
	Error	116	.2	
Rhythm	Social Class (SC)	1	9.1	24.5***
	Ethnicity (E)	1	3.0	8.1**
	SC x E	1	6.1	16.4***
	Error	116	.4	
Coitus Interruptus	Social Class (SC)	1	5.6	27.5***
	Ethnicity (E)	1	2.7	13.2***
	SC x E	1	3.3	16.2***
	Error	116	.2	

*p <.05

**p <.01

***p <.001

No significant social class differences in knowledge of birth control methods were found with respect to three of the ten methods studied: specifically, the pill, douche and abortion.

Significant ethnic group differences in knowledge of birth control methods, as presented in Table 7, were observed with respect to the diaphragm (Puerto Ricans, $M = 1.8$; White Americans, $M = 1.3$), rhythm (Puerto Ricans, $M = 2.0$; White Americans, $M = 1.7$), and coitus interruptus (Puerto Ricans, $M = 2.4$; White Americans, $M = 2.0$). In all three instances, White Americans were found to have greater knowledge of these birth control methods than Puerto Ricans. No other significant ethnic group differences in knowledge were noted for any other method.

As seen in Table 7, social class and ethnicity were found to interact significantly with respect to knowledge of the following methods: diaphragm, spermicides, condom, rhythm, and coitus interruptus. These interactions are analyzed in a series of five tables containing group means, standard deviations and t-tests to be presented next.

Results of the t-tests in Table 8 show that as far as knowledge of the diaphragm -- and condom, rhythm and coitus interruptus, as presented in other tables in this series -- the pattern was that the Puerto Rican working class had significantly less knowledge than all other groups being compared: White American working class, White American middle class and Puerto Rican middle class. In the case of the diaphragm, the White American middle class had significantly less knowledge than their working class counterparts, as well as the Puerto Rican middle class women.

Table 8

Knowledge of Diaphragm: Means, Standard Deviations,
and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	2.5	0.7	-	-	-	9.0**	-	-	9.1**	-	-	6.9**
PR MC				1.1	0.4	-	-	-	NS	-	-	2.2*
WA WC							1.2	0.4	-	-	-	2.0*
WA MC										1.4	0.5	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p < .05; **p < .001

The t-tests of Table 9 on knowledge of spermicides show that working class Puerto Ricans have less knowledge of this method than working class White Americans or middle class Puerto Ricans. However, there were no significant differences between middle class White Americans and working class Puerto Ricans in this respect. Middle class Puerto Ricans did have significantly greater knowledge of spermicides than their White American middle class counterparts.

Table 10, for knowledge of the condom, Table 11, for knowledge of rhythm, and Table 12, for knowledge of coitus interruptus, all show evidence of the prevalent pattern for the Puerto Rican working class women to be less knowledgeable about these methods than the rest of the social class/ethnic groups being studied. As observed in these tables, no other t-test group comparisons proved to be significant.

Attitudes

The ANOVA presented in Table 13 shows that there were significant social class differences, and a significant interaction of social class and ethnicity with respect to the general acceptability of birth control methods. This general acceptability is the degree to which a participant approves for their personal use of all ten birth control methods studied (sterilization, abortion, IUD, contraceptive pill, diaphragm, spermicides, condom, rhythm, douche and coitus interruptus). A list containing these methods was read to each participant. To determine degree of acceptability, each individual method was scored as follows: a score of 1 if the method was acceptable now, 2 if unacceptable now, but possible in the future, and 3 if the method was never acceptable. To

Table 9

Knowledge of Spermicides: Means, Standard
Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	1.7	0.7	-	-	-	3.6**	-	-	2.1*	-	-	NS
PR MC				1.2	0.4	-	-	-	NS	-	-	2.3*
WA WC							1.3	0.5	-	-	-	NS
WA MC										1.4	0.5	-

¹PR = Puerto Ricans; WA = White Americans; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p < .05; **p < .001

Table 10

Knowledge of Condom: Means, Standard Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	1.6	0.6	-	-	-	2.8**	-	-	1.9*	-	-	1.9*
PR MC				1.3	0.5	-	-	-	NS	-	-	NS
WA WC							1.4	0.5	-	-	-	NS
WA MC										1.4	0.5	

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

* p < .05; **p < .01

Table 11

Knowledge of Rhythm: Means, Standard Deviations
and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	2.5	0.7	-	-	-	6.2*	-	-	4.5*	-	-	5.4*
PR MC				1.5	0.6	-	-	-	NS	-	-	NS
WA WC							1.8	0.6	-	-	-	NS
WA MC										1.7	0.5	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p < .001

Table 12

Knowledge of Coitus Interruptus: Means, Standard Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	2.8	0.4	-	-	-	6.2*	-	-	5.2*	-	-	7.5*
PR MC				2.0	0.5	-	-	-	NS	-	-	NS
WA WC							2.1	0.5	-	-	-	NS
WA MC										2.0	0.3	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p <.001

Table 13

General Acceptability of Birth Control Methods:
By Social Class and Ethnicity

F-test

Source	df	MS	F	p
Social class (SC)	1	76.8	6.8	.01
Ethnicity (E)	1	19.2	1.7	NS
SC x E	1	61.6	5.5	.02
Error	116	11.3		

establish general acceptability, as in Table 13, the scores obtained for all methods were combined. Since there were ten methods, for an individual participant the greatest possible general acceptability is indicated by a score of 10 (all methods acceptable now) with a score of 30 indicating the least possible general acceptability (all methods never acceptable).

The analysis of variance in Table 13 suggests that middle class women ($M = 20.6$) have significantly greater acceptability of birth control methods than working class women ($M = 22.5$). Ethnicity by itself is not significant, but the interaction of ethnicity and social class produced significant results. This interaction effect is analyzed in greater detail in Table 14, which contains t-tests, group means and standard deviations.

The data in Table 14 show that the Puerto Rican middle class women were significantly more accepting of birth control methods in general than any other social class/ethnic group of women studied; that is, the Puerto Rican working class and the White American working and middle classes. No social class differences within the White American group, nor any other t-test comparison, proved to be significant.

The series of ANOVAS presented in Table 15 point to significant social class, ethnic group and interaction differences regarding the acceptability of the various specific birth control methods studied. The data being analysed in this table are the participants' level of acceptability of each specific birth control method, scored as described earlier.

Table 14

General Acceptability of Birth Control Methods: Means,
Standard Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	22.8	2.9	-	-	-	3.2**	-	-	NS	-	-	NS
PR MC				19.7	4.2	-	-	-	2.6**	-	-	2.3*
WA WC							22.1	2.9	-	-	-	NS
WA MC										21.9	3.1	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p < .05; **p < .01

Table 15

Acceptability of Various Birth Control Methods:
By Social Class and Ethnicity

F-test

Method	Source	df	MS	F
Abortion	Social Class (SC)	1	6.5	15.1***
	Ethnicity (E)	1	1.2	2.8
	SC x E	1	5.6	13.0***
	Error	116	.4	
Pill	Social Class (SC)	1	3.7	4.4*
	Ethnicity (E)	1	3.7	4.4*
	SC x E	1	2.4	2.9
	Error	116	.8	
Diaphragm	Social Class (SC)	1	7.0	11.3***
	Ethnicity (E)	1	.7	1.1
	SC x E	1	1.4	2.3
	Error	116	.6	
Spermicides	Social Class (SC)	1	6.1	8.7**
	Ethnicity (E)	1	.1	.1
	SC x E	1	1.0	1.5
	Error	116	.7	
Condom	Social Class (SC)	1	7.0	9.8**
	Ethnicity (E)	1	.7	.9
	SC x E	1	1.9	2.6
	Error	116	.7	
Douche	Social Class (SC)	1	1.2	2.1
	Ethnicity (E)	1	2.7	4.7*
	SC x E	1	.0	.1
	Error	116	.6	

*p < .05

**p < .01

***p < .001

The ANOVAS in Table 15 indicate that the middle class women were significantly more accepting than the working class of the following six birth control methods: abortion (working class, $M = 2.8$; middle class, $M = 2.3$), contraceptive pill (working class, $M = 2.1$; middle class, $M = 1.7$), diaphragm (working class, $M = 2.2$; middle class, $M = 1.7$), spermicides (working class, $M = 2.4$; middle class, $M = 2.0$), and condom (working class, $M = 2.2$; middle class, $M = 1.7$). There were no methods of which the working class women were more accepting than the middle class. No social class differences in acceptability were found regarding sterilization, IUD, rhythm, and coitus interruptus.

Ethnicity proved to be a significant factor affecting acceptability, as shown in Table 15, with respect to the pill and the douche. In the case of the contraceptive pill, it was the White Americans ($M = 1.7$) who were significantly more accepting of it than the Puerto Ricans ($M = 2.1$). The douche, however, was significantly more acceptable among the Puerto Ricans ($M = 2.3$) than the White American women ($M = 2.6$). Ethnicity by itself was not significant with respect to the acceptability of the majority of methods: sterilization, abortion, IUD, diaphragm, spermicides, condom, rhythm, and coitus interruptus.

However, as seen in Table 15, the interaction of social class and ethnicity was significant with respect to the acceptability of abortion. This interaction is analyzed further in Table 16 which contains group means, standard deviations and t-tests.

The data in Table 16 explains the interaction effect by showing evidence of a strong social class difference within the Puerto Rican group

Table 16

Acceptability of Abortion: Means, Standard Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	2.9	0.4	-	-	-	5.1***	-	-	3.1**	-	-	2.1*
PR MC				2.0	0.9	-	-	-	3.3**	-	-	3.4***
WA WC							2.7	0.7	-	-	-	NS
WA MC										2.6	0.6	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p < .05; **p < .01; ***p < .001

with respect to acceptability of abortion. Working class Puerto Ricans were significantly less accepting of abortion than all other social class/ethnic groups studied (middle class Puerto Ricans, working class and middle class White Americans). In fact, the mean of 2.9 group acceptability score of the Puerto Rican working class closely approaches the least acceptability rating allowed by the scale, which is a score of 3. In marked contrast, the middle class Puerto Ricans were more accepting of abortion than all other groups. The t-test did not reverse social class differences in the acceptability of abortion within the White American women group.

Attitudes towards abortion and sterilization were further assessed with three statements presented to participants. A first statement referred to whether abortion was acceptable if a pregnant woman did not want a baby. A second statement was about whether sterilization was an acceptable birth control method. The third referred to whether the participant herself would want to be sterilized after having all the children she wanted. Responses were rated as follows: agreement was rated as 1, neither was 2, and disagreement as 3. Results by social class and ethnicity are presented in the two tables that follow.

The Chi Squares in Table 17 reveal significant social class differences with respect to abortion and sterilization. As observed in the table, a significantly greater number of middle class women agreed with the statement on the acceptability of abortion. More than half (53.3%) of the middle class women agreed with the statement of abortion, while almost three-fourths (73.4%) of the working class

Table 17

Social Class Differences in Attitudes Towards
Abortion and Sterilization

Item	Social Class						Chi Square
	Working			Middle			
	Agree	Neither	Disagree	Agree	Neither	Disagree	
+ If a woman is pregnant and does not want a baby, an abortion is acceptable	18.3% (11)	8.3% (5)	73.3% (44)	53.3% (32)	18.3% (11)	28.3% (17)	24.5**
+ Sterilization is an acceptable method of birth control.	69.0% (40)	8.6% (5)	22.4% (13)	76.3% (45)	5.1% (3)	18.6% (11)	NS
+ If you had all the children you wanted, you would want to be sterilized.	74.1% (43)	1.7% (1)	24.1% (14)	56.7% (34)	10.0% (6)	33.3% (20)	5.6*

Note. Numbers in parenthesis indicate the number of subjects in each category.
*p <.05; **p <.001

women disagreed with it. No social class differences were observed in the proportion of women agreeing or disagreeing with the statement on the acceptability of birth control. However, significant social class differences were present with respect to the statement about whether the participant herself would want to be sterilized after having all of the children she wanted. Though more than half (56.7%) of the middle class agreed with being sterilized under such circumstances, a significantly larger number of working class women (74.1%) agreed with it.

Table 18 shows that as a whole the Puerto Rican and White American groups had approximately similar views on these three statements about attitudes on abortion and sterilization. No significant ethnic group differences were found in this respect. Half of the participants in the sample, with about an identical number of Puerto Ricans (50%) and White Americans (51.7%), disagreed with the notion that an abortion was acceptable if a pregnant woman did not desire a baby. Roughly about the same number of Puerto Ricans (69%) and White Americans (76.3%) considered sterilization an acceptable method of birth control. Also, about the same number of Puerto Ricans (67.2%) and White Americans (63%) agreed with wanting to be sterilized after having all the children they wanted.

Through the ANOVA on Table 19, the effect of social class, ethnicity, and their interaction on ideal family size were also assessed and found to be significant. The ideal family size for working class women ($M = 3.1$) was significantly larger than that of middle class women ($M = 2.6$). Ideal family size was also larger for the Puerto Ricans ($M = 3.1$) than

Table 18

Ethnic Group Comparisons in Attitudes Towards
Abortion and Sterilization

Item	Ethnicity						
	Puerto Rican			White American			
	Agree	Neither	Disagree	Agree	Neither	Disagree	
						n	
+ If a woman is pregnant and does not want a baby, an abortion is acceptable.	35.0% (21)	15.0% (9)	50.0% (30)	36.7% (22)	11.7% (7)	51.7% (31)	60
+ Sterilization is an acceptable method of birth control.	69.0% (40)	10.3% (6)	20.7% (12)	76.3% (45)	3.4% (2)	20.3% (12)	59
+ If you had all the children you wanted, you would want to be sterilized.	67.2% (39)	6.9% (4)	25.9% (15)	63.0% (38)	5.0% (3)	31.7% (19)	60

Note. Numbers in parenthesis indicate the number of subjects in each category.

Table 19

Ideal Family Size: By Social
Class and Ethnicity

F-test

Source	df	MS	F	p
Social class (SC)	1	6.1	6.2	.05
Ethnicity (E)	1	8.0	8.2	.01
SC x E	1	8.0	8.2	.01
Error	116	1.0		

the White Americans ($M = 2.6$). Since the interaction of social class and ethnicity on ideal family size was significant, group means and standard deviations were obtained and a series of t-tests were conducted, as presented in Table 20.

The t-tests in Table 20 show that the ideal family size of the Puerto Rican working class was significantly larger than that of any other social class/ethnic group studied (Puerto Rican middle class and White American working and middle class groups). For the average working class Puerto Ricans, ideally a family should have 3.6 children, while the averages of the other three groups studied were either 2.5 or 2.6.

A final analysis pertaining to attitudes towards birth control methods in general, presented in Table 21, involves the participants' concerns on whether the purpose of birth control programs was the genocide of poor people. More specifically, the women in the sample were asked whether the real aim of birth control programs was to reduce the number of low-income people. There were three possible responses: agree (scored 1), neither (scored 2) and disagree (scored 3). The social class and ethnic group comparisons that were made with these data are shown in Table 21, which contains group percentages and a Chi Square analysis.

The Chi Square analysis and percentages presented in Table 21 indicate that the Puerto Rican women (30%) were significantly more often in agreement than the White American women (13.3%) with the statement that the real aim of birth control programs was to achieve a reduction in the number of low-income persons. Thus, the data suggests that the

Table 20

Ideal Family Size: Means, Standard Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	3.6	1.2	-	-	-	3.8**	-	-	3.7**	-	-	3.3*
PR MC				2.6	0.7	-	-	-	0.32	-	-	0
WA WC							2.5	0.9	-	-	-	0.36
WA MC										2.6	1.0	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p <.01; **p <.001

Table 21

Social Class and Ethnic Group Comparisons of Responses
to the Item: "The Real Aim of Birth Control
Programs is to Reduce the Number of
Low-Income People

Group	Responses			n	Chi square ¹
	Agree	Neither	Disagree		
Social class					
working	16.7% (10)	6.7% (4)	76.7% (46)	60	NS
middle	26.7% (16)	0.0% (0)	73.3% (44)	60	
Ethnicity					
Puerto Rican	30.0% (18)	5.0% (3)	65.0% (39)	60	5.4*
White American	13.3% (8)	1.7% (1)	85.0% (51)	60	

Note. Numbers in parenthesis indicate the number of subjects in each category.

¹To meet Chi square cell frequency requirements, only "Agree" and "Disagree" responses were contrasted; "Neither" responses were excluded.

*p < .05

Puerto Ricans were relatively more concerned with the genocide of the poor. However, no significant social class differences were found in this respect. The proportion of working class women (76.7%) and middle class women (73.3%) disagreeing with this statement was almost the same.

Practice

Table 22 presents comparatively the frequency of women in the sample who used at least one birth control method at some point in their lives (ever-users) and those who had not (non-users). The table contains comparisons for social class and ethnicity groups and for all combinations of social class/ethnicity subgroups.

With respect to social class, as observed in Table 22, the working (81.7%) and middle class (86.7%) has roughly the same proportion of ever-users. Data on ethnicity follows this pattern, with Puerto Rican (81.7%) and White American (86.7%) groups having also about the same percentage of ever-users.

The only significant differences with respect to having used a birth control method at some point, as reported in the Chi Squares of Table 22, related to the comparison of the Puerto Rican working class with the middle class of the same ethnic group and of the Puerto Rican working class with the White American working class. Working class Puerto Ricans (70%) had a significantly lower proportion of ever-users than their middle class (93.3%) ethnic counterparts, as well as a significantly lower proportion of ever-users than the middle class White Americans (93.3%). Working (93.3%) and middle class White Americans (80%) had about the same number of ever-users. Similarly

Table 22

Social Class and Ethnic Group Comparisons of Ever-Users and Non-Users of Birth Control Methods

Group	Ever-Users	Non-Users	n	Chi-Square
<u>Social Class Groups</u>				
Working	81.7% (49)	18.3% (11)	60	NS
Middle	86.7% (52)	13.3% (8)	60	
<u>Ethnic Groups</u>				
Puerto Rican	81.7% (49)	18.3% (11)	60	NS
White American	86.7% (52)	13.3% (8)	60	
<u>Ethnic/Social Class Subgroups</u>				
Puerto Rican				
Working class	70.0% (21)	30.0% (9)	30	4.0*
Middle class	93.3% (28)	6.7% (2)	30	
White American				
Working class	93.3% (28)	6.7% (2)	30	NS
Middle class	80.0% (24)	20.0% (6)	30	
<u>Social Class/Ethnic Subgroups</u>				
Working class				
Puerto Rican	70.0% (21)	30.0% (9)	30	4.0*
White American	93.3% (28)	6.7% (2)	30	
Middle Class				
Puerto Rican	93.3% (28)	6.7% (2)	30	NS
White American	80.0% (24)	20.0% (6)	30	

Note. Numbers in parenthesis indicate the number of subjects in each category.

*p < .05

the Puerto Rican middle class (93.3%) had about the same frequency of ever-users than their White American (80%) social class counterparts.

As shown in Table 23, the interaction of social class and ethnicity proved to be significant with respect to the general use of birth control methods. By themselves, social class and ethnicity were not significant. General use refers to the number of birth control methods used by study participants. For this measure, only eight methods were used: IUD, contraceptive pill, diaphragm, spermicides, condom, rhythm, douche, and coitus interruptus. Sterilization and abortion were not included since they are considered to be special cases that women use once in a lifetime or much less frequently. A score of 2 was given to each method used at least once by a participant. If the individual had not used a method at all, it was scored as 1. Since there were eight methods being considered, the highest possible general use score for a given participant was 16 (used all methods at least once), and the lowest possible score was 8 (never used any methods).

As stated above, the results obtained from the ANOVA in Table 23 indicate that there was a significant interaction between social class and ethnicity regarding general use of birth control methods. This interaction effect is analyzed further with the t-test, group means and standard deviations shown in Table 24.

The results of the t-tests in Table 24 indicate that the Puerto Rican middle class had a significantly higher general use of birth control methods than the Puerto Rican working class and the White American middle class women. These are the differences explaining the social class/ethnicity interaction effect. No other group differences were reversed by the t-tests.

Table 23

General Use of Birth Control Methods:
By Social Class and Ethnicity

F-test

Source	df	MS	F	p
Social Class (SC)	1	.3	.1	NS
Ethnicity (E)	1	.1	.1	NS
SC x E	1	20.8	8.6	.01
Error	116	2.4		

Table 24

General Use of Birth Control Methods: Means,
Standard Deviations and t-tests

	Groups ¹										
	PR WC		PR MC		WA WC		WA MC				
	M	SD	M	SD	M	SD	M	SD	M	SD	
PR WC	9.9	1.8	-	-	2.3*	-	1.7	-	0.1	-	0.1
PR MC			10.9	1.4	-	-	0.4	-	2.5*	-	2.5*
WA WC					10.7	1.6	-	-	1.7	-	1.7
WA MC									10.0	1.4	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p < .05

The series of ANOVAS in Table 25 point to significant social class, ethnic group and interaction differences regarding the use of various specific methods of birth control. The data used in these analyses are the participants' use of each specific birth control method, scored as described above.

Significant social class differences, as reported in Table 25, were observed for use of the rhythm and douche methods. More middle class women (M=1.3) had used the rhythm to control births than working class women (M=1.1). The reverse happened with the douche method, which had been used by a significantly greater number of working class (M=1.1) than middle class (M=1.0) women. No significant social class differences in use were found with respect to the following six methods: IUD, pill, diaphragm, spermicides, condom, and coitus interruptus.

Ethnic group differences, as observed in Table 25, were significant only with respect to the use of only one method, the diaphragm. The number of Puerto Rican women (M=1.3) that had used the diaphragm was significantly greater than that of White American women (M=1.1).

As shown in Table 25, social class and ethnicity were found to interact significantly with respect to use of three methods: the diaphragm, the condom, and rhythm. These interactions are analyzed with t-tests, group means and standard deviations in a series of three tables that are presented next.

The t-tests in Table 26 show that usage of the diaphragm was significantly higher for the Puerto Rican middle class than for all other

Table 25

Use of Various Birth Control Methods: By
Social Class and Ethnicity

F-test

Method	Source	df	MS	F
Diaphragm	Social Class (SC)	1	.4	2.8
	Ethnicity (E)	1	.7	4.7*
	SC x E	1	1.9	12.9***
	Error	116	.1	
Condom	Social Class (SC)	1	.3	1.2
	Ethnicity (E)	1	.0	.1
	SC x E	1	1.6	6.8**
	Error	116	.2	
Rhythm	Social Class (SC)	1	.8	5.2*
	Ethnicity (E)	1	.0	.2
	SC x E	1	.8	5.2*
	Error	116	.2	
Douche	Social Class (SC)	1	.1	4.2*
	Ethnicity (E)	1	.0	1.1
	SC x E	1	.0	1.1
	Error	116	.3	

*p <.05

**p <.01

***p <.001

Table 26

Use of Diaphragm: Means, Standard
Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	1.1	0.3	-	-	-	3.4**	-	-	NS	-	-	NS
PR MC				1.5	0.5	-	-	-	2.3*	-	-	3.9**
WA WC							1.2	0.4	-	-	-	NS
WA MC										1.1	0.3	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p <.05; **p <.001

groups considered in this study, the Puerto Rican working class, and the White American working and middle classes. No similar social class differences were evident within the White American group.

Use of the condom, as presented in the t-tests of Table 27, was significantly lower for the Puerto Rican working class than the Puerto Rican middle class, and the White American working class. No other significant group differences emerged from these analyzes.

The t-tests in Table 28 explain the interaction of social class and ethnicity by pointing to a significantly higher frequency of use of the rhythm among the Puerto Rican middle class as compared to the Puerto Rican working class. The analyses contained in this table did not reveal similar social class differences with the White American group, nor any other group difference.

Table 29 presents the frequency with which the women in the sample were using birth control methods, not at any point in their lives, but right at the time they were interviewed for the study. A little over one-fourth of them (28.3%) were not using any method then. But, among these was a group (7.5%) that was pregnant. Sterilization (28.3%) was the most frequently used method; further analyses of these data will be shown in the following section. The contraceptive pill (14.2%) was the next most popular birth control method. Other less commonly used methods, in isolation or in combination, may be seen in the table.

Table 27

Use of Condom: Means, Standard Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	1.3	0.5	-	-	-	2.7**	-	-	2.1*	-	-	NS
PR MC				1.6	0.5	-	-	-	NS	-	-	NS
WA WC							1.6	0.5	-	-	-	NS
WA MC										1.4	0.5	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p <.05; **p <.01

Table 28

Use of Rhythm: Means, Standard Deviations and t-tests

	Groups ¹											
	PR WC			PR MC			WA WC			WA MC		
	M	SD	t ²	M	SD	t	M	SD	t	M	SD	t
PR WC	1.1	0.3	-	-	-	3.3*	-	-	NS	-	-	NS
PR MC				1.4	0.5	-	-	-	NS	-	-	NS
WA WC							1.2	0.4	-	-	-	0
WA MC										1.2	0.4	-

¹PR = Puerto Rican; WA = White American; WC = Working Class; MC = Middle Class

²df = 58 for all t-tests

*p < .01

Table 29

Frequency of Current Use of Birth Control Methods

Method	n	%
Sterilization	34	28.3
Pill	17	14.2
Diaphragm	7	5.8
IUD	6	5.0
Condom	4	3.3
Rhythm	4	3.3
Diaphragm and Condom	3	2.5
Spermicides	1	.8
Condom and Spermicides	1	.8
IUD and Douche	1	.8
Condom and Coitus Interruptus	1	.8
Condom and Rhythm	1	.8
Diaphragm and Spermicides	1	.8
Diaphragm, Condom and Rhythm	1	.8
Other	4	3.3
None	25	20.8
None, pregnant	9	7.5
TOTAL:	120	100.0

Further Analyses on Sterilization: Comparison
of Sterilized and Non-sterilized Women
on Birth Control

Knowledge

The data in Table 30 indicate that sterilized and non-sterilized women in the sample had about equal knowledge of eight of the ten birth control methods studied. Knowledge of birth control methods was measured as reported earlier in the chapter by level of awareness. Specifically, the data here suggest that these women had roughly equal knowledge of the following methods: sterilization, abortion, IUD, pill, spermicides, condom, rhythm and douche.

The only exceptions to this rule, as observed in Table 30, were the diaphragm and coitus interruptus. A significantly higher number of the non-sterilized women mentioned spontaneously or were able to recognize the diaphragm from a given list, than the sterilized women. Similarly, the proportion of non-sterilized women able to recognize the coitus interruptus method from a list was significantly higher than that of the sterilized women.

Attitudes

The results presented in Table 31, show that the sterilized and non-sterilized groups had approximately the same degree of acceptability of seven of the ten methods studied. Acceptability was measured, as explained earlier, by establishing the extent to which an individual would approve of a given method for personal use. Sterilized and non-sterilized women regarded the following methods with about the same level of acceptability: IUD, pill, spermicides, condom, rhythm, douche,

Table 30

Knowledge of Birth Control Methods: Comparing
Sterilized and Non-sterilized women

Method	Knowledge level	Sterilized (n=34)	Non-sterilized (n=86)	Chi Square
Sterilization	Mentioned			NS
	spontaneously	32.4% (11)	25.6% (22)	
	Recognized	67.6% (23)	74.4% (64)	
	Unknown	0	0	
Abortion	Mentioned			NS
	spontaneously	0	1.2% (1)	
	Recognized	100.0% (34)	98.8% (85)	
	Unknown	0	0	
IUD	Mentioned			NS
	spontaneously	70.6% (24)	81.4% (70)	
	Recognized	29.4% (10)	16.3% (14)	
	Unknown	0	2.3% (2)	
Pill	Mentioned			NS
	spontaneously	91.2% (31)	97.7% (84)	
	Recognized	8.8% (3)	2.3% (2)	
	Unknown	0	0	
Diaphragm	Mentioned			6.9*
	spontaneously	44.1% (15)	67.4% (58)	
	Recognized	29.4% (10)	22.1% (19)	
	Unknown	26.5% (9)	10.5% (9)	
Spermicides	Mentioned			NS
	spontaneously	61.8% (21)	64.0% (55)	
	Recognized	32.4% (11)	33.7% (29)	
	Unknown	5.9% (2)	2.3% (2)	
Condom	Mentioned			NS
	spontaneously	58.8% (20)	60.5% (52)	
	Recognized	41.2% (14)	38.4% (33)	
	Unknown	0	1.2% (1)	

Table 30 (continued)

Method	Knowledge level	Sterilized (n=34)	Non-sterilized (n=86)	Chi-Square
Rhythm	Mentioned			
	spontaneously	26.5% (9)	34.9% (30)	NS
	Recognized	47.1% (16)	47.7% (41)	
Unknown	26.5% (9)	17.4% (15)		
Douche	Mentioned			
	spontaneously	2.9% (1)	1.2% (1)	NS
	Recognized	58.8% (20)	74.4% (64)	
Unknown	38.2% (13)	24.4% (21)		
Coitus Interruptus	Mentioned			
	spontaneously	5.9% (2)	5.8% (5)	7.6*
	Recognized	47.1% (16)	72.1% (62)	
Unknown	47.1% (16)	22.1% (19)		

Note. Numbers in parenthesis indicate the number of subjects in each category.

*p <.05

Table 31

Acceptability of Birth Control Methods: Comparing
Sterilized and Non-sterilized Women

Method	Acceptability level	Group percents		Chi-Square
		Sterilized (n = 34)	Non-sterilized (n = 86)	
Sterilization	Acceptable	67.6 (23)	24.4 (21)	20.9**
	Possibly	11.8 (4)	45.3 (39)	
	Never	20.6 (7)	30.2 (26)	
Abortion	Acceptable	5.9 (2)	17.4 (15)	5.8*
	Possibly	8.8 (3)	19.8 (17)	
	Never	85.3 (29)	62.8 (54)	
IUD	Acceptable	26.5 (9)	22.1 (19)	NS
	Possibly	14.7 (5)	26.7 (23)	
	Never	58.8 (20)	51.2 (44)	
Pill	Acceptable	38.2 (13)	53.5 (46)	NS
	Possibly	8.8 (3)	11.6 (10)	
	Never	52.9 (18)	34.9 (30)	
Diaphragm	Acceptable	20.6 (7)	41.9 (36)	6.2*
	Possibly	47.1 (16)	26.7 (23)	
	Never	32.4 (11)	31.4 (27)	
Spermicides	Acceptable	26.5 (9)	29.1 (25)	NS
	Possibly	17.6 (6)	24.4 (21)	
	Never	55.9 (19)	46.5 (40)	
Condom	Acceptable	26.5 (9)	46.5 (40)	NS
	Possibly	23.5 (8)	22.1 (19)	
	Never	50.0 (17)	31.4 (27)	
Rhythm	Acceptable	32.4 (11)	24.4 (21)	NS
	Possibly	26.5 (9)	30.2 (26)	
	Never	41.2 (14)	45.3 (39)	

Table 31 (continued)

Method	Acceptability level	Group percents		Chi Square
		Sterilized (n=34)	Non-sterilized (n=86)	
Douche	Acceptable	23.5 (8)	15.1 (13)	NS
	Possibly	26.5 (9)	24.4 (21)	
	Never	50.0 (17)	60.5 (52)	
Coitus Interruptus	Acceptable	11.8 (4)	20.9 (18)	NS
	Possibly	38.2 (13)	33.7 (29)	
	Never	50.0 (17)	45.3 (39)	

Note. Numbers in parentheses indicate number of subjects in each category.

*p <.05; **p <.001

coitus interruptus.

There were three methods, as seen in Table 31, which the sterilized and non-sterilized women did not find equally acceptable: abortion, diaphragm and, notably, sterilization itself. Though the majority of women in both groups found abortion unacceptable ever, a significantly higher proportion of non-sterilized than sterilized women stated that abortion was either acceptable or possibly acceptable. The diaphragm was also significantly more acceptable for the group of non-sterilized women.

As might be expected, sterilization was significantly more acceptable for the sterilized than the non-sterilized women (see Table 31). The majority (67.6%) of the sterilized women found sterilization acceptable, while this was the view of only a minority (24.4%) of the non-sterilized women. Worthy of note, however, is the fact that a considerable number (20.6%) of the women who had already been sterilized viewed sterilization as never acceptable.

Practice

As presented in Table 32, about the same proportion of sterilized and non-sterilized women in the sample had tended to use or not use the same birth control methods at some point in their lives. This was the case for the frequency of women in both groups who had used the IUD, the pill, spermicides, condom, rhythm, douche, and coitus interruptus. The table did not include data on abortion. The only exception to this pattern of similar frequency of use was the diaphragm method. As seen in Table 32, a significantly larger proportion of non-sterilized women had used the diaphragm.

Table 32

Use of Birth Control Methods: Comparing
Sterilized and Non-sterilized Women

Method	Usage level	Group percents		Chi-Square
		Sterilized (n = 34)	Non-sterilized (n = 86)	
IUD	Not Used	64.7 (22)	77.9 (67)	NS
	Used	35.3 (12)	22.1 (19)	
Pill	Not Used	32.4 (11)	26.7 (23)	NS
	Used	67.6 (23)	73.3 (63)	
Diaphragm	Not Used	97.1 (33)	72.1 (62)	7.8*
	Used	2.9 (1)	27.9 (24)	
Spermicides	Not Used	82.4 (28)	70.9 (61)	NS
	Used	17.6 (6)	29.1 (25)	
Condom	Not Used	64.7 (22)	46.5 (40)	NS
	Used	35.3 (12)	53.5 (46)	
Rhythm	Not Used	73.5 (25)	80.2 (69)	NS
	Used	26.5 (9)	19.8 (17)	
Douche	Not Used	97.1 (33)	96.5 (83)	NS
	Used	2.9 (1)	3.5 (3)	
Coitus Interruptus	Not Used	79.4 (27)	81.4 (70)	NS
	Used	20.6 (7)	18.6 (16)	

Note. Numbers in parentheses indicate number of subjects in each category.

*p < .01

Table 33 presents data contrasting the frequency of sterilized and non-sterilized women by social class and ethnicity groups. Neither social class nor ethnicity as such proved to be significant. However, within the working class, there were significant differences. Specifically, the proportion of Puerto Rican working class women who were sterilized was significantly higher than that of their White American social class counterparts (see Table 33). Notably, almost half (46.7%) of the Puerto Rican working class women were sterilized.

By contrasting the frequency of women with tubal ligations and hysterectomies, data in Table 34 allow a closer examination of the practice of sterilization which reveals significant ethnic group differences. Note that the practice of sterilization was largely tubal ligation (79.4%). Tubal ligation is more explicitly a method of birth control. Hysterectomies are often performed primarily for health reasons, and not for birth control as such. Though, as seen in Table 33, ethnicity is not significant with respect to the general frequency of sterilizations, it does seem to relate to type of sterilization.

Comparing only the women who were sterilized, it was found that relative to White Americans, the Puerto Ricans had significantly more frequently undergone a tubal ligation than a hysterectomy (see Table 34). Actually, only 2 of the 21 Puerto Rican women who were sterilized had had a hysterectomy. No social class differences were found in the frequency of women with tubal ligation or hysterectomy.

Table 33

Social Class and Ethnic Group Comparisons of Sterilized and Non-sterilized women

Group	Sterilized	Non-sterilized	n	Chi-square
<u>Social Class Groups</u>				
Working	31.7% (19)	68.3% (41)	60	NS
Middle	25.0% (15)	75.0% (45)	60	
<u>Ethnic Groups</u>				
Puerto Rican	35.0% (21)	65.0% (39)	60	NS
White American	21.7% (13)	78.3% (47)	60	
<u>Ethnic/Social Class Subgroups</u>				
Puerto Rican				
Working class	46.7% (14)	53.3% (16)	30	NS
Middle class	23.3% (7)	76.7% (23)	30	
White American				
Working class	16.7% (5)	83.3% (25)	30	NS
Middle class	26.7% (8)	73.3% (22)	30	
<u>Social Class/Ethnic Subgroups</u>				
Working class				
Puerto Rican	46.7% (14)	53.3% (16)	30	5.0*
White American	16.7% (5)	83.3% (25)	30	
Middle Class				
Puerto Rican	23.3% (7)	76.7% (23)	30	NS
White American	26.7% (8)	73.3% (22)	30	

Note. Numbers in parentheses indicate the number of subjects in each category.

*p < .05

Table 34

Social Class and Ethnic Group Comparisons of Women
with Tubal Ligation or Hysterectomy

Group	Tubal ligation (n = 27)	Hysterectomy (n = 7)	n	Chi- Square
<u>Social Class Groups</u>				
Working	89.5% (17)	10.5% (2)	19	NS
Middle	66.7% (10)	33.3% (5)	15	
<u>Ethnic Groups</u>				
Puerto Rican	90.5% (19)	9.5% (2)	21	4.1*
White American	61.5% (8)	38.5% (5)	13	

Note. Numbers in parentheses indicate the number of subjects in each category.

*p < .05

Fears of Genocide: Comparison of Working and
Middle Class Puerto Rican Women

This final and brief section presents some results contrasting the opinions of working and middle class Puerto Rican women on issues relevant to fear of genocide.

As seen in Table 35, two significant social class differences were found within the Puerto Rican group with respect to fears of genocide. First, middle class Puerto Ricans were significantly more likely than the working class to agree with the statement that the establishment of free sterilization clinics in Puerto Rico represented a governmental attempt to eliminate Puerto Ricans. Second, a significantly higher number of middle class Puerto Rican women agreed with the statement that birth control clinics in Puerto Rican neighborhoods should be operated by Puerto Ricans. There was almost unanimity among the middle class on the second statement, with 93.3% of the middle class Puerto Ricans expressing agreement. No social class differences were observed with respect to the statement on whether the Puerto Rican families not limit their sizes. A total of 76.7% of the working class and 80% of the middle class disagreed with this last statement, indicating a strong interest in birth control among Puerto Ricans.

Table 35

Responses of the Working and Middle Class Puerto Rican Women to
Various Items that Relate to Fears of Genocide

Item	Working class (n=30)			Middle class (n=30)			Chi-Square
	Agree	Neither	Dis-agree	Agree	Neither	Dis-agree	
+The establishment of numerous free sterilization clinics in Puerto Rico shows a deliberate attempt from the federal, as well as the insular, government to eliminate Puerto Ricans.	6.7% (2)	20.0% (6)	70.0% (21)	36.7% (11)	10.0% (3)	53.3% (16)	8.9*
+Birth control clinics in Puerto Rican neighborhoods should be operated by Puerto Ricans.	40.0% (12)	60.0% (18)	0	93.3% (28)	6.7% (2)	0	16.9**
+Puerto Rican families should not limit their sizes.	16.7% (5)	6.7% (2)	76.7% (23)	3.3% (1)	16.7% (5)	80.0% (24)	NS

Note. Numbers in parentheses indicate the number of subjects in each category.

*p < .05; **p < .001

CHAPTER IV

DISCUSSION

The findings of this study suggest that there are similarities and substantial differences on the ways in which Puerto Rican and White American women of diverse social class backgrounds approach the question of limiting births. Most dissimilar are the Puerto Rican working class women, whose idiosyncratic birth control knowledge and attitudes leads to a practice in which tubal ligation is prevalent to an unprecedented degree.

The results on the birth control knowledge, attitudes and practice of working and middle class Puerto Rican and White American women are discussed in this chapter in six sections. First, the findings regarding social class are reviewed. Second, differences that are related to ethnicity are considered. A third section tests differences that are due to the interaction of social class and ethnicity. Fourth, additional findings on the issue of sterilization are discussed. The fifth section presents a birth control profile of each of the four social class/ethnic groups studied -- the Puerto Rican working class, the Puerto Rican middle class, the White American working class, and the White American middle class -- by summarizing some of the principal results and conclusions. Finally, the practical implications of these findings for birth control programs, and suggestions for future research are outlined.

Before proceeding with the discussion, it should be noted that the argument could be made that a number of characteristics of the Puerto Rican middle class group might limit the generalizability of the findings. Educationally, the middle class Puerto Ricans had gone to college or beyond more frequently than any other social class/ethnic group. However, their family income, another social class index, was lower than that of White American middle class (see Table 3). Many of the middle class Puerto Ricans included in this sample, as mentioned earlier, were members of a national women's organization. Further, the middle class Puerto Ricans tended to be less frequently affiliated with a particular religion, though their church attendance seemed comparable to that of White Americans. Given the poverty prevalent among Puerto Ricans in the United States, middle class persons are a rarity in this group. The features just described -- i.e., high educational attainment, greater likelihood of membership in an organization, lower frequency of religious affiliation -- are characteristic of the Puerto Rican middle class in the United States. And in all these respects, working and middle class Puerto Ricans differ markedly. These social class differences parallel those found generally in the Third World from which the Puerto Rican group emerged. Finally, it should be noted that the only limitation suggested by these differences is in comparing the two middle class groups.

Another potential limitation to the generalization of the results lies in the fact that the White American group was interviewed in Massachusetts. The population of this state has a higher population of Catholics than any other state in the country.

Social Class Differences and Birth Control

Knowledge

Social class emerged as a more significant factor than ethnicity by itself for knowledge of birth control methods and most other aspects studied.

The finding that the middle class in this sample collected in the 1980's has greater knowledge in general, and were significantly more knowledgeable about most birth control methods (see Tables 5 and 7) is in line with and updates the available literature (Linn et al., 1978; Rainwater, 1965; Borrás, 1981). The one exception to this pattern was the IUD, which was better known by the working class. The significance of the finding that the middle class had better knowledge of methods to limit births should not be underestimated.

Wealth of knowledge of birth control methods has a number of important implications. One is that it allows individuals to have greater control over such a central aspect of their lives as the size of their families. Another is that it leads to more informed choices in family planning. This is particularly true if the knowledge the individual possesses goes beyond level of awareness of the existence of a method and extends, for example, to such aspects as the health consequences entailed by its use. Also, it makes for greater flexibility in the use of methods. This permits the person to choose approaches to limit births that are more in tune with variations in personal health status or family circumstances. The findings of this study regarding knowledge of contraceptives suggest

that in all these respects, relative to the working class, the middle class tends to be in a more advantageous position.

Attitudes

The results show that middle class women were more accepting of birth control methods in general, and of specific methods in particular, than the working class, which is in line with prior research (see Tables 13 and 15). These findings, with data gathered in the 1980's, are consonant with those of studies done in the 1970's (Linn et al., 1978; Westoff & Ryder, 1977), the 1960's (Rainwater, 1965), and the 1950's (Hatt, 1952). There were no methods of which working class participants were more accepting than the middle class. Among the most favored methods of the middle class women here were the condom, diaphragm, and the pill, which were also widely favored in Rainwater's (1965) sample.

The results show strongly and consistently that the middle class had a more favorable attitude towards abortion for their personal use (see Table 15), and for the use by other women as well (see Table 17). Studies by Westoff and Ryder (1977), and by Linn and colleagues (1978) had also shown that there was a positive attitude towards abortion among the middle class.

The evidence on attitudinal social class differences regarding sterilization is mixed. The measure on acceptability of sterilization for their personal use did not reveal significant results (see Table 15). However, when the participants were presented with a statement on whether they would want to be sterilized after having all the children they wanted, significant social class differences did

emerge (see Table 17). And in this case, it was not the middle class, but actually the working class women who were giving signs of a more favorable attitude towards sterilization by agreeing with the statement significantly more frequently. The inconsistency in the findings might have to do with the questions themselves. In one instance, the women are asked the degree to which they favor sterilization. In the other, they are more directly asked whether they would actually want to be sterilized themselves after having their children. And the working class agreed with this latter question more frequently.

The results indicating a more positive attitude by the working class towards sterilization are at odds with earlier research. Research of the 1970's (Westoff and Ryder, 1977) showed that, on the contrary, it was the higher educated and higher income women who were more approving of sterilization.

These findings on sterilization and the discrepancy with prior research can be interpreted in a number of ways. First, they suggest that, as sterilization has become more available to the poor, the earlier attitudinal gap between the working and middle class women has either been closed, or perhaps has even been reversed. A second related possibility is that perhaps more middle class men, than working class men, might be opting for the vasectomy operation, making sterilization by their female middle class partners less necessary. In any case, the findings might well be pointing to newly emerging trends in social class related attitudes towards sterilization.

Ideal family size, another attitudinal variable, also varied according to social class background. Working class women favored a larger ideal family size than middle class women (see Table 19). An average of three children made the ideal family size for the working class women and two-and-a-half was the ideal number for middle class women in this sample. In the 1960's (see Whelpton et al., 1966; Rainwater, 1965), the ideal family size had also been reported to be larger for the working class (an average of four) than for the middle class (an average of three). Although the proportion of the ideal number of children for the middle and working class is less for this sample than that reported in the earlier literature, the same relationship still exists: the higher one is in social class status, the smaller the family size ideals. But the ideal conception of family size seems to be shrinking in recent times for all social classes.

Practice

As such, few significant social class differences were found in the use of birth control methods (see Tables 23 and 25). As will be discussed later, however, social and ethnicity at times interacted significantly in influencing the practice of birth control.

By itself, social class was a significant variable with respect to the use of the douche and the rhythm methods. Use of the douche was higher among the working class. The reverse was true for the rhythm which was practiced significantly more often by the middle class.

A number of interpretations are offered on this finding on social class differences on the use of the douche and the rhythm methods.

First, the middle class might use the rhythm more often because larger numbers of them might be able to behave more consistently and with more discipline with respect to birth control. Perhaps more than any other method, the rhythm requires consistent, planned action. Second, the preference shown by the middle class for the rhythm might in part relate to their greater knowledge of birth control methods which could be leading a significant number of them to be concerned with the side effects of chemical or mechanical contraceptives. Finally, this greater knowledge of birth control methods might be influencing the middle class, and not the working class, to refrain from using the douche because of its low reliability rate.

Missing from these data were any indications of social class differences in the practice of birth control due to considerations of the differential costs of the methods. Prior research had found a strong tendency for the middle class to employ more expensive methods (i.e., spermicides and diaphragm) while the working class used less costly ones (i.e., withdrawal and condoms; cf. Koos, 1947; Rainwater, 1965). Perhaps the easy availability of free contraceptives for the working class, which is a relatively more recent occurrence, has eliminated these differences due to cost.

Ethnic Group Differences on Birth Control

Knowledge

White American women exhibited greater general knowledge of birth control methods than Puerto Rican women (see Table 7). White Americans also had greater knowledge of three specific methods: the diaphragm, coitus interruptus and rhythm. The reason for these differences are not clear. Nothing in the literature available sheds light on these differences. But, White American women do seem to operate from a position of greater knowledge which should be advantageous to them when making birth control choices.

Attitudes

No ethnic group differences were apparent regarding general acceptability of birth control methods (see Table 13). However, differences between Puerto Ricans and White Americans were found with respect to acceptability of the pill and the douche (see Table 15). Puerto Ricans were more accepting of the douche, while White Americans had more favorable attitudes towards the contraceptive pill.

The high acceptability of birth control methods among White Americans has been relatively well documented in the past (Whelpton et al., 1966; Blake et al., 1969; Linn et al., 1978). In fact, it has been found that when compared to other ethnic groups (i.e., Black Americans, Mexican Americans, or Cubans), White American women tend to be even more positively inclined towards birth control (cf. Blake et al., 1969; Linn et al., 1978). These higher general acceptability

ratings of birth control did not appear in the data here when White Americans were contrasted with Puerto Ricans.

White American women have also been reported to be more positive in their attitudes towards abortion than Black Americans (Westoff and Ryder, 1977). In this sample, however, White American women did not differ from Puerto Ricans on acceptability of abortion as a birth control method for themselves (see Table 15) or for other women (see Table 18).

Ethnic differences did emerge as far as conceptions of the ideal family size. On the average, the Puerto Ricans conceived the ideal family as having more children (3) than White American women ($2\frac{1}{2}$). A similar relationship between Black and White Americans, where Blacks averaged higher family size ideals, has been documented by Whelpton and colleagues (1966). Previous research with Puerto Ricans in the 1950's showed family size ideals averaging 4 children (Stycos, 1955). Thus, the fact that on the average the ideal was three children for the Puerto Ricans in this sample, represents a notably significant reduction on family size ideals from what has been documented in the earlier literature.

Practice

No ethnic group differences as such were uncovered with respect to the general use of methods to control births (see Table 23). Puerto Rican and White American women had used about the same number of methods at one time or another in their lives. The only exception to this pattern was the diaphragm, which had been used by a greater

number of Puerto Ricans (see Table 25).

It is important to note that the measure of use of birth control methods employed is a relatively restricted one. What was measured was which methods a participant had or had not used at some time in their lives. More complete measures (for example, that include the number of times each methods was used) are needed to detect possible ethnic group differences in birth control practices.

Differences Due to the Interaction of
Social Class and Ethnicity

Knowledge

Regarding knowledge of birth control, as measured by level of awareness of methods, the pattern that emerged was one of very strong social class differences among the Puerto Ricans, and no social class differences among the White Americans (see Tables 5-12).

Working and middle class Puerto Ricans basically lie at the extreme ends on a continuum of knowledge of methods to control births. On the one hand, the Puerto Rican working class demonstrated less knowledge of birth control methods in general, and of various methods (diaphragm, condom, rhythm, and coitus interruptus) in particular than the rest of the subgroups in the sample; that is, middle class Puerto Ricans, working, and middle class White Americans. On the other hand, the middle class Puerto Ricans gave evidence of greater general knowledge, and knowledge of certain specific methods (diaphragm and spermicides) not only than the working class Puerto Ricans, but also

the middle class White Americans. In these respects, the level of knowledge was the same between Puerto Rican middle class women and White American working class women. There were no methods about which the Puerto Rican middle class was shown to know less than any other group. In sum, the working class Puerto Ricans appeared to be the least knowledgeable, while the middle class Puerto Ricans knew at least as much or more about birth control methods than any other group.

The consequences of this birth control knowledge gap among Puerto Ricans seem obvious. The evidence suggests that middle class Puerto Ricans are relatively well informed -- in some ways best informed -- when choosing methods of birth control. In contrast, working class Puerto Ricans seem to be choosing among birth control methods with significantly less information.

White American women seem to be equally informed about the range of contraceptives irrespective of their social class status.

Attitudes

Puerto Rican middle class women stand out as the group being more accepting of birth control methods in general for their personal use than any other subgroup being studied (see Table 14). Thus, middle class Puerto Ricans not only are aware of a wide variety of methods, but they also have the most positive attitudes towards them.

On the question of attitudes towards abortion, the Puerto Rican working and middle classes were again at opposite ends (see Table 16). Working class Puerto Ricans were least accepting of abortion than

all others, including the White Americans. The exact opposite was true of the middle class Puerto Ricans who exhibited greater acceptability of abortion than anyone else. White Americans were not found to differ by social class or acceptability of abortion.

The data on differential attitudes towards abortion is very revealing about Puerto Ricans and illustrates the importance of avoiding the common mistake of social science research of treating Puerto Ricans as a homogenous group. They also offer a rare view of the attitudes of middle class Puerto Ricans on abortion, which is largely unavailable in the literature. These results confirm previous findings on the negative attitudes towards abortion among Puerto Rican women of working class background (Borras, 1981; Berle, 1957; Padilla, 1959; Hill et al., 1959).

Regarding ideal family size, the average number of children preferred by the Puerto Rican working class women ($M = 3.3$) was significantly larger than that of all other ethnic/social class subgroups studied (see Table 20). In this respect, the ideal family size of middle class Puerto Ricans ($M = 2.6$) was actually just about the same as those of working class ($M = 2.5$) and identical to those of middle class ($M = 2.6$) White Americans.

Practice

Middle class Puerto Ricans had a higher general use of birth control methods than their working class counterparts, and middle class White Americans (see Table 24). Puerto Rican middle class women had also used specifically the diaphragm more than all other groups, and the

condom and rhythm more than working class Puerto Ricans (see Table 27). More White American working class participants had also used the condom than Puerto Ricans of the same social class. The working class Puerto Ricans had a smaller proportion of women who had used at some time in their lives a birth control method ("ever-users") than middle class Puerto Ricans or working class White Americans (see Table 22).

In line with the knowledge levels and positive attitudes discussed earlier, the Puerto Rican middle class had a pattern of seemingly high utilization of a variety of birth control methods. This did not appear to be the case with working class Puerto Ricans.

The relatively low number of ever-users and other utilization data, coupled with the high incidence of sterilization among the Puerto Rican working class, suggests that these women might be opting for such a drastic birth control method without first experiencing other alternatives. The relatively low general knowledge of birth control methods reported earlier for this group indicates that working class Puerto Ricans might not be fully aware of the existence of alternatives to the practice of sterilization.

Additional Findings on Sterilization and Fears of Genocide

Differences Between Sterilized and Non-sterilized Women on Birth Control

Knowledge. Comparing sterilized and non-sterilized women as groups, the results indicate that they had about the same knowledge of birth control methods (see Table 30). The only exceptions to this pattern were the diaphragm and coitus interruptus, which were better known by non-

sterilized women.

This suggests, therefore, that it was not a lack of awareness of other methods which, as a group, prompted the sterilized women to opt for sterilization.

Attitudes. Sterilized and non-sterilized women regarded most birth control methods with the same degree of acceptability (see Table 31). There were three exceptions -- the diaphragm, abortion, and sterilization itself.

Not surprisingly, sterilized women found sterilization significantly more acceptable than non-sterilized ones. This suggests that a relatively high number of those who had been sterilized continued to have a favorable attitude towards this method; specifically, 67.6% of the sterilized women said it was acceptable (see Table 31). A significantly smaller, but still considerable, number of the non-sterilized women (24.4%) found sterilization acceptable. No doubt that some of them would go on to be sterilized in the future.

However, a striking statistic (see Table 31) which reveals the ambivalent attitudes and personal conflicts that this issue evokes is that about one-third (32.4%) of the women who had already been sterilized found the method to be only possibly acceptable (11.8%) or even never acceptable (20.6%). The irreversible quality of sterilization makes it all the more important that those about to undergo the operation are made aware of its consequences, and the possible

attitudinal fluctuation they might experience.

The lower acceptability of abortion among sterilized women (85.3% found it never acceptable) compared to non-sterilized women (62.8% never acceptable) might be related to the former's opting for sterilization (see Table 31). Some sterilized women might have chosen this method rather than risking a pregnancy which they would find unacceptable to terminate by inducing abortion.

Practice. Sterilization was used by more women in the sample (28.3%) than any other birth control method (see Table 29). It clearly is a very popular method of birth control, as well as a way of dealing with certain health problems, particularly in the case of hysterectomies.

Use of other birth control methods had been about the same for both sterilized and non-sterilized women (see Table 32). Only for the diaphragm were differences found, with the non-sterilized women using it more frequently.

The high proportion (46.7%) of sterilized working class Puerto Rican women is in line with what has been documented in the past literature (Scrimshaw and Pasquariella, 1971; Berle, 1975; Gonzalez, Barrera, Guarnaccia and Schensul, 1980; Borrás, 1981).

Examining the practice of sterilization more closely, it was found that the proportion of Puerto Rican women who had had tubal ligation, as opposed to a hysterectomy, was higher than that of White American women (see Table 34). Only 9.5% of the Puerto Ricans who were sterilized had had a hysterectomy while the corresponding figure for

White Americans is significantly higher (38.5%). The importance of these data lie in the fact that hysterectomies are performed most often primarily for health reasons, while tubal ligation is principally a method to control births. Consequently, it seems that Puerto Ricans are being sterilized, through tubal ligation, with the purpose of limiting births in significantly higher numbers than White Americans.

Differences Between Working and Middle Class Puerto Ricans on Fears of Genocide

The evidence gathered in this research points to considerable fears of genocide among middle class Puerto Ricans, but not among the working class of this ethnic group (see Table 35). Specifically, over one-third (36.7%) of middle class Puerto Ricans agreed with the statement that the establishment of free sterilization clinics in Puerto Rico represented a governmental attempt to eliminate Puerto Ricans. This middle class group also felt quite strongly (93.3% agreed) -- and to a significantly higher degree than the working class (40% agreed) -- that birth control clinics in Puerto Rican neighborhoods should be operated by Puerto Ricans.

Fears of genocide related to birth control programs had been documented earlier for Black Americans (Darity, Turner and Thieboux, 1971; Darity and Turner, 1972; Turner and Darity, 1980; 1980-81).

One would like to think that these fears of genocide are unfounded, despite the existence of ethnic prejudice in society. In any case, the fears themselves are a reality which needs to be considered when

when planning birth control programs for Puerto Ricans, particularly of middle class background.

Birth Control Profile: Summary of Findings

This section schematically summarizes the major findings of the study by presenting a profile of the birth control knowledge, attitudes and practice of each of the four ethnic/social class subgroups studied -- the Puerto Rican working class, the Puerto Rican middle class, the White American working class and the White American middle class women. All group differences mentioned on the profile are based on statistically significant results as reported earlier.

1. Puerto Rican working class

a. Knowledge

- Less general knowledge of birth control methods than all other groups
- Less knowledge of diaphragm, condom, rhythm, coitus interruptus than all other groups

b. Attitudes

- Less accepting of abortion than all other groups.
- Average ideal family size was larger than for all other groups

c. Practice

- Smaller proportion of women ever-users of birth control than for the Puerto Rican middle class and White American working class
- General use of birth control methods, use of the diaphragm, and rhythm was comparable to White Americans, both working and middle class
- Less use of the condom than their middle class counterparts and White American working class

- Use of the condom was about the same as for the White American middle class
- High incidence of sterilization, in particular tubal ligation
- Higher frequency of sterilization than White American working class

2. Puerto Rican middle class

a. Knowledge

- Greater general knowledge of birth control methods than White American middle class and Puerto Rican working class.
- Greater knowledge of diaphragm and spermicides than the White American middle class and Puerto Rican working class

b. Attitudes

- Greater general acceptability of birth control methods than all other groups
- More accepting of abortion than all other groups
- More concerned with fears of genocide than Puerto Rican working class
- Average ideal family size about the same as White American middle and working class

c. Practice

- Higher general use of birth control methods than Puerto Rican working class, and White American middle class.
- Greater use of diaphragm than all other groups
- Greater use of the rhythm than the Puerto Rico working class

3. White American working class

a. Knowledge

- Knowledge of birth control methods in general and of spermicides, condom, rhythm, and coitus interruptus in particular was about the same as the Puerto Rican and White American middle class
- Greater knowledge of the diaphragm than the White American middle class, but about the same as the Puerto Rican middle class.

b. Attitudes

- General acceptability of birth control methods was about the same as the White American middle class and the Puerto Rican working class
- Acceptability of abortion was about the same as the White American middle class
- Average ideal family size was about the same as that of the Puerto Rican middle class

c. Practice

- General use of birth control methods and use of the rhythm was about the same as for all other groups
- Use of the diaphragm was about the same as for the White American middle class and Puerto Rican working class
- Use of the condom was about the same as that of the White American and Puerto Rican middle class.

4. White American middle class

a. Knowledge

- General knowledge of birth control methods was comparable to that of their working class counterparts
- Knowledge of spermicides was comparable to that of the White American and Puerto Rican working class
- Knowledge of the condom, rhythm, and coitus interruptus was about the same as for the White American working class and the Puerto Rican middle class

b. Attitudes

- Acceptability of birth control methods in general was approximately the same as for the White American and Puerto Rican working class
- Acceptability of abortion was comparable to their working class counterparts.
- Average ideal family size was about the same as for the White American working class and Puerto Rican middle class

c. Practice

- Use of birth control methods in general was comparable to the White American and Puerto Rican working class

- Use of the diaphragm was about the same as the White American and Puerto Rican working class
- Use of the condom and the rhythm was comparable to the Puerto Rican middle class and to both the White American and Puerto Rican working class

Implications for Praxis and Research

Practical Implications

A number of findings of this study have implications for birth control programs. The focus here will be on some of the principal practical consequences of these results.

A major need manifested by these findings is that of better educating people regarding birth control methods and their biological and psychological consequences. This need seems particularly acute for the working class Puerto Rican women, but is really extensive to all women and men of reproductive age. Few women in this study, of any ethnic/social class background, seemed to have a thorough knowledge of methods and their consequences, particularly of chemical or mechanical methods, and of abortion and sterilization.

The need for information regarding birth control methods is especially evident with respect to the practice of sterilization. Relative to prior studies, the findings of the present research indicate that sterilization is becoming increasingly popular among White Americans, and, for tubal ligation, specifically, continues at incomparably high levels among the Puerto Ricans. The results also suggest that about one-third of the women who had already been sterilized were conflicted about its acceptability. People have to be informed about this method before they proceed to make irreversible choices.

Birth control programs need to take note of the fears of genocide and the partially related desire for clinics to be operated by Puerto Ricans that was evident among the Puerto Rican middle class. Failure to do so can only lead to misunderstandings, and underutilization of programs by the population they intend to serve.

Future Research

Several research directions derive from questions raised when examining the findings of the present study.

A principal research direction involves an even more detailed exploration of women's birth control knowledge, attitudes and practice based on and going beyond the findings obtained from the present research. Regarding knowledge, it would be important to measure the extent and accuracy of women's actual information about methods. A better understanding of attitudes would require an investigation of women's rational and irrational beliefs and concerns regarding methods and their biological and psychological side-effects. And, as far as practice, there is the need to measure more precisely the actual usage patterns of all methods over the reproductive life of an individual, and to shed light on the fluctuations that are sure to appear.

The findings of the present study suggest quite forcefully the importance of taking social class into account for future research on birth control with Puerto Ricans. Major social class differences among the Puerto Ricans were apparent in many areas studied here; for

example, the general acceptability of methods. Birth control studies with White Americans routinely consider social class, at least as a variable to be controlled. But it seems that too often social science research erroneously regards Puerto Ricans as a homogeneous group.

Finally, further examination of the relationship between ethnicity and birth control requires a more in-depth treatment of cultural differences. When comparing Puerto Ricans, for example, it is critical to devise measures that are sensitive to such central cultural values as respect, dignity and "capacidad" (cf. Pacheco, 1981). When the appropriate cultural dimensions are tapped, ethnicity will probably emerge as an even stronger variable explaining differences in the actions that people take to control births.

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APPENDIX

Appendix A

A Study of Birth Control and Family Planning

Consent Form

"I am working on a research project at the University of Massachusetts in Amherst. We are doing a study to find out what women think about birth control and family planning. To do the study, I would like your permission to ask you a series of questions. At any point during this interview you may withdraw your consent and discontinue participation, if you so desire. I want you to know that this information will be kept strictly confidential. Do you have any questions? If this sounds satisfactory to you, please sign the consent form below."

Authorization: I understand the extent of my involvement in this project and agree to participate in the study. Its general purposes and particulars of my involvement have been explained to my satisfaction.

Signature of Subject

Date

Name of Interviewer

Hoja de Autorizacion

"Yo estoy trabajando en un estudio de la Universidad de Massachusetts en Amherst. Estamos haciendo el estudio para conocer lo que piensan las mujeres sobre el control de la natalidad y la planificacion familiar. Para hacer el estudio, necesito su permiso para hacerle una serie de preguntas. Quiero que sepa que la informacion se mantendra estrictamente confidencial. Si lo deseara, en cualquier momento durante esta entrevista usted puede retirar su autorizacion y participacion en este estudio. Tiene alguna pregunta? Si esto le parece satisfactorio, por favor firme esta hoja de autorizacion."

Autorizacion: Yo entiendo el grado hasta el cual estare envuelta en este proyecto y estoy de acuerdo con mi participacion en el estudio. Los propositos generales y los detalles de mi involucimiento me han sido explicados satisfactoriamente.

Firma del Subjeto

Nombre del Entrevistador

Fecha

Appendix B

Consent for Participation in a Research Project
 University of Massachusetts Medical Center

Project: A Study of Attitudes and Beliefs about Birth Control and Family Planning

Investigator: Vickie A. Borrás, Ph.D. candidate

You are invited to participate in a study of women's beliefs and attitudes about birth control and family planning. In this study, each subject will be asked a series of questions by a female interviewer. This will take approximately 30 to 40 minutes. There are no foreseeable risks (physical, psychological, social, economic, legal or other) to participants.

This study may be of no direct benefit to you, but understanding women's beliefs and attitudes towards birth control and family planning would help in the formulation of practical suggestions for family planning programs and health professionals who provide birth control counseling.

To preserve confidentiality in this study, you will be identified by a number. Your name will be known only to the researchers. Names of individuals will not be used in any reports of the study.

You are free to choose not to participate. If you do become a subject, you are free to withdraw from this study at any time during its course without prejudice to you.

Please feel free to ask about anything you do not understand and to consider this research and the consent form carefully -- as long as you feel its necessary -- before you decide to participate.

Authorization: I have read this form and decided to participate in the project described above. Its general purposes, the particulars of my involvement and possible hazards and benefits have been explained to my satisfaction. My signature also indicates that I have received a copy of this consent form.

Date

Signature of Subject

I have explained to the above named subject the nature and purpose of the procedures described above and any potential risks and benefits that may result. I have asked the subject if any questions have arisen regarding the procedures and have answered these questions to the best of my ability.

Principal Investigator

Appendix C

A STUDY OF BIRTH CONTROL AND FAMILY PLANNING

Department of Psychology
 University of Massachusetts
 Amherst, Massachusetts

INTERVIEWER'S INITIALS

SUBJECT #

TODAY'S DATE: _____

1. Address _____
 (Interviewer Completes)

2. Sex (Interviewer Completes)

1. Male
2. Female

3. How many years have you lived in this city? _____ in U.S.A.? _____

1. Less than a year
2. 1-5 years
3. 6-10 years
4. 11-15 years
5. 16-20 years
6. 21-25 years
7. 26 or more years

4. a. Where were you born?

1. Puerto Rico
2. United States
3. Other: _____

b. If answer is #1

1. town
2. city

5. a. Ethnic group (Interviewer Completes)

1. Puerto Rican
2. White American

b. / Only for White American Subjects /

Do you identify with a particular ethnic background?

- | | |
|------------|-------------------------|
| 0. None | 3. Jewish |
| 1. Irish | 4. Mixed, specify _____ |
| 2. Italian | 5. Other, specify _____ |

6. / Only for Puerto Rican subjects /

How many years do you plan to live in this country? _____

1. Less than a year
2. 1-3 years
3. 4-6 years
4. 7-10 years
5. 10 years or more

Now I want to ask you some questions about your feelings about family size and a few questions about birth control.

7. How many children, would you say, makes the best family size? _____

- | | |
|----------|------------------|
| 0. None | 5. Five |
| 1. One | 6. Six |
| 2. Two | 7. Seven |
| 3. Three | 8. Eight or more |
| 4. Four | |

Comments: _____

8. What methods of birth control have you heard of? / Please check in the first column specifically each method that the respondent mentions.

- () () 1. Sterilization ("the operation", ligation, "tubes tied", hysterectomy)
- () () 2. Abortion
- () () 3. IUD (Intrauterine coil or loop)
- () () 4. Contraceptive Pill

- () () 5. Diaphragm
- () () 6. Spermicides (jelly, foam, cream, suppositories)
- () () 7. Condom (rubber, safe, prophylactic)
- () () 8. Rhythm
- () () 9. Douche
- () () 10. Coitus interruptus (withdrawal)
- () () 11. Other, Specify: _____

/ Read methods not mentioned by respondent (not checked in first column).
 Check in 2nd column any of the methods the respondent recognizes as
 you read them /

- 9. Have you or your present partner used any methods to limit your family size?
 - 1. Yes (Go to question #11)
 - 2. No (Go to next question)

10. If no (#9), why not? _____

Now I want to know about the history of usage of these methods.

- 11. If yes (#9), please circle the period of time over which the respondent used each specified method. If a method was not used, circle "0".

- 0. not used
- 1. one year or less
- 2. two years
- 3. three years
- 4. four years
- 5. five years
- 6. six years
- 7. seven years
- 8. eight years
- 9. nine years or more

1. IUD (intrauterine coil or loop).....0 1 2 3 4 5 6 7 8 9
 2. Contraceptive Pill.....0 1 2 3 4 5 6 7 8 9

- 3. Diaphragm0 1 2 3 4 5 6 7 8 9
- 4. Spermicides (jelly, foam, cream, suppositories)0 1 2 3 4 5 6 7 8 9
- 5. Condom (rubber, safe, prophylactic).....0 1 2 3 4 5 6 7 8 9
- 6. Rhythm0 1 2 3 4 5 6 7 8 9
- 7. Douche0 1 2 3 4 5 6 7 8 9
- 8. Coitus interruptus (withdrawal).....0 1 2 3 4 5 6 7 8 9
- 9. Other, specify: _____ 0 1 2 3 4 5 6 7 8 9

12. Have you every had an abortion?

- 1. Yes
- 2. No

13. If yes (#12), how many? _____

14. From what person or source did you first learn about preventing pregnancy? (Do not read list)

- 1. School mates or friends
- 2. Husband, boyfriend
- 3. Social worker
- 4. Physician
- 5. Relative (mother, father, brother, sister, uncle, etc.)
- 6. Public health nurse
- 7. Read about it
- 8. Other, specify: _____

15. Have you ever been to a clinic or physician to obtain information about preventing pregnancies?

- 1. Yes, to a clinic
 - 2. Yes, to a physician
 - 3. No -- Why not? _____
- _____
- _____

16. What do you believe is the purpose of birth control centers and clinics?

17. Would the following methods be acceptable or unacceptable for your personal use? After reading to you the particular method, please answer if acceptable or unacceptable. (Prompt at the start.)

	Doesn't know	Acceptable now	Unacceptable, but possible in the future	Never acceptable
1. Sterilization ("the operation", ligation, "tubes tied", hysterectomy)	0	1	2	3
2. Abortion	0	1	2	3
3. IUD (intrauterine coil or loop).....	0	1	2	3
4. Contraceptive Pill	0	1	2	3
5. Diaphragm	0	1	2	3
6. Spermicides (jelly, foam, cream, suppositories).....	0	1	2	3
7. Condom (rubber, safe, prophylactic).....	0	1	2	3
8. Rhythm	0	1	2	3
9. Douche	0	1	2	3
10. Coitus interruptus (withdrawal).....	0	1	2	3
11. Other, specify: _____	0	1	2	3

18. How would you describe or how does each one of the following methods work? (Write as close to verbatim as possible.) Side effects associated with each?

1. Sterilization ("the operation", ligation, "tubes tied", hysterectomy):

2. Abortion: _____

3. IUD (intrauterine coil or loop): _____

4. Contraceptive Pill: _____

5. Diaphragm: _____

6. Spermicides (jelly, foam, cream, suppositories): _____

7. Condom (rubber, safe, prophylactic): _____

8. Rhythm: _____

9. Douche: _____

10. Coitus interruptus (withdrawal): _____

11. Other, specify: _____

Now I am going to read some statements to you. Please tell me whether you agree or disagree with each one.

19. If a woman is pregnant and does not want a baby, an abortion is acceptable.

1. Agree

2. Disagree

20. Sterilization is an acceptable method of birth control.

1. Agree

2. Disagree

21. If you had all the children you wanted, you would want to be sterilized.

1. Agree

2. Disagree

22. After "the operation" is performed, one could never get pregnant again.

1. Agree

2. Disagree

23. / Only for Puerto Rican subjects /

Puerto Rico has the highest proportion of sterilized women in the world.

1. Agree

2. Disagree

31. / Only for Puerto Rican subjects /

How would you rate your English proficiency?

	Poor or none	Fair	Good	Excellent
1. Speak	1	2	3	4
2. Write	1	2	3	4
3. Read	1	2	3	4

32. How many people live in the household at present? _____

1. number of children _____

2. number of adults _____

33. (If the respondent has children:) How many children did you want when you started your family?

(If the respondent does not have children:) How many children do you want when you start your family?

- | | |
|----------|------------------|
| 0. None | 5. Five |
| 1. One | 6. Six |
| 2. Two | 7. Seven |
| 3. Three | 8. Eight or more |
| 4. Four | |

Why?: _____

34. How many births have you every had? _____
- | | |
|----------|------------------|
| 0. None | 5. Five |
| 1. One | 6. Six |
| 2. Two | 7. Seven |
| 3. Three | 8. Eight or more |
| 4. Four | |
35. How many children do you have? (If the respondent does not have children, do not ask this question. Circle "none" and skip to question #36).

- | | |
|----------|------------------|
| 0. None | 5. Five |
| 1. One | 6. Six |
| 2. Two | 7. Seven |
| 3. Three | 8. Eight or more |
| 4. Four | |
36. Are any of these adopted or foster children?
- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|
37. If yes (to question #36), how many of the children are adopted or or foster children?

- | | |
|----------|------------------|
| 0. None | 5. Five |
| 1. One | 6. Six |
| 2. Two | 7. Seven |
| 3. Three | 8. Eight or more |
| 4. Four | |
38. How many more children would you like to have? _____
- | | |
|----------|------------------|
| 0. None | 5. Five |
| 1. One | 6. Six |
| 2. Two | 7. Seven |
| 3. Three | 8. Eight or more |
| 4. Four | |
39. If none (to question #38), would you have liked a smaller family?
- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|

47. What was your age when you were first married?

_____ Years old

/ Remember: There are no right or wrong answers. We want to simply find out the basis of people's decisions about birth control methods. This is not intended to be a judgment of the kinds of decisions you have made /

48. What contraceptive method(s) are you currently using? (Please check)

- 1. Sterilization ("the operation", ligation, "tubes tied", hysterectomy)
- 2. Abortion
- 3. IUD (intrauterine coil or loop)
- 4. Contraceptive Pill
- 5. Diaphragm
- 6. Spermicides (jelly, foam, cream, suppositories)
- 7. Condom (rubber, safe, prophylactic)
- 8. Rhythm
- 9. Douche
- 10. Coitus interruptus (withdrawal)
- 11. Other, specify: _____

(If answer is 1, ask questions 49-60; if answer is other than 1, go to question #61.)

49. What were your reasons for choosing sterilization?

- 1. medical reasons, specify: _____
- 2. convenience
- 3. too many children
- 4. family or marital problems
- 5. economic reasons
- 6. physician's decision

50. When did you decide to become sterilized?

- 1. during pregnancy
- 2. right after labor
- 3. after an abortion
- 4. after a miscarriage or stillbirth

58. c. Have you ever regretted it?

1. Yes

2. No

59. Approximately what age were you when you first learned about sterilization?

60. a. Would you do it again?

1. Yes

2. No

b. Why? _____

(Go to question #63)

61. How did you decide on it (or on them)? _____

(Do not read list)

1. Suggested by professional (physician, counselor, nurse practitioner)
2. Suggested by relative or friend
3. Read about it
4. Suggested by husband or partner
5. Financially affordable
6. By mutual agreement with husband or partner
7. Less threatening to the health
8. Decided by herself only

62. Does your husband or partner approve of this method?

1. Yes

2. No

3. Husband or partner doesn't know about it

63. What do you understand by sterilization ("the operation", ligation, "tubes tied", hysterectomy)?

1. A method to avoid pregnancy.

2. A treatment for certain health problems. Specify: _____

64. How would you describe or how does sterilization in women work?

65. In which situations should sterilization be used?

66. Do you think that your religion approves of sterilization?

1. Yes

2. No

67. Some people are afraid of different problems that might be caused by the use of birth control methods. I am going to read you a list. Which of the following problems do you think are caused by some methods? (For each alternative below specify which method(s) is related to the fear.)

1. Cancer, method(s): _____

2. Bleeding, method(s): _____

3. Infection, method(s): _____

4. Pain, method(s): _____

5. Change in sexual relations in woman and man, method(s): _____

6. Intervention of a male physician, method(s): _____

7. Spouse or partner suspecting infidelity, method(s): _____

8. Miscarriage or stillbirth, method(s): _____

9. Religious objections, method(s): _____

10. Other fears and methods: _____

68, a. Are you renting, buying, or do you own your own home?

- | | |
|------------|--------|
| 1. Renting | 3. Own |
| 2. Buying | |

b. How would you describe the over-all appearance of your house?
(Interviewer ranks house type)

- | | |
|--------------|--------------|
| 1. Excellent | 5. Fair |
| 2. Very good | 6. Poor |
| 3. Good | 7. Very poor |
| 4. Average | |

c. How would you describe the neighborhood in which you live?
(Interviewer ranks quality of dwelling area)

- | | |
|------------------|------------------|
| 1. Very high | 5. Below average |
| 2. High | 6. Low |
| 3. Above average | 7. Very low |
| 4. Average | |

69. a. How much was your total family income for last year? _____

- | | |
|-------------|---------------------|
| 0. \$ _____ | \$999 or less |
| 1. \$ _____ | \$1,000 - \$1,999 |
| 2. \$ _____ | \$2,000 - \$3,999 |
| 3. \$ _____ | \$4,000 - \$5,999 |
| 4. \$ _____ | \$6,000 - \$7,999 |
| 5. \$ _____ | \$8,000 - \$9,999 |
| 6. \$ _____ | \$10,000 - \$11,999 |
| 7. \$ _____ | \$12,000 - \$13,999 |
| 8. \$ _____ | \$14,000 - \$15,999 |
| 9. \$ _____ | \$16,999 or more |

b. What is your occupation? _____

- | | |
|-----------------------------------|--|
| 1. Professional | 5. Manual worker or skilled worker |
| 2. Proprietor or manager | 6. Protective and service worker
or semi-skilled worker |
| 3. Business woman | 7. Unskilled worker |
| 4. Clerk or blue collar
worker | |

70. How many months were you employed in 1983? _____ Husband? _____

- | | |
|-------------|------------------|
| 0. All year | 5. Seven |
| 1. Eleven | 6. Six |
| 2. Ten | 7. Five |
| 3. Nine | 8. Four |
| 4. Eight | 9. Three or less |

71. How would you classify yourself in terms of the following categories?

- | | |
|--------------------------------|-----------------------|
| 1. Very poor | 4. Well enough off |
| 2. Below average | 5. A very good income |
| 3. Average middle class income | 6. Wealthy |

72. How far did you go in school? _____

1. 3rd grade or less
2. 4th to 6th grade completed
3. 7th to 9th grade completed
4. 10th to 11th grade completed
5. High School graduate
6. At least one year of college completed (but did not graduate)
7. Junior college, technical school, or business school (completed)
8. College graduate
9. Graduate school, professional training (lawyer, etc.) (completed)

Indicate degree received: _____

Or profession: _____

73. What was the religion in which you were brought up?

- | | |
|-------------------|--------------------------|
| 0. Catholic | 4. Adventist |
| 1. Pentecostal | 5. Episcopal |
| 2. Jehova Witness | 6. Other, specify: _____ |

74. What is your religion now?

- | | |
|-------------------|--------------------------|
| 0. Catholic | 4. Adventist |
| 1. Pentecostal | 5. Episcopal |
| 2. Jehova Witness | 6. Other, specify: _____ |

75. How often have you attended church in the last two years? _____

- | | |
|---------------------------------------|-------------------------------|
| 0. None | 3. One to three times a month |
| 1. Once a year | 4. Once or more each week |
| 2. One to five times every six months | |

76. a. If there were a birth control clinic near your home, would you use it?

1. Yes

2. No...Why not? _____

76. b. Is transportation a problem to get to your clinic? _____

77. Would you welcome someone into your home if she (or he) came to teach you how not to have a baby until you wanted one?

1. Yes

2. No...Why not? _____

78. a. / Only for Puerto Rican subjects /

Would you prefer that this person be Puerto Rican?

1. Would have to be Puerto Rican

2. Yes

3. Doesn't make any difference

4. No

b. Would you prefer this person to be a woman or a man? _____

