

## DISCUSSION

KINGSLEY DAVIS

I am delighted to see the results of the rural fertility surveys coming to light. The work of Carmen Miró and Walter Mertens is done with skill, and the results will be of considerable significance, especially when compared with the city surveys previously done.

The present paper itself has a somewhat tentative character. The rural surveys reported are pilot surveys, and I have not yet seen any of the previous city studies in full disclosure. Only when these data are provided in greater detail will a critical appraisal be possible. Such appraisal would be highly advisable, leading to still further and still better studies of reproductive behavior in Latin America. For that reason I hope that the data will be made available to scholars in as much detail and as soon as possible.

The present report presents data primarily on the levels of fertility. It should be possible to get more insight into reproductive behavior in these rural areas when the attitude materials are included with the data on reproductive performance.

Again, I would stress the desirability of furnishing the data in their absolute and more-or-less raw form to widen the analytical use of them and maximize their effective value.

Also, I hope that in the more detailed reporting of data, much attention will be given to the maximum amount of longitudinal analysis that these surveys permit. For example, the relation of marriage and, above all, the relation of consensual unions to fertility cannot be ascertained except with the complete reproductive and marital history.

The same is true with reference to women working and fertility. The

fact that a woman is working at the time of the interview does not necessarily bear a close relation to her past fertility, because she may have started working only recently. At least, one does not know how to construe the current situation without any notion of the woman's past labor force history in conjunction with her past reproductive performance. The same question would arise with reference to past migrations among the women in both the urban and the rural samples.

I might say a little about the broader question of sampling in the urban studies. The biggest city in each country was selected as the site for the urban surveys. Even though the biggest cities necessarily contain a larger share of the urban population than any other city in the country, they do not necessarily contain the major portion. The rest of the urban population can be expected to lie somewhere between the rural and the big city samples. This is fine. We may wish in the future, however, to have national samples, especially if they are developed in connection with some regular system of demographic surveys. This would have the advantage of sampling various sectors of the population at one point in time, which the authors state in their paper is one disadvantage of the present situation.

Some of the cross-country comparisons given in the present report are interesting. On the whole, they are what one would expect, but I do not understand some of the findings. For instance, why should Mexico City have higher fertility than San José? I think it will be necessary to review the survey operations in specific cities, being careful to make sure that no defects appear in the data. Again, of course, it is easier to judge the quality of data when they are presented in as raw a form as possible. Also, the demographic information should be available before much can be said about interpretation. It is hard to say much about the pattern of fertility without looking very carefully at the age-specific data.

It would certainly be interesting if the international differences in the level of fertility were greater, for instance, in rural areas than in cities, as is hinted by the pilot data. On the whole I would think that past thoughts on this would tend to run the other way. This point is surely worth investigating.

Also worthy of note is the finding of lower fertility in the poorer areas of the rural sectors. Here, of course, we have two questions. First, is it true? And second, if it is true, why should it occur?

In a sense the present preliminary paper raises a good many questions that it does not answer. The tendency of anyone discussing a paper

is to raise such questions. I was curious as to why the age structure in Buenos Aires should be used as a standard in standardizing for age. I was also curious as to the relation of age structure to migration history. It was stated that the age structure in Mexico City was relatively old. Since the city also has a considerable in-migration, how does it happen to have a relatively old age structure?

What consideration is given to the fertility of the woman who is no longer in the rural area but who may have borne most of her children in that area? Here again, I would like to stress the desirability of using longitudinal analysis as far as possible.

The findings reported suggest that the rural fertility is being controlled, in so far as it is being controlled, mainly by age at marriage. Again, however, a longitudinal analysis is desirable to assess this. As already indicated, it is desirable to have the attitudinal material analyzed along with the history of the fertile years of married life. I think such longitudinal study would help bring out the meaning of the attitudes, the meaning of the marital behavior and the reasons for the reproductive behavior within marriage.

In short, it seems to me that we owe CELADE a great deal for its enterprise and skill in conducting these significant surveys. We hope to see the results in as full a form as possible. The present paper gives some tantalizing results and raises some further questions, but the entire series of surveys represents a new and ground-breaking level of work. This study of reproductive behavior in Latin America in areas where there is, to say the least, an abundance of reproduction, is of great interest to general demographic theory as well as to the understanding of the demography of the Latin American region in particular.

## RESEARCH ON PHYSIOLOGICAL ASPECTS OF REPRODUCTION

HOWARD J. TATUM

The purpose of this paper is to present a survey of current research being carried out within the broad field of physiology of reproduction in the many research centers in Latin America. This material is categorized by country and by institutions and individuals. Of necessity, because of space limitation, the scientific aspects of the research are limited to generalities and have excluded, for the most part, details relevant to experimental procedures. Although as complete a survey as possible is presented, some programs inevitably will have been neglected or even omitted. Such omissions are certainly unintentional.

### ARGENTINA

#### *Buenos Aires*

A group headed by Roberto E. Mancini of the University of Buenos Aires Faculty of Medicine, has been involved for a number of years in the study of immunologic aspects of human and animal spermatogenesis. They have in the past attempted to show that the human male is capable of developing antisperm antibodies in response to experimentally induced autologous or homologous sensitization with specific testicular antigens. They are also concerned with the mechanism of these phenomena and are especially interested in the relationship between the antibody production by antispermatic antigens with particular reference to the development of germinal cell lesions in the sensitized animals. This group under Mancini's direction has been exceedingly productive in studying spermatogenesis with special ref-