

growth. If a population has many young people who are raising families or who will be raising families in the near future, the population will continue to increase even if the families limit themselves to two children. Depending on the number of young people in a population, it may take 20 years to a century for the population of a country to stabilize so that there is no net growth.

SOCIAL FACTORS

It is clear that populations in economically developed countries of the world have low fertility rates and low rates of population growth and that the less-developed countries have high fertility rates and high population growth rates. It also appears obvious that reducing fertility rates would be to everyone's advantage; however, not everyone in the world feels that way. Several factors influence the number of children a couple would like to have. Some are religious, some are traditional, some are social, and some are economic.

Culture and Traditions

The major social factors that determine family size are the status and desires of women in the culture. In many male-dominated cultures, the traditional role of women is to marry and raise children. Often this role is coupled with strong religious input as well. Typically, little value is placed on educating women, and early marriage is encouraged. In these cultures, women are totally dependent on their husbands and children in old age. Because early marriage is encouraged, fertility rates are high, since women are exposed to the probability of pregnancy for more of their fertile years. Lack of education reduces options for women in these cultures. They do not have the option to not marry or to delay marriage and thus reduce the number of children they will bear.

By contrast, in much of the developed world, women are educated, delay marriage, and have fewer children. It has been said that the single most important activity needed to reduce the world population growth rate is to educate women. Whenever the educational level of women increases, fertility rates fall. Figure 7.14 compares total fertility rates and educational levels of women in the 20 most populous countries of the world. The educational level of women is strongly correlated with the total fertility rate and economic well-being of a population.

Data on the age at which women marry and have children are strongly correlated with total fertility rate. Early marriage results in women being exposed to the probability of pregnancy for a longer period of their lives and results in a higher total fertility rate. Table 7.3 compares the age of marriage and total fertility rate.

Even childrearing practices have an influence on population growth rates. In countries where breast feeding is practiced, several benefits accrue. Breast milk is an excellent source of nutrients for the infant as well as a source of antibodies against some diseases. Furthermore, since many women do not return to a normal reproductive cycle until after they have stopped nursing, during the months a woman is breast

feeding her child, she is less likely to become pregnant again. Since in many cultures, breast feeding may continue for one to two years, it serves to increase the time between successive births. Increased time between births results in a lower mortality among women of childbearing age.

Attitudes Toward Birth Control

As women become better educated and obtain higher-paying jobs, they become financially independent and can afford to marry later and consequently have fewer children. Better-educated women are also more likely to have access to and use birth control. In economically advanced countries, a high proportion of women typically use contraception. In the less-developed countries, contraceptive use is much lower—about 28 percent in Africa, about 71 percent in Latin America, and about 67 percent in Asia (about 56 percent if China is excluded).

It is important to recognize that access to birth control alone will not solve the population problem. What is most important is the desire of women to limit the size of their families. In developed countries, the use of birth control is extremely important in regulating the birthrate. This is true regardless of religion and previous historical birthrates. For example, Italy and Spain are both traditionally Catholic countries and have low total fertility rates (Spain 1.4 and Italy 1.3). The average for the developed countries of the world is 1.6. Obviously, women in these countries make use of birth control to help them regulate the size of their families. By contrast, Mexico, which is also a traditionally Catholic country, has a total fertility rate of 2.3, which is somewhat less than 2.8, which is typical for the less-developed world regardless of religious tradition.

Women in the less-developed world typically have more children than they think is ideal, and the number of children they have is higher than the replacement fertility rate of 2.1 children. Access to birth control will allow them to limit the number of children they have to their desired number and to space their children at more convenient intervals, but they still desire more children than the 2.1 needed for replacement. Why do they desire large families? There are several reasons. In areas where infant mortality is high, it is traditional to have large families, since several of a woman's children may die before they reach adulthood. This is particularly important in the less-developed world, where there is

TABLE 7.3 Age of Marriage, Births to Young Mothers, and Total Fertility Rate (2007)

	Africa	Latin America	Asia Excluding China	Asia	Developed World
% women 15–19 years old who have married	23	17	24	15	3
% of women 15–19 years old who give birth in any year	11	8	8	5	2
Total Fertility Rate	5.0	2.5	2.8	2.4	1.6