Population research and training opportunities for psychologists are enumerated in this speech by Dr. Sidney Newman, a behavioral scientist administrator at the Center for Population Research. It was presented at the symposium on "Psychology and Population: Evolving Trends" at the annual meeting of the American Psychological Association, Miami Beach, Florida, September 1970. He points out that although few psychologists had been interested in psychosocial research on population problems prior to 1960, the impetus of the federal government in establishing population related programs in the late sixties has encouraged more scientists to enter the population field or increase their activities in it. Eleven problem areas to which psychologists can make a contribution are identified. In addition, opportunities involving research training programs, and conferences in behavioral aspects of population, family planning, and reproduction are described together with the avenues for achieving them. Reference sources are also provided. Dr. Newman concludes that because the study of population problems is multidisciplinary, psychologists are provided unlimited opportunities in the population area.
I am very glad to have this opportunity to discuss with you the research and training opportunities for psychologists in the population area.

Let me emphasize at the outset that in terms of need, in terms of urgency, and in terms of the challenge of areas new to psychology, we have unlimited opportunities. In terms of availability of funding, that materialistic problem which produces headaches and difficulties for all of us, opportunities are good, a qualitative but, I hope, a meaningful description.

In view of the favorable situation, is it not surprising that there are very few psychologists doing research on population problems, and a still lesser number engaged in teaching or writing in the population field? As perceptive and innovative as many psychologists are, why didn't the rich possibilities for population research and training impress them?

A partial answer to these questions, and only a partial answer, lies in the fact that it has only been in the decade of the sixties, really the last half, that the nation's interest in population problems, family planning, and contraception has really burgeoned. During this period, and a little before, a very few psychologists tried to point the way to psychosocial research on population problems. These include Centers and Blumberg (5), Mishler (15) (28) (29), Back (1) (2) (3), Kelly (28) (30), Hoffman and Wyatt (11), Rodgers (25) (26), Rabin (23) (24), Guze (14), M.B. Smith (27), Pohman (19) (20) (21), Wyatt (31), Leavitt (13), Crawford (6), Poffenberger (17) (18), Fawcett (8) (9) (22), Newman (4) (16), David (7), and Insko (12). This is only about 20 psychologists, and only a few of these have maintained a sustained research or teaching interest in the population area. Parenthetically, I might point out as you may have noted, we have omitted discussion of the psychobiology of reproductive behavior, although this is certainly an important area of research interest.

In 1967, The Society for Psychological Study of Social Issues tried to stimulate psychological research on population by devoting an issue of the Journal of Social Issues to "Family Planning in Cross National Perspective" (13) (20) (31). It is significant that only three of its fifteen authors were psychologists. Even with an editor like Rainwater, the volume, like the other attempts, seemed to affect psychologists no more than a brief drizzle would a parched field of corn.

Despite the lack of interest of psychologists, however, the Federal government did recognize the tremendous and varied population problems faced by our country and the rest of the world. The National Institute of Child Health and Human Development, begun in 1963, was given responsibility for population and reproduction research and training, beginning with programs in reproductive biology and contraceptive development.

In 1968, The Center for Population Research was established within the Institute to emphasize the singular importance of population and reproduction. During this year, support of the behavioral-social science aspects of population was implemented. The population program of the Agency for International Development has developed rapidly since 1967. The National Center for Family Planning Services, devoted to the proposition that family planning services should be provided to all American women who wish to control their fertility, began operation in 1969.

So you can see that the interest of the United States government in population research and training increased tremendously in the late sixties. This has encouraged scientists to enter the population field or to increase their activities in it. As a matter of fact, during the last two years or so, I have communicated with some 721 behavioral-social scientists interested in the extramural population grants program. Of these, 285, or 40 percent were psychologists, 188, or 26 percent were sociologist-demographers, 5 percent anthropologists, 3 percent psychiatrists, 5 percent other physicians, 2 percent economists, 2 percent statisticians, and 1 percent geographers; a few other professions were sparsely represented. Some of these behavioral-social scientists were already working in the population field, while others decided to consider it as a possible field of work interest. At least, a new impetus is being given to research and training in the behavioral aspects of population research, and I am hoping that this impact will become increasingly evident.

It should be stressed that the Center is interested in a broad spectrum of population research and training—the entire field, if you will. I have developed a summary of problem areas for research and training programs which is designed to demonstrate to psychologists the wide range of psychological or psychosocial problems which may be considered in the population field (Appendix). This listing is meant to suggest possible topics, but it is not meant to be all-inclusive or to exclude other subjects which may occur to you.

Research and training in the population field is bound to involve scientists from a number of disciplines. The study of population problems is truly multidisciplinary. The barriers growing out of the typical departmental organization of universities may play quite a part in maintaining the unidisciplinary approach, instead of encouraging the multidisciplinary one.

Let's take a look at the disciplines involved. On the biological side, biologists, endocrinologists, physiologists, biochemists, obstetrician-gynecologists and other specialists study reproductive processes and how to affect them through contraceptive methods. On the behavioral-social science side, sociologists and sociologist-demographers, anthropologists, economists, psychologists, political scientists, geographers, and others investigate such population phenomena as fertility and its regulation, as well as population growth, distribution and change. The roles of psychological, social, economic, political, and cultural factors in the determination and explanation of population phenomena are studied by these behavioral and social scientists. Psychobiologists, usually experimental-physiological psychologists, bridge the biological and behavioral sciences to some extent, by studying the parts played by physiological, neurological and endocrinological factors in reproductive and sex behavior.

Psychologists can bring to the population field the benefits of their special training and experience in theory and conceptualization, research design, and measurement techniques.

What are some of the major problems to which psychologists can make a contribution? The listing of "problem areas" in the summary sheet gives an overview of these problems, and Fawcett and Postman have discussed a number of problems of fertility in some depth. I will just refer to several important and interesting
problems to which psychologists might give research attention. There may be repetition of some of the ideas presented by Fawcett and Pohlman, but if such emphasis stresses the importance of the problems, it will be worthwhile.

First, psychologists could develop a conceptual framework for studying motivations for parenthood and adequate methods for testing the hypotheses. For example, why do men and women want children? How do motivations for parenthood develop in our society? What are the anticipated and realized satisfactions of parenthood?

Second is the question of how decisions are made concerning when to have the first child, the spacing of children, and the number of children to have. Psychologists could work on the development of theory of decision making, how couples interact in making decisions affecting childbearing, and factors influencing such decisions.

Third, how can psychologists contribute to an understanding of contraceptive practices? Can we discover in greater depth than is now known the factors which contribute to the selection of contraceptives, and the continued or discontinued use of contraceptives? What kinds of studies can be done to throw light on contraceptive "failures?" Can we contribute to the development of new contraceptives by finding out how to predict what kinds of methods would be most acceptable and most likely to be used for long periods of time?

Fourth, can psychologists develop and test hypotheses concerning the antecedents and consequences of migratory behavior to better understand the factors involved in the distribution of population in the United States? Perhaps we could arrive at improved explanations of the great rural to urban migration which has occurred in this country, often in the face of considerable barriers and difficulties. Such explanations may lead to studies of factors that might alter the great urban concentrations of population and what appears to be a drift into megalopolises.

Fifth, while we are on the subject of concentrations of population, what can psychological studies tell us about the effects of overcrowding on human beings, their social, emotional, and intellectual development? Analogies from animal studies do not really give us definitive answers to such questions.

Sixth, what are the psychosocial factors that motivate abortion seekers and what are the psychosocial outcomes of abortion obtained and denied? The Center for Population Research has held two workshops on abortion, attempting to elucidate research approaches to the complex and elusive problems in this area (4) (16).

Seventh, what are the psychological factors affecting the use of sterilization to control family size?

As the last problem area to be mentioned here, I would like to call your attention to the contributions that psychologists could make to the measurements of human behavior necessary to population research. The interview is the technique used in population studies to measure such behavioral characteristics as knowledge, attitudes, and practices. The interview is time-consuming, expensive, often superficial, and as used in many studies, not as reliable or valid as might be desired. Needed for use in population research are standardized reliable and valid instruments for measuring appropriate psychosocial characteristics. Hopefully, these instruments, in use, would require minimum time and expense.

In preparing population research proposals, it would be well to keep in mind that the proposals will be carefully evaluated by a group of non-Federal experts, usually from universities, including sociologists, demographers, psychologists, anthropologists, and other specialists as needed. These experts use rigorous standards of scientific merit.

Since most psychologists have entered the population research field fairly recently, collaboration or consultation with sociologist-demographers should benefit their research projects. As mentioned before, a considerable amount of population research could well be multidisciplinary, so that obtaining the collaboration of various appropriate specialists would be advisable.

Having observed review groups evaluating research grant proposals, I can say that research proposals should be meticulously

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and clearly written. It would be most helpful to the proposal if those who prepare it could have it independently reviewed in the most critical fashion by appropriate experts, such as another psychologist, a sociologist-demographer, and a statistician.

Let us now turn to opportunities for psychologists to participate in teaching or training in the population area. As far as I know, very few psychologists are now engaged in such teaching. I would urge that psychologists view population problems as appropriate subject matter for a variety of undergraduate psychology courses such as General, Social, Personality, Developmental, Tests and Measurements, and Clinical. An undergraduate course in Psychology of Population could well be given. Unless undergraduates are afforded early and continued contact with population problems in psychology courses, they will continue to ignore the scientific psychosocial aspects of population. This is particularly crucial for those undergraduate psychology majors who will become graduate students and, eventually, psychologists.

At the graduate level, the behavioral-social aspects of population could become one of the fields of specialization and of thesis research. There are few psychology departments which are now ready, in terms of staff and facilities, to develop psychologists in the population area. This emphasizes the necessity for psychologists to develop population training programs in collaboration with a number of disciplines, which could include biology, physiology, sociology, anthropology, and economics, and other disciplines as appropriate and strategic within a given university. A Department of Psychology could develop multidisciplinary training programs to produce doctorates with specialization in the psychological aspects of population. Psychology departments could also participate in the multidisciplinary programs of other departments which would produce doctorates in physiology, sociology, anthropology, economics, or whatever, who would specialize in the population area. There are a few departments of psychology which are now doing this.

The Center for Population Research has awarded grants to a number of training programs in the behavioral-social science aspects of population. These training programs, designed to develop Ph.Ds specialized in the population area, exist at Cornell, Pennsylvania, Chicago, North Carolina, Brown, Berkeley, Johns Hopkins, and Princeton.

For those psychologists wishing to increase their background in population, a year spent in a population research and training center would be appropriate. Training psychologists is an excellent way to make psychological sophistication beneficial to the population area, which is in need of such expertise. The Center for Population Research can award Post-doctoral and Special Research Fellowships for full-time research training. Pamphlets describing these Fellowships are available from the Center. However, there are also other ways of funding training, such as grants from private foundations and paid leave from universities.

For those psychologists who have been thinking about population problems but have not yet read much in the field, I recommend three excellent books:

- The Psychology of Birth Planning by Pohlman (21),
- Psychology and Population by Fawcett (8),
- The Sociology of Human Fertility by Freedman, the revised edition of which is to be published by The Population Council (10).

The Center for Population Research is launching a new program for the support of population research and training centers. This program will furnish funds for core services and personnel and for program development. Psychologists can certainly become affiliated with existing population centers or programs at their universities. In addition, they can become involved in some of the new centers which apply for and receive support. Many of the sociologist-demographers engaged in population research and training might welcome the collaboration of psychologists.

Perhaps you can see now why I began by saying that psychologists could have unlimited opportunities in the population area. Unfortunately, only a few psychologists were ready when opportunity knocked. Luckily, despite the aphorism, opportunity knocks more than once in this case. The Center for Population Research offers opportunities on a continuing basis for psychologists to submit or...
become involved in research grant proposals, training grant proposals, Special and Post-doctoral Research Fellowships, and population center grant proposals. Also, requests for contract proposals are distributed at various times during the year.

Population problems will be with us for a long time. Psychologists are strongly urged to take advantage of their opportunities to contribute to a scientific field which is of profound significance and relevance to all the world’s peoples.

REFERENCES


APPENDIX

Problem Areas for Research, Training Programs, and Conferences in Behavioral Aspects of Population, Family Planning, and Reproduction Research

1. Psychosocial factors involved in fertility and pregnancy, including motivations, personality, psychological or emotional disturbances, ability, knowledge, minority or subcultural differentials, spouse or other familial inter-relationships, family size, alienation, social isolation, political attitudes, etc.

2. Psychosocial factors in the use of the various contraceptive techniques, including: choice of contraceptives; psychological characteristics of acceptors, dropouts, and rejectors; emotional resistance to contraceptives; factors involved in the “careless” use of contraceptives; psychological reactions of spouses when contraceptives are used; roles of men and women in making decisions concerning the use of contraceptives in birth planning; psychological factors in the delivery of contraceptives to prospective users; sources of information about contraceptives; attitudes of physicians, psychiatrists, clergymen, and other kinds of personal advisors which affect contraceptive practices; socio-psychological impact of contraceptive programs on individuals, youth, status of women, abortion, illegitimacy, etc.

3. Psychological and socio-economic factors in the formation and determination of choices or preferences involved in making decisions about childbearing and spacing.

4. Origin and development of attitudes toward family planning; reproductive norms, fertility desires or expectations, birth spacing.

5. Origin and development of attitudes toward sex, especially as these attitudes relate to non-marital sex behavior and illegitimacy, as well as to marital sex behavior and family planning.

6. Antecedent and consequent psychosocial factors in abortion and sterilization.


7. Antecedent and consequent psychosocial factors in internal migration (i.e., rural to urban); relation to fertility and population changes.

8. Psychosocial factors and considerations in the design and evaluation of population policy and action programs; development of attitudes of leaders toward population problems and effect of such attitudes on policy formation.

9. Psychosocial consequences of population changes and growth, as produced by such factors as increased size, density, and heterogeneity; experimental testing of various plans or methods for dealing with such consequences.

10. Methodological studies: measurement of attitudes, choices, preferences, opinions, values, and other psychological characteristics; developing methods for relating such measurements to fertility rates, family planning, contraceptive practices, sex behavior, population change, etc.
