ABSTRACT

ADOPTION OF A NEW CONTRACEPTIVE IN URBAN INDIA:
ANALYSIS OF COMMUNICATION AND FAMILY DECISION-MAKING PROCESSES

by Dinesh Chandra Dubey

This study focuses upon systematically studying, analyzing and understanding of the innovation acceptance behavior of the people in one of the most personal, sensitive and vital areas of their lives, family planning. Two social processes, decision-making and communication, have been emphasized because of their crucial importance for all types of social change. Decision-making, given the presence of several possible alternative solutions to a difficult situation, leads to social and technical innovation. And formal and interpersonal communication influence individual roles, make change decision possible and provide social meaning to innovative behavior of individuals and groups in the society. This explains the emphasis put on these two processes in this study. The ultimate aim of the study is to understand better and thereby increase the possibilities of manipulating more effectively the general acceptance of family planning.

Repeatedly family planning surveys in India have shown that while most people in India prefer small families, very few of them actually succeed in realizing this goal. By concentrating on the analysis of decision-making and communication behavior of those who have accepted the innovation of family planning, the study indicates possible variables

which may be of particular importance for stimulating positive response towards the above stated goals of both the people and the family planning program of the country. This approach makes the study of interest to students of the diffusion process, particularly of family planning, and to the change agents working in this field.

The particular family planning innovation studied here is popularly known as IUD and stands for Intra-Uterine Contraceptive Device made out of plastic in the form of a loop. The area of study consists of three colonies of middle-class government employees in New-Delhi, India. These colonies happen to be among the areas in the country where IUD was first used by the existing family planning clinics. The unit of analysis has been the family with the wife and the husband as main actors exhibiting positive contraceptive behavior, both between themselves and the immediate society. This implies a microscosmic view of the problem of population growth as opposed to a macroscosmic view with which demographic surveys are usually concerned.

The general theoretical and methodological strategy for this analysis consists in the application of diffusion framework as used in studies of acceptance in agricultural and public health fields. An analytical model based on the models of Hill and Meier was developed to conceptualize phases of acceptance, variables of importance to the study, and develop the interview schedule used in the study. Interviewing involved reconstructing the sequence of events leading to acceptance of IUD on the part of IUD users as accurately as possible. Actual date of IUD acceptance and identification data were collected from the three family planning clinics serving the colonies under study. The data could be gathered from only 182 out of the 263 IUD users as per clinic records.

Most of the families studied belong to the moderate income groups of the working and middle classes. On the average, they had 3.2 living children, and out of the whole group only 5 percent did not have any living son. A little more than half of the women were married between 13-18 years, and the mean for the whole group was seventeen years. On the average, they had lived twelve years of married life before accepting IUD. The modal age groups for acceptance of the device were 25-29 and 30-34 years for women and men, respectively. About 82 percent of them did not want any more children. In terms of some key demographic variables, our group is comparable to a relatively much larger study consisting of about 6000 cases of family planners from a similar population.

It was found that husbands and wives utilized different sources of information at the information-receiving-gathering, and evaluating stages. At the "first awareness" stage the individual learns of the existence of the new idea or practice. About three-fourths of the wives were reported to have become first aware of IUD through personal face to face sources, mainly change agents. An equal proportion of husbands became first aware of it through mass media.

At the "interest" stage the individual collects more information in order to learn more about the innovation. At this stage personal sources of information were found to be the main sources for additional information for both the wives and husbands. However in terms of personal localite and personal cosmopolite sources, it was found that localite sources were used most extensively by both the wives and husbands. Personal cosmopolite sources were differentially used by the two, and wives were said to have used them as sources of additional information about twice as frequently as husbands.

Mass media ranked as second important source of additional information for husbands. Among the various mass media sources, newspapers and journals accounted for almost all the responses. Other sources, such as posters, exhibitions and radio were rarely given as sources of additional information. For wives mass media was found to be of negligible importance as a source of additional information.

During the evaluation stage, the individual perceives and considers the advantages and disadvantages of the innovation for himself. At this stage, personal sources of information were found to be most important in the case of both the wives and husbands. Within the broad category of personal sources, wives depended more on personal cosmopolite sources--change agents--and husbands on personal localite sources--particularly relatives--for evaluative information.

Mass media was of second importance for such information in case of husbands, and it was of almost no significance to wives at the evaluation stage. At the evaluation stage we found the presence of a high degree of mutual exchange of information between the wives and husbands. There was a high degree of convergence in the perceived advantages, the quality most preferred, by husbands and wives.

In brief, then, we noticed that while husbands tend to use both the mass media and personal sources of information with varying degrees of emphasis at different stages, wives seem to maintain a consistent trend of heavy dependence on personal sources, especially of cosmopolite nature. Use of mass media in case of wives and personal cosmopolite sources--change agents--in case of husbands was insignificant. However, this trend of isolation of wives from the mass media and of husbands from personal

cosmopolite sources seems to be largely compensated for by the evidence of a high degree of mutual intercommunication between the two inside the family. This was interpreted as the operation of a varient of the two-step flow of communication where each member of the couple acts as the opinion leader for the other in relation to those communication sources which, due to some reason, were not used by the other. This working of the two-step flow was seem as a possible explanation of effectiveness of both the types of communication sources.

Generally in these days of mass media our data highlighted the importance of personal communication sources. These were found to be crucial for women all through the process.

In the general area of decision-making, it was found that, with the exception of seven percent of cases, both the wive and husband were involved in decision-making. However, the final decision in about 50 percent of the cases was made by the wife, in about 44 percent of the cases by the husband, and in the remaining both were equally involved. A remarkable absence of concentration of final decision-making authority in the male figure within the families goes counter to the general belief which regards the husband as the only decision-making power within the Indian family system.

We found that friends, neighbors, and other users had an important role in decision-making. One significant finding was that while friends were consulted by both the husbands and wives, consultation with neighbors and users was exclusively limited to wives at the decision-making stage.

In about 66 percent of the cases the respondents reported consulting other IUD users and at least in two-thirds of such cases this consultation

was done by the wife alone. On an average, each of the users studied claimed to have influenced one more IUD user.

This group of IUD users was divided into two groups according to stages involved in decision-making. In the case of the larger group consisting of about 80 percent of cases, the decision was limited to changing to a more effective method from a less effective one. In the case of the other group it involved first accepting the idea of family planning as good for their situation and then selecting the IUD to fulfill the goal of family size limitation.

Lastly, in this group of IUD users a majority of respondents had high aspirations for their children's education (96.5%), credited effort orientation for their present position in life (77.9%), were reading printed mass media (76.4%), had modern ideological orientation to life (61.6%), owned and used modern articles (60.5%), and had a non-ritual religious orientation (46.8%). In brief, the greatest favorable influence amongst the above variables was exerted by aspirations for children's education and least by religious orientation. Ritually oriented people were likely to accept IUD as frequently as those who were not so oriented to religion.

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By

Dinesh Chandra Dubey

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CHAPTER I

INTRODUCTION

About the Intra-Uterine Contraceptive Device: The term "IUD" stands for "Intra-Uterine Device" and largely explains its meaning. It is a contraceptive device of high effectiveness in preventing conception and is at the center of the study reported here. Since its stone-age invention, centuries ago, the device has undergone various stages of change--cotton, silk, steel and gold. Ultimately, the modern plastic age put its stamp on it. Today it is generally made of plastic (polyethylene).

In terms of its shape, it has moved from round solid pebble to a steel ring, to plastic bow, to large and small spiral and to large and small loop of inexpensive plastic. The device is inserted with the help of a plastic inserter inside the uterine by a qualified doctor who has been trained for insertion. Before the insertion takes place each case is medically examined. There is not always a medical follow-up program attached to this. In the program described in this study each woman is free to report and consult the doctor whenever she feels the need to do so. Once inserted, the device can stay in place for several years. As regards its mechanism of work, this is still a problem for medical exploration. In practice, medical authorities believe that it prevents fertilization, however, how it does so is not certain.

In India, first interest in the device can be traced back to May, 1962, when some high ranking delegates from India participated in a

conference on the IUD, sponsored by the Population Council in New York. As a result of this interest the first clinical study of IUD was started in June, 1962, in India. In December, 1962, government appointed a study group to consider and recommend on the suitability of the IUD as a family planning method. This group felt that the stage was not yet reached to recommend the use of the IUD for general use and suggested more clinical studies.

As a result, during the period 1962-64 about fifty clinical studies were set up in different parts of the country. Based on the results of these studies, the "Advisory Committee on Scientific Aspects of Family Planning" recommended on January 5, 1965, that the "IUD is safe, effective and acceptable and should be made available through all medical and health centers."

The government accepted the recommendation and the national family planning program moved quickly to organize itself for IUD service. The Delhi housing colonies studied in this investigation happened to be some of the few places in the country where the program of IUD insertion started first on a significant scale.

For countries like India the IUD holds a great promise. The nature of the practice recommended has long since been recognized as an important factor in the acceptance of any innovation. One of the several felt needs of the Indian family planning program during the last fifteen years has been the lack of a simple, cheap, effective, acceptable and "one-time" contraceptive method. The IUD has all these advantages. In addition, it is technically one of the most effective methods. It is easily reversible and its after effects are minor in nature and can be

treated easily. The only possible difficulty may be the scarcity of lady doctors in the country to insert the device.

Background of the Family Planning Program in India: This part deals with the background of the study and relates it to the overall picture of demographic dynamics of the Indian sub-continent. The details fall into four main sub-sections:

I. Population Policy
II. Program
III. Progress
IV. Project Area

I. National Population Policy--Its Growth

Before independence (1947) India had no national population policy in the sense of having a deliberate and purposive goal to maintain or change the natural trend of national population growth. However, this pre-independence era did produce some pioneers like Dr. R. D. Karve and P. K. Wattal who brought this problem to the attention of the masses and the government. Also, it was during this period that one of the states in the Union--Mysore--opened the first government operated birth-control clinic in the world. The National Planning Committee of the Indian National Conference was the first political party to strongly support promotion of family planning as a state policy.

After independence, when the Congress Party came into power, the vital role of population control in the overall planned development of national economy was fully recognized by the government. Unrestricted population growth was viewed as a serious threat to all national development efforts. The sub-committee on family planning of the Planning Commission strongly recommended that family planning should be recognized officially. The

nation's first Five-Year Plan stressed that measures aimed at reducing fertility should form part of the national public health program. The alarming growth rate of 21.6 percent and a total population of 361 million as revealed by the 1951 Census imparted increased significance and urgency to the problem of numbers. In 1953 the Planning Commission came out with a four-point policy on the problem. It directed that the family planning program in India should:

a. Obtain an accurate picture of factors which contribute to rapid increase of population.

b. Gain fuller understanding of human fertility and the means of regulating it.

c. Devise ways of educating the public.

d. And make family planning advice and service an integral part of the services in hospitals.

Experience of this first adventure of providing services to the people by the government revealed absence of any strong organized opposition to the government for taking effective steps and organizing programs in this field.

Thus encouraged, the government laid additional emphasis on family planning in its Second Five-Year Plan. The financial allocation, which was 6½ million RS. (one U.S. dollar is equal to 7.5 Rs.) in the First Plan, was raised to 50 million Rs. in the Second Plan. Action was also initiated to develop organizational structure at the National and State levels. The major activities emphasized in the Second Plan were:

a. Education about family planning through use of mass media.

b. Provision of clinical referral services, in urban and rural areas.

c. Training of personnel.

d. Provision of supplies

e. Research

In terms of organization, posts of State Family Planning Officers were created in the States, and a Director of Family Planning was appointed at the center. The number of family planning clinics was further increased. During this period there were 1379 rural and 757 urban clinics in the country.

The Third Plan in 1961 came out with a most realistic statement in this field when it declared the goal of stabilizing the growth of the population to be at "the very center of planned development." A provision of Rs. 2697.57 Lakhs was made for the family planning program during the Third Plan, with a program ceiling of Rs. 50 crores (500 million). In addition, declarations were made by responsible members of the Commission that hence forth finance will be no limitation to the program.

For the first time, an overall national goal was set up by the Director of Family Planning in his report (1962-63) which said, "The proposed main goal from now on is to accelerate the rate of adoption of family planning so as to reduce the birth rate in India to 25 births per 1000 population by 1973." The time target was, however, modified later to the reduction of the birth rate to 25 births per 1000 population as early as possible.

In short, over these 15 years of three Five-Year Plans there has been a rocketing growth and development of the National Population Policy. The government of India has consciously firmly committed itself to develop the program with the objective of making family planning "a way of life" for the masses in as short and reasonable a time as possible.

II. National Program

While the policy got crystallized and defined at the national level, what happened to the program? How did it develop? What problems are involved? These and similar other aspects will be dealt with in this section. In order to have an objective picture, it is worthwhile to state a few baseline facts of the situation.

a. For centuries Indians have been emphasizing and blessing norms of high fertility and large families as prime values.

b. Illiteracy, isolation and physical distances involved are enormous, restricting fast and easy family planning communication between the different parts of the country.

c. The size of the problem, involving almost every adult member, in itself creates an unparalleled situation. No comparable example or model in the world was available where any national government had faced similar problem in the past.

d. Several levels are involved in the development and execution of a country-wide program. India has a federal type of government and health which includes family planning is a transferred subject. Moreover, the whole program at all the levels is voluntary.

e. The task of developing a huge national organization and manning it with trained and skilled personnel.

f. No indigenous source of manufacturing contraceptives and absence of any established distribution channel to reach its teeming millions.

g. Need to depend on conventional family planning contraceptives which are largely complex and lead to very difficult and low acceptability from a population which is relatively very simple, and less developed.

Naturally, in view of the above given elements in the situation, the pace of developing a national family planning program could not match the fast growth of national policy and accelerated financial allocations to implement it. And yet the national program has developed steadily and

firmly so that by the end of the Third Plan it has all the essential elements of an on-going program. It started by systematically gathering the facts of the situation in the First Plan, by developing a basic core of a national organization complex for providing and administering training and resources in the Second Plan, and by focusing on spreading of knowledge and services to millions of people all over the country in the Third Plan. Of course, there have been gaps and delays. All the allocated money has not been spent; all the states did now show the same concern with the problem; posts remained vacant due to paucity of skilled personnel like doctors and nurses; all the training centers did not come up as planned; difficulties of supplies were frequent; organizational bottlenecks were experienced; and differential response was received from different communities; but the attempts proved worth the stake. The process continued. The national program developed step by step as is evident by the program's operational goals stated during the Third Plan. The report of the Director (1962-63) states that "The operational goals of the program will be to create, for 90 percent of the married adult population of India, the three basic conditions needed for accelerating the adoption of family planning by couples: group acceptance, knowledge about family planning and available supplies." To achieve this, organizational, financial, personnel and other facilities were provided in developing the national program. The role of the extension education approach was recommended, volunteer leaders' positions were recognized, and statistical and research support was provided to the program.

III. Progress and Achievement

The picture gets still more dim when one comes to think of this phase of the situation in terms of its effects on overall birth rate. No significant trend of fertility decline has been observed in the country or any of its sizable parts till now. Singur pilot project area was the first to indicate fall in the birth rate during the period 1956-61. The birth rate for the experimental population was reduced by about 18 percent from the 1956 level of birth rate or by about 14 percent, when compared to the 1961 birth rate of the control population. Analysis of births in Bombay has shown that birth rate is about 27 per thousand, as compared to 40 for the country as a whole. GandhiGram pilot project area, where the program has been given its best chance, claims to have brought a declining trend in the birth rate in some of its villages. Similarly careful observers suspect a declining trend in some other urban areas. But all this needs to be systematically established and documented.

When we consider the amount of work done during these years, the picture becomes hopeful and encouraging.

a. India has started manufacturing contraceptives--rubber, chemical, and IUD--within the country itself. In 1957 availability of rubber contraceptives was 7.116 millions. The same figure stood at 30.297 million in 1962. The off-take figure for this contraceptive was 0.062 million in 1956. This reached 7.875 million in March, 1963.

b. In 1963 (January) 6774 rural and 1667 urban family planning service centers were operating, giving free advice and supplies.

c. Educational material--posters, pamphlets and folders--to the extent of 1,09,54,000 was produced in all the main regional languages.

d. About 27483 regular and short term skilled workers--doctors, health visitors and social workers--were working for the program by the end of March, 1963. During the same period, 27483 persons were given training (regular and short term) for working in the program.

e. From January, 1956, till March, 1963, 3,95,870 persons, including 2,42,371 males and 1,53,499 females were reported to have been sterilized.

f. In January, 1965, IUD was added to the list of contraceptives and was made available through family planning clinics. Simultaneously, its manufacture was started in the country.

IV. Project or the Study Area

This brings us to the last sub-section of the background factors. This will briefly describe the organization of family planning clinics and the procedure adopted for giving IUD services to the people in the areas covered by this study. Very briefly, the colonies will also be described.

As already stated, Delhi was one of the first few places where the IUD program was organized on a wide scale. All the C.G.H.S.--Contributory Government Health Scheme--clinics in the city provide this service. This study deals with three of such clinics. At the time of the study, the staff of each of these clinics consisted of a part-time qualified lady doctor, two full-time female family planning extension workers, one part-time male social worker, one attendant, and a part-time clerk. In two of these clinics, the doctor was available twice a week, and in the third once a week. On these fixed days IUD insertion was undertaken. On other days, the work was so organized that somebody was always available in the clinic for supply and advice, while others carried out educational programs in the community. Each clinic is fully equipped for IUD insertion

and medical examination. Before insertion each case in medically examined. At the time of insertion, a case card is made which contains information on the name, address, age, number of children, date of insertion, type and size of loop and remarks of the doctor. Each case is also recorded in the family planning register. There is no follow-up program attached to this, but each woman is free to report and consult the doctor whenever she feels the need to do so.

These clinics are situated in three residential colonies built by the government for its workers. The colonies are planned to be self-sufficient communities. All the services, like schools, medical center, playground, market, community hall, and parks are provided in each colony. Two of these colonies provide accommodation for all grades--Class I to IV--of government officers, while one does not provide for Class I officers. These officers enjoy different levels of facilities and living space according to a fixed rule. All the houses are pucca, two-storied buildings and are well connected by motorable lanes and roads to the rest of the city. These three colonies are roughly at a distance of three miles from the Kutub-Minar, a historical landmark of the city of Delhi and are spread over on either side of a major highway over a distance of four miles.

Need for the Study: John Kenneth Galbraith has observed that in every country there are two classes of people: those who see the ultimate problem and warn and those who see the immediate problem and act. The former are the prophets and philosophers. The latter are the operators.[1] This

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[1]John Kenneth Galbraith, "cited by" John D. Rockefeller, III, in Family Planning and Population Programs, eds. Bernard Berelson, et al., opening remarks, p. 4.

study is concerned with neither. It goes a step further and emphasizes a third class of people, usually referred to as target-group in social change literature. It concerns itself with "actors" towards whom the phrophecy of prophets and the organization and services of the operators are directed. It concerns itself with how these actors interpret the prophecy and act to avail or not to avail of the services offered by operators.

Galbraith is said to have further observed that the population problem must now be put in the hands of the operators. In this study we assume that, while the above shift is very important and long overdue, it may not be enough. In order to be a successful operator, one must correctly perceive those upon whom he operates. To produce the desired result, then, emphasis must be transferred further down to actors who actually matter in the final acceptance of change. So long as family planning continues to be considered as a voluntary act of millions of free individuals--and the trend seems to be so--contributions of the operator would remain heavily tied down to the ways in which his services and messages are received, understood and perceived as cogent and reasonable by the actors. Use of such services would be further limited by the ways individual families are organized in relation to communication, authority and decision-making. And lastly, operator's efforts would be modified by actor's orientation to life--current and aspired--both for themselves and for those whom they bring into this world. These aspects of actors' lives with respect to the processes of family growth therefore become the legitimate concern of this study.

The case for the viewpoint of the target-group appears so simple and obvious that it tends to be neglected or regarded as trivial when compared with matters of policy and organization. Even granting the above view, nobody can deny the importance of the viewpoint of actors in the acceptance of any change. Particularly in situations where the concern is with "early" success rather than eventual success, the role of the target-group becomes crucial in accounting for the difference between success today and success tomorrow, and between success at minimum cost and success at the cost of greater human misery, social disorder and suffering.

Several studies in the general area of social change have demonstrated the necessity and usefulness of understanding the point of view of the target-group. The failure to introduce improved corn in Mexico and the Japanese method of paddy cultivation in India are cited as two examples, out of several, in the agricultural field.[2] This has been found true also in the field of public health. Some examples are: "Water Boiling in a Peruvian Town,"[3] "A Cholera Epidemic in a Chinese Town,"[4] and "Diptheria Immunization in a Thai Community."[5] That a similar situation prevails in the field of family planning should not therefore be a surprise.

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[2] Anacleto Apodaca, "Corn and Custom: Introduction of Hybrid Corn to Spanish-American Farmers in New Mexico," Human Problem in Technological Change, ed. Edward H. Spicer, pp. 35-40.

[3] Edward Wellin, "Water Boiling in a Peruvian Town," Health, Culture and Community, ed. Benjamin D. Paul, pp. 71-106.

[4] Francis L. K. Hsu, "A Cholera Epidemic in a Chinese Town," Health, Culture and Community, ed. B. D. Paul, pp. 135-154.

[5] L. M. Hanks, Jr., Jane R. Hanks, et al., "Diphtheria Immunization in a Thai Community," Health, Culture and Community, ed. B. D. Paul, pp. 155-188.

Stycos' study of "Birth Control Clinics in Crowded Puerto Rico" illustrates effectively the importance of the factor of "context of change."[6] What is really surprising is the fact that this is true not only of the developing countries, but also of the more developed countries so far as family planning is concerned. Studies by Rainwater, And the Poor Get Children,[7] and Family Design,[8] illustrate this best in the case of U.S.A.

If so, the social scientist with his insights into human behavior could contribute a great deal by focusing on the viewpoint of the target-group. Curiously enough, with the exception of some demographers, social scientists have shown only a casual interest in this area.[9] This lack of curiosity is further compounded when one considers their contributions to diffusion studies in the field of agriculture and public health. In these fields they have demonstrated the applicability of their theoretical concepts and soundness of their methodology. This study is an attempt to explore the family planning field with the help of the above concepts and methods. However, this is done with the full realization of the fact that human fertility is a very complex phenomenon and that more knowledge in this field can result only from a multiplicity of several research efforts.

A question can be raised at this point on the relevance of making diffusion studies in family planning on the grounds of a rich and reliable

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[6] J. M. Stycos, "Birth Control in Crowded Puerto Rico," Health, Culture and Community, ed. B. D. Paul, pp. 189-210.

[7] Lee Rainwater, And the Poor Get Children, preface, p. 9.

[8] Lee Rainwater, Family Design, pp. 15-20.

[9] Ibid., p. 17.

fund of knowledge and generalizations already available. While this is true, a strong case can be made for such studies in family planning because of its peculiar nature. Very few past studies deal with such an intimate and private aspect of human life as sex and progeny. Family planning is very closely linked with the emotional core of personality. It is deeply rooted into the social structure of every society through the institutions of family, marriage, religion, social norms and customs, and codes of interpersonal social behavior. And lastly, unlike many items of diffusion which have been studied till now, it concerns almost all the members of every society. Viewed thus, the study of diffusion in family planning really offers an opportunity for further confirmation, verification and modification of the already available knowledge in the diffusion field. According in Bogue, in our knowledge of diffusion in family planning lies the nature to one of the most difficult and urgent problems of the present day world.[10] He regards diffusion as the key to the problem of population. Application of the diffusion framework to family planning therefore becomes still another focus of this study.

Further, it is hoped that a highly valuable body of knowledge could be gradually built in the field of family planning by the above suggested approach. Much can be learned about the ways families view and face the basic facts of biological procreation, about the processes of attitude formation and decision-making regarding the vital events of life, and about how they make choices between different alternatives impinging upon

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[10] Donald J. Bogue, who spoke on general importance of diffusion studies at the annual meetings of the American Sociological Association, Miami Beach, Florida, August, 1966.

family growth and size. Out of the several aspects of family planning we need to know more about the "family" part of it. This study seeks to emphasize the family component of the program by attempting to focus on the dynamics of interaction between the wives and husbands in relation to this aspect of their lives.

In the end it is believed that, as in the case of agricultural development so also in this field, such a body of knowledge would prove of great help to the operators and their action program by rendering their approach more realistic, less costly and more effective. The ultimate result being our achieving more efficiently something today which might have been possible somehow tomorrow.

CHAPTER II

THEORETICAL AND METHODOLOGICAL ASPECTS OF THE STUDY

Every study in its planning phase is concerned with two important problems: (1) a need of an appropriate theoretical frame of reference, and (2) suitable methodology. In this chapter, we would be largely concerned with these two main aspects of our study. Interrelating the two aspects will be the discussion of a conceptual and analytical model which is used in this study to formalize the major variables, their interrelationship, the related methodological concepts and the resulting organizing guidelines for analysis and presentation of the findings.

In the section on theoretical aspects we will be concerned broadly with defining the problem, briefly stating the position of theory in the field of demography, indicating some basic ideas and concerns which guided the study, and finally designating the unit of analysis. In methodology, our concern will be to describe in detail the mechanism of identifying the respondents, developing the tools of research, the procedure of collecting information, and lastly the limitations of the study resulting from various theoretical and methodological decisions.

Review of Theory and Proposed Theoretical Frame

Statement of the Problem: Several demographic studies and surveys prior to this have shown that Indian couples favor a limited family size of

about three to four children.[11] This is relatively more true of urban areas. Table 1 below illustrates this with the help of the findings of some selected surveys in India.

TABLE 1

Ideal Family Size as Reported in Some Selected Surveys in India

Survey and Source	Ideal Family Size
National Sample Survey - sixteenth round - urban[a]	3.2
Bangalore City - wife response[b]	3.6
Calcutta Study of Contraceptive Prevalence - middle class clerks, etc.[c]	2.6
Fertility Growth Through Contraception - Delhi Govt. Clinics - majority of those who had 3 pregnancies reported to F. P. Clinics[d]	3.0
Family Planning in Selected Villages[e]	4.0
Survey of Fertility and Mortality in Poona District - city median[f]	3.4

[a]C. Chandrasekaran, "Recent Trends in Family Planning Research in India," Family Planning and Population Programs, eds. B. Berelson, et al., p. 553.

[b]Ronald Freedman, "Norms for Family Size in Underdeveloped Areas," The Proceedings of the Royal Society, B, Vol. 159 (1963), p. 235. This article is also reprinted by The University of Michigan Population Studies Center, Reprint No. 16.

[c]Donald J. Bogue, "Some Tentative Recommendations for a Sociologically Correct...," Research in Family Planning, ed. Clyde V. Kiser, p. 504.

[d]S. N. Agarwala, Fertility Control Through Contraception, p. 28.

[e]The Demographic Section of the Institute of Economic Growth, Family Planning in Selected Villages, p. 24.

[f]Bogue, p. 504.

[11]B. L. Raina, Family Planning Programme: Report for 1962-63, p. 12.

This trend is further supported by the fact that in 1964 about 63.4% of the national population did not want any more children.[12]

Studies in India have also revealed that, while there is almost a universal desire to have a family of limited size, a large majority of people end up with a much larger family than what is desired. This is best illustrated by Table 2, based on the estimates of the Registrar-General of India 1951 Census Report.[13]

TABLE 2

Average Number of Children Born to a Woman of 45 Years and Above in Selected Regions of India

Regions of India	No. of Children
Travancore-Cochin	6.6
East Madhya Pradesh	6.1
North-West Madhya Pradesh	6.3
South-West Madhya Pradesh	6.6
Two Groups of Districts in West-Bengal	(in each case) 6.3

According to Bogue, both in urban and rural areas the actual average family size is between six and seven children were born per married woman above forty-five years of age.[14] In the 1961 Census, the percentage of

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[12] The Indian Institute of Public Opinion, "Family Planning," Monthly Public Opinion Surveys, 9 (March, April, 1964), p. 6.

[13] K. C. K. E. Raja, "Family Planning in Relation to the Population Problem and Community Welfare," in (Proceedings of) Second All Indian Conference on Family Planning, p. 25.

[14] Bogue, p. 504.

births of the sixth order and above was estimated to be about 22.8%.[15]

This gap in actual and desired family size is further confirmed when we look to estimates of the extent of use of family planning methods other than abstinence. According to the National Sample Survey of Indian Statistical Institute Calcutta (1963), only 5 percent of the husbands in urban areas with wives below forty-five years had ever practiced a family planning method.[16] The United Nations' Mysore Population Study reported the use of family planning methods by only 4 percent of the couples in Banglore city.[17] The Indian Institute of Public Opinion (1964) concluded that in urban areas only 14.6 percent of men and 13.1 percent of women said they had ever practiced family planning. In rural areas the corresponding figures were 10.8 for men and 3.1 for women.[18]

The above analysis brings into focus in unmistakable terms the difference in the actual and desired family size. This difference, which is considerable indeed, measures the gap between the desire and action of about ninety million couples who are in the reproductive age-group and who together constitute India's most baffling problem of incessant population growth. According to the 1961 census, India's population was 439.2 million and the same is now estimated to have crossed the 500 million mark.

If, on the one hand, the desire for small family is so much evident, and on the other, the actual family size so large and family planning

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[15] B. L. Raina, "India," in Berelson, et al., op. cit., p. 112.

[16] Chandrasekaran, p. 555.

[17] Ibid., p. 555.

[18] The Indian Institute of Public Opinion, op. cit., p. 19.

practice very low or rare, what can be the factors necessary to bring about convergence between the two? This is in very broad terms the problem of central concern to this study.

There cannot be any one simple answer to this question. And yet, in terms of action programs the success of work in this field depends on our success in identifying one by one all the possible factors that account in creating this gap. The usual factors which immediately come to one's mind are: (1) lack of service organization, (2) lack of information about the methods and available services, and (3) lack of suitable family planning methods. This reasoning is indicated by the fact that family planning programs now under way in most of the developing countries place great emphasis upon the "knowledge and service" theory.[19] The assumption is that if these barriers are somehow overcome, there would be an automatic mass acceptance of family planning. While this seems to be largely true, this does not seem to exhaust all the possible factors responsible for the problem. For example, areas could be identified in urban centers of the country where services have been available free and information is claimed to be sufficient by the agency, and yet, the acceptance is far below the expectations as implied in the assumption. The fact that the situation does not change radically even after the introduction of IUD in such areas calls for a search of other possible factors which may be partly responsible for family planning acceptance. If some of these additional factors could be identified and their relationship

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[19] Donald J. Bogue, "Family Planning Research: An Outline of the Field," in Berelson, et al., op. cit., p. 727.

to acceptance understood and appreciated, it would help in giving additional direction for action programs and go a step further in reducing the gap between desire and action.

In this search for additional factors and better understanding of already recognized factors, the importance of the target-group, its patterns of behavior and its action potential have long been recognized as important in social sciences. Diffusion studies in particular are very much concerned with these aspects from the point of view of the target-groups. They have studied problems such as: how information is diffused in the group, how it reaches the units concerned, how these clues are perceived and interpreted, how decisions are made, and what types of orientations accelerate or slow down the processes of acceptance of agricultural innovations. It would therefore be quite reasonable to expect the presence of similar factors and processes in acceptance of family planning. Unfortunately very little has been done by way of research in this area of family planning. This may be largely due to the fact that intensive family planning research, within the general field of demography, is hardly ten years old.[20] In developing countries like India, research in this field is still in its infancy and systematic studies in the diffusion processes of family planning innovation leaves much to be desired. Viewed thus, our broad problem becomes further specified in terms of studying diffusion processes of family planning in target-groups within the theoretical frame available to us from a large body of agricultural diffusion studies in sociology. The specific theoretical concepts

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[20] Ibid., p. 734.

derived from this body of knowledge have been reviewed and defined in the context of this study in relevant chapters and they will not be discussed here in the abstract. This will also avoid unnecessary repetition.

The Basic Unit of Analysis: Human fertility is a very complex phenomenon. It is the result of several factors, spread over from the smallest human unit--the individual--to the largest--the nation or community of nations. This means that several units of analysis are available to researchers in this field. Out of these, three--the individual, the family and the society--have been most frequently used. Generally speaking, all the three differ in their focus and theoretical and methodological orientations with some degree of over-lapping. Those who study the society generally depend on demography for theoretical orientation, seek their data by the census method, and are concerned with larger problems of food, employment, housing and national planning. Generally they furnish a broad perspective which makes it evident that fertility control is necessary and urgent for human welfare. Some typical examples of this type are: (1) "Population Growth and Economic Development in Low Income Countries" by Coale and Hoover, and (2) "Modern Science and the Human Fertility" by Meier. Those who focus on the individual generally tend to follow psychological orientation, adopt clinical depth interviewing as their important method of data collection, and focus more intensively on the individual's personality, his peculiar sex life, and unique life experiences. The typical example of such an approach are the studies of Rainwater--And the Poor Get Children and Family Design. There are others who take the family or community as the unit, follow largely the sociological

methods of field interviewing, and emphasize the processes and concepts of social interaction, human behavior and communication. Typical examples of this approach are: (1) study of Stycos, "Family and Fertility in Puerto Rico," (2) Hill's study of "Family and Population Control," and (3) Bogue's study of "Written Communication for Birth Control." As already pointed out, there is frequent over-lap but the dominant characteristic of different studies generally shows up on closer examination.

In brief, then, the problem of human fertility takes on one researchable formulation in the case of individual, another in the case of the family, and still another when nation or nations are the unit of analysis. The second (family) approach has been selected for this study because of several theoretical and practical reasons:

(1) It comes closer to author's theoretical and methodological orientation.

(2) Family forms a close link between the unique micro level of the first type and the aggregate or macro approach of the third type, and yet gives us an ample scope to concentrate, observe and analyze the central sociological concepts.

(3) The selection of the family as a unit also helps in providing some theoretical frame in a field which is noted for a lack of theory and where contributions in the form of descriptive analysis predominate.[21] Kiser, while reviewing the theoretical strengths of some of the classical studies--the Indianapolis Study, Hill's study in Puerto Rico and the Princeton Study--

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[21] Ronald Freedman, "American Studies of Family Planning and Fertility: A Review of Major Trends and Issues," in Kiser, op. cit., p. 211.

concluded that the effort to arrive at a single organizing theory failed in each case and the researchers had to be satisfied with independent isolated variables and their descriptive analysis.[22] Selection of the family as a unit comes to us as a great help through the available fund of theoretical knowledge of sociology in general and family sociology in particular. Because the family is a small social group, it lends itself to the systematic approach of sociology. Family studies bridge the gap between the conceptual extremes of the culture at one pole and of the individual at the other, making possible observation of both culture and personality as they are interrelated in real life.[23] This view of family enabled us to identify the following four areas of interest to this study:

(a) Communication to and within the family

(b) Decision-making

(c) General orientation of the head of the family to life

(d) Demographic and related aspects of family growth

Once this was done, several theoretical concepts such as roles, authority, communication stages and linkage, and orientation to life became available as tools for analyzing family planning behavior of the families studied. These and other concepts

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[22] Clyde V. Kiser, "The Indianapolis Study of Social and Psychological Factors Affecting Fertility," in Research in Family Planning, pp. 161-162.

[23] Oscar Lewis, "The Culture of Poverty," Scientific American (October, 1966), pp. 20-21.

used in the study have been defined and described further in the text of the thesis.

In adopting the above approach we are supported by Bogue who has advocated a differentiation between demographic and family planning research. According to him, "Family planning research identifies explicitly the sociological and psychological knowledge that is needed to 'solve' the world's population problem and sets out on a long trail of producing it. The raison d'etre for family planning research is the recognition that none of the theories or hypotheses being explored by traditional demography can provide the basis for stepped-up 'crash' programs for fertility reduction."[24] Bogue's "setting out on a long trail" argument hints toward a possibility of some future theoretical break-through in family planning research through sociology and psychology. But as of today, researchers, including this one, will have to depend on the descriptive analysis of independent variables seen as systematically related within some sociological unit which is the family in this case.

(4) Normally it is within the family as a social and biological unit that decisions are made concerning procreation.[25] Therefore, any study which focuses on the analysis of action and processes of acceptance must concern itself with the family,

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[24] Bogue, "Family Planning Research...," in Berelson, et al., op. cit., p. 724.

[25] Richard L. Meier, Modern Science and the Human Fertility Problem, p. 129.

once the organizational problems of service and the medical problem of suitable methods have been reasonably well taken care of.

(5) In addition to the above, several practical reasons of selecting the family as a suitable unit of study have been pointed out by Hill. According to him, "It is the unit of planning, choice making and action. It is capable of serving as a referent in several conceptual systems of theory. It is accessible for empirical observation and investigation and it is the unit of medical and education services in matters of fertility control."[26] In brief, then, by selecting the family as a unit of study, we have further specified our problem in terms of the target-group unit and appropriate theoretical orientation.

Methodology of the Study

Proposed Analytical Model: The first step in methodology was to develop an analytical model illustrating the conceptualization of the problem, the major blocks of variables and their possible interelationship with the family as an integrating force.

Given the dearth of coherent theory in the field, developing a model becomes a difficult job. We had to depend on available, middle-range, existing generalizations which apply to distinct levels of social units such as groups, communities and societies. In this study, family is viewed as a small group interacting both within itself and with the larger

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[26] Reuben Hill, J. Mayone Stycos and Kurt W. Back, The Family and Population Control: A Puerto Rican Experiment in Social Change, pp. 28-31.

society. At this level of analysis, family-in-society, initial reconnaissance of the existing literature, showed that two models focusing on interaction processes within the family were available. These are the interaction model of Hill[27] and the dynamic model of Meier.[28] On closer analysis of these two models it was felt that the two were basically the same and involved practically the same common variables of decision making, communication, and demographic and general value orientation. These variables also happen to be of interest to agricultural diffusion studies in general and to this study in particular. The main difference within these two models seems to be mainly related to the fact that the interaction model tends to emphasize more the family as the unit, and the interaction processes in it, while the dynamic model focuses more on the family as related to the larger society.

For the purposes of this study, a more simplified model based on the above two was developed and is illustrated in Figure 1 on the next page. The main difference between our model and the two discussed above lies in the fact that, unlike them, we are not concerned with the individual action level where perhaps the factors of service and method become most crucial because action is a given fact in our study design as we are concerned with acceptors of family planning alone.

This model has been used in three ways in this study:

First, it helped in conceptualizing the major variables and associated processes involved in family planning action from the point of view

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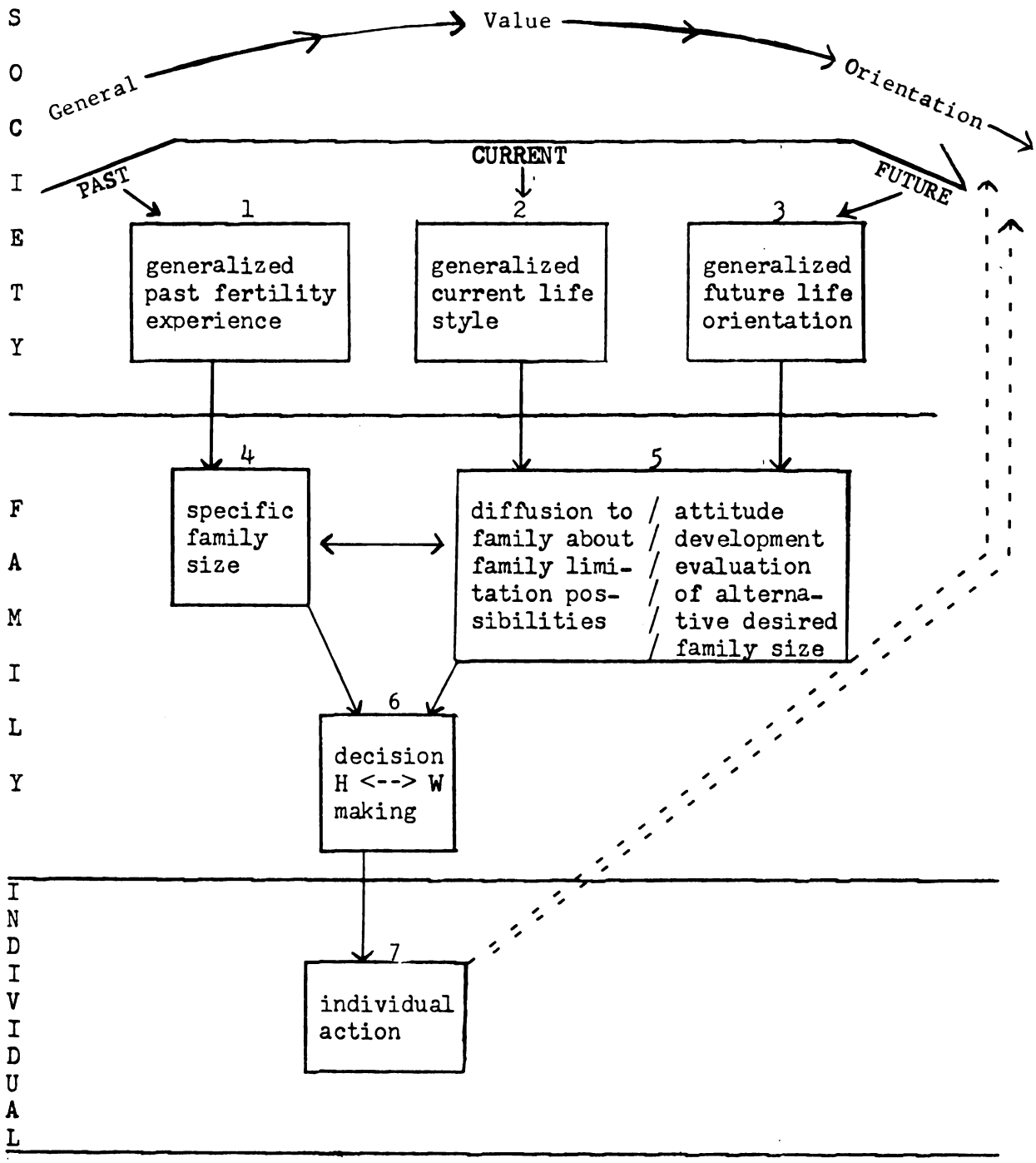
[27] Ibid., pp. 218-240.

[28] Meier, op. cit., pp. 134-136.

Figure 1

Conceptual Analytical Model Specifying the Interrelationship of Selected Variables in Fertility Planning



of the target-group. Such a conceptualization, in turn, helped in developing relevant diagnostic questions and provided theoretical justification for their inclusion in the interview schedule, which was the main tool of collecting information.

Secondly, this analytical model laid open several theoretical concepts related to each major block of variables. Thus, in spite of a lack of an over-all organizing theory, it made possible the study of the block of variables in some interrelated way, and greatly enhanced our understanding of the dynamics of the processes and variables involved in family planning acceptance, in spite of the fact that they refuse to be closely knit together in a systematic theory capable of generating specific researchable hypotheses.

Lastly, the model is used in the analysis, organization and presentation of the findings of this study. Thus, questions considered in decision-making--block six--constitute the chapter on decision-making and questions of block five dealing with communication, evaluation of means and ends and developing of specific attitudes towards them go together to make the chapter on communication. Similarly blocks one, two and three compose the chapter on value orientation, and the chapter on demographic characteristics takes into account the responses to questions in blocks four and one of the model.

The Respondents: It has already been explained that the purpose of this study was to find out the WHY and HOW of family planning from the point of view of the target-group by focusing on certain selected variables and their interrelation within the family as a unit. The use potential of knowing this for improving action program was also emphasized.

In order to meet the above two expectations, it was necessary to limit the study to units which have undergone the different phases of acceptance so that their experiences could be studied with definite benefit to future programs. Hence, a decision was made to study only those who have accepted family planning. But this decision brought another problem of defining acceptance which has proved very elusive to researchers in this field. Balfour has emphasized the need to differentiate between the opinion of the researcher and the observed fact so far as acceptance of a method is concerned.[29] Verification by observation is impossible in this area of one's private life. Reliance on responses could be biased when the respondent knows no one could check it and therefore he is tempted to give the expected answer to please the researcher. Further, respondents in developing countries like India have no experience of survey-interview-situation.[30] Under these difficult circumstances researchers have tended to define acceptance in different ways, ranging from professed interest, through acceptance of teaching and materials, to ever-user, continued-user and effective-user.[31]

This study was fortunate to be undertaken at a time when IUD--intra uterine device made of plastic--program had been in operation for about ten months. It was therefore decided to study acceptance of IUD because in this case acceptance was more definite, and its continued and effective

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[29] Marshall C. Balfour, "Comparative Acceptability of Different Methods of Contraception," in Kiser, op. cit., p. 373.

[30] Harvey M. Choldin, A. Majeed Khan and B. Hosne Ara, "Cultural Complications in the Fertility Survey," pp. 13-14. (Unpublished)

[31] Balfour, op. cit., p. 384.

use more assured because of its one time semi-permanent nature. Further, as it could be had only from certain designated sources, the fact of acceptance could be established objectively. Another strong reason to study only IUD acceptors was the promise it holds for easing population problems in developing countries like India. This decision to study only IUD acceptors, then, became an additional specification of our stated broad problem.

Location of the Study: This brings us to the selection of areas where the study was to be carried out. Three colonies--Kidwai-nager, Andrews-gang and Shri-Niwas-Puri--of middle-class government servants in New Delhi were selected on the following criteria:

(1) These were easily approachable to the researcher, in view of time and other resources available to him.

(2) These colonies also happen to be those where mass use of IUD--as different from the experimental use--was first started.

(3) All the three selected colonies are served by the same family planning agency and by similar clinical set-up.

(4) Lastly and perhaps the most important consideration was the fact that in these colonies family planning program has been in operation for several years under optimum favorable conditions in respects to the factors of general organization, information and availability of methods. This meant that here we could have a more thorough and comprehensive situation to observe the target-group viewpoint in acceptance of family planning.

But for these advantages we had to pay the price in terms of the general applicability of our findings, which had to be limited to these

colonies and perhaps similar others in the country. However, this in no way minimizes the value of the resulting insights in this most important and least investigated area of the target-group interaction and its tremendous relevance for practical family planning programs. Such compromises in research studies, rather than being the exception, tend to be a matter of a general rule. What is more important for the researcher is his awareness to these limitations resulting from compromises.

Number of Respondents: The previous two decisions about studying only IUD acceptors and in the three government colonies influenced very much the problem of deciding the number of cases to be studied and the procedure of selecting them. When the possibility of the number of cases to be studied was viewed with the above two decisions, it soon became obvious that given the rate of acceptance of IUD and the size of colonies, the cases would be so limited as to make sampling unnecessary. The other possibility of including more colonies was considered and given up on the basis of limited time and material resources available to the study. It was therefore decided to study all the 182 cases who had accepted IUD through these clinics and who reside in the colonies.[32] This meant limitations on the use of possible statistics, but as the focus of the study was to find out general pattern of the process of acceptance, it was felt that the use of simple descriptive statistics should be acceptable as the

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[32] According to clinic records, 263 women took IUD. However, 81 cases (30%) had to be dropped because they could not be contacted on the grounds such as, "wrong address," "moved out," "could not be contacted," and "husband not knowing use of IUD by his wife." In another study done by S. N. Agarwala under similar conditions the loss was estimated to be 21% at the clinic level.

second best indicators of broad trends at this initial stage of the IUD program. In the course of time, when the cases would be more numerous or more resources were available to include other colonies, it would be much easier to follow this study with a more rigorous design.

Plan for Collecting Information: In deciding upon the strategy of collecting information, several situational and cultural aspects were considered by the researcher before he could develop a suitable mechanism to get the information necessary for the purposes of this study.

First, we decided that the general approach would have to be one calling for the cooperation of the respondents to reconstruct the sequence of events as accurately as possible. This approach meant a heavy reliance on the recall ability of the respondents. We had to view this decision against the problem of possible lapse in recall. Several factors indicate that this problem existed at a minimum in this study. First, the smooth and easy way in which the respondents replied to the questions showed that it was not a serious problem. Secondly, IUD had been in use only for ten months and most people accepted it in the latter half of this period. Thus, for most of them acceptance of IUD was less likely to be a fact of a dead and distant past. The fact that most of the respondents were literate, that the question of limiting the family was treated by them as a serious problem and that the agency has maintained a continuous information program of IUD in these colonies, reduced further the chances of lapse in recall very much.

The next question to which consideration was given concerned the problem of deciding as to who should be interviewed in each family. Three

alternatives were available. Following the practice of interviewing the women which has almost become a tradition in fertility studies, or alternatively to interview husbands or both of them. Several considerations led to the decision to interview husbands as the "agent" for the whole family.[33] First of all, we were not concerned in great detail about the fertility and pregnancy histories of the families, which is an area where women's information is supposedly more reliable as compared to their husband's. Secondly, this supposed advantage of interviewing women is being questioned more and more by empirical studies. Poti's study[34] in India and Yankey's study[35] in Pakistan indicate higher chances of more information and also reliable one from the husbands as compared to wives in most areas of interest to family planning research even when women investigators are used to collect information. Berelson, reviewing several fertility surveys all over the world, found striking similarity between the responses of wives and husbands.[36] In addition to these empirical evidences, one would expect husbands to verbalize more accurately and completely because of their higher education and greater orientation to the outside world. This will be particularly more true of developing countries like India. Lastly, the fact that for this study the investigator was male weighted heavily in favor of deciding to interview husbands as agents of their families.

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[33]Indianapolis study treated wives as reporting agents for their families. Hill, op. cit., p. 28.

[34]S. J. Poti, et al., "Reliability of Data Relating to Contraceptive Practices," in Kiser, op. cit., pp. 51-67.

[35]David Yankey, et al., "Husbands' vs. Wives' Responses," Population Studies (July, 1965), pp. 29-43.

[36]Bernard Berelson, "KAP Studies on Fertility," p. 661.

Another related problem was the question of availability of husbands as compared to wives for interviewing. In places where women employment is low, their availability for an interview is much greater than men who are employed outside the home. Having made the choice to interview the husbands, we had to decide to carry out our interviewing on holidays when husbands could be expected at their homes. In addition to this, interviews were also done during odd hours of the night. Another aspect of this problem was that limited availability of husbands meant repeated visits per interview. In some cases as many as eleven visits were made for one interview.

Identification of Cases: A study of the working of family planning clinics in these colonies revealed that clinics maintain a six by four inch card on each woman who had accepted IUD from the clinic. This card contains information about names of wife and husband, their home address, number and sex of children, age of wife, description of IUD used and date of insertion. This much information was considered more than enough to locate the house and identify the couple. It was therefore decided to duplicate these cards and use them for identifying the cases. In addition to this an attempt was made to check the details of residence of the cases from the records of estate offices in each colony. However, this was given up as the records in the estate office were found to be deficient for the purposes of this study.

Interviewing Schedule: A schedule[37] was used for collecting the data of this study. It was developed in five parts having several questions in

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[37] See Appendix 2.

each area of concern to the study. These areas were: (1) general information, (2) demographic characteristics, (3) diffusion of information to and within the family, (4) general orientation to life of these families, and (5) decision making in the family (see the model). This schedule was pretested in a similar population outside the three colonies covered in this study. The final schedule which emerged after taking account of the pretesting experience contained sixty-one questions so arranged as to cause the least possible problem to the informants in reconstructing the general sequence of events as experienced by them. This means intermixing questions from different areas, but every care was taken to include all the areas and relevant questions in each one of them in the final schedule.

So far as the nature of questions was concerned, some of them were structured while others were open-ended depending upon the nature of expected response and experience in pretesting. Thus, the final schedule was a semi-structured tool providing for probes and questioning in depth wherever necessary.

Interviewing Situation: Because of the nature of the study, careful consideration was given to the problem of introducing the investigator and the study to the respondents. After trying various alternatives, a suitable statement was evolved which became the first part of each schedule. As a result of our experience, we are convinced that the statement served our purpose of establishing appropriate rapport with respondents.

Another aspect of the interviewing situation was the problem of privacy. In the case of this study, our decision to interview the

respondents in their homes reduced this problem to privacy from sons, daughters, and relatives, if any. The apartments are small. Only one room is open to the outsider. This room also serves as the drawing room of the family, study room of the adults, playroom of the children and bedroom of the old members of the family. Without going into details as to how the situation was faced, it would be sufficient to mention that most of the interviews involved this problem and that each case needed a different strategy to ensure privacy of interview. Roughly about one and one-half hours was required for interviewing one respondent. In addition to this, about half an hour was required for locating the house, identifying the respondent and securing his consent for the interview.

In conclusion, it must be frankly stated that no attempt is made here to create the impression that once the above decisions were made the research and data collection became a smooth and pleasant job. On the contrary, several unanticipated problems were faced during the course of the study. A brief discussion of some of these follows.

Interviewing Experiences: One of the aims of all the investigators in field research is to plan in advance all possible situations that may arise in interviewing. In spite of this, unexpected things happen and upset his plan of work. Several factors such as differences in the perceptions of respondents, questions about the identity of the interviewer, uncertainties of interview situations and problems of communication, may cause such upsets of his field program. In this study an attempt was made to minimize such events through pretesting, but still deviations occurred. Rather than ignore such experiences an attempt is made to

document some of these for the benefit of those who might face similar situations in the future.

Image of the Investigator: This study made use of a factual statement to introduce the investigator and the study to each respondent. And yet, perhaps because of the nature of the device, the respondents continued to regard the investigator as a medical doctor. This was natural because IUD is inserted by doctors in the clinics and hospitals. The question, "Are you a doctor?" was put to the investigator by some bold respondents. Many continued addressing the investigator as doctor. In order to correct the situation, at some appropriate stage of the interviewing process, it was explained to them that the investigator works with doctors and is not a doctor himself. This seemed to satisfy the informants, and also established his right to ask questions about IUD.

Confidential Nature of Information: Studies in family planning deal with information which is usually regarded as strictly personal in most societies. In the case of some, talking about sex is a taboo. Sanctions of decency and good taste are used to prohibit sharing information on such topics. In the case of certain persons, it can be a highly emotional experience. Generally speaking, the more backward the group, the higher the sanctions. In such situations, unless the confidential nature of the information is assured, one runs the risk of missing a lot of information.

Another aspect of this problem is to interview the respondents privately. The problem of outsiders was partly solved by interviewing the respondents at their homes. However, the difficulty of maintaining

privacy from their sons, daughters and relatives continued. The apartments of respondents are small and only one room is open to the outsider. This room is also the only common room for the whole family. Obviously, only a highly skilled interviewer could meet the demands of such situations. Without going into details of how this problem was faced, it would be sufficient to state that the majority of interview situations in this study involved this difficulty and that each one of these needed a different strategy.

Time: The Problem of a Long Schedule: Roughly, about one and a half hours was required for each interview. Interviewing women perhaps could have reduced this difficulty partly, but the decision of this study involved interviewing husbands. Because of the reasons already explained, this very much enlarged the problem. Several steps were taken to keep this difficulty to a minimum.

First, immediately after the introduction, the investigator made inquiries about the health of his wife since she started using IUD. This made the inquiry look purposive and entirely for the benefit of the informants. Some were keen to collect additional factual information about IUD and this was provided to them whenever inquired. This sense of the inquiry being to their advantage was further increased by emphasizing the fact that as a result of their sharing the information, the IUD program would be further improved so that it could be of use to others in the society. These implications had the effect of his agreeing for the interview. The decision to do most of the interviewing on holidays further reduced this problem. Lastly, each respondent was given the option of fixing

the interview some other day in case he could not give the required time right away. The fact that only a few took advantage of this alternative leads one to think that the procedure used to minimize this unexpected difficulty worked very well.

However, the problem of non-availability of the respondents for the initial contact remained a major problem. This involved on an average three visits per respondent and resulted in the loss of so many working hours. But in circumstances where there is no other way of establishing the first contact this difficulty had to be lived with.

Communication: Language was not a problem in this study. Everybody could talk Hindi or English and the investigator knew both the languages. The difficulty appeared in another form. It is usual in a group to use several terms for the technical name of any innovation. IUD being new, so many terms, ring, coil, thread, challa, three year plan of not having children, and five year injection of not having children, were in use. This meant a very careful investigation to establish the fact that the respondent was using IUD. If one was not alive to this, so many cases would have been classified as "wrong information or address from the clinic" and wasted. In this study, therefore, before starting the interview, the common identity of the family planning method--IUD--was first established.

About the Questions: Going back and reviewing the questions used could be a great help in analysis and interpretation of the data. Some of the troublesome questions would be considered here.

Pay Per Month (Q-10): Normally in a salaried class such as this one would expect to get this information easily. Experience showed that even in the case of a fixed income group it is a very tricky question and needs several sub-questions to get to more realistic information. The problem is caused by so many types of cuts implemented at the source and by several other types of direct and indirect benefits included in the pay-packet based upon the individual status of each worker.

What State Do You Belong (Q-13): In the opinion of the ennumerator this was a poor question. It allowed informants to interpret it differently as there was no clear cut definition of "belonging." The result was that many of the respondents said they belonged to a state which is in Pakistan, some of them interpreted it to be the state of birth, and a few of them responded to it in terms of a state where they hold property rights. In addition to these, there were several additional variations. A correct way would have been to define it more concretely so that the reliable information could be obtained. Hence for the purpose of the study, this information will be treated as lost.

How Long Have You Been Married (Q-14): This question proved a blocker in the smooth flow of the interview as it made informants do some calculation. After some interviews, it was found that for most of them it was relatively easy to give the year of marriage and very frequently the date and month also. Hence in the rest of the schedules the year of marriage was asked and calculation of number of years was done in the office by the enumerator.

Have You Influenced Any And If Yes How Many (Q-44): Respondents expressed difficulty in giving answers to the second part of this question. The emphasis in this part was to obtain that number about which the respondent was sure. The respondent's difficulty was that generally people consult before having IUD but do not necessarily inform about the fact of having taken the device. To avoid any guessing, only such numbers were recorded about whom they had definite information. On second thought, the investigator now feels that it would have been better to take intelligent guesses of the respondent as a sufficient answer to this question. The degree of reliability insisted upon was not called for.

Practice Of Family Planning Before IUD, The Method(s) Used and Regularity Of Use (Q-45, 46): The last two aspects of the questions created various difficulties. For example, over a period of time people change from one family planning method to another. Some methods are used in combination. In the case of several respondents, the meaning of the term "regularity" remained undefined. And lastly, the questions did not provide for planned spacing of children. Therefore, the information collected on the type of method used and regularity of use is not used.

What Other Things About IUD You Liked (Q-29): This was a probe question to list all possible qualities of the device which entered in decision making process. Looked at from the informant's point of view, experience leads the investigator to feel that perhaps this was pushing him too far for recalling all the possible good qualities. It seems a process of selective perception operated which made the informant see and remember only those specific qualities of the device which met their need or

problem and the rest were just blocked out of memory. This also explained why the most important quality was mentioned very easily while other qualities made him pause, think and rationalize. The other difficult task involved in the question was to relate the qualities to sources of information. Obviously this was a hard exercise. Keeping in view the above difficulties and the poor response to this question, the investigator feels justified in not using this information.

Questions On Projection Into Future (Q-52, 53, 57): Frequently the informant would ask toward the end of the interview how these and other questions (54, 55, 59-60) are related with your study of IUD? This led to developing answers for such situations on the spot. Some of those who belonged to the lowest grade of employment had to be stimulated by examples to construct imaginary situations and then respond to questions.

Another difficulty was that the range of response in some cases was simply beyond the closed response categories provided in the schedule. Perhaps a provision for recording free responses would have been better. But such cases were not large enough to cause any concern.

Questions Requesting Information On Wives From Husbands (Q-24, 30-31, 34-35, 40, 42-43): As already explained, this was the second best alternative available to the investigator. Theoretical reliability of information from secondary sources can be questioned. However, the investigator thought it better to work on his hunch that the decision of family planning acceptance should largely be a joint decision requiring frequent interaction and sharing of information and opinions between the couple. If so, the advantage should be taken for seeking information on wives

from the husbands on this special problem under investigation. After having interviewed the respondents, the investigator feels that his hunch was definitely the best compromise within the situation. With the exception of a couple of cases, the response to such questions came easily and confidently from the husbands, which largely negates the objection discussed above. Partly the level of sophistication and the style of life of the respondents was also responsible for this outcome.

CHAPTER III

DEMOGRAPHIC CHARACTERISTICS

Some demographers view demography as the numerical portrayal of human population represented by certain types of statistics. These statistics represent two main aspects of the behavior of any population: the composition of the aggregate and changes that occur during some period of observation.[38] In this chapter we are concerned with the composition aspect, while in the chapters following this, we would be largely concerned with the change aspect and its related processes as experienced and revealed by the group of IUD acceptors under study.

In dealing with the structure or the composition of this group we would be mainly concerned with factors such as age, education, number of living children, number of living sons, age at marriage, duration of married life and desire for additional children. With the help of these statistics we would present a descriptive numerical portrayal of the cases under study.

Age at Marriage: The distribution of women by their age at marriage showed that nearly 55 percent of them were married between 13-18 years of age

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[38]George W. Barday, Techniques of Population Analysis, p. 2.

(Table 3). The mean age of women at marriage was seventeen years which is fairly close to the figures for urban areas in India.[39]

TABLE 3

Age at Marriage - Women*

Age Group in Years	No.	Percent
Under 13	14	8.0
13 - 14	20	11.4
15 - 16	47	26.9
17 - 18	31	17.7
19 - 20	29	16.6
21 - 22	20	11.4
23 and above	14	8.0
Total	175	100.0

*Variations in the number of responses in this table and others in the study are because of unavailability of responses from all the respondents on all the questions.

Age at Acceptance: The average age of women at the time of IUD acceptance worked out to be about 29.3 years and that of husbands 35.4 years (Table 4). Nearly 56 percent of the women accepted the device when they were below thirty years of age, and at this time about forty-seven percent of their husbands were below thirty-five.

[39]S. N. Agarwala, Fertility Control Through Contraception, p. 15.

The table below gives the distribution of the respondents (wife and husband) by their age. It is significant to note that almost no women accepted the device before the age of twenty, and after the age of thirty-nine. The modal age group was 25-29 in the case of women and 30-34 in the case of the husband. This may be largely due to the fact that husbands seem to be older on an average by about five years.[40]

TABLE 4

Age of Husbands and Wives at the Time of IUD Acceptance

Age Group in Years	Wives		Husbands	
	No.	Percent	No.	Percent
Under 19	0	0.0	0	0.0
20 - 24	30	16.3	1	0.5
25 - 29	71	39.2	18	9.9
30 - 34	49	27.0	66	36.6
35 - 39	31	17.0	54	29.9
40 - 44	1	0.5	34	18.8
45 - 49	0	0.0	7	3.8
50 and above	0	0.0	1	0.5
Total	172	100.0	181	100.0

Duration of Married Life: On the average, the acceptors have lived twelve years of married life before acceptance of IUD. The frequency

[40] Ibid., p. 14.

distribution of the respondents according to number of years of married life is given in Table 5.

TABLE 5

Duration of Married Life

Duration in Years	No.	Percent
Under 5	14	8.0
5 - 9	52	29.7
10 - 14	52	29.7
15 - 19	39	22.3
20 - 24	14	8.0
25 - 29	3	1.7
35 - 39	1	0.6
50 and above	0	0.0
Total	175	100.0

From the above table it is clear that about 60 percent of the couples have been married between five and fourteen years. Further, a small percentage of families accepted the device before five years and after nineteen years of married life. The acceptance was maximum when the married life duration was between five and fourteen years. Acceptance was almost negligible after twenty-four years of married life. (Women were probably infertile by then.)

Number of Living Children: Table 6 shows that most of the acceptors belonged to medium and high parity groups in terms of living children. Nearly

71 percent of them had three or more children. Khan and Choldin in their study in East Pakistan found 75 percent of family planners having three or more children.[41]

TABLE 6

Acceptance and Number of Living Children

Category	No.	Percent
Low (up to 2)	51	28.0
Medium (3 or 4)	89	49.0
High (5 and above)	42	23.0
Total	182	100.0

When we classify the respondents according to number of living children, we find that these couples had an average of 3.2 living children at the time of IUD acceptance. Nearly 63 percent of the couples had up to three living children, while nearly 28 percent had up to two living children. Very few of the respondents had no or one living child (Table 7).

Living Sons: In this group of family planners nearly 5 percent had no living sons while 95 percent had one or more living sons. About 76 percent had one or two living sons, and the percentage of those having three or more sons drops down to about 19 percent, suggesting a desire to have one or two living sons as important for this group (Table 8).

[41] A. Majeed Khan and Harvey M. Choldin, "New Family Planners in Rural East Pakistan," Demography, Vol. 2, p. 5.

TABLE 7

Number of Living Children

Living Children	No.	Percent
0	0	0.0
1	7	3.8
2	44	24.2
3	64	35.2
4	25	13.8
5 and more	42	23.0
Total	182	100.0

TABLE 8

Number of Living Sons

Living Sons	No.	Percent
0	9	4.9
1	65	35.7
2	74	40.6
3 or more	34	18.8
Total	182	100.0

Desire for More Children: Table 9 below gives the distribution of respondents according to their desire for more children. It is clear that a very high percentage (82%) of the people in this group think they have reached or exceeded the desired family size. About 100 respondents said

that their youngest living child was not desired by either of them. In other words in using IUD the goal of most of the couples was to close the family rather than space the children. Only 18 percent accepted IUD for spacing future births.

TABLE 9*

Desire for More Children

Desire for Next Child	No.	Percent
Don't want	147	82.1
Want within 3 years	4	2.3
Want between 3 - 5 years	16	8.9
Want after 5 years	12	6.7
Total	179	100.0

*The National Sample Survey (sixteenth round) conducted in urban areas found that among husbands who had 3 living children, about 9 percent expressed a desire for more children; 70 percent did not desire more; and about 10 percent were indifferent.

Income: Most of the families under study belong to the moderate income groups of the working and middle classes. On the average, husbands earned 281 rupees per month.[42] Roughly about 49 percent of the respondents were earning between 200-349 rupees per month. Table 10 shows the distribution of income for this group of respondents.

[42]About 7.5 rupees equal one dollar.

TABLE 10

Income of Husbands

Monthly Income Rs.	No.	Percent
Under 100	0	0.0
100 - 149	34	18.8
150 - 199	12	6.6
200 - 249	26	14.4
250 - 299	33	18.4
300 - 349	29	16.2
350 - 399	12	6.7
400 - 449	13	7.3
450 - 499	21	11.6
500 and above	0	0.0
Total	180	100.0

Education: It has been pointed out earlier that this study deals with persons who are employed by the government of India and its related offices in Delhi. Some minimum literacy is generally expected for all government positions.

Table 11 below gives the distribution of husbands and wives according to their education. The population studied is much more literate than the population of Delhi in general.

Nearly 80 percent of the women were literate and had attended a school. About 28 percent of them had studied up to middle school, that is,

had eight years of education. Twenty-three percent of the women had high school education, and about 7 percent of them attended college or a university.

TABLE 11

Education of Wives and Husbands

Education Categories	Wives		Husbands	
	No.	Percent	No.	Percent
Illiterate	36	20.2	5	2.7
Primary	38	21.3	9	4.9
Middle	50	27.9	22	12.2
High School	42	23.4	56	30.9
Graduate	12	6.7	68	37.6
Post Graduate	1	0.5	21	11.7
Total	179	100.0	181	100.0

In the case of husbands, about 97 percent of them had attended some school and were literate. Out of these literate persons, as high as 80 percent have studied up to high school or more.

In this last section of this chapter an attempt is made to compare the demographic characteristics of our respondents with those of a similar study largely covering the same category of respondents, that is, white collar government servants, belonging to moderate income groups of the working and middle classes, living in similar government colonies,

and served by the same family planning agency. This would give us a comparative idea of our respondents.

This study was done in 1960 by S. N. Agarwala of the Demographic Research Centre, Institute, of Economic Growth, Delhi University, entitled "Fertility Control Through Contraception."[43] His survey involved a study of 5912 family planning cases and covered eight GHSS[44] clinics as compared with three GHSS clinics in this study. One of the clinics is common to both the studies. Table 12 below compares some of the key demographic variables of the two surveys.

Similarity between the demographic characteristics of the cases in two surveys is striking. The difference in mean monthly income is perhaps largely due to inflation resulting in increased dearness allowance of government employees. This suggests our cases are fairly representative of family planners in such colonies and further strengthens the findings of this survey.

Summary: In brief, the following main demographic traits characterize this group of IUD acceptors.

Most of the families belonged to educated moderate income groups of the working and middle classes. All of them belong to service class and live in government built two or three room apartments. On the average they had 3.2 living children, and out of the whole group only 5 percent did not have any living son.

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[43] Agarwala, op. cit., pp. 11-43.

[44] GHSS stands for "Government Health Service Scheme." This scheme is organized by the government of India for its workers. In addition to other health problems, it is also responsible for providing family planning services.

TABLE 12

Comparison of Some Demographic Characteristics*

Characteristics	Agarwala's Survey (1960)	Dubey's Survey (1965)
1. Women's average age at marriage	17	17
2. Average number of living children	3	3
3. Percent accepting family planning after 24 years of marriage	2	2
4. Percent having 3 living children	62	63
5. Mean age of women	27	29
6. Mean age of men	32	35
7. Duration of married life (Agarwala's figure refers to effective married life)	10	12
8. Percent literate husbands	99	97
9. Percent literate wives	89	80
10. Percent women married at age 15-20	73	60
11. Mean monthly income in rupees	214	281
12. Cases studied	5912	182
13. Sources of information	clinic records only	clinic records & interviews

*Figures have been rounded off to full numbers.

A little more than half of the women were married between age 13-18 while the mean for the whole group was seventeen years. On the average they had lived twelve years of married life before accepting IUD. The

model age groups for acceptance of the device were 25-29 and 30-34 for women and men respectively. By this time most of them had either reached or exceeded the desired family size, and 82 percent of them did not want any more children. In other words, they were keen to close the family. About 28 percent of them were low-parity women.

In terms of some key demographic variables our group is comparable to a relatively much larger study consisting of about 6000 cases of family planners from a similar population. To some extent this further strengthens the findings of our study and enhances its applicability to family planners in such populations.

CHAPTER IV

COMMUNICATION

Students of diffusion seem to be convinced of the central role of communication processes in the acceptance of innovations. Some of their major contributions, such as, adoption stages, opinion leaders, two-step flow of information, and importance of primary relationships in acceptance of change relate to communication processes.

Fast and effective transmission of family planning messages to the Indian masses seems to hold the key to India's population problem. Bogue has the following to say about the present condition and future importance of communication in family planning:

> We sincerely believe that communication with the masses about birth control has been a neglected area of family planning programs all over the world... People must not only be made aware of the existence of such centers (family planning clinics) but they must be stimulated to use them, or to visit private physicians or other sources of information to get help.[45]

We are, therefore, concerned with certain aspects of communication in this study. We are concerned as to (1) how the acceptors get the first information, (2) what steps they took to collect additional information, and (3) how they got the crucial information which made them favor IUD. Further, we will also see and analyze the information-collecting behavior

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[45] Donald J. Bogue and Veronica Heiskanen, How to Improve Written Communication for Birth Control, p. 2.

of husbands and wives, in what respect they differ and how they complement each other's efforts. Lastly, we will examine not only the use significance of different communication media in relation to the three diffusion stages of "awareness," "interest," and "evaluation;" but also compare the communication media according to their importance, taking the responses of wives and husbands together for the acceptance process as a whole.

Awareness: Innovation adoption is not a one act operation. It is a process comprised of several steps or stages.[46] Diffusion studies without exception recognize awareness as the first stage in the process. It signifies the entering of the innovation into the cognitive map of the individual. The individual is exposed to the innovation for the first time and may not have complete information about it. According to Rogers, the primary role of the awareness stage is to initiate the sequence of later stages that lead to eventual adoption or rejection of the innovation.[47]

Agricultural diffusion studies have widely documented differential use and importance of communication media according to stages in the adoption process. On the basis of the findings of these studies the following two generalizations can be made about the diffusion of information at the awareness stage:

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[46]Herbert F. Lionberger, Adoption of New Ideas and Practices: A Summary of the Research Dealing with the Acceptance of Technological Change in Agriculture, with Implications for Action in Facilitating Social Change, passim. See also NCRS Sub-committee, How Farm People Accept New Ideas, pp. 3-6.

[47]Everett M. Rogers, Diffusion of Innovations, p. 82.

1. Impersonal mass media have been found to be the most frequently quoted source of first information.[48]
2. Cosmopolite sources of information predominate at the awareness stage and local sources of information are important at the evaluation stage.[49]

In general, family planning diffusion studies also treat family planning acceptance as a process involving several stages. Lionberger has applied the five stages concept to family planning. However, because of the recency of interest in family planning diffusion studies, there is not much to document.[50] Bogue, while accepting the stages concept, has slightly modified them. He refers to four stages in family planning acceptance: (1) Awareness and interest, (2) Information-gathering, evaluation, and decision to try, (3) Implementation, and (4) Adoption and continued use.[51] The dominant trend seems to make use of the stages concept rather than revalidate or modify the concept in line with family planning. As a result, while one finds isolated mention of one or another stage in various studies, there is no systematic treatment of stage by stage diffusion process in any one single family planning diffusion study.

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[48] Ibid., p. 99.

[49] Ibid., p. 102. In this study, personal cosmopolite sources refer to the personal sources of information outside the system, such as, the clinic staff. Personal localite sources refer to the personal sources within the system, such as, friends, neighbors, relatives, and users. Mass media in this study includes printed material, exhibitions, and radio.

[50] Everett M. Rogers and Erwin P. Bettinghaus, "Comparisons of Generalizations from Diffusion Research on Agricultural and Family Planning Innovations," paper presented at the American Sociological Association, Miami Beach, August, 1966, pp. 7-8.

[51] Bogue and Heiskanen, op. cit., pp. 7-20.

For making people aware of family planning, experience in Japan[52] and experiments in Taiwan[53] and in India[54] have made use of impersonal mass media and found it to be effective. In Taiwan and India local sources of information have also been found to be more influential. This seems to be at variance with the findings of agricultural studies, but this difference in findings is more apparent than real. Firstly, these studies are not concerned with final acceptance. And secondly, the agriculture studies do maintain that when the process has been initiated by cosmopolite sources, the early majority, late majority, and laggards[55] tend to get their first information from localite sources of information.[56]

SURVEY DATA

In this study acceptance of IUD for family planning is considered a joint action of the wife and the husband. Each couple is confronted with the twin goals of having enough and not having too many. In such a

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[52]Minoru Noda, "Contraception in Japan: Problems of Motivation and Communication," in Research in Family Planning, ed. Clyde V. Kiser, pp. 563-569.

[53]T. C. Hsu, et al., Taiwan Population Studies Center Annual Report, 1962-63, pp. 26-6.

[54]K. V. Ranganathan, K. Srinivasan, and Betty Mathews, "India: The Use of Community Leaders to Promote Family Planning," Studies in Family Planning, Vol. 13 (August, 1966), pp. 6-7.

[55]Diffusion studies have been classified into five categories on the basis of time of adoption. The first 2.5 percent are called "innovators," and the next 13.5 percent are classified as "early adopters." This group is followed by "early majority" and "late majority," each accounting for 34 percent of adopters, respectively. The last group is known as "laggards." Here the reference is to the last three categories.

[56]NCR Sub-committee, Adoption of New Farm Ideas: Characteristics of Communication Behavior, Vol. 13 (October, 1961), p. 9.

situation, where a small group (in this case a two-person group) rather than an individual is involved in acceptance of an innovation, it will be of interest to know which partner was first to know of the new family planning method and how husband and wife differed in their sources of information.

Who Became Aware First: In this section awareness will refer to the first information obtained about IUD. The table below indicates the sequence in which the first information was received within the family. Wives seem to lead husbands in receiving the information first.

TABLE 13

Time Sequence of Receiving First Information

Who Received First	Frequency	Percentage
Husband received first	80	43.9
Wife received first	96	52.8
Both received together	6	3.3
Total	182	100.0

Sources of Information: Although the couple is the unit of acceptance for IUD, the two individual members are different personalities having different roles. In addition to sex and role differences, there are differences in age and in formal education. It would therefore be reasonable to expect differences in their sources of first information. The men interviewed in the colonies indicated eight sources of information: (1) Clinic Staff, (2) Friends and Neighbors, (3) Users of IUD, (4) Relatives,

(5) Newspapers and Journals, (6) Posters and Handouts, (7) Exhibition, and (8) Radio. For purposes of analysis, these categories have been further grouped into three categories of: (1) Personal Cosmopolite, (2) Personal Localite, and (3) Mass Media. This classification scheme is developed from the ideas of Rogers and Meynen,[57] and Wilson and Gallup.[58]

In this study Personal Cosmopolite sources refer to the personal sources of information outside the system, such as, the clinic staff. Personal Localite sources refer to the personal sources within the system, such as, friends, neighbors, relatives, and users. Finally, in this study mass media will include printed material, exhibitions, and radio.

Table 14 shows that the sources of first information for wives and husbands are different. Approximately three-fourths of the women received first information from cosmopolite sources--staff working for the clinics as change agents. The same proportion of men were receptors of information from mass media--newspapers and journals (one category accounting for 65% of the cases). Personal localite sources come out as a weak second, and of equal importance to both the sexes. The very low contribution of radio, exhibitions, posters and handouts in mass media, and users and relatives in localite sources as a means for first information should be noted.

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[57] E. M. Rogers and W. L. Meynen, "Communication Sources for 2, 4-D Weed Spray Among Columbian Peasants," Rural Sociology, 30 (1965), pp. 213-219. See also, Man Modan Sawhney, "Farm Practice Adoption and the Use of Information Sources and Media," paper presented at the American Sociological Association, Miami Beach, August, 1966, p. 5.

[58] M. C. Wilson and Gladys Gallup, Extension Teaching Methods and Other Factors that Influence Adoption of Agricultural and Home Economics Practices, pp. 3-4.

TABLE 14

Sources of First Information of Wives and Husbands[a]

Receptor	Personal Cosmopolite	Personal Localite			Mass Media				
	Clinic Staff	Friends Neighbors	Users	Relatives	Newspapers Journals	Posters Handouts	Exhibi-tions	Radio	Total
Husband (80)	8.75%	17.50%	1.25%	0.00%	65.00%	5.00%	1.25%	1.25%	100%
Wife (96)	72.92	16.67	6.25	3.13	0.00	0.00	0.03	1.00	100
Both together (6)[b]	-----	-----	----	----	----	----	----	----	---

[a]More than one source was given by some respondents. In this study only the first source is considered.

[b]As the number involved is small, its distribution has been left out.

Interest Stage: Interest is defined here as an attempt to collect additional information about IUD. We are concerned here as to who got more enthusiastic about the device and how each member of the couple went about collecting additional information. When asked if they tried to collect additional information, only 110 or 53.13% of the husbands replied in the affirmative. The remaining did not make any attempt to get additional information and relied on their wives or did not reply to the question. As against this, 138 or 67.3% of the wives collected additional information. Table 15 gives the distribution of the wives and husbands, who collected additional information, according to the sources of information. This table indicates that personal localite sources are the most important sources for additional information for both the wives and the husbands. In the case of husbands, mass media, which was most important at the awareness stage, takes second place and similarly personal cosmopolite sources, which were most important for wives at the awareness stage, are of second importance.

One can conclude that mass media remains the most insignificant for wives at both the stages of awareness and interest, and personal cosmopolite remain of third importance for husbands at both the stages of awareness and interest.

Evaluation Stage: Following Rogers' definition, evaluation in this study means mentally recognizing the advantages of the innovation under consideration.[59] Respondents were asked about the advantages they saw in

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[59]Rogers, Diffusion of Innovation, p. 83.

TABLE 15

Sources of Additional Information of Wives and Husbands

Receptors	Personal Cosmopolite	Personal Localite			Mass Media				
	Clinic Staff	Friends Neighbors	Users	Relatives	Newspapers Journals	Posters Handouts	Exhibi-tions	Radio	Total
Husbands (110)	20.9%	43.5%	4.8%	4.8%	23.5%	1.7%	0.8%	0.0%	100.0
Wives (138)	43.4	34.7	18.3	2.8	0.8	0.0	0.0	0.0	100.0

the IUD (before using it) that made them accept it and how they came to know of such advantages.

Table 16 gives the most preferred qualities for husbands and wives. The very high degree of agreement between wives and husbands as to the most preferred quality is to be noted in this table. Also, the two qualities of "no botheration" and "sure" seem to be equally important for both the wives and the husbands. This table is highly indicative of the fact that in spite of their collecting information with different degrees of interest and from different sources at the preceeding two stages of "awareness" and "interest," there is exchange of information resulting into high degree of convergence between the ideas of each member of the couple at this evaluation stage. This is in line with Hill's interactional model of family planning acceptance as found in Puerto Rico Study.[60]

So far we have examined the sources of information at the awareness and interest stages. Now we will examine the sources of information of wives and husbands at the evaluation stage. Table 17 gives the sources of information for most liked quality of IUD for wives and husbands. This table shows, that the evaluation stage, personal localite sources remain the most important for husbands followed by mass media and personal cosmopolite sources. For women personal cosmopolite sources, which were the most important at the awareness stage, once again become the most important source for evaluation followed by personal localite. Mass media remains of least significance to women.

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[60] Reuben Hill, J. Mayone Stycos, and Kurt W. Back, The Family and Population Council: A Puerto Rican Experiment in Social Change, pp. 142-144.

TABLE 16

Most Preferred Qualities of IUD for Husbands and Wives*

Receptors	Most Preferred Quality of IUD						
	Natural	No Botheration	Sure	Reversible	Nothing in Particular	Other Reasons	Total
Husbands (164)	9.3%	35.9%	35.9%	10.9%	4.8%	3.1%	100.0
Wives (154)	5.8	37.8	37.0	11.0	7.2	1.2	100.0

*More than one quality was mentioned by some respondents, but here we are dealing with the one first mentioned.

TABLE 17

Sources of Information of Husbands and Wives for Most Preferred Quality

Categories	Personal Cosmopolite	Personal Localite			Mass Media				
	Clinic Staff	Friends Neighbors	Users	Relatives	Newspapers Journals	Posters Handouts	Exhibi-tions	Radio	Total
Husbands (152)	15.3%	9.8%	1.9%	39.4%	28.4%	1.9%	2.6%	0.7%	100.0
Wives (144)	63.4	9.7	2.8	20.3	1.3	0.6	1.3	0.6	100.0

Thus far we have analyzed information seeking behavior of husbands and wives in terms of three adoption stages. At this stage of analysis an attempt will be made to find out the most frequently used information media during the whole process, taking into account both the male and female preferences together. Table 18 brings out the following important trends relating to communication media use.

TABLE 18

Total Use of the Three Sources of Information*

Sources of Information	Husband's Frequency of Mention		Wife's Frequency of Mention		Total	
	No.	Percent	No.	Percent	No.	Percent
Personal Cosmopolite (274)	53	19.34	221	80.65	274	37.95
Personal Localite (300)	151	50.33	149	49.66	300	41.55
Mass Media (148)	141	95.27	7	4.72	148	20.49

*Only first mentioned sources of information are considered.

First, we see that the use of all the three media was significant. In other words, between the couples all the three media were used fairly. Among the three sources of information, the most widely used media was "personal localite" sources. "Personal cosmopolite" was second in importance, while the mass media was last in importance (Table 18).

Secondly, as indicated by the table, personal localite sources are most equally used by husbands (50.33%) and wives (49.66%). Unlike personal cosmopolite and mass media, they do not tend to show any sex bias.

Thirdly, personal cosmopolite sources seem to have been more accessible to females than to males. And similarly, mass media seems to have been more accessible to husbands as compared to wives.

Having found out the frequency of use of these three types of information media, we will now attempt to find out the role of each of these media in the stages of adoption under consideration. Table 19 shows that for awareness stage the most frequently used communication source is personal cosmopolite--change agent--followed closely by mass media and personal localite sources. For interest and evaluation phases, localite sources seem to be most apt and used most frequently. Figure II shows the above trend.

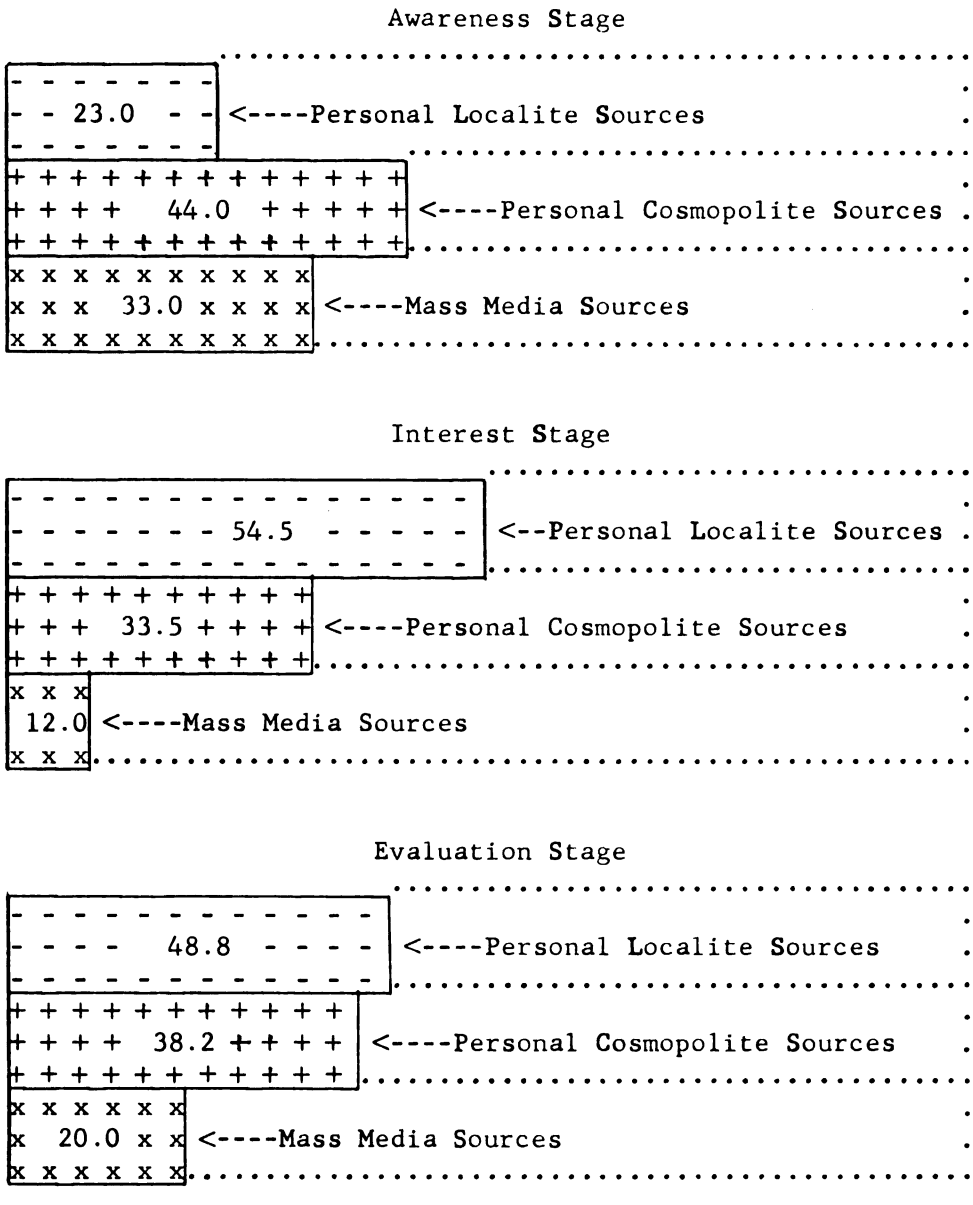
TABLE 19

Distribution of Total Mention of Three Communication Media According to Adoption Stages

Information Sources (Total of Wives and Husbands Mention)	Adoption Stages					
	Awareness (No. Times Mentioned)		Interest (No. Times Mentioned)		Evaluation (No. Times Mentioned)	
	No.	Percent	No.	Percent	No.	Percent
Personal Localite (300)	40	23.0	135	54.5	125	41.8
Personal Cosmopolite (274)	77	44.0	83	33.5	114	38.2
Mass Media (148)	58	33.0	30	12.0	60	20.0
Total (722)	175	100.0	248	100.0	299	100.0

FIGURE II

Stages and Use of Media



Out of the two widely supported generalizations[61] based on several studies, the second one stating that the "cosmopolite sources of

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[61] See page 59 for details.

information predominate at the awareness stage and local sources of information are important at the evaluation stage" is fully validated. Further, our data suggest refinement of the first generalization by providing for the role of the change agent along with the mass media as equally important sources for creating awareness. This role of change agent is to be particularly noted in two types of situations. First where the innovation is technically complex, and secondly where it makes an excellent fit with some already accepted role within the society. Because of the special nature of IUD, we are in a position to suggest this refinement.

Discussion: The Delhi Colony data revealed that wives became aware of IUD first. There can be two possible explanations for this. First, this might be a function of the family planning programs organized in the colonies. As already described, the clinics are heavily biased in favor of female workers. With the exception of a part-time family planning male social worker, all the staff in the clinics are female. Secondly, the clinic work hours are the same as the work hours of the male population of the colonies. As all the male residents work outside the colonies, the female clinic field workers are more likely to contact the female residents of the colonies. Thus, both the work organization and clinics' staffing pattern are more favorable for women contacts.

However, this does not explain why males failed to know of IUD earlier through mass media which were simultaneously and very extensively used by the change agency during the time of the study. The second possible reason is in terms of the male and female roles within the family.

Child bearing and rearing is both biologically and socially a role of women. This is much more so in urban India where female employment is almost insignificant. Thus, due to the intimate closeness of family planning to women and because of this being their major area of concern, the wives could be expected to become aware of IUD earlier than husbands. This second explanation seems to be reasonable and enjoys wide theoretical support. The findings of other chapters of this study also support this.

Table 14 reveals a sex bias for the sources of information at the awareness stage. Three-fourths of the husbands became aware of IUD through mass media, while an equal proportion of wives became aware of it through personal cosmopolite--change agent--sources. Thus, while both the sources are important in making the couple aware of IUD, they tend to specialize on sex lines. Perhaps the relatively low education of wives and their restricted role inside the family results in their reduced ability to appreciate impersonal, universally oriented, one-sided, written or vocal mass information sources. The reverse seems to be the case for husbands, who seem to use more impersonal, indirect sources of information. After all, they (men) are less directly related to childbearing and through it to family planning. At least this seems to be their perception of the role. This perception of husbands seems to be further sharpened and socially reinforced (unconsciously) by the work organization and staffing pattern of the change agency. This results in the observed sex differentials in information sources at the awareness stage.

The interest stage was defined in terms of attempts to get additional information on IUD. It was operationalized in this study by the relative

amount of interest shown in the device and how additional information was collected. In 105 cases (63.5%) husbands admitted that more additional information was collected by their wives. In sixty-two cases (36.5%) husbands said they took more interest in seeking additional information as compared to their wives. This leading participation of the wives is consistent with the trend and the explanation documented at the awareness stage.

We see in Table 15 that for both the husbands and wives personal localite sources become most important for collecting additional information. This is consistent with the findings of several agricultural diffusion studies, where it has been repeatedly validated that friends, neighbors, users, and relatives become very significant for collecting and reinforcing information derived at the awareness stage largely through personal and impersonal cosmopolite sources which by definition belong outside the social system of the individuals. Relevance of the innovation to the social system can only be ascertained through such members within the system with whom the individual participates. This would also explain the second and third positions of personal cosmopolite and mass media sources as indicated in this table.

Tables 16 and 17 deal with the evaluation stage which was defined as mentally weighing the advantages of the innovation. The first of these two tables reveals an unusually high degree of convergence as to the two most preferred qualities--"sure" and "no botheration"--of IUD. The proportion of males and females favoring the two qualities is also remarkedly equal. In other words, there is not only the unanimity regarding the two qualities, but it is further extended to each quality in almost the same

proportion by both the wives and husbands. This is a very strong indication of the presence and importance of wife-husband discussion at the evaluation stage. This also supports the assumption of this study that family planning is a joint concern of both the wives and husbands.

In order for this discussion to take place between the couple, each must formulate, at least tentatively, his or her own preference based on their respective sources of information and thinking. Table 17 gives the sources of husbands and wives for the most liked quality. It indicates that while husbands depend more on personal localite sources, wives made the most use of personal cosmopolite or expert change agents at the evaluation stage. When this trend is considered along with the intense mutual discussion between the wife and husband, it seems reasonable to assume that husbands, while remaining psychologically aloof from women experts of the clinics, made use of them through their wives. Very frequently husbands replied that they learned of the advantages of IUD through their wives who discussed it with the clinic staff. This was in addition to the husbands seeking opinion and help from personal localite and mass media sources. After all, when experts combine the role of change agent one also runs the risk of overselling the innovation on the part of the expert. No wonder, therefore, that husbands concentrated on personal localite and impersonal authority of mass media while wives gathered the most information from experts at the evaluation stage. Between the two of them they had ideal conditions to evaluate IUD from their own point of view.

As a matter of fact, in this whole drama of IUD acceptance, a modified form of two-step flow of communication is in evidence coming as it were

from two directions. The opinion leaders of the larger social system are replaced by the two actors making a small social system of the family. Each actor becomes an opinion leader for the other and receives and transmits the information from channels which are not readily available to the other. As in the two-step flow hypothesis, opinion leadership here is treated as a function of receiving and transmitting the information by virtue of strategic position of the individual in the group structure which makes him more accessible to certain channels of information. In other words, husbands receive and make available to wives information from mass media from which structurally the wives seem to be cut off.

Our data goes a step further and indicates the presence of a two-step flow from personal cosmopolite or experts to wives and through them to the other partner equally concerned in the decision.[62] This we could find because wives seem to be structurally more open and accessible to expert opinion (because of the reasons already discussed) as compared to husbands in this field of family planning. In place of mass media the message originates from personal cosmopolite--expert--sources, reaches wives who are structurally accessible to them and who by virtue of this function act as the opinion leader for transmitting this information to husbands who are equally involved in the decision.

In the last section of this chapter we have done two things. First, we have merged the male and female responses of all the three stages to rank the three communication sources according to their ranked importance in the whole adoption process. And, secondly, by merging the male and

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[62] James P. Bebermeyer and Everett M. Rogers, "Mass Media and Interpersonal Communication in National Development," pp. 18-19. (Unpublished)

female responses for each stage we have tried to find out the importance of each of the three communication sources in each stage. In other words, we have tried to rank the communication sources according to their importance as determined by their frequency of use and their importance by stages of adoption.

In Table 18 our survey data indicate that personal localite sources are the most frequently used sources of information considering adoption process at all stages. Personal cosmopolite--change agent--rank second and mass media as third in use importance. It seems the peculiar nature of the personal localite sources make them apt or amenable for use in all the three stages and by both the sexes which probably explains their first rank.

The use of personal cosmopolite sources is relatively restricted first because of the particular organization of the clinics, and secondly because of the knowledge of the fact that they may have vested interest in the acceptance of the innovation. In general, their use tends to be regulated according to the need of the expert opinion for an innovation and the technical level of the group. The mass media use tends to be limited because of their impersonal nature and also because of the low level of education in developing countries.

Different sources are used differentially at different stages: Table 19 and Figure II reveal that for the awareness stage, personal cosmopolites rank first, mass media second, and personal localites third. It further indicates that for creating and satisfying interest and helping in the evaluation, personal localite sources rank first. It seems that while they lack in initiating innovation acceptance, they become more important

when somebody interested approaches them for further information and evaluation. In other words, family planning innovation differs from other innovations inasmuch as one does not feel socially secure and acceptable as to how other members of his group would feel about his taking the initiative in a matter so private and socially controlled. Perhaps this may be overcome a little in the case of a very small intimate contact group. In short, the rewards of being the innovator and socially recognized as such are uncertain in this field, which explains the predominant role of personal cosmopolite sources--change agent--in creating awareness and the important function of the personal localite in creating and satisfying interest and helping in the evaluation. After all, to own a modern article like a radio and be known as its owner is certainly socially rewarding in terms of higher social status, while this may or may not be so in the case of family innovation.

Summary: In conclusion then, our data bring into focus the following points as seen in IUD acceptors covered by this study.

(1) In IUD acceptance we found that the division of role on sex basis has a significant bearing on the information receiving, gathering and evaluating processes. In a majority of cases wives were more active than husbands who seem to be satisfied in getting involved and being informed by their wives at different stages. Whereever such mutual involvement is possible, the chances of innovation acceptance seem to be high. At least this was the dominant trend in our study.

(2) It sharply brings into focus the overall general importance of personal localite sources in the diffusion process of family

planning information. Their potential of use across the sexes and in all the three acceptance stages was noted.

(3) It was found that both the cosmopolite sources of information (mass media and change agent) and the localite sources of information played specific function in IUD acceptance. The first largely created awareness and the second sources were credited at the information and evaluation stages.

(4) It was noted that in the acceptance of IUD the cosmopolite sources (mass media and change agent) were successfully mediated by personal communication between wives and husbands to produce acceptance. This supports the observation of Bebermeyer and Rogers that "mass media exposure is only an arbitrary beginning of a diffusion process; the ultimate consequences in part depend on the configuration and nature of sociometric networks beyond the points of contact."[63] In this study the network of husband-wife communication contacts within the social system of the family was found to be important for acceptance.

(5) The role of expert or change agent was found to be significant.

(6) A modified form of operation of the two-step communication flow was evidenced in this study.

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[63] Ibid., pp. 18-19.

CHAPTER V

DECISION-MAKING

In the communication chapter we were mostly concerned with diffusion --from the source to the potential users--of the innovation with emphasis on the sources and processes of information.[64] In this chapter, we are concerned with the adoption of the innovation by the individual or individuals (in this case the couple) and emphasis would be placed on the decision-making factors and processes.[65]

The immediate decision as to the size of the family is generally made by the concerned couple.[66] In this decision, the couple is largely motivated, guided, and helped by specific social norms of the group to which the couple belongs and by the institutional structure of the larger society. In other words, decision-making can be conceptualized at any of the following three levels: the larger society, the immediate kinship group, and the concerned couple. In demographic literature, the three levels of conceptualization are termed as: Structural model of Davis and

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[64] Everett M. Rogers, Diffusion of Innovation, pp. 12-20.

[65] Ibid., pp. 77-78.

[66] Lee Rainwater, And the Poor Get Children, p. 20. Reuben Hill, J. Mayone Stycos, and Kurt W. Back, The Family and Population Control: A Puerto Rican Experiment in Social Change, p. 162. Donald J. Bogue and Veronica Stolte Heiskanen, How to Improve Written Communication for Birth Control, p. 2. Ronald Freedman, "Norms for Family Size in Underdeveloped Areas," in The Proceedings of the Royal Society, B, Vol. 159 (1963), pp. 225-226.

Blake,[67] Normative model of Freedman,[68] and Interaction model of Hill, Stycos and Back.[69] The normative model partakes (overlaps) of both the first and the third model.[70]

Any full analysis of decision-making in the family planning field should therefore involve consideration of all the three levels and the corresponding models. Such a task would be beyond the scope of any one study. In this study we are largely concerned with the third level of decision-making. Our focus is on the couple primarily because all action programs in this field take the couple as the target unit and also because our data are largely a result of such an actual program. However, in focusing on the last level, we may indirectly also deal with the other two levels in as much as they are made operative through the decisions and behavior of the couple. This view would mean our considering the above three levels as forming a continuum of decision-making, while at the same time keeping our attention focused on a level which is relatively easy for empirical observation.

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[67] Kingsley Davis and Judith Blake, "Social Structure and Fertility: An Analytic Framework," Economic Development and Cultural Change, IV (April, 1956), pp. 211-235. Description of this model can also be found in Seymour Martin Lipset and Neil J. Smelser (eds.), Sociology: The Progress of a Decade, pp. 356-377.

[68] Ronald Freedman, "The Sociology of Human Fertility: A Trend Report and Bibliography," Current Sociology, X/XI (2), (1961-62), p. 41.

[69] Hill, Stycos and Back, p. 220. A statement of this model can also be found in Reuben Hill, Kurt W. Back, and J. Mayone Stycos, "Family Structure and Fertility in Puerto Rico," Social Problems, Vol. 3, No. 2 (October, 1955), p. 93.

[70] H. Yuan Tien, "Modernity and Maternity: The Sociology of Fertility Change," p. 2. (Unpublished) This paper also gives a brief comparison of the three models referred to in this study.

When we say we would be mostly concerned at the interactional level of the wife and husband, we mean to cover only some aspects of the personal and motivational aspects of the situation, as experienced and considered by the couple in reaching acceptance decision. In personal factors we would be concerned with the husband and wife and how the two together made the decision. We would be analyzing the importance of significant others--primary group members--who might or might not influence decision-making processes. In motivational factors, our interest would be limited to the consideration of specific family size goals of the couples and their past family planning status. In addition to this, because of the specific importance of current users, both in diffusing information and influencing decision-making processes of potential acceptors, we would be concerned with the current user's role in influencing decisions of respondents under study.[71] We would in turn also try to find out how the acceptors in this study influenced others.

CONCEPT OF DECISION-MAKING

Agricultural Diffusion Studies: The five stages of the adoption process --awareness, interest, evaluation, trial and adoption--in this field are well known and congruent with almost all the research findings of the past. As a result, their purely arbitrary nature and conceptual purpose tends to be minimized.[72] While the stages fit well in most cases their arbitrary nature suggests that they would fit only partially in several other cases.

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[71] Bogue and Heiskanen, op. cit., pp. 3-6. Also see, Bernard Berelson and Ronald Freedman, "A Study in Fertility Control," Scientific American (May, 1964), pp. 10-11.

[72] Rogers, op. cit., pp. 76-120.

Another characteristic of the stages concept is that they are mainly descriptive of stages and imply a natural order of events--the preceding stage leading to the one following.[73] As one moves on this five stage continuum, one gets the impression that the end stages of the continuum are more or less taken for granted. For example, in several studies the stage of acceptance unlike that of awareness is more or less taken for granted and the fact of acceptance is simply mentioned. Why this is so, can only be speculated. Perhaps because the agricultural studies are largely concerned with "improved practices"--replacing something which is already accepted and used--"acceptance" is supposed to follow provided "awareness" and "interest" have been taken care of. An exception to this general trend is found in the studies of Wilkening and Straus and certain others who have focused on decision-making processes involved in accomplishing acceptance as implied by the term "acceptance stage." If so, the situation in fields like family planning would be different. So far as developing countries are concerned, family planning is not simply a problem of replacing some old technique by a new efficient one, but involves both acceptance of new goals and selection of appropriate means under a given situation. Thus, while it recognizes the need of diffusion of ideas, it imparts special significance to social-psychological processes and personal and situational motivational factors that go in individual's decision-making processes at the "acceptance" stage.

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[73] Ibid., pp. 76-120. In this chapter we are using the term "function" in the descriptive sense as Rogers has used it. According to him at the present time there seem to be five main functions involved in the adoption process and each of these is assigned to a stage.

In the preceding chapter on communication we have examined the three stages of "awareness," "interest," and "evaluation." In this chapter we are concerned with the stages of "trial" and "acceptance," under the label of decision-making, to analyze the processes rather than merely describe them. In agricultural studies, the "trial" stage is characteristically one of small scale use by the potential adopter or his observation of use under conditions which simulate those of his own situation, and "acceptance" implies full or one hundred percent use.[74] Because of the peculiar nature of IUD which is a one time application in full, the closest one can get to the trial stage is to use some other acceptor as a relevant empirical reference. Similarly, full or one hundred percent use has to take place in the first application of the device itself.

Family Planning Diffusion Studies: Relatively speaking, little work has been done with decision-making and related diffusion stages in family planning. Partly this is because of the recent interest in this field, and partly because of the different and difficult nature of the field.[75] Generally in all the societies it is very private, highly emotional, rigidly controlled by society's norms of religion, custom, and behavior; in almost all cases it touches the very core of individual personality and social structure. This makes it altogether different from agricultural practices.[76]

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[74]Joe M. Bohlen, "Adoption and Diffusion of Ideas in Agriculture," in Our Changing Rural Society: Perspectives and Trends, ed. James H. Copp, p. 269.

[75]Bernard Berelson, "KAP Studies on Fertility," in Family Planning and Population Programs, p. 655.

[76]Donald J. Bogue, who spoke on general importance of Diffusion Studies at the annual meeting of the American Sociological Association in Miami Beach, Florida, August, 1966.

Lorimer has observed that "acceptance is sharply defined for only one method: sterilization. With all other methods there are various degrees of acceptance, ranging from professed interest through acceptance of teaching and materials, to continued and effective use."[77] Chandrasakaran emphasizes many processes involved in contraceptive acceptance.[78] Balfour points to the need of recognizing various stages of acceptance between the initial interest and continued and effective use.[79] Bogue has highlighted the importance of subjective relevance of family planning idea and objective empirical evidence in relation to potential users as the crucial factors in acceptance decision-making. It seems, after one has known all that is necessary to know, one is faced with the problem to transfer and apply to one's own situation that which is true in general for others. According to Bogue, "Perhaps the best explanation for the apparent inconsistency between almost universal acceptance of birth control and, at the same time, widespread lethargy and negligence with regard to adoption and use is lack of awareness that this is something that applies to one's self personality..."[80] Similarly, Hill in his Puerto Rico study came to the conclusion that accuracy and adequacy in the processes of empathy and consensus within the family largely explain success or failure in family planning.[81] Rainwater largely supports Hill's findings

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[77]Marshall C. Balfour, "Comparative Acceptability of Different Methods of Contraception," in Research in Family Planning, ed. Kiser, pp. 383-384.

[78]Ibid., p. 384.

[79]Ibid., p. 386.

[80]Bogue and Heiskanen, op. cit., p. 20.

[81]Hill, Stycos, and Back, op. cit., p. 162.

in his U.S. study.[82] In brief, therefore, we come to the conclusion that, unlike agricultural studies, the acceptance stage is regarded as very important in family planning, and that processes and factors involved in acceptance decision-making are very crucial for promotion of family planning practices.

Decision-Making in This Study: The above short review of studies in agricultural and family planning fields with a focus on acceptance decision-making brings out the following two points:

(1) While the agricultural studies emphasize the description of activities of the stages of adoption, family planning studies lay relatively greater stress on the processes involved in fulfilling these.

(2) Acceptance decision which tends to be taken for granted, if previous stages are taken care of, in agricultural studies becomes most crucial for family studies.

In this study we have tried to reconcile the activity-process dilemma, first by accepting the well known five stages and then dividing them into two major blocks or stages of the decision-making process. In doing so, we have tried to synthesize: (a) Roger's interpretation of decision-making as a particular example of learning theory involving the two stages of: (1) incorporating first stimulus as meaningful followed by (2) repetition of interaction in a more and more improved way; (b) the distinction between innovation and improved practice as used by some agricultural

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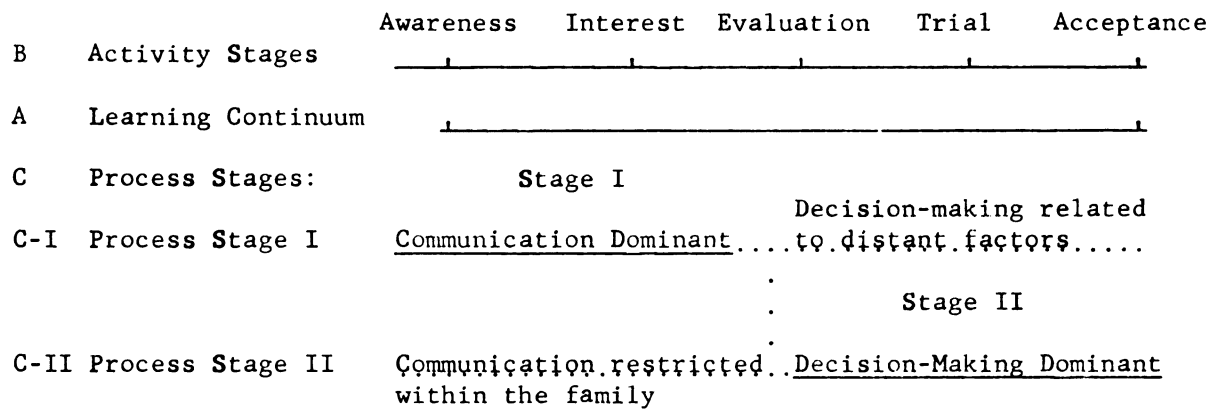
[82] Lee Rainwater, Family Design: Marital Sexuality, Family Size, and Contraception, pp. 15-17.

diffusion students and by Barnett;[83] (c) and the two stages of initial and continued acceptance as observed by demographers.

The following diagram illustrates these integrated concepts of decision-making along with the descriptive-function and process stages giving the differentiating and unifying characteristics.

FIGURE III



Characteristics of the two stages of decision-making:

Stage I	Stage II
1. More concerned with diffusion--from the source to potential users.[84]	1. More concerned with adoption decision during which one remaps the general situation in the light of specific situation.[85]
2. Diffusion takes place between persons.[86]	2. Acceptance is an individual family matter.[87]

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[83] H. G. Barnett, Innovation: The Basis of Cultural Change, pp. 7-10.

[84] Rogers, p. 13. Also see Bogue and Heiskanen, p. 8.

[85] Rogers, pp. 76-86. Also see Bogue and Heiskanen, p. 8.

[86] Rogers, pp. 13-14. Also see Bogue and Heiskanen, pp. 8-9.

[87] Rainwater, And the Poor Get Children, p. 20. Also see Hill, Stycos and Back, The Family and Population Control, p. 162.

Stage I	Stage II
3. Communication and its sources are important processes.[88]	3. Learning and proper role playing within the concerned units more important.[89]
4. Concerns with first knowledge and setting up of tentative generalized goals.[90]	4. Concerns with specific goal means relationships and continued decision making for efficient learning.[91]

Such a schema allows us to consider the personal, social, motivational and value variables of concerned acceptors in decision-making for family planning acceptance, while at the same time retaining the five stage concept. In doing so, besides adopting a helpful analytical scheme to the special needs of family planning, we are being suggestive of differences in emphasis between adoption stages in agriculture and in family planning. By relating the two decision-making stages to the learning continuum, we are simultaneously emphasizing the basic overall similarities between the two.

SURVEY DATA

Husband-Wife Role: For the purposes of this study we are treating the wife and husband as constituting a small group concerned with family planing. In any interaction group there are role relationships--both behavioral and attitudinal--among its members. When this relationship is such that the behavior of any one of the interacting persons or any combination of them affects the other in the same way with respect to goal attainment,

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[88] Rogers, pp. 16-17. Also see Bogue and Heiskanen, pp. 2-6.

[89] Rogers, pp. 76-78. Also see Bogue and Heiskanen, pp. 8-9.

[90] Bogue and Heiskanen, p. 7.

[91] Ibid., p. 8.

it is termed a cooperative role relationship.[92] In our survey an attempt is made to find out how far the cooperative role relationship in decision-making holds good in the case of IUD acceptors. First we will try to know how far both are involved in decision-making. This would be one indication of cooperative role relationship. However, this would not be enough because in spite of joint involvement, the final decision may lie with one who is traditionally vested with authority in the family group. Thus, joint involvement may merely be a facade and final decision-making authority may be unduly biased in favor of either one of the two members of this small group. In this survey we would, therefore, also try to find out whether the decision-making authority is evenly distributed between the wife and husband or favors either one of them.

A question was asked of each informant emphasizing as to who between the two made the final decision even when, in such a situation, usually both are involved. A typical answer was "both were involved," except in cases where the wife went ahead by herself, accepted the device, and informed the husband afterwards as to what she had done. In such a case, the response was: "My wife had it and informed me only afterwards." In the case of the typical answer, the respondents were told that even in situations where both are involved, somebody makes the final decision and the other accepts; they were asked, "Who was this 'somebody' in your case?" Responses to this question are analyzed in Table 20.

But this high degree of joint involvement may be either a mere courtesy to the other member or may be an attempt to impress the interviewer.

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[92] Theodore M. Newcomb, Ralph H. Turner and Philip E. Converse, Social Psychology: The Study of Human Interaction, pp. 351-352.

TABLE 20

Involvement of Either Both or One Member in Decision-Making

	No.	Percent
Both were involved in decision-making	169	92.8
Wife made the decision alone, had the device and informed husband afterwards	13	7.2
Total	182	100.0

As already explained, such responses were further probed, and Table 21 below indicates as to whom between the two had the final say in the matter. Table 21 indicates a remarkable absence of concentration of final decision-making authority in favor of any one member of the small family group.

TABLE 21

Final Decision Makers

Final Decision Maker	No.	Percent
Husband	75	44.4
Wife	84	49.8
Both	10	5.8
Total	169	100.0

Role of Friends and Neighbors: In the communication chapter, we found that friends and neighbors imparted confidence to the messages sent into the system by outside cosmopolite sources like mass media and the change agent. The outside news became the inside concern of enough importance

to get serious consideration from the individual members. In this sense, they acted predominantly as confidence creating communication media. According to Bogue, friends and neighbors also act as sources of legitimation in decision-making regarding acceptance of family planning. To ascertain this, a set of specific questions was put to the informants with reference to their actual decision-making and the possible contribution of friends and neighbors to it. Table 22 presents the responses to this set of questions. This table indicates that between the couple there is significant use of primary group sources at the time of decision-making.

TABLE 22

Consultation with Friends and Neighbors in Decision-Making

Consultation	Husband		Wife	
	No.	Percent	No.	Percent
Consulted friends	72	42.8	103	61.6
Did not consult friends	96	57.2	64	38.4
Consulted neighbors	15	8.9	94	56.3
Did not consult neighbors	153	91.1	73	43.7

Current Users and Decision-Making: It has been already indicated that the greatest need of the individual in decision-making is to have some objective empirical reference. According to Rainwater, anxiety is the major concern of couples at this stage.[93] Because the technique of IUD

[93] Balfour, op. cit., p. 376.

cannot be checked by sight, there is much uncertainty about its use. People would need strong reassurance which can best come from those who are already using it. This led us to investigate the role of current IUD users in decision-making of the new acceptors. We asked each of our respondents whether he or his wife consulted any user at the time of deciding to try IUD. Table 23 gives the distribution of responses received on this question. Approximately two-thirds of those who responded consulted an IUD user sometime during decision-making and such consultation was largely carried out by the wives.

TABLE 23

Consultation with Current IUD Users in Decision-Making

Consultation			No.	Percent
Somebody or both consulted user:			111	65.6
Wife consulted user	(87)	(78.3)		
Husband consulted user	(12)	(10.8)		
Both consulted user	(12)	(10.8)		
None talked to user			58	34.4
		Total	169	100.0

Another way to ascertain definite impace of users was to ask IUD acceptors in the study as to the number of persons they think they have influenced to accept IUD. To eliminate guess work, respondents were told to consider only such cases as they could name and about whom they think that it was because of their influence that they took IUD. In all 180 respondents replied to this question. Out of these, seventy persons (38.5%) claimed to have influenced 240 new IUD users. One hundred and ten persons

(51.2%) said they did not influence any. Taking the whole group into consideration, this gives an average of 1.3 new users for every user studied in this study.

Previous Family Planning Status: In this study previous family planning status--position of respondent on the acceptance continuum--is regarded as another important consideration influencing the acceptance decision. We have already delineated two stages--acceptance of the idea and continuous attempt to improve ends-means relationship--of acceptance.

In situations as represented by our colonies where family planning program was already in action even before the introduction of IUD, one would expect two types of groups. The first consisting of those who would be required to undergo both the stages, of accepting the idea of family planning, and adopting efficient means (IUD) to achieve it. The second group would consist of persons who have not only accepted the idea but have either tried or are trying some means to achieve it. In the case of the second group, IUD, being most compatible and least threatening to their basic idea structure, would be relatively easily accepted by them. For the first group, it would be a more difficult process in as much as they would be normally required to change their basic idea structure, formulate new goals, and adopt IUD as a means to achieve it.

Given the above considerations, one would normally expect that a large proportion of IUD acceptors in our survey would belong to the second group requiring change from a less efficient to a more efficient means. With this view, the survey included a set of questions relating to family size goals and family planning practice so as to ascertain those who simply accepted another improved practice and those who in accepting IUD

underwent both the stages of accepting the overall need and idea of family planning, and adopting an efficient means to accept it. Tables 24, 25 and 26 deal with the responses to this set of questions.

TABLE 24

Distribution of Acceptors According to Use of Other Methods Before IUD Acceptance

Use of Other Methods	No.	Percent
Have used or using other contraceptives before IUD	147	80.7
No other contraceptive used before	35	19.3
Total	182	100.0

TABLE 25

Distribution of Respondents According to Desire for More Children

Desire for Children	No.	Percent
Do not want any more children	147	82.2
Want more children	32	17.8
Total	179	100.0

The three tables together indicate that a significant majority of acceptors of IUD knew how many children they wanted, they have been active in using contraceptives to stay close to their goal, and finally they felt that in spite of their desire and action they have exceeded their desired family size by having unwanted children.

TABLE 26

Distribution of Acceptors According to Whether Last Child Was Wanted or Not

Desire for Youngest Living Child	No.	Percent
Last child not wanted by both	99	55.9
Last child wanted by both	46	25.9
Last child not wanted by one of the two	32	18.2
Total	177	100.0

DISCUSSION OF FINDINGS

For purposes of discussion and interpretation, and for relating our findings to other relevant research findings, we have divided this section into three major parts. The first part of findings deals with husband-wife role relationship. The second covers the role of primary group members and significant others--users. The last part deals with phases of decision-making as revealed by their present family planning status.

Husband-Wife Role Relationship: The first two tables deal with husband-wife role relationship. There is a wide range of relevant research findings bearing on this topic in family sociology, agricultural diffusion studies, and family planning. Here we would try to interpret and relate our findings to this body of research knowledge.

Family Sociology: There are two types of orientation to this problem in this field. (1) The first and the abundant source of information is the ethnographic data which emphasize the idealized sex-based role

relationship between wife and husband.[94] According to these studies the tasks of control management, decisions and appeals to God belong to the husbands on the principle that generally in most societies any role which is more honorific belongs to man.[95] (2) There are relatively few studies on actual role-relationship within the family as compared to idealized generalizations. This lack becomes even more obvious when one is concerned with the family in family planning. Rare exceptions to this trend are the studies of Hill[96] and Rainwater.[97] Both of these authors find the existence of cooperative role relationship as one of the important variables to explain failure or success of individual couples in family planning. Hill says, "The record on sociological facilitation is less encouraging. Puerto Rican couples are poorly equipped organizationally to undertake family planning. They lack the skills of communication between spouses necessary to turn concordance on goals and means into consensus so they cannot take effective action on their family size goal." Rainwater in his U.S. study came to a similar conclusion: "In terms of family planning goals, the number of children one has and the planning involved in having them, achieve meaning from the ways married adults conceive of themselves as members of a family of procreation, and the ways they regard their spouses as members. With respect to contraceptive

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[94]William N. Stephens, The Family in Cross-Cultural Perspectives, p. 288.

[95]William J. Goode, The Family, p. 70.

[96]Hill, Stycos and Back, The Family and Population Control: A Puerto Rican Experiment in Social Change.

[97]Rainwater, And the Poor Get Children and Family Design: Marital Sexuality, Family Size, and Contraception.

practices, the way in which contraception is executed from day to day will depend to a considerable extent on how the husband and wife relate to each other, on how they see themselves and their partners in marital relationship.[98]

Agricultural Diffusion Studies: The dominant trend in this field tends to treat man and farmer as synonymous. This may be because of the practical obviousness of the fact. As a result, the family, as a unit of decision-making for accepting agricultural innovation, has not been studied much. Male bias is predominant in this field. Exceptions to this trend are studies of Wilkening[99] and Straus.[100] According to Burchinal, Wilkening found that "husband-wife interaction in relation to decisions about farm operations is not a simple function of the status of either spouse or the complexity of the farming enterprise. Rather the joint decision-making patterns appear to be a function of the extent to which farm family and farm firm decisions are viewed as having a joing consequence... He [Wilkening] suggests that the roles played by husbands and wives in decision-making are determined more by their preceptions of farm and household needs than by culturally determined pattern of interaction."[101] Evidence for the husband-wife sharing of the executive role

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[98] Rainwater, And the Poor Get Children, p. 60.

[99] E. A. Wilkening, "Joint Decision-Making in Farm Families as a Function of Status and Role," American Sociological Review, 23 (1958), pp. 187-192.

[100] M. A. Straus, "The Role of Wife in the Settlement of the Columbia Basin Project," Marriage and Family Living, 20 (1958), pp. 59-64.

[101] Lee G. Burchinal, "The Rural Family of the Future," in Our Changing Rural Society, ed. James H. Copp, p. 171.

in farm families have also been reported by Beers[102] and Fitzsimmons.[103]

Family in Family Planning Studies: If farming and male go together, bearing of children and female seem inseparable. The historical development of the field best illustrates the above statement. As a result, there has been a female bias in this field at the cost of male or husband.[104] The male-female controversy gets further compounded in relation to male and female methods of family planning.[105] In 1960 Bogue and Stycos made a powerful attempt to rehabilitate males into family planning. While they succeeded in drawing some attention to males, they to some extent revived the controversy. The role of males has come to be questioned again because of IUD being a female method.

Bogue has observed, "A high percentage of couples who successfully plan their families are found to have discussed most of their problems with each other with respect to family planning; they appear to have discussed the matter, agreed upon a course of action and jointly set out to accomplish it."[106] Stycos argued that, "There are several a priori reasons for believing the husband to be less motivated for family planning

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[102] H. W. Beers, "A Portrait of the Farm Family in Central New York States," American Sociological Review, 2 (1937), pp. 591-600.

[103] C. Fitzsimmons and N. W. Perkins, "Patterns of Family Relationships in Fifty Farm Families," Rural Sociology, 12 (1947), pp. 300-303.

[104] J. Mayone Stycos, "A Critique of the Traditional Planned Parenthood Approach in Underdeveloped Areas," in Research in Family Planning, ed. Clyde V. Kiser, pp. 481-482.

[105] Ronald Freedman, "Family Planning Programs Today: Major Themes of the Conference," in Family Planning and Population Programs, ed. Berelson, et al., pp. 818-819.

[106] Donald J. Bogue, "Some Tentative Recommendations for a 'Sociologically Correct' Family Planning Communication and Motivation Program in India," in Research in Family Planning, ed. Kiser, p. 536.

than the wife... But there are equally plausible reasons for believing the male might be more motivated for family planning... At the very least, the disadvantages of the large family would seem to be as great for the males as for females."[107] Freedman regards, "A prima facie case for the interest of the father, too, in limiting fertility... If it is true that preindustrial couples do not discuss fertility control or family size, this may be because a long standing consensus on high fertility leaves little to discuss."[108]

This was the trend before IUD came into the picture. With the advent of IUD the balance of power has again been tipped in favor of females. In 1965, at the international conference Freedman observed, "The spectacular rise of a female method, the IUD, has eclipsed this line (at least equal importance to man) at least temporarily."[109] Once again the question of only male, only female, or both together has been laid open.

When we examine Table 20 we get a clear indication that in the case of this group of acceptors of IUD, it was definitely an involvement of both the wife and husband. As high as 92.8 percent of the respondents said that both were involved in reaching acceptance decision for IUD.

Our faith in this is further enhanced when we look at Table 22 which gives the responses of further probes as to who made the final decision, accepting the fact that both were involved. We find that in this group

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[107] Stycos, op. cit., pp. 490-491.

[108] Ronald Freedman, "Norms for Family Size in Underdeveloped Areas," in The Proceedings of the Royal Society, B. Vol. 159 (1963), pp. 225-226.

[109] Ronald Freedman, "Family Planning Programs Today: Major Themes of the Conference," in Family Planning and Population Programs, eds. Berelson, et al., p. 819.

of acceptors of IUD, both had almost equal chance of making a final decision. The fact that both the wife and husband are significant to an almost equal degree in final acceptance decision validates the existence of cooperative role relationship for acceptance of IUD. As already discussed, this finding is widely supported by studies in family sociology, agricultural diffusion, and family planning.

Role of Friends, Neighbors and Users: Tables 23 and 24 relate to this aspect of decision-making. Subjective reference and objective empirical evidence have been found to be two crucial factors in decision-making in agricultural[110] and family planning studies.[111] Several studies in community action have found legitimization as a crucial factor in decision-making.[112]

A close study of Table 22 reveals that for the couple as a whole friends and neighbors provide significant social support--variously referred to as legitimization or subjective reference--at the time of decision-making. We further note that between the two, wives have made more use of these sources than husbands. Husbands have made very little use of neighbors.

Table 23 deals with the problem of the need of objective empirical evidence at the time of decision-making. From the table, the significant

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[110] Bohlen, op. cit., pp. 268-269.

[111] Bogue and Heiskanen, op. cit., pp. 8-9.

[112] Christopher Sower, et al., Community Involvement, pp. 96-121. Also see Paul A. Miller, "A Comparative Analysis of the Decision-Making Process Within Community Organization Toward Major Health Goals," unpublished Ph.D. dissertation.

role of users in this regard is clear. Approximately two-thirds of the couples consulted some user at the time of decision-making. We also noted that on an average our respondents, till the time of interviewing, have influenced 1.3 persons in deciding to take IUD. This is more concrete and direct proof of the factor of objective reference in decision-making.

The significance of their role is further enhanced and a new dimension to it is added when we compare the findings of this table with Tables 14, 15 and 17 of the communication chapter. This comparison brings out clearly that while users are less frequently mentioned as communication sources, they become very significant and prominent at the time of decision-making. This means that once the information is received and evaluated as useful, the person searches out for what we have called objective empirical reference to remove anticipated anxiety or fear resulting from acceptance of IUD.

Stages of Decision-Making as Revealed by Family Planning Status: As already explained, we have divided the acceptance process into two stages of (1) diffusion and acceptance of the new idea including initial trial, and (2) continued attempts to correlate ends-means in more and more efficient ways.

Generally in agricultural diffusion studies any proposed change which involves both the stages is called "innovation" and the one which involves only the second stage is called "improved practice." Further, it is also suggested that change decisions are relatively very easy when only the second stage is involved, as it does not interfere much with the basic structure of ideas or values of the individual.[113]

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[113] Bohlen, op. cit., p. 272.

In the field of family planning the need for effective and continued use of contraceptives have led demographers to think of acceptance in two stages of "initial acceptance" and "continued acceptance." Bogue refers to the first stage as "implementation" and the second as "adoption and continued use." In the first, one overcomes "wrong ideas" (wrong notions) and accepts "new correct ones." In the second, the individual follows the new idea as a part of his life.[114] Stycos recognizes the need for "transitional stage" of contraceptive behavior."[115] Minoru Noda[116] and Freedman[117] delineate two stages of acceptance at the national level. Mathen in the Singur study uses the initial and later stages of acceptance.[118] Kantner regards conventional methods as a step to more sophisticated methods.[119] In brief, we find a wide reference to two stages of family planning acceptance.

In our data, Tables 24, 25 and 26 relate to positions of our respondents on acceptance continuum before accepting IUD. Table 25 shows that 82 percent of the acceptors perceived their situation as having reached

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[114]Bogue and Heiskanen, op. cit., pp. 8-9

[115]Stycos, op. cit., p. 500.

[116]Minoru Noda, "Contraception in Japan: Problems of Motivation and Communication," in Research in Family Planning, ed. Kiser, pp. 555-556.

[117]Ronald Freedman, "Next Step in Research on Problems of Motivation and Communication in Relation to Family Planning," in Research in Family Planning, ed. Kiser, pp. 599-601.

[118]K. K. Mathen, "Preliminary Lessons Learned from the Rural Population Control Study of Singur," in Research in Family Planning, ed. Kiser, p. 42.

[119]John F. Kantner, "The Place of Conventional Methods in Family Planning Programs," in Family Planning and Population Programs, eds. Berelson, et al., p. 407.

the desired family size. They had definite family size goals and knew that they had reached a point where the size of the family appeared as a problem to them. As they put it, "We don't want any more children."

Table 24 goes a step further and relates that they not only defined the problem as meaningful but took the further step by trying some other method. About eighty percent of the acceptors tried a different contraceptive method before accepting IUD. However, in the case of a majority of respondents, it was a failure. According to Table 26, about 55 percent of the respondents said that their last living child was not wanted to either of them.

In brief, we conclude that in terms of our two stages of acceptance, we find that a large majority was already past the first stage of accepting a new idea and defining family planning as a meaningful goal. So when IUD was promoted as a most effective way of planning a family, acceptance of it in their case was merely switching over from a proven, less efficient method to some expected, highly effective method to bring about a more efficient correlation between their desired goals and available means. They had no problem of changing their basic idea structure. This is best illustrated by Table 24. It shows very clearly that among our respondents 80.7 percent had tried or were using some other method before accepting IUD. A similar high percentage of switching over from other methods to IUD has been reported by Agarwala[120] in India and by Takeshita[121]

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[120] See Family Planning News, Vol. 7, No. 4 (April, 1966), p. 20.

[121] John Y. Takeshita, "Lessons Learned from Family Planning Studies in Taiwan and Korea," in Family Planning and Population Programs, eds. Berelson, et al., p. 706.

in Taiwan and Korea. While these authors have only noted this trend, we have tried to provide a partial explanation with the help of the concept of decision-making.

As a caution it may be pointed out that the two stages, as conceptualized here, are not inevitable as is clear from Table 24. About 20 percent of the respondents were those who perceived the two stages as one. It seems that these people, either because of their superior ability or because of the extraordinary efforts of change agents or because of the heavy pressure of personal and social situation, were in a position to compress the two stages into one. However, because one cannot expect the first quality of ability to be universal and because it is dangerous to wait for the third situation to arise till everybody reaches a breaking point, we may conclude that with the passage of time as users of other methods adopt IUD, more and more imaginative promotional attempts will be required to get new converts to family planning through IUD. One suggestion on the basis of our analysis is that if a country gives importance and fixes higher target of IUD, let it also fix equally a higher target and importance for less sophisticated conventional methods. Kantner and Freedman have very correctly observed the need to view conventional less sophisticated practices as a step to more sophisticated methods. Another suggestion based on the 20 percent of new converts is that the attempt should be made to compress the two stages into one by promotion agencies. This can be done by combining both the "idea" and "technique" together in educational efforts of the change agents, so that a good and sure technique of IUD sells the idea of family planning and the advantages of the idea of family planning promotes a good technique of IUD. In other

words, the fact of getting 20 percent new converts through IUD should not be underestimated. On the other hand, this unique potential of IUD should be expanded and fully exploited by imagainative promotional efforts.

SUMMARY

This chapter brings into focus certain points in relation to decision-making at the family level.

Main Findings:

(1) The couples under study largely exhibited significant degrees of cooperative role relationship in deciding about the acceptance of IUD.

(2) Taking the couples as a whole, social influence of friends and neighbors was in evidence and it was achieved more often through the wife than the husband.

(3) The influence of current IUD user was much prominent at the decision-making stage through providing objective empirical evidence. Their role in taking the initiative in making people aware of IUD was relatively insignificant.

(4) Most of the couples clearly perceived their family size as a problem which needed their attention.

(5) Most of these people tried or were trying to restrict family size through contraceptives. Therefore, for most of them IUD acceptance involved only changing from a less efficient method to a more efficient method.

(6) In spite of their efforts about 50 percent of them had experienced unwanted pregnancy.

In general, we would say the IUD acceptors in this study had a clear perception of their family size goal, they were serious about it, and had experienced frustration in achieving their goal. This finding is fully supported by Freedman's finding in Taiwan. According to Takeshita in Taiwan, "The program has had a special appeal to couples who already feel they have a problem of family limitation and who have made unsatisfactory attempts to do something about it."[122]

(7) We found support for a "normal" acceptance process as consisting of two stages. However, the significance of 20 percent of our respondents who could reduce this into a one act decision was noted.

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[122] Ibid., p. 700.

CHAPTER VI

MODERNITY IN CONSUMPTION AND COMMUNICATION BEHAVIOR AND VALUE ORIENTATION

In the chapter on decision-making we had an overview of the behavioral aspects of family planning and family limitation activities of IUD acceptors. We now turn to an examination of some of the background factors of their behavior. An attempt is made to understand the general value orientation to life of IUD acceptors. What kind of people are these? How do they live their lives? What is their world view--something predestined or a place to make efforts and manipulate it? Are they progressive in their ideology and outlook or adhere to tradition? What aspirations do they have for their children? These and other similar questions will concern us in this chapter.

In doing so we have tried to follow Blake and Davis' framework for values and norms in human fertility research. According to them, "... the normative aspect of human society and human behavior is broad in coverage but conceptually distinct. It embraces, for example, the notion of 'values,' which are the goals or principles in terms of which specific norms are claimed to be desirable."[123] In other words, for them values are generalized goals in terms of which specific norms of behavior are

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[123]Judith Blake and Kingsley Davis, "Norms, Values, and Sanctions," in Handbook of Modern Sociology, ed. Robert E. L. Faris, p. 456.

claimed to be desirable. But they do not see the two to be causally related. In this connection they observe, "Presumably a norm 'exemplifies' a value, but this does not mean that the norm is caused by the value it exemplifies, or..."[124] A more satisfactory use of 'values' in sociological analysis is to abandon them as causal agents and to recognize them frankly as sheer constructs by which we attempt to fill in subjective linkages in the analysis of social causation."[125] Thus an analysis of both the norms and values gives a more comprehensive understanding of the process and the related action. In brief, then, according to this schema the last chapter on decision-making relates to (behavioral) norms and what we propose to do in this chapter is to consider values as explanatory aids to the already considered (behavioral) norms of IUD acceptors.

Value orientation to life can be thought of in two ways--orientation to present or the future way of life. Either of the two could result in family planning action. For example, one can take to family planning to protect his present life style, or alternatively, one may use it as a means to achieve his future hopes and aspirations. Generally, in family planning action, both value orientations are involved.

In this survey we have attempted to get to both the present and future value orientations of IUD acceptors in a "limited" way. We have attempted to get to some ideas of their present way of life on three crucial variables. One deals with the acceptor's position on the communication network as determined by the use of four types of written

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[124] Ibid., p. 460.

[125] Ibid., p. 461.

communications.[126] This would give us some idea of their relatedness with the outside world. The other deals with their personal aspect of life, that is, their level of living as indicated by the use of eight consumption articles.[127] The third deals with their religious orientation as revealed by their present commitment to this activity in terms of time spent on it.[128]

So far as their orientation to the future is concerned we have tried to ascertain if they have faith in the future and regard it as something which can be manipulated, as against predestined by some power outside the individual's control. This is revealed by responses indicating the relative importance given to luck or effort in their lives.[129] Secondly, we have tried to measure their future aspirations in terms of education

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[126] For seeking information on this, the following question was asked of each respondent:

Do you read	never	sometimes	regularly
a. daily newspaper	___	___	___
b. weekly magazine	___	___	___
c. monthly magazine	___	___	___
d. other books	___	___	___

[127] For seeking information on this, the following question was asked of each respondent:

Do you own

(a) radio
(b) sewing machine
(c) tea and/or dinner set
(d) wrist watch
(e) name plate
(f) sofa and/or dining table
(g) carpet
(h) dressing table

[128] For seeking information on this, each respondent was asked the following question:

Do you spend some time on any religious activity (Puja Path) regularly?

[129] For seeking information on this, each respondent was asked the following question:

In your life till now which has played a greater role--your efforts or your luck?

of one of their children.[130] Some studies have treated level of aspirations for children as indicative of economic aspirations. Lastly, we have attempted to know whether they have a modern progressive ideology or are guided by tradition and custom in their lives.[131]

Thus, in brief, through a series of questions the respondents were queried about their life situation, their general outlook on life, their educational aspirations for children and their willingness to manipulate change, with a view to explore their present social milieu and their future orientation to life. One of the main limitations of analysis in this chapter is the fact that we do not have information about non-users to highlight the differences. However, in Appendix 1 an attempt is made to compare how the variables of this chapter and those discussed in previous chapters affect early or late use of IUD.

SURVEY DATA

A. Communications and Consumption Behavior:

Several studies in diffusion of agricultural practices[132] and family planning[133] have found communication behavior to be indicative of

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[130] For seeking information on this, each respondent was asked the following question:

How far in school do you want your daughter to go?

[131] For seeking information on this, each respondent was asked the following question:

If your daughter-in-law with the consent of your son takes up to some part-time or full-time job would you approve or disapprove her taking up the job?

[132] James P. Bebermeyer and Everett M. Rogers, "Mass Media and Interpersonal Communication in National Development: AID Diffusion Project," (unpublished), January, 1966, pp. 14-21.

[133] Donald J. Bogue and Veronica Stolte Heiskanen, How to Improve Written Communication for Birth Control, pp. 1-20.

acceptance of change. The concept of opinion leader further emphasizes its curcial role. In this survey each respondent was asked if he reads daily newspapers, weekly or monthly magazines, or books. Table 27 gives the communication scores ranging from 0-8 of the respondents. The average score for the group comes to 4.2.

TABLE 27

Communication Scores of IUD Acceptors*

Score		No.	Percent
No. communications used -	0	4	2.3
	1	4	2.3
	2	25	13.8
	3	13	7.2
	4	36	20.0
	5	35	19.5
	6	22	12.2
	7	14	7.7
High use of communication	8	27	15.0
	Total	180	99.8

*The responses were recorded into three categories of "never," "sometime," and "regularly." The three categories were coded 0, 1 and 2 respectively. On this basis the communication scores ranged from 0 to 8.

Table 28 gives the distribution of respondents into three categories of very low, very high and medium in communication. This table shows exceptionally large difference between the first two categories of "almost no communication" and "some communication." This suggests that so far as this group is concerned "some communication" goes a long way, the difference between those with "no communication" and those with some communication being close to 67 percentage points. Hill found a similar trend

in the case of education and concluded that a little education goes a long way in family planning.[134]

TABLE 28

High, Medium and Low on Communication*

Categories	No.	Percent
Almost no communication	8	4.5
Some communication	131	72.7
Exceptionally high communication	41	22.8
Total	180	100.0

*Scores 0-1 = almost no communication; 2-6 = some communication; and 7-8 = exceptionally high communication.

Table 29 below divides the respondents into two categories of high and low on communication. On the basis of scores in Table 27 we get an average score of 4.2. Rounding this at score four we divide the group into two. Those who scores less than four are termed "low" and those who scored four or more than four are termed "high" on this variable.

Roughly about three-fourths of the acceptors are high in location on the communication network. This may suggest a strong relationship trend between existing level of communication and acceptance of family planning (IUD) in the case of this group of early acceptors. This is strongly supported by the studies in the fields of agricultural[135] and family

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[134]Reuben Hill, J. Mayone Stycos and Kurt W. Back, The Family and Population Control, p. 124.

[135]M. C. Wilson and Gladys Gallup, Extension Teaching Methods and Other Factors that Influence Adoption of Agricultural and Home Economics Practices, p. 20.

planning[136] where one of the consistent findings is that exposure to a variety of information sources and media is usually needed before an innovation is adopted.

TABLE 29

High and Low Around Group Average on Communication Network

Categories	No.	Percent
High on written communication	134	74.4
Low on written communication	46	25.6
Total	180	100.0

CONSUMPTION PATTERN

Modern Consumer Items: Use of such items have been found to be generally associated with acceptance of family planning practices. This factor has been credited for providing a part of the motivation for developing the small family size norm in the Western world,[137] and in Japan.[138] Recently, Freedman[139] in his Taiwan study found this to be associated with family

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[136]Bernard Berelson and Ronald Freedman, "A Study in Fertility Control," Scientific American (May, 1964), p. 10. Also see Bogue and Heiskanen, op. cit., p. 6.

[137]Frederick Osborn, Three Essays on Population: Thomas Malthus, Julian Huxley, Frederick Osborn, p. 97.

[138]Minoru Noda, "Contraception in Japan: Problems of Motivation and Communication," in Research in Family Planning, ed. Clyde V. Kiser, p. 551.

[139]Ronald Freedman, John Y. Takeshita, and T. H. Sun, "Fertility and Family Planning in Taiwan: A Case Study of the Demographic Transition," American Journal of Sociology, 70 (July, 1964), pp. 16-23.

planning acceptance. The proverbial race between a baby or a car seems to be universal. Thomlinson has observed, "A desire for more and better material possessions and comfort enhancing conveniences is nearly universal."[140] Family planning could be a very important factor in influencing the outcome of this race.

This survey attempted to know something about this factor for our IUD acceptors in Delhi. Each one of them was asked how many items he owned out of a given list of eight articles of consumption. The respondents were given a score corresponding to the total number of articles owned. Table 30 below gives the distribution of acceptors according to the number of articles owned.

TABLE 30

Use of Modern Consumer Articles*

Score	No.	Percent
0 - (No modern items owned)	9	5.1
1	17	9.4
2	22	12.4
3	23	12.7
4	39	21.6
5	25	13.9
6	28	15.5
7	14	7.7
8 - (All items owned)	3	1.7
Total	180	100.0

*Articles considered were: radio, sewing machine, tea and/or dinner set, wrist watch, name plate, sofa and/or dining table, carpet and dressing table.

[140]Ralph Thomlinson, Population Dynamics, p. 330.

Table 31 below divides the group into "high" and "low" around the rounded group average score of four. All those who scored the group average or more than that are classified as high and others are classified as low.

TABLE 31

High and Low on Modern Consumer Items
Around Group Average

Category	No.	Percent
High* on level of consumption	110	60.5
Low on level of consumption	70	39.5
Total	180	100.0

*Persons scoring equal to group average (4) or higher are classified as high. Others have been treated as low.

Two broad trends become apparent in the above table:

1. Majority of IUD acceptors score either equal or higher than the group average.
2. However, the strength of the above relationship is sufficiently weakened by the fact that about as high as 40 percent of the acceptors scored less than the group average on this variable indicating that at least in their case the low score on level of living as indicated by certain items of consumption was not a very powerful barrier in the acceptance of family planning (IUD).

B. Value Orientations

Religious Beliefs of Acceptors: Fertility is the result of biological facts and complex social and cultural forces that may encourage child bearing or discourage or limit it. The institution of religion in all societies provides for both the encouragement and check of the fertility phenomenon. However, it seldom affects fertility directly. "The major influence on religion on reproductive behavior often lies outside the strict theological field. It lies in the changes of ways of life which the religions tend to impede--for example, the rising status of women, aspirations for social mobility, the values attaching to secular evaluation and the like."[141] In other words, the effects of religion over fertility are generally unconscious. People have other immediate ends in mind and yet their resulting behavior affects fertility.

Therefore the variable of religion has been of particular interest to studies in demography. Conflicting findings have been reported as to the role of religion in family planning. According to some studies in U.S.A., "religion has proved to be the social attribute of greatest single importance... Religious preference is a factor not only in the choice of methods but also in the effectiveness of contraceptive practice as well. Jews begin contraception earlier, use more effective methods, have the largest birth intervals and report the fewest unplanned pregnancies. Catholics are at the opposite end of this pattern and Protestants are

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[141]Frank W. Notestein, Dudley Kirk, and Sheldon Segal, "The Problem of Population Control," in The Population Dilemma, ed. Philip M. Hauser, p. 132.

intermediate."[142] On the other hand, Hill found Catholicism to be of little significance in accounting for the high fertility pattern in Puerto Rico, a Catholic state.[143] In the West Indies the Roman Catholics were found to take advantage of family planning services as much as any other religious group.[144] Religious differences are also found to be of little significance for fertility differences in present day Europe.[145]

In the case of India, a powerful indirect influence of religion through various customs and beliefs has been noted in several studies.[146] The importance of having a son and early and universal marriage are some often quoted factors.[147] This has led some to believe that in the case of Hinduism the emphasis upon the religious duty of producing and raising children will not encourage population control except by continence.[148] While others on the basis of several recent KAP (knowledge, attitude, and practice) surveys have come to the conclusion that caste and religion are not directly related to knowledge and practice of family planning.[149]

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[142]Charles F. Westoff, "The 'Family Growth in Metropolitan America': A Progress Report," in Research in Family Planning, ed. Kiser, pp. 187-188.

[143]Reuben Hill, J. Mayone Stycos, and Kurt W. Back, The Family and Population Control, p. 131.

[144]George W. Cadbury, "Outlook for Government Action in Family Planning in the West Indies," in Research in Family Planning, ed. Kiser, p. 330.

[145]Osborn, op. cit., p. 112.

[146]S. N. Agarwala, "Evaluating the Effectiveness of a Family Planning Program," in Research in Family Planning, ed. Kiser, pp. 414-415. Also see, K. K. Mathen, "Preliminary Lessons Learned from the Rural Population Control Study of Singur," in Research in Family Planning, ed. Kiser, pp. 38-39.

[147]William J. Goode, World Revolution and Family Patterns, pp. 215-216.

[148]Osborn, op. cit., p. 108.

[149]B. L. Raina, Family Planning Program: Report for 1962-63, p. 12.

Dandekar observes that as far as religion in family planning is concerned, the "two major findings of this series of studies carried over a period of five years and in number of urban and rural centers spread over several districts were as follows: Firstly, the population did not suffer from any religious dogma opposed to family planning..."[150]

In this survey an attempt was made to find the relationship of IUD acceptance to the degree of religious commitment of the acceptors as revealed by their regularity in performing daily prayers--Puja Path--something comparable to Rosary of Catholics. Each respondent was asked whether he devotes some time every day to this ritual. Those who did so regularly as a part of daily life routine have been treated as "high" on religiousness and others have been rated as "low" on this variable. In Table 32 the first group is shown as having high orientation to religion, and the other is treated as having low orientation to it.

TABLE 32

Religious Orientation of IUD Acceptors

Category of Religious Orientation	No.	Percent
High orientation to religion	97	53.3
Low orientation to religion	85	46.7
Total	182	100.0

This table shows that nearly as many high-religion-ritual oriented people accepted IUD as those having low orientation, thus suggesting some

[150]Kumudini Dandekar, "Family Planning Studies Conducted by the Gokhale Institute of Politics and Economics, Poona," in Research in Family Planning, ed. Kiser, p. 8.

sort of equal role of religion so far as family planning (IUD) acceptance or non acceptance is concerned.

This finding is interesting when considered with the finding of several attitude surveys which repeatedly found lack of any significant negative influence of religion in adoption of family planning in India. Bogue has observed, "in Hindu religion there seems to be few overpoweringly strong religious or moral taboos against the practice of family planning--or at least few members of the population voice objections on religious grounds when they discuss it."[151] However, the trend shown by the table should not be interpreted as religion providing a positive norm for the small family. What seems to happen is that the people generally do not face the problem of family planning with a vivid consciousness of its relationship to religious teaching and values, except perhaps the intellectually alert religious persons, or persons of very sound material means. The laity seems to be guided by the immediate situation that confronts them.[152]

Personal Control or Effort vs. Fate Orientation: Family planning implies belief in future and confidence in one's ability to manipulate it. It means that one looks ahead, orients himself toward future and commits himself to some action.[153] Fatalistic families were found to fare less well

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[151] Donald J. Bogue, "Some Tentative Recommendations for A 'Sociologically Correct' Family Planning Communication and Motivation Program in India," in Research in Family Planning, ed. Kiser, p. 503.

[152] Osborn, op. cit., pp. 105-106.

[153] Lee Rainwater, And the Poor Get Children, p. 50.

in dealing with the problem of family size in Puerto Rico.[154] According to Lorimer, where hope is weak, contraception will be absent or ineffective.[155]

The general attitude to life, in developing countries has been characterized as that of fatalism, resignation or hopelessness. People are unaccustomed to the idea of manipulating the future to suit their ends.[156] The Indian belief in "Nirvana"--the ideal of extinguishing the self--and non-materialistic orientation to life have been cited as examples illustrating this point. While these are very general observations very few studies in this field have found this to be a crucial barrier to family planning. Mathen has observed that, "One of the chief barriers in a successful family planning campaign in a rural population is the fatalistic attitude of the people towards the subject of family size. There are people who believe that just as the time of death is predestined the occurrence of birth or conception is also a matter beyond the control of man."[157]

But how powerful is the ideology of fate in the actual day-to-day life of the Indian masses and to what extent are they today ascetic or materialistic in their way of life needs to be further investigated.[158] More recent accounts of developing countries including India, point to

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[154]Hill, Stycos, and Back, op. cit., p. 225.

[155]Frank Lorimer, "Issues of Population Policy," in The Population Dilemma, ed. Philip M. Hauser, p. 149.

[156]Hill, Stycos, and Back, op. cit., pp. 144-145.

[157]Mathen, op. cit., p. 38.

[158]Goode, op. cit., pp. 203-214.

the presence of a "revolution of rising expectations." Hauser[159] mentions this and Taeuber[160] calls this developing of rising aspirations as the greatest social and political process of our time. This may partly explain the desire of 70 percent of the Indian adult population to be highly concerned about the number of living children and their desire to have limited number of children.[161] The Indian Institute of Public Opinion found 74.5 percent in urban areas and 65.9 percent in rural areas reported dissatisfaction with their present income.[162]

An attempt was made in this survey to identify the general orientation to life of the acceptors in terms of their evaluation of the role of "fate" as against "efforts" in their lives. Each respondent was asked which of the two has played a greater role in shaping his life. Those who credited efforts more than fate have been ranked high on effort continuum and those who saw their position more as a work of fate and less a result of efforts have been classified as low on this variable.

It appears that most of the respondents were effort-oriented to life implying a belief in the future and the possibility of manipulating it to meet their ends. Our findings are supported by Rainwater's studies in the U.S.A. and Hill's study in Puerto Rico. Both of them found this to

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[159]Philip M. Hauser, "Introduction and Overview," op. cit., p. 3.

[160]Irene B. Taeuber, "Population Growth in Underdeveloped Areas," in The Population Dilemma, ed. Hauser, p. 30.

[161]Baljit Singh, "Family Planning Work in Ultar Pradesh," in (Proceedings of) Second All India Conference on Family Planning, p. 60. Also see Raina, p. 12.

[162]The Indian Institute of Public Opinion, "Family Planning," Monthly Public Opinion Surveys, IX (March, April, 1964), p. 36.

be a characteristic of successful family planners. Indian Institute of Public Opinion reported that 52.8 percent of the people in urban areas thought it a good idea to plan for the future.[163]

TABLE 33

Effort vs. Fate Orientation of IUD

Category	No.	Percent
Believes in effort	131	77.9
Believes in fate	37	22.1
Total	168	100.0

Aspirations for Education of Children: While the desire to have children to continue the family name initiates fertility, parents' aspirations for a better life of their living children tends to inhibit unlimited number of them.[164] This desire for a better life for children is credited to be one of the main reasons of the long decline in American fertility during the nineteenth century and the early part of the twentieth century.[165] Therefore, "closely allied to an orientation toward life as something one can or cannot manipulate are the aspirations held for self and children."[166]

However, the negative influence of living children on those yet to be born depends on the changing concept of better life and differs from

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[163] Ibid., p. 36.

[164] Taeuber, op. cit., p. 30.

[165] Wilson H. Grabill, Clyde V. Kiser, and Pascal K. Whelpton, The Fertility of American Women, p. 3.

[166] Hill, Stycos, and Back, p. 55. Also see Minoru Noda, pp. 562-563.

culture to culture and between different groups within the same culture. In societies such as India where change is relatively slow and difficult self aspirations tend to be projected and realized through children.[167] Also, because of the expected old age dependency of parents on children, a part of their self-interest gets tied to the better life chances of children. Under the circumstances the children seem to have great economic value in addition to spiritual and emotional values for the parents. No wonder therefore that the parents show so much concern about having children, marrying and educating them, and extend their responsibility to providing them a good start in life. Under conditions of serious competition in society, opportunities in life tend to be determined by one's educational achievements which thus becomes a crucial factor.

We in this survey attempted to ascertain parents' aspirations for the education of children by asking each respondent how far in the school he would like his daughter to go. The question is asked in terms of the daughter rather than the son on the basis of pretest to get variation of responses. The responses were recorded according to the six well recognized stages in the education system--no education, primary, middle, high school, B.A. and M.A. The first three stages have been grouped as indicating low educational aspirations, and the last three showing high educational aspirations for children.

Table 34 gives the distribution of responses in these two categories along with the sub-categories. The table shows that the "family planners"

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[167] Bogue, "Some Tentative Recommendations for a 'Sociologically Current'...," op. cit., p. 526.

in our housing colonies have exceptionally high educational aspirations for their children. One could hypothesize a strong and direct relationship between aspirations for children and acceptance of family planning.

TABLE 34

Educational Aspirations

Category	No.	Percent
Low Educational Aspirations Illiterate (0) Primary (0) Middle (6)	6	3.5
High Educational Aspirations High School (77) B.A. (64) M.A. (28)	169	96.5
Total	175	100.0

Bogue has very rightly observed that, "One of the most powerful motives to which Indian couples will respond is the welfare of their children. This should be dominant theme rather than hedonistic appeals to greater personal comforts and a higher level of living."[168] The argument is put forth that under the present situation when there is a strong tendency to put the child before the self, it would be easier to arouse hope for one's children in the midst of despair and people would be willing to hope for better things for their children as the second best longer-run objective. Similarly Westoff found the emphasis on children's education

[168] Ibid., p. 526.

as a highly important factor in explaining Jewish greater success in family planning as compared to Catholics and Protestants in America.[169] Osborn has gone a step further and referred to this trend as a general rule holding good in most of the situations.[170]

Ideological Orientation--Modern vs. Traditional: Modern ideological orientation means acceptance of new, rational and progressive ideas governing the conduct of behavior. As opposed to this, traditional ideology implies respect for tradition and the status-quo. A general finding which is overwhelmingly supported in agricultural diffusion studies is that innovativeness of individuals is related to modern rather than traditional ideological orientation.[171] In the case of family planning this association has been found to be true for western countries.[172] This has also been found to be true in the case of eastern countries. In Japan it was found that the desire for more and more modern goods was a very important factor in man's acceptance of family planning.[173] Similarly in Taiwan modern orientation to life was found to be associated with the small family size norm.[174]

This has led some to suggest modernization and its accompanying ideology as a prerequisite to solving of the population problems of developing

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[170] Osborn, op. cit., p. 93.

[171] Everett M. Rogers, Diffusion of Innovations, pp. 66-67.

[172] Ronald Freedman, "Norms for Family Size in Underdeveloped Areas," in The Proceedings of the Royal Society, B, Vol. 159 (1963), pp. 220-234.

[173] Minoru Noda, op. cit., pp. 551-562.

[174] Freedman, Takeshita, and Sun, "Fertility and Family Planning in Taiwan...," op. cit., pp. 16-27.

societies. But the recent experience in the spread of family planning program of several developing countries indicate that to a fair extent educational extension approach could perhaps make good for the lack of missing modern ideological orientation to life of the people.[175]

With a view to find out the role of modern vs. traditional ideological orientation the survey picked up the crucial institution of the family and the role of women outside the home. It is socially crucial in the sense that it brings face-to-face in a most forceful way, the forces of the old and the new in ideology. It is also equally relevant for the problem of fertility control because of its intimate relationship with the status of women. The specific question which concerned us was the housewife seeking a career outside the home. Each of the respondents was asked the following question: "If your daughter-in-law with the consent of your son takes up to some part-time or full-time job, subject to your final approval, would you approve or disapprove her taking up the job." Those who replied yes have been rated high on modern-rational ideology and those who disapproved have been rated low on this variable.

TABLE 35

Modern vs. Traditional Ideological Orientation

Categories	No.	Percent
Approve of daughter-in-law taking job	103	61.6
Disapprove of daughter-in-law taking job	64	38.4
Total	167	100.0

[175]Bernard Berelson, "KAP Studies on Fertility," in Family Planning and Population Programs, eds. Bernard Berelson, et al., p. 664.

Table 35 above indicates a relationship in acceptance of family planning (IUD) and modern ideological orientation to life so far as this group is concerned. However, the strength of this relationship is sufficiently weakened by the fact that for 40 percent of our cases it was possible to accept IUD in spite of their being not so (modern) oriented.

The general trend as indicated by Table 35 is supported by studies in Korea and Taiwan where they found a trend of getting more and more less modernized IUD acceptor as a result of deliberate programmatic efforts and the passing of time. As a matter of fact, some have argued that because of the advantages of IUD it tends to be acceptible by even those who are more traditional in several ways.[176]

SUMMARY

With a view to summarize the main trend findings of this chapter, an attempt is made in Table 36 below to give the percent of respondents scoring high in each of the variables considered in this chapter. The following broad pattern emerges from Table 36.

The majority of acceptors score high on all the variables. This suggests the general importance of the considered variables in the acceptance of family planning (IUD) so far as this group is considered.

The strongest favorable influence is exerted by aspirations for the education of children, followed by faith in the capacity to manipulate the future and the position of the acceptor on the communication network. The national program should take note of this and manipulate them as powerful motives for acceptance of family planning.

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[176]John Y. Takeshita, "Lessons Learned from Family Planning Studies in Taiwan and Korea," op. cit., pp. 691-710.

TABLE 36

Rank Order of Variables According to Percent Scoring High

Variables	No. of Responses	Percent High
Aspirations for children education	175	96.5
Belief in efforts as against fate	168	77.9
Position on communication network	180	74.4
Modern vs. traditional ideological orientation	179	61.6
Level of living	180	60.5
Religiousness	182	53.2

Religiousness seems to have a sort of uncertain influence. The level of living and the need for modern ideological orientation to life, although important, does not seem to be unsurmountable in acceptance to family planning (IUD).

This conclusion is supported by findings in Korea and Taiwan, where the poor and illiterate tend to accept IUD almost as frequently as the modern and well-off people. In Korea as high as 40 percent of acceptors are illiterate. Takeshita has summarized the trend in Korea and Taiwan as follows: "While practice of contraception before the program (IUD) was definitely more frequently reported among the better educated, the higher income and the more modern groups, acceptance in the program was likely among the less educated, the lower income and the less modern group as among the former."[177] Our findings support the trend as observed above.

[177] Ibid., p. 702.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Overview: Family planning programs have won wide intellectual acceptance in India. As a result, several far-reaching policy decisions such as initiating a national program of family planning, making funds available on demand basis, and creating a nation-wide organization to provide free and easy availability of many kinds of contraceptives and related services to every person in the country, have been taken within a relatively short period of time.

While all these are essential first steps, equally crucial is the acceptance of these measures at the behavioral level by the millions of couples called the target group in this study. This leads into a variety of important social science problems. The behavior of this target group as a response to national policy was made the main focus of this study. Of particular interest to this study was the positive response termed acceptance of one of the new contraceptive devices popularly known as IUD.

Acceptance was studied to unveil and better understand the dynamic processes leading to changed behavior through acceptance of this innovation. The main objective was the recognition of the fact that action programs would greatly benefit by such an analysis of the process. If the acceptance process is to be accelerated to ward off future crisis, the need for systematically studying, analyzing and understanding the innovation

acceptance behavior of the people in this most personal, sensitive and vital area of their lives, becomes obvious.

This particular emphasis on the analysis of the acceptance process makes this study different from usual demographic surveys which have great use in providing information for policy decisions, but usually lack in focusing on information necessary for improving action and accelerating acceptance of family planning. Secondly, this emphasis implies a micro-cosmic view of the problem of population growth as opposed to macrocosmic view with which demographic surveys are concerned. Hence, all through this study the unit of concern has been the family, with the wife and the husband as main actors exhibiting positive contraceptive behavior, both between themselves and the immediate society. Lastly, this study departs from general demographic surveys in its methodological orientation. The deficiencies of demographic approach in failing to explain the differential fertility behavior has been noted amongst others, by Hauser, Hill, Rainwater, and Bogue. Each one of these authors indicate that the subject of family planning is more appropriately amenable to sociology and recommend the need to explore it by family sociologists, social-psychologists and diffusionists, for possible new understanding of fertility behavior to complement the already available demographic information and understanding of the phenomenon of population growth.

According to Rainwater, the demographic orientation has tended to encourage overly ambitious standards of certainty in the family planning studies and therefore he highlights the need for cracking the overly quantitative mold into which such studies seem to have cast our conceptualization of the process by which families regulate size.

Keeping in view the above viewpoint, this study used the opportunity provided by the research in understanding the process of family planning acceptance within the diffusion framework used in studies of acceptance of innovation in agricultural and health practices.

The diffusion approach emphasizes variables of communication, decision-making, situational context of change, and characteristics of innovations and the men involved in the process of change. Some of these variables, therefore, were of considerable interest to us in this study. In order to better appreciate the significance of these variables, a conceptual model of acceptance of family planning practice was developed based upon the two models of Hill's and Meier's. Based upon this conceptualization, a semi-structured schedule was developed which was used as the main tool for information collection on the variables of interest to this study from the users of IUD in three government colonies of New Delhi.

These three colonies were among the first ones where the program of IUD was started in the country. As there were limited numbers of IUD acceptors in the three colonies, the study involves all those who were using IUD. There were 263 users. Out of these, eighty-one could not be interviewed because of various reasons. This study therefore limits to 182 cases of users.

Most of these families belonged to educated modern group of the working and middle classes. All of them belonged to the service class and were working in government offices. On the average they had lived twelve years of married life, and they had an average of 3.2 living children. The modal age groups for acceptance of the device were 25-29 and 30-34 years for women and men, respectively. In terms of some key

demographic variables our group was found to be comparable to a relatively much larger study consisting of about 6,000 cases of family planners from a similar population of government colonies. However, when compared to the general population, it is a highly atypical group.

Main Findings: Our data indicated several communication behavior trends of this group of respondents. We found that division of roles on sex basis showed an important bearing on the information receiving, gathering and evaluating processes. As compared to husbands, more wives first became aware of the innovation. Relative to their husbands, they took more initiative in collecting additional information on the device.

We noticed a differential response in the case of wives and husbands to the different communication media at the awareness stage. About three-fourths of the wives were reported to have known about IUD through impersonal mass media. Thus the use of communication media tended to specialize on a sex basis.

The analysis of our data indicated that more wives (67%) collected additional information on IUD, when compared to husband's (53%). In doing so, wives largely depended upon personal cosmopolite--clinic staff--sources, and husbands on personal localite--friends and relatives--sources. It seems that at the "interest stage" the differential use of communication media noticed at the "awareness stage" disappears. Personal sources of information become important to both of them. However, within this broad category of personal sources, it was noticed that wives mostly depended upon personal cosmopolite sources and husbands made the most use of personal localite sources. Considering both the stages of "awareness and interest" together, in relation to the use of different communication

media we found that personal sources were most intensively used by wives and mass media was the least important to them. In the case of husbands, mass media was reported to be important at the awareness stage and personal sources were more relied upon at the interest stage. At the evaluation stage husbands tended to depend more on mass media while women showed an increased tendency to rely on personal cosmopolite sources. At this stage we found the indication of a high degree of mutual exchange of information between the wives and husbands.

In brief, then, we noticed that while husbands tend to use both the mass media and personal sources of information with varying degrees of emphasis at different stages, wives seem to maintain a consistent trend of heavy dependence on personal sources, especially of cosmopolite nature. However, this trend of isolation of wives from the mass media and of husbands from personal cosmopolite sources (experts) seem to be largely corrected by the evidence of a high degree of mutual intercommunication between the two inside the family. This was interpreted as the operation of the two-step flow of communication where each member of the couple acts as the opinion leader for the other in relation to those communication sources which, due to some reason, were not used by the other. This working of the two-step flow was seen as a possible explanation of effectiveness of both the types of communication sources.

Lastly, in these days of mass media our data highlighted the importance of personal communication sources. This was found to be crucial for women all through the process.

The data of this study indicates that in the case of this group of IUD users both the wive and husband were involved in decision-making.

Only in the case of seven percent of the cases the wife made the decision, took the device and informed the husband about her using it after the event. We also observed that in such cases where both were involved in about 50% of the cases the wife made the final decision and in about 44% of the cases the husband played this role. In the case of the remaining cases, respondents claimed equal responsibility in making the final decision. A remarkable absence of concentration of final decision-making authority in the male figure within the families of this group goes counter to the general belief which regards the husband as the decision maker within a family. At least this was not so in this group so far as decision regarding acceptance of IUD was concerned.

We found that friends and neighbors of IUD users had a role in decision-making. One significant finding was that while friends were consulted by both the husbands (43%) and the wives (62%), consultation with neighbors was much more in the case of wives (56%) as compared to husbands (8%). "Outside-colony" orientation of husbands and "inside-colony" orientation of wives might have caused this trend.

Consultation with IUD users as a factor in decision-making was studied. In about 66% of the cases users were consulted either by the wife or the husband, and at least in two-thirds of such cases this was done by the wife. IUD being a female method might have produced this pattern of consultation. On an average, each of the users studied claimed credit for having influenced one more user of IUD, between the period they took the device and the time of the interview.

In this group of people we found two groups of persons, on the basis of their family planning status defined in terms of use of any other

family planning method prior to the use of IUD. About 80% of our respondents were using or had used some other method before accepting IUD. Another characteristic of this group was that most of them found the previous method inefficient, resulting in unwanted births in the family. The other small group consisted of those for whom IUD was the first family planning method ever used. This trend was explained as a possible result of prior acceptance of the idea in the case of the first group so that they had to chose between efficient and more efficient methods, while in the case of the other group acceptance of IUD involved both the acceptance of family planning idea and the device. In other words, for the first group it was easier to accept IUD as compared to the members of the second group, and hence the difference between the sizes of the two groups.

Lastly, we examined some general characteristics of the life styles of this group of IUD users. The selection of characteristics was based upon the current interest as evident in the fertility literature. These were: (1) aspiration for children's education, (2) effort or luck orientation to life, (3) reading of printed mass media (newspapers, journals, and books), (4) statements reflecting ideological orientation, (5) ritualistic orientation to religion, and (6) consumption of certain modern articles. Our data indicated that about 50% or more of our respondents scored "high" on each of these considerations. A majority of respondents had high aspirations for their children's education (96.5%), credited effort orientation for their present position in life (77.9%), were reading printed mass media (74.4%), had modern ideological orientation to life (61.6%), were using more modern articles (60.5%), and were having a non-ritual-religious orientation (46.8%). In brief, strongest favorable

influence amongst the characteristics considered was exerted by aspirations for children's education and the lowest by non-ritual-religious orientation to life.

Limitations of the Study: Like many studies, this investigation has several limitations. A brief discussion of some of these would set healthy limits to the findings of this study.

This is basically an exploratory study geared to the great need pointed by Freedman for factual investigations focusing on "what" before one proceeds too far with the "why."[178] The IUD being almost new, this fact had to be kept in view. Its aim is not to yield generalizations for wider application. In putting this limit the study recognizes what Notestein emphasized that "... programs useful at one stage and in one setting may be useless or even harmful in another context, depending on the stage of public acceptance and on a multitude of social, economic and political factors."[179] Findings from studies tied to a particular action program, therefore, would have to be restricted in so far as their general application is concerned.

Another limiting condition on generalization is put by the fact that the trends observed in the case of IUD--female method--may not hold good in the case of male methods for family planning even in the same population.

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[178]Ronald Freedman, "Next Steps in Research on Problems of Motivation and Communication in Relation to Family Planning," Research in Family Planning, ed. Clyde V. Kiser, p. 597.

[179]Frank W. Notestein, "General Significance of the Conference," in Research in Family Planning, ed. Clyde V. Kiser, p. 608.

It has been pointed out in the study that the group with which we were concerned is highly atypical. To add to this, it may also be emphasized that the physical environment of these well planned self-sufficient colonies could be a significant factor in influencing the trends we observed in this study.

The design of the study involved only IUD users. One would, therefore, do better not to infer that the non-users in these colonies would show similar behavior when they are faced with the problem of adopting IUD in the future. It would be better to keep an open mind and expect that they may or may not show similar trends.

This study was done in the initial phase of the IUD program. As the cases of acceptance were limited, we studied the whole universe of users to insure reasonable numbers of respondents. In other words, it was not a sample survey. Of the two hundred and sixty-three users, we lost eighty-one, or about 30% of the cases. We have no means to estimate how the loss of these cases have influenced our findings.

Fertility data is regarded as the "hard core" of demographic studies. If any study in this field has to have any comparability, it needs to have enough basic fertility data. In this study, except for the number of living children and sons, we do not have any information relating to the "hard core" and thus this lack becomes a limiting factor so far as this study is concerned.

Suggestions for Further Research: Any logical extension of this exploratory study would be an improvement, to the extent it takes into consideration the limitations pointed out in the previous section. It could use the trend information revealed by this data and propose several hypotheses

relating to either of the two areas of communication and decision-making. Use of a control group (non-users) would be a major improvement in the design. Moving the locale of the study from an atypical group to additional more typical ones would generate possibilities of a wider application. Inclusion of more fertility data would add to the comparative value of the findings.

Improvements could also be made in the research tool, if one keeps in view the limitations of several questions already indicated. Specific suggestions in this area would be to attempt to develop a scale to measure variables related to the general background variables indicating life orientation and life style of the respondents. Some way of incorporating users of other important methods would further sharpen the implications of such future studies to action programs. While all of the above suggestions would have additional pay-off, it seems the main factors limiting the improvements would be the peculiar circumstances, such as purpose, sponsorship, finance, time and technical competence of researchers, of each future study.

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APPENDIX - 1

SUB-ANALYSIS

Diffusion studies are concerned with the element of time in the process of acceptance of innovations. Two distinct time periods--diffusion period and acceptance period--have been identified in the corn study of Ryan and Gross.[180] According to Hoffer the Iowa Study showed "that the spread of knowledge and usage are separate considerations, but that the degree of use depends upon adequate knowledge about the practice."[181] This interdependence of the two time periods is best exemplified by the stages concept of the diffusion period, first steps of which are largely knowledge or awareness oriented and the later steps of which are mainly concerned with usage decision-making processes.

Innovation studies have tended to study the problem of time in two ways. One trend is to be mainly concerned with individual adoption process from the time the individual knows of it, till he actually adopts it. Studies of Wilkening and Katz and Coleman focus on this aspect. They recognize that individuals take different amounts of time in deciding about the usage of innovations.

The other and more dominant trend is to study the time element in diffusion within a population where the new practice has been largely accepted within the framework of the stages concept. The implicit assumption here seems to be that the individuals more or less take the same

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[180]Ryan, Bryce, and Neal Gross, Acceptance and Diffusion of Hybrid Corn Seed in Two Iowa Communities, Iowa State College, Research Bulletin 372, 1950.

[181]Charles R. Hoffer and Dale Stangland, Farmer's Reaction to New Practices, Michigan State University, Technical Bulletin 264, 1958.

amount of decision-making time, or that individual differences balance out each other. Given this consideration, they divide different members of this group on the time dimension as innovators, early adopters, late adopters and laggards in accordance with the different phases of the total time period the innovation took for spreading throughout the population. The next step of analysis in such studies is to examine the differences between the communication behavior of the above categories both within the system and outside the system.

If one were to highlight the differences between the above two approaches, one could state that the first approach studies time in relation to the individual unit of adoption; it is not concerned with awareness which it takes for granted and treats it as the starting point of analysis. On the other hand, the second approach treats time in relation to the group as a whole, tends to assume individual differences--which tend to even out--as of little consequence from the point of the group and emphasizes the role of early or late awareness as important in making some people adopt an innovation earlier than others. Thus, according to Rogers, "many change agents wish to speed up the process by which innovations are adopted. One method is to more adequately communicate information about new ideas so awareness is created at an earlier data. Another method is to shorten the amount of time required for adoption after an individual is once aware of a new idea."[182] As already referred to, according to Hoffer the hybrid seed corn study of Ryan and Gross showed

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[182]Everett M. Rogers, Diffusion of Innovation, p. 105.

"that period of knowledge and usage are separate considerations, but that the degree of use depends upon adequate knowledge about the practice." The above view is supported by Hassinger who has questioned the tendency of most researchers who conceptualize the awareness stage as a random or nonpurposive occurrence. Rogers has also observed that because of the process of selective perception people become aware of an innovation at different times, although all of them might be exposed to it simultaneously.

In brief, then, on the basis of the above analysis there is enough evidence to suggest the desirability of treating these two periods--emphasizing the speed of individual decision-making, and the speed of awareness in a given population--as separate considerations in relation to the element of time in the diffusion processes.

As already pointed out earlier, one of the concerns of this study has been the problem of cutting short the period of the spread of a family planning innovation--the IUD. It is clear from the above discussion of the two periods that such a saving of time could reasonably be the combined result of both the periods and processes involved in them.

Keeping in view the above discussion, we would now engage in doing our analysis of the time period in two ways. First we will study the adoption period, emphasizing individual adoption time. Then we will be concerned with time largely from the point of the group.

1-A. Speed of Adoption

Here our main concern is with the speed of decision-making. In proceeding with this analysis we have divided the IUD users into two groups

of quick decision makers and delayed decision makers. Quick decision makers are those who made the decision and started using IUD within 14 days of their receiving their first information about the innovation. Delayed decision makers are those who adopted it two months or more after their first information. Having divided the users into these two extreme groups, we have tried to relate several selected variables, particularly their presence or absence in an absolute or relative sense with early or late adoption. In doing this analysis of time and variables through a set of four-fold tables, we have assumed that the relationships observed in preceeding chapters would still show even at this next stage of analysis. In other words, those variables which were found to be related to acceptance would also be related to the speed of decision-making. The statistical test of the relationships is the chi square test, and we are considering the .05 level of significance to show a solid relationship. Percentage differences are considered for indicating general relationships.

The following fourteen variables subdivided into the categories indicated, were considered because of their importance already noted in the general analysis and also because of their being possibly related with several others. For example we have considered the variable of "number of living sons" as possibly related to "number of married years," "number of living children," "past use of any other family planning method," and "desire for more children."

1. Age of husband--high and low
2. Education of husband--fair and high*
3. Age of wife--high and low
4. Education of wife--fair and high*
5. Number of living sons--high and low
6. Who was contacted first--wife or husband
7. Source of first information--personal or impersonal

8. Who collected more additional information--wife or husband
9. Consultation with user--yes or no
10. Modern article consumption score--fair or high*
11. Aspiration for children as indicated by daughter's education--fair or high*
12. Age of marriage of daughter--low or high
13. Effort or luck orientation--effort or luck
14. Ritualistic religious orientation--high or low

On the basis of the analysis in the text we would expect: high age of wife and husband, fair education of wife and husband, high number of living sons, first contact with wife, her greater initiative in collecting additional information, dependence on personal sources of first information, consultation with users, fair amount of consumption of modern articles, higher aspirations for children, higher proposed age of marriage, effort orientation, and low ritualistic religious outlook to life, to be related with quick decision-making. The tables below give the result of our analysis.

TABLE 37

Adoption Period Analysis:
Speed of Decision-Making

(1) Age of Husband

	up to 34 yrs. low	34 + yrs. high	x^2	df	P
quick decision	50	52	.041	1	
delayed decision	50	47			

*Variables 2, 4 and 11 have been subdivided into "fair" and "high" because of the atypical characteristics of the respondents where almost everybody must be fairly educated to hold a government job. On similar reasons variables 10 and 11 have been divided into "fair" and "high."

(2) Education of Husband

	up to high school fair	high school + high	x^2	df	P
quick decision	64	38	5.472	1	**
delayed decision	35	61			

(3) Age of Wife

	up to 29 yrs. low	29 + yrs. high	x^2	df	P
quick decision	41	60	2.812	1	
delayed decision	58	39			

(4) Education of Wife

	up to primary fair	primary + high	x^2	df	P
quick decision	50	52	.037	1	
delayed decision	50	47			

(5) Number of Living Sons

	1 son low	1 + son high	x^2	df	P
quick decision	52	48	0.127	1	
delayed decision	47	51			

(6) First Heard or Contacted

	husband	wife	x^2	df	P
quick decision	30	71	13.495	1	***
delayed decision	69	28			

(7) Source of First Information

	personal localite & cosmopolite	impersonal press & radio	x^2	df	P
quick decision	66	25	12.368	1	***
delayed decision	34	74			

(8) Who Collected More Information

	yes	no	x^2	df	P
quick decision	30	53	3.924	1	**
delayed decision	70	46			

(9) Talk to User?

	yes	no	x^2	df	P
quick decision	36	56	2.388	1	
delayed decision	63	44			

(10) Modern Articles Consumption Score

	from 0-3 fair	from 4 + high	x^2	df	P
quick decision	59	44	1.623	1	
delayed decision	40	55			

(11) Aspiration for Daughter's Education

	up to high school fair	high school + high	x^2	df	P
quick decision	61	37	4.266	1	**
delayed decision	38	62			

(12) Age of Marriage of Daughter

	up to 18 yrs. normal age	18 + yrs. progressive age	x^2	df	P
quick decision	46	52	.223	1	
delayed decision	53	48			

(13) Effort or Luck Orientation to Life

	effort	luck	x^2	df	P
quick decision	48	53	.228	1	
delayed decision	51	46			

(14) Ritual-Religious Orientation

	yes high	no low	x^2	df	P
quick decision	50	51	.016	1	
delayed decision	50	48			

The tables indicate the expected trend of relationships in the case of all but two variables of "effort or luck orientation" and "higher number of living sons." Out of the remaining twelve variables, five are significantly related with quick decision-making. These are:

1. First contact or information to wife
2. Personal sources of first information
3. Higher aspiration for children
4. Wife's taking more initiative in collecting additional information
5. Fair education of husband

In the case of the remaining six although the tables show a moderate trend in the expected direction, yet the relationship was not significant.

Our interpretation of the findings is that given fair education of the husband, and higher aspirations for living children, contacting the wife first through personal sources of information (cosmopolite and localite) to the point where she takes initiative in collecting more information, makes for a significant complex of factors for accelerating the processes of decision-making within the family.

1-B. Diffusion Period: The First and Second Groups of Adopters

As already explained in the beginning of the first section of this appendix, here we are concerned with diffusion period as largely concerned with awareness. Awareness we are treating in the sense of Hassinger who argues that awareness must be initiated by the individual and is not a passive act as conceptualized by most of the researchers. We also noted that because of the processes of selective perception people become aware of innovation at different times, although all of them might be exposed to it simultaneously.

Although all the cases studied in this project are early adopters, in as much as we are dealing with the first several months of a new program, we have divided them into two groups for closer analysis: earliest first group and the second group. The same procedure as outlined for adoption period analysis was followed in this stage. The variables used are the same. The one difference between the two is that in this section early and second groups have been defined in terms of the total time period of the first nine months of the IUD program in these colonies. Here early group represents those who accepted the device in the first four months of the program and the second group includes those who accepted IUD in the

last four months of the program. In the tables they are referred to as first and second group. The expected relationships are also in the direction as expected in the previous analysis. The tables below give the results of this stage of analysis.

TABLE 38

Diffusion Table

(1) Age of Husband

	up to 34 yrs. low	34 + yrs. high	x^2	df	P
first group	48	51	.180	1	
second group	51	47			

(2) Education of Husband

	up to high school fair	high school + high	x^2	df	P
first group	54	46	.864	1	
second group	45	53			

(3) Age of Wife

	up to 29 yrs. low	29 + yrs. high	x^2	df	P
first group	46	55	1.050	1	
second group	53	45			

(4) Education of Wife

	up to primary fair	primary + high	x^2	df	P
first group	61	42	4.775	1	**
second group	38	57			

(5) Number of Living Sons

	1 son low	1 + son high	x^2	df	P
first group	39	57	4.239	1	**
second group	60	42			

(6) First Heard or Contacted

	husband	wife	x^2	df	P
first group	43	55	1.867	1	
second group	56	45			

(7) Source of First Information

	personal localite & cosmopolite	impersonal press & radio	x^2	df	P
first group	57	33	6.979	1	**
second group	42	66			

(8) Who Collected More Information

	husband	wife	x^2	df	P
first group	56	44	1.860	1	
second group	43	45			

(9) Talk to the Users?

	yes	no	x^2	df	P
first group	50	46	0.141	1	
second group	50	53			

(10) Modern Articles Consumption Score

	from 0-3 fair	from 4 + high	x^2	df	P
first group	56	45	1.450	1	
second group	43	54			

(11) Aspiration for Daughter's Education

	up to high school fair	high school + high	x^2	df	P
first group	59	44	2.806	1	
second group	40	55			

(12) Age of Marriage of Daughter

	up to 18 yrs. normal age	18 + yrs. progressive age	x^2	df	P
first group	47	51	.183	1	
second group	52	48			

(13) Effort or Luck Orientation

	effort	luck	x^2	df	P
first group	50	50	.003	1	
second group	49	50			

(14) Ritual Religious Orientation

	yes high	no low	x^2	df	P
first group	41	58	4.118	1	**
second group	58	41			

The above tables indicate the expected trend of relationship in the case of all but one variable, "effort or luck orientation." Out of the remaining thirteen variables, four are significantly related with early awareness leading to early adoption considered from the point of the whole group. These are:

1. High number of living sons
2. Low ritual religious orientation
3. Fair education of wife
4. Personal sources of first information

In the case of the remaining variables, although the tables show a moderate trend in the expected direction, yet the relationship was not significant.

In brief, then, we can say that having more sons, a low ritualistic-religious orientation, a favorable position in the personal (localite and cosmopolite) communication network and more educated wife, can be treated as performing gate-keeping functions in relation to the couples in the group. If they are in the required degree, they lower the barriers of selective perception, and make such cases liable to be easily exposed to innovation earlier than other members of the group.

Lastly, it may be noted that "effort or luck orientation" was found to be unrelated in both the two approaches, and "high number of living sons" which was not found to be related with speed of decision-making (first analysis) is found to be related with diffusion-awareness analysis at .05 level. We may also note that in the case of the majority of variables, although we found mild relationship in the expected direction, it was not significant at .05 level. Perhpas with enough number of cases one could expect better results. We would therefore suggest further investigation in this direction.

APPENDIX - 2

INTERVIEW SCHEDULE

1. Schedule No._____

2. Name of the colony_____

3. Flat type_____

4. Block No._____

5. Flat No._____

6. Name of the respondent_____

7. Age (in completed years)_____

8. Highest education degree or certificate_____

9. His present occupation_____

10. Income per month from the occupation_____

11. Wife's age (in completed years)_____

12. Wife's highest education degree or diploma_____

13. To what state do you belong?_____

14. How long have you been married (completed years)?_____

15. How many living children do you have?_____ How many sons?_____

16. Have you heard of the new method of preventing pregnancy called the IUD (loop/wire)? yes_____ no_____

17. Do you know if the IUD is being used in this locality or by any of your friends or neighbors? yes_____ no_____

18. Do you think you and your wife might like to try it? yes___ no___

(End interview and probe if by the end of the above questions he does not mention his wife's use of IUD. Continue interview if he mentions use of IUD.)

Since you use IUD, I wonder if you would be willing to answer a few questions about how you came to make that decision so that we can learn how to help other people follow your example.

19. Between you and your wife who was the first to hear of IUD? husband_____ wife_____. From where did you (she) first hear of it?

_____

20. Roughly how many days or months before the insertion of IUD did you (she) first hear of IUD?_____

21. When you first heard of IUD, what was your general reaction?
favorable_____ unfavorable_____
(Probe for specific information)_____
_____

22. Please recall all that happened from the time you first heard of IUD till your wife actually had it inserted. Now would you tell me who took more interest in this whole matter of your accepting IUD? Was it your wife or yourself? husband_____ wife_____

23. After you first heard of IUD did you yourself try to collect more information about IUD? yes_____ no_____

(If yes) How did you collect this additional information? (Probe for full information by asking, did you do any other thing and so on.)
_____
_____
_____

24. Did your wife also collect further information about IUD? yes__ no__
Would you tell us how she collected this additional information?
_____
_____
_____

25. Now talking of this whole business of information collection, would you tell us who collected more information, you or your wife?
husband_____ wife_____

26. Usually in decisions on matters such as this both wife and husband are involved. But generally one of them makes the final decision and the other agrees. Now in this case of IUD, would you say you made the final decision and she agreed_____ OR she made the final decision and you agreed_____.

27. To you what was the most attractive attribute or quality of IUD that made you accept it?_____
_____

28. How did you learn about this particular aspect of IUD?_____
_____

29. You have told me about the things you liked most about IUD. In addition to this, what other things did you like about IUD and how did you learn of them?

Other quality liked	How came to know of It
a._____	_____
b._____	_____
c._____	_____
d._____	_____

30. You have told me things you liked about IUD. Now what about your wife? In your view what did she seem to like most about IUD?

_____

31. Could you tell me how she came to know about this._____

_____

32. Was there anything about IUD that made you fearful or doubtful about it? yes_____ no_____

33. (If yes) How did you overcome that fear or doubt?_____

_____

34. In your view was there anything about IUD about which your wife was fearful or doubtful? yes_____ no_____

35. (If yes) How did she overcome that?_____

_____

36. Did you consult with your friends about IUD at the time of making your decision? yes_____ no_____

37. (If yes) Generally speaking, were they favorable or unfavorable? favorable_____ unfavorable_____ no opinion_____

38. Did you consult with neighbors about IUD at the time of your making the decision? yes_____ no_____

39. (If yes) Generally speaking, were they favorable or unfavorable? favorable_____ unfavorable_____ no opinion_____

40. Do you think at the time of your making the decision, your wife (also) consulted her friends about IUD? yes_____ no_____

41. Do you think at the time of your making the decision, your wife (also) consulted with any neighbors? yes_____ no_____

42. At the time of making your decision did you or your wife consult with anybody who was using IUD? yes_____ no_____
(Probe who talked, wife or husband or both. And who was the user: friend/neighbor/relative/somebody in the locality/somebody in working situation/others)_____

_____

43. Since after you have had IUD have you talked to anybody about it? yes_____ no_____
(Probe for who talked: wife or husband or both, and to whom, friends/neighbors/relatives/somebody in the locality/somebody in working situation/others)_____

_____

44. Are you sure that any of the persons you and/or your wife has talked to have been influenced to use IUD? yes_____ no_____ How many?___

45. Did you use any other family planning method before taking up IUD? yes_____ no_____ What method(s)?_____
_____

46. (If yes) would you say you used the other method regularly? yes_____ no_____

47. Now please think of this other method you used before IUD. Would you say you talked with others about that method? yes_____ no_____

48. (If yes) Would you say you talked more, less, or about the same degree about your old method as you do about IUD?
more_____ less_____ about same_____
(If the response is more or less, probe for why.)_____
_____

49. When would you like to have your next child?_____

50. Do you read:

	never	sometimes	regularly
daily newspapers	___	___	___
weekly magazines	___	___	___
monthly magazines	___	___	___
other books	___	___	___

51. Do you own:

radio	yes_____	no_____
sewing machine	yes_____	no_____
tea and/or dinner set	yes_____	no_____
wrist watch	yes_____	no_____
name plate	yes_____	no_____
sofa and/or dining table	yes_____	no_____
carpet	yes_____	no_____
dressing table	yes_____	no_____

52. How far in the school do you want your daughter to go?_____

53. What is the earliest age below which you would not like your daughter(s) to be married?_____

54. In your life till now which has played a greater role, your efforts or your luck? efforts_____ luck_____

55. According to you which is more important in one's life.
one's efforts_____ luck or chance_____

56. Who was more keen to have your last child, you or your wife?
husband_____ wife_____

57. If your daughter-in-law with the consent of your son takes up to some part-time or full-time job, would you approve her taking up the job? approve_____ disapprove_____

58. Do you spend sometime on religious activity (Puja Path) regularly? yes_____ no_____

59. On how many occasions have you helped your near relatives during this year? _____no. of times

60. How many times have you visited your near relatives (outside Delhi) during this year? _____no. of times

61. Are you insured? yes_____ no_____

Remarks_____

INTRODUCTION STATEMENT

A brief statement used for introducing the investigator and the study to the respondents is given below.

My name is Dinesh Chandra Dubey. I work as a social scientist in the National Family Planning Institute of Health Ministry. We are making a survey. This survey relates to family planning and especially to the new method of family planning known as the "loop" or IUD. I would very much appreciate if you can give me a few minutes to talk about your ideas relating to this new device.

INFORMATION NOT USED IN THIS STUDY

Although information on all the questions was collected, some of it is not used because of various reasons.

Questions 16, 17 and 18 were used as screening questions. We were told by informed people that some women were using IUD without the knowledge of their husbands. Taking this information at its face value, we never wanted our study to become a cause of discord between wives and husbands. These three questions were used to ascertain whether the husband knows the fact of IUD use by his wife. The interviews were done for only those cases where husbands knew about their wives using IUD.

Information on question 21 is not used because the respondents hesitated to classify their reaction as for or against.

Question 22 is not used because the same information is more specifically asked in question 23 and question 24.

Information on questions 37 and 39 is not used because the respondents who talked to more than one friend or neighbor found it difficult to answer these questions. The usual response was "some were favorable and some were unfavorable." Similarly questions 47 and 48 were difficult for the respondents to answer confidently.

Lastly, information on questions 59, 60 and 61 is not used as different respondents interpreted the questions differently because the key terms in the questions were not precisely defined.

INFORMATION COLLECTED FROM CLINICS

As already pointed out, clinic information from case cards was used for identification of the cases. The following information on each case was available from the clinic cards.

1. Card no.
2. Name of clinic unit
3. Name of woman
4. Name of husband
5. Address
6. Age of wife
7. No. of living children (male_____ female_____)
8. Date of L.M.P.
9. Interval since last confinement/mis-carriage/abortion
10. Remarks (menses)
11. Pelvic examination
12. Type of device inserted_____size_____
13. Date of insertion
14. Comments
15. Signature of medical officer

Information from the first seven questions was used for identifying the respondents or IUD users.