During the 1950's, the shift upward in the fertility of American women, as well as an increase in the average number of children desired, raised doubts in the minds of any who believed that an inverse relation regularly exists between income and reproductive performance. The change in fertility values during that affluent period was not as easy to explain as had been the baby boom after World War II, when delayed marriages and childbearing evidently were being made up.

It seems, then, that a number of the older assumptions, linking fertility preferences and performance to certain readily quantifiable factors, such as income, community size, years of schooling and so forth, need to be constantly modified in the light of new sociological and psychological insights. Thus one is reminded anew that man is not a calculating machine simply reacting to marginal utilities or change of quantifiable factors. This has implications for the developing areas, suggesting that fertility will not necessarily decline because of urbanization, industrialization, more schooling or higher incomes.

Caution is in order when interrelating higher education and fertility values, it would seem. The authors of the present report state that, in demographic terms, higher education is assumed to be
connected with lower fertility "through the mechanisms of deferred marriage and greater use of the means of fertility control." In more social-psychological terms, they add, "the assumption is that persons (especially women) receiving higher education develop interests and values that compete with the attraction of home, family and children."

Nevertheless, when the authors draw their conclusions regarding the effects of higher education upon fertility, they feel bound to warn that the evidence "indicates quite clearly that a large representative sample of American women in their fourth year of college prefer almost the same number of children on the average as women in their first year."

In other words, the impact of four years of college upon fertility values has been negligible or nil, so far, at least, as the data in the sample are concerned. The effect, the authors note, or the lack of effect, is found "in a variety of different types of institutions—small and large, urban and rural, nonsectarian as well as Roman Catholic and Protestant, women's schools and coeducational institutions, and private colleges as well as state universities."

The authors suggest and the reviewer concurs, that several possible alternatives may explain this finding, which seems at variance with earlier findings, such as those of Grabill, Kiser and Whelpton (*The Fertility of American Women*). This latter study found generally prevailing in 1950, at least for the older age groups, an inverse relation between level of education and fertility. Thus, "the inverse relation of education to general cumulative fertility rates as well as to marital cumulative fertility rates still existed in 1950."

The present study of Westoff and Potvin is, of course, based on a sample and not on aggregate census data. Furthermore, it relies for its findings on expectations and desires, not on actual reproductive performance of the women surveyed. Nevertheless, it does seem to reflect current trends and attitudes among college-trained women. Why, then the conclusion that four years of college make little or no difference as regards fertility values, in the great majority of cases?

The possibility exists, the authors properly note, that the use of
a synthetic cohort in the sample may obscure the impact of changes in thought, attitude and fashion over time. Asking the views on fertility of college freshmen and seniors simultaneously is not necessarily the same as asking the freshmen this year and the seniors four years later. Social, psychological and other factors might conceivably be operating in the meanwhile upon the same individuals. On the other hand, the synthetic cohort presumably can reveal any significant impact of the college education when allowance is made for extramural factors over time. The authors make such allowances, analyzing many background variables and factors not directly dependent upon college education as such.

Another explanation of the findings from the sample is that the effects of college education are delayed when it comes to fertility behavior. Some years later, perhaps, the women would be reproducing differently than they anticipated or desired while still in college and unmarried.

Now both these possibilities need to be taken into account. Nevertheless, Jacob's statement may be more valid than some believe: "The weight of evidence indicates that actually very little change occurs during college in the essential standards by which students govern their lives. . . . Most students remain fundamentally the same persons with the same basic value-judgments" (Changing Values in College, p. 53). Westoff and Potvin cite this passage as illustrative of their hypothesis that higher education, as such, has less impact upon fertility than once was thought to be the case by many demographers.

What factors, then, account for the differentials in fertility values and expectations, noted among various women of college age? High on the list is the influence exerted by size of their families of origin, the number of siblings. Probably close in importance is the average size of the families among which they grew up. It would seem that basic attitudes toward family size are already formed among women generally by the time they enter college. Thereafter any modifications will be slight. They already have acquired in their minds an image of what is meant by a large family and by a small family.

Accordingly, the values as well as the fertility performance of
various religious, ethnic and class groupings have helped form these attitudes among precollege-age women. Moreover, in the case of some colleges, including certain Catholic women's colleges, a selectivity factor is at work. In other words, women with certain values choose certain types of colleges, so that the data in the sample from such colleges reflect the early background and training of the women perhaps more than what is taught in the college.

Finally, the authors note that fertility values have an element of fashion about them. A family size that is preferred in one generation may be out of fashion in the next, and what are positive fertility values in one decade may become negative in the decades following. In a sense, this appeal to fashion seems to beg the issue. The question still remains as to what psychological and social mechanisms are at work when such decisions are reached, either individually or within a given cohort.

Part three of the study redirects the analysis from "the effects of higher education on fertility values to the significance of certain characteristics of individuals and religious groups for the understanding and prediction of these values." The findings of part three reveal "some basic similarities as well as differences in the factors affecting the fertility values of women of different religious preferences."

Thus, it is found that "both family size preference and beliefs are a function of the overall religious and social systems in which women find and orient themselves." Moreover, the multivariate analysis confirms that number of siblings, intentions to have a career and to plan fertility significantly affect fertility values and expectations. Some of the important differentials in expected number of children can be traced to the fact that the religious and social systems wherein the women grew up and live in turn affect attitudes toward a career that may conflict with motherhood.

It is also clear that the restrictions placed by the teachings of their Church upon the means of family planning affect the attitudes and expectations of many Catholic women. The authors note, however, that Catholic women generally do not think of their Church as urging or requiring large families. Hence, at least
some of the fertility values of these women are traceable to factors other than a belief that large families are commanded by their Church.

The present report occasions some interesting reflections upon the interrelation of subjective attitudes and objective norms. Since the authors engage on occasion in such reflections, the reviewer feels that he may do the same. Several times during the analysis of the sample findings, it is suggested that Catholic teaching on fertility is undergoing change. Now if by this is meant that some change may be occurring in actual or anticipated behavior, there is some validity to the idea. If on the other hand, it is suggested that the objective norms are changing, then this is an incorrect inference from the data at hand and from opinion polls generally.

In a sense, the Church is in process of adjusting its teaching to demographic realities. More emphasis is being placed on responsibility in entering and making use of marriage. Large families are not regarded as necessarily an evidence of moral behavior, and so forth. Nevertheless, no change has occurred in the teaching as to what are morally permissible ways of holding down fertility. The traditionally banned means of control are still disapproved. The teaching will not be changed simply because some Catholics so desire, or because surveys indicate use of the disapproved methods by a certain percentage of Catholic couples. In other words, Church teaching is not made by consensus nor by sampling of attitudes of its members.

It needs to be taken into account that, among Catholic populations, patterns of reproductive behavior differ. In a number of Latin American countries, early marriage and frequent childbearing is common. Ireland, on the other hand, presents a different pattern, one that makes more use of delayed marriage and celibacy as a way of holding down numbers. The Italian experience, since the Renaissance years, might also be examined demographically. The fertility and population increase rates were often lower than in Protestant England until recent times. Moreover, later marriage and a high percentage of celibates have been common in parts of Italy, and still are.
In conclusion, this reviewer would note that it is easy to place too much emphasis upon fertility control within marriage. The underlying assumption in such an approach seems to be that everyone or nearly everyone is going to marry, and presumably at a relatively young age. Malthus disagreed with this approach in suggesting delayed marriage on a wide scale. The eighteenth-century Italian economist Giammaria Ortes went even further and suggested that population could be held stationary were a high enough percentage of the population to forego marriage entirely. Although neither of these suggestions could be expected to be very widely adopted, they do identify factors that should not be overlooked in a discussion of decelerating population growth rates.

The Westoff-Potvin report adds significantly to the knowledge of how fertility values are arrived at, especially among the college-educated portion of the population. The inference should not be drawn that college education is an indifferent matter inasmuch as student behavior is less influenced by it than many are inclined to think. The content of what is taught, as well as the intellectual formation, are still important. In any case, the findings of this study do not prove college students cannot be influenced by what is taught regarding fertility, but merely that in a large number of cases they are not so influenced while in college.

WILLIAM J. GIBBONS