COUPLE COMMUNICATION ON FAMILY PLANNING IN VIETNAM

LE THI PHUONG MAI

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
(POPULATION AND FAMILY PLANNING RESEARCH)

IN
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
1996

Thesis

entitled

COUPLE COMMUNICATION ON FAMILY PLANNING IN VIETNAM

Le Thi Phuong Mai
Candidate

Varachai Thongthai, Ph.D.
Major Advisor

Kritaya Archavanitkul, Ph.D.
Co-Advisor

Adulya Viriyavejakul, M.D., LL.B., F.R.C.P.

Dean
Faculty of Graduate Studies

Bencha Yoddumnern-Attig, Ph.D.

Chairman
Master of Arts Program
in Population and Family
Planning Research
Institute for Population
and Social Research

Thesis

entitled

COUPLE COMMUNICATION ON FAMILY PLANNING IN VIETNAM

was submitted to the Faculty of Graduate Studies,
Mahidol University
for the Degree of Master of Arts
(Population and Family Planning Research)

on

1 May, 1996

Le Thi Phuong Mai
Candidate

Varachai Thongthai, Ph.D.
Chairman

Kritaya Archavanitkul, Ph.D.
Member

Kanchana Tangchonlatip
Member

Adulya Viriyavejakul, M.D., LL.B., F.R.C.P.
Dean
Faculty of Graduate Studies

Aphichat Chamratrithirong, Ph.D.
Director
Institute for Population
and Social Research

BIOGRAPHY

Name	Le Thi Phuong Mai
Date of Birth	22 February, 1959
Place of Birth	Hanoi, Vietnam
Institution Attended	National Economic University Hanoi, Vietnam 1976-1981. Bachelor of Science in Mathematics. International Institute for Population and Science Bombay, India, 1990-1991. Diploma Population Study. Institute for Population and Social Research, Mahidol University, 1995-1996. Master of Arts in Population and Family Planning Research.
Present Occupation	Researcher Institute of Statistical Science, General Statistical Office, Hanoi, Vietnam.
Funding Agency	The Royal Thai Government, Department of Technical and Economic Cooperation (DTEC)

ACKNOWLEDGMENT

First of all, I would like to express my deepest gratitude and special thanks to my major advisor, Dr. Varachai Thongthai for his thorough guidance, attention, valuable comments and fruitful suggestion to my thesis. Without his supervision and support, this task would not have been completed.

My heartfelt thanks to members of my Thesis Advisory Committee, especially Dr. Kritaya Archavanitkul and Ms. Kanchana Tangchonlatip for their extensive review and suggestions which contributed to the enrichment of this thesis.

I am highly indebted to Dr. Apichat Chamratrirong, Director IPSR for allowing me to participate in this program. I also wish to thanks to Dr. Bencha Yoddumnern-Attig, Dr. Philip Guest, Dr. Nimfa Ogena and all other faculty members for their guidance and assistance during my study. Sincere thanks to all staffs of administration, library and computer units of IPSR and my friends for their help, cooperation, kindness and friendship during my stay at the Mahidol University.

My special thanks and gratitude also go to my sponsor, the Royal Thai Government for the providing a scholarship for my participation in this course.

I appreciate with sincere regards and gratitude to Dr. Le Van Toan, Director of General Statistical Office, Hanoi, Vietnam for his support to my study. Also, I would like to extend my sincere appreciation to Institute of Statistical Science, General Statistical Office for providing the data from KAP Survey 1993 which were used in this study.

Finally, special love and thanks to my beloved mother and father, without their affection and moral support all the success in my life never be achieved. To my husband and two my daughters, Mai Huong and Mai Khanh, my everlasting love and devotion for your bearing patience and understanding during my absence.

Thesis Title **Couple Communication on Family Planning in Vietnam**

Name Le Thi Phuong Mai

Degree Master of Arts
(Population and Family Planning Research)

Thesis Supervisory Committee

Varachai Thongthai, Ph.D
Kritaya Archavanitkul, Ph.D

Date of Graduation 1 May B.E. 2539 (1996)

ABSTRACT

Husband- wife communication is an important factor in the process of decision making in regard to family size and adoption of family planning practice. This study is to identify the nature and extent of couple communication and the influence of couple communication on family planning practice. Special effort is paid to examine some socio-economic, demographic and other factors which contribute to the variation in communication between couples in Vietnam.

The data used in this study was obtained from the Knowledge, Attitude and Practice (KAP) on Family Planning Survey which was conducted in seven provinces in 1993. In this study 2492 couples consisting of 4984 respondents were used in the analysis.

Crostabulation technique with Chi-square test was applied to analyze the influence of couple's communication on contraceptive use. Determinants of couple communication employed logistic regression.

It was found that majority of couples had discussed about family planning issues, especially contraceptive methods and limiting family size. Furthermore, the data confirmed that husband-wife communication was linked to the adoption of family planning. The study also indicated that wife's age, duration of marriage, number of living children, husband's education, knowledge of contraception and wife's satisfaction with knowledge about family planning were significantly influenced couple communication.

TABLES OF CONTENTS

TABLES OF CONTENTS (continued)

Page

TABLES OF CONTENTS (continued)

Page

LIST OF TABLES

LIST OF FIGURES

Page

CHAPTER I

BACKGROUND OF THE STUDY

1.1 Introduction

The Socialist Republic of Vietnam is a tropical country in South-east Asia, covering land area of 330,000 square kilometers. The country is divided into 53 administrative units. Vietnam is the second largest country in South-east Asia. Of the total population of 72.5 million (1994) just over 20% live in urban areas. The population is estimated to be growing by 2.1% per annum (GSO, 1995). Life expectancy at birth was 65 for male and 67.5 for female (GSO, 1991).

The Family Planning Program was first launched in Vietnam in 1981 and set up by the National Committee for Population and Family Planning with financial assistance from the Government and UNFPA. The Population and Family Planning Program in Vietnam is a National Program whose goals for 1992-2025 are to promote the acceptance of a small family as a social norm through the provision of suitable Population and Maternal Child Health/Family planning information and service in order to encourage voluntary participation in the Population and Family Planning Program.

During the past years, together with fertility decline, contraceptive prevalence rate (CPR), especially the rates of modern contraceptive use have been increasing. The overall CPR in 1993 was estimated at 53.8%, of which four-fifths

represents modern methods. The most commonly used method was IUD which accounted for 62% of all methods used. The contraceptive methods had become more diversified, and the network of health and family planning service was expanding (GSO and NCPFP,1995).

In order to achieve the Government's target of lowering the annual population growth rate to below 1.8% by the year 2000, the CPR should be increased significantly. A cafeteria approach of modern, effective, safe and long-lasting contraceptives, including methods for men is favored by the Government for achieving this (NCPFP,1993). Furthermore, emphasis would have to be placed on IEC activities to promote couples' adoption of contraceptives.

The KAP Survey on Family planning was carried out by the Institute of Statistical Science in 1993. This survey interviewed both husband and wife. Beside providing information on situation of contraception in Vietnam, this survey also provide information which allows examining the effect of couple communication on contraceptive use as well as the determinants of couple communication.

1.2 Problem identification and justification.

Prior research in Vietnam had indicated that there were many factors affecting a couple's contraceptive use and that communication was one among those important factors. The low contraceptive prevalence rate related not only to inadequate and

ineffective health service delivery but also to lack of family planning information, education and communication (IEC) activities. Prior researches indicated that in the past, the lack of IEC activities might have led to negative effects of family planning as well as to family planning behaviors of couples.

As in many developing countries in the world as well as in this region, Vietnam is a society which has been suffering from traditional ideology, where husband may exert a major influence in the family and also affect his wife's decision in the use of family planning services (GSO,1995). In fact, not all women in Vietnam have the freedom to make the choice on contraceptive use. They must seek support and approval from their partners and/or families. Furthermore, the issue of equal partnership of the couple in the fertility decision as in all decisions is not adequately addressed in IEC and motivation work. When the wife but not the husband accepts family planning, the husband must be convinced by motivator to give his permission for her use of contraception and husband and wife should have discussions about family planning (UNFPA,1990).

Couple communication plays an important role in decision making, especially in family planning issues. The fact is that a person who intends to use contraception must communicate that fact to his/her spouse. Communication transmits decision to practice of family planning (U.N,1974). Through discussion between husband and wife, it will be more easily led to agreement between husband and wife on his/her spouse's use of contraception.

Despite the fact that couple communication plays a decisive role in the practice of family planning, no previous study of contraceptives in Vietnam has evaluated the importance of husband-wife communication. Such evaluation is especially essential in areas where IEC activities are limited. Spouses' approval of contraceptives will lead to improved utilization of family planning services and the success of family planning programs.

Furthermore, most KAP surveys are based on the wife's information, the information about the husband's attitude toward contraception was obtained through his wife, the actual attitude of the husband may be different. Thus the husband's attitude may be misclassified if the wife's view is different from the husband's view. This survey allowed the direct study of the husband's attitudes relating to family planning issues, especially on intraspouse communication, by interviewing the husbands themselves. This will allow the study to spell out clearly the nature and extent of couple communication.

In brief, in order to increase the level of CPR and understand the impact of husband-wife communication upon adoption of family planning , it is necessary to study the effect of couple communication on contraceptive use and the factors which contribute to variation in communication between husband and wife in Vietnam.

1.3 Objectives

1. To examine the consistency of responses between husband and wife on family planning issues.
2. To study the nature and extent of communication between husbands and wives.
3. To study the influence of couple communication on contraceptive use.
4. To find out factors which contribute to communication between couples.

CHAPTER II

LITERATURE REVIEW

2.1 Overview on couple communication

Family planning behavior is a complex activity in a sense that it is determined by different factors. Due to its significant role in the process of implementing population and family planning policy, social scientists of diverse fields have investigated these factors and one of interesting factors is communication. Increasingly, governments within the ESCAP region are recognizing that the success of policies intended to decrease the rate of population growth is largely influenced by communication programs (U.N, 1974).

The communication efforts of the family planning program, either through personal contact or mass media, or both, have a direct impact in promoting family planning adoption. Person who have had the most contact with the information-education-communication program, tend to be adopters; those who have none, tend not to be adopters. In this context, husband-wife communication appears as an important factor which effects family planning adoption (U.N, 1974).

Couple communication is generally defined as the frequency of discussion between spouses as reported by one or both partners. In addition, frequency of husband-wife discussion of birth control and family size was negatively affected by demand for

children, positively influences use of contraception and negatively influences fertility (Beckman,1993). Many studies in Africa as well as in Asia point out that the percentage of couples who share their views with on family planning issues vary from country to country. A national follow up survey in Sri Lanka in 1985 indicated that there was high the degree of family planning communication between spouses (78%) and a large proportion of wives reported hearing about male contraceptive methods directly from their husband as well as a large proportion of husbands reported hearing about female contraceptive methods directly from their wives. These facts emphasized the importance of both partners as sources of knowledge about family planning. The decision to use family planning, and discussions about which method to use seem to be initiated by wives, but there was a high degree of consistency in reporting methods used, discussion and desired family size (Kane and Sivasubramaniam, 1989).

On the one hand, Makomva et al. (1991) indicated that men believed that women had more opportunity to talk and make decisions about family welfare such as household management and child care. Yet women did not feel that they had the opportunity to discuss issues. In fact, they believed that men made fertility decisions while men believed that these decisions were mainly up to the women. However, there were only some men who did mention that ideally these decisions should be made jointly. On the other hand, Beckman (1993) stated that women initiated discussion of family planning more

often than men because they are more affected by the consequences of unplanned pregnancies and they have more access to family planing information.

Thus, with respect to couple communication about family planning, both husband and wife have opportunities to initiate talk with each other. But the question is that how to encourage them to communicate freely and easily.

2.2 The influence of couple communication on contraceptive use

The relationship between husband-wife agreement on family planning matters with family planning practice was explored in many countries around the world. The findings of studies on husband-wife communication conducted in Western societies have indicated that the nature and extent of husband -wife communication is crucial factor in adoption of family planning practices (Dubey and Devgan, 1969).

Discovery of the high correlation between intraspouse communication and family planning adoption should be attributed to Hill, Back, and Stycos (1959). Their argument was that despite a generally favorable attitude toward family planning, a substantial share (about one -third) of the interviewees in the authors' early studies of family planning in Puerto Rico had never discussed the topic of family size with their spouses. Furthermore, the proportion of couples who had ever used family planning methods was higher among those who had discussed family size than among those who had not discussed it. In addition, they also postulated that husband-wife communication about family

planning alone is not crucially important, but generally husband-wife communication about a wide variety of topics is important.

The results from fertility surveys of nine Latin American metropolises (CELADE, 1972) showed that couples' discussion on desired number of children revealed a high correlation with all measures of contraceptive behavior. Couples with good communication patterns were more likely to practice effective contraception.

Oh (1988) found that husband wife conversation about number of children had an impact on fertility. The results also revealed that conversation between spouses had more significant effect on fertility than other variables, thus contributing to birth control.

In the study of 3,753 men and women in HongKong, Mitchell (1972) spelled out that women who did not want more children were more likely to practice family planning if they had high levels of verbal communication with their husbands. This was true regardless of the number of children a couple had. In addition, he also confirmed that wives who had high scores of husband-wife communication tended to start contraception at a lower parity. He also found that husband-wife communication was inversely correlated with education and income, but among lower class couples who did communicate, the barriers of education and status were largely overcome.

Nyblade and Menken (1993) analyzing the 1989 Kenya demographic and health survey found that use of contraceptive use increased considerably with the level of communication between partners whether indicated by direct discussion about

contraception or simply by knowing the partner's attitude toward use. The male partner's positive attitude had strong impact on actual use.

The association between husband-wife communication and family planning behavior was reconfirmed by findings from Macwan'gi study (1990) in Zambia. He found that approximately 50% of the respondents discussed family size with their spouses. In addition, he stated that communication effects on family planning intentions and behavior varied by content of communication (type of message) between husbands and wives. Messages about disadvantages of having many children were significantly associated with the couple's current use of family planning, but those about advantages of having many children were significantly associated with couple's intention to use family planning. However, husband-wife agreement on the desire for few children was significantly associated with couple's current use of family planning.

The significant relationship between discussion of family planning between spouses and current contraceptive use was also found from the studies in Ghana, Sri Lanka, India, Pakistan, and Bangladesh (Salway, 1994; De Silva, 1994; Misra et al., 1981; Mahmood and Ringheim, 1993; Kabir et al., 1988).

The lack of communication between spouses was a barrier to the adoption of family planning practice. The results of Raju's study (1987) indicated that the prevalence of low levels of intra-spouse communication might be one of the major factors for the low rate of family planning adoption observed in this region. Furthermore, the results of the

contraceptive prevalence survey in Indonesia in 1983 demonstrated that men rarely discussed family size or family planning attitudes with their wives, so there were less use of male contraceptive methods (Utomo et al., 1984).

However, Poffenberger (1968) realized that the cultural barriers to husband-wife communication tended to dissolve with increasing duration of marriage, so that by the time a couple had borne all the children both desired, communication was freer than might have been anticipated. Moreover, he concluded that "Lack of communication, after a sufficient number of children, was probably of less significance as cause of delayed adoption of method than was the lack of availability of a method easily accessible to the couple".

In Vietnam, there were no research concerning about the influence of husband-wife communication on contraceptive use. However, the 1988 DHS in Vietnam also showed that husbands' disapproval of wife's contraceptive use is related to lack of couple communication (NCPFP,1990).

In brief, the association between couple discussion and contraceptive use in developing countries is strong, although some studies suggest that husband -wife discussion was a correlate rather than a determinant of birth control use. However, there is enough evidence from studies in Asia, Africa, and Latin America which shows that husband-wife communication is a major factor in family planning adoption in many countries.

2.3 The demographic and socio-economic factors effecting couple communication

In the light of the opinion that intraspouse communication is an essential factor in the process of deciding whether or not to practice family planning, it is also important to discover the which explaining family planning couple communication. Communication, however, varied according to couple's number of living children and to wives' age, education, place of residence, religion and work status, family income etc. In their study, Kane and Sivasubramaniam (1989) stated that older women, those with little or no education, those living on tea estates, and Muslims were less likely to communicate with their husband on family planning matters than women in other age, education, residence and religion categories.

Husband -wife communication about family planning and the role of this communication in accepting family planning in an Egyptian study have shown that determinants of husband-wife communication include socioeconomic and demographic characteristics of the spouse (Hagar, 1988).

In another study in the subcontinent, Green et al (cited by U.N, 1974) learned that some of the demographic variables seemed to enhance intraspouse communication on family planning matters. This study stated that the following factors contributed to an increase in communication between spouses: (1) age, (2) length of marriage, (3) social class status, and (4) education. The following sections will look into

variables such as age, number of living children, duration of marriage, education, occupation, knowledge on contraceptive use, number of desired children and satisfaction with family planning information.

2.3.1 Age

When examining husband-wife communication concerning fertility management, Makomva et al.(1991) found that only younger married women included family planning issues as topics of occasional communication.

When studying gender ideology and fertility strategies in an Ekiti Yoruba village, Renne (1993) came to the conclusion that younger women and their spouses were more likely than older ones to discuss and decide upon a desired family size. The study of Hill et al. (1959) also found that the tendency to discuss family planning with the spouse tended to vary inversely with age and education; and that older and less educated people tended to have less intraspouse communication than younger and more highly educated persons.

On the other hand, a comparative study of communication and related factors affecting husband-wife communication and the practice of family planning for four countries: India, Iran, Philippines and Singapore in 1974 have concluded that where the wife was between 20-34 years of age, the proportion communicating about family planning was higher than where the wife was under 20 or 35-39 because contraceptive was not a big

issue to extremely young people and to couples who were approaching or had passed menopause. However, this result found that the overall association between age and family planning communication was very low (U.N 1974).

Moreover, Poffenberger (1968) has argued that the traditional patterns appear to be changing rapidly, so that younger couples were freer in their communication than their elders had been at the same stage of the family cycle.

Although there are different opinions about the influence of age on couple communication, the research around the world support the conclusion that young couples were more likely to discuss about family planning issues than old one's.

2.3.2 Number of living children

The conclusion that couple who did not communicate had more live births than those who did communicate were found from studies in China (Li, 1993) and India (Sujatha and Murthy, 1993).

As study in Sri Lanca showed that only 7% of husbands and wives discussed family planning before the birth of the first child and 25% discussed family planning for the first time after their first birth. By the second child, almost 50% had discussed family planning (De Silva, 1994). So, family size increased, husband-wife communication regarding birth control increased (Misra,1966). On the other hand, another study investigating the husband-wife communication in Asia realized that the tendency to discuss

family planning was almost identical for all sizes of families and showed little trend with changing family size (U.N,1974).

Thus, the number of children had an effect on husband-wife communication. However, the level of effect varied from country to country.

2.3.3 Duration of marriage

A study relating to couple communication in Singapore, Iran, Phillipines and India indicated that discussion of family planning tended to peak between the fifth and fifteenth year of marriage. It was explained that this is the period of marriage cycle during which childbearing approaches completion. After fifteen or more years of marriage, couples approach menopause, and family planning becomes less important (U.N,1974).

Thus, duration of marriage influence discussion between husband and wife. It means that couples with shorter duration of marriage are more likely to discuss to each other than those who have longer duration of marriage.

2.3.4 Education

In an attempt to better understand the process through which the family planning program and social development in China affect fertility, women's participation in fertility discussion with their husbands was examined as an intermediate factor. The results showed that a women's education attainment was the most significant positive indication of

their participation in fertility discussion (Li, 1993). The Oni and Mc Carthy's study (1991) indicated that while 77% of the most highly educated men had discussed family planning with their wives, only 13% of uneducated men had done so.

There are different opinions about the effect of husband's and wife's education on couple communication. The wife's education was found to have a strong effect on the level of intraspousal communication in Sujatha and Murthy's study (1993) in Andhra Pradesh State, India. He concluded that enhancing women's status via education can improve communication between spouse. On the other hand, the results of a study of four countries (Iran, Singapore, Phillipines and India) demonstrated that education attainment may have been a more important factor among males than females in the willingness or the tendency to report engaging intraspouse discussion. Moreover, in noting the consistent relationship between education and communication, even illiterate husbands and wives did communicate. This study also indicated that at least 20% of illiterate female respondents reported that such communication had taken place (U.N, 1974).

Thus, there are several assumptions underlying the relationship between education and couple communication. It is often assumed that better educated couples, being more exposed to family planning information, accept new ideas and have more opportunities to discuss with each other and therefore find it easier to adopt family planning. It is expected that educated women marry later, show more responsibility for the welfare of their children, and discuss problems more freely than uneducated women.

2.3.5 Occupation.

There was very limited evidence which indicated the effect of occupation of couple on discussion on family planning. A study in Bangladesh (Kabir et al., 1988) shows that women working outside the house had improved their status in the family and the community, and this more equal status and the presence of good husband and wife communication are intervening variables through which economic and demographic factors effect fertility. In Singapore (U.N, 1974), where the proportion of employed women was larger, the correlation between occupation and husband-wife communication was significant and sizable for both male and female respondents. On the other hand, Mukherjee (1975) in his study in several states in India stated that long hours of work outside the home emerged as one of the most crucial barriers to communication.

Thus, there are two contrasting opinions about the effect of occupation on couple communication. However, occupation might have positive influence on intraspouse communication because the couples who work outside their home are likely to have higher education and consequently higher of knowledge of family planning and this may lead to more discussion between husband and wife.

2.3.6 Knowledge of contraceptive methods

There is positive relationship between knowledge of contraceptive methods and couple communication. Some studies provided evidence that women had greater

knowledge of birth control and were more likely to communicate this knowledge to their husbands (Misra, 1966). The results of DHS in 1988 in Ghana found that only 35% of wives and 39% of husband who knew at least one contraceptive method had talked to their spouses about family planning (Salway, 1994).

The study of Mukherjee (1975) also demonstrated that the rate frequency of husband wife communication regarding family planning was significantly related to awareness and knowledge of contraceptive devices.

Hence, couples with more knowledge of contraceptive methods are more likely to discuss family planning than others because in psychological terms, ones who have more knowledge, they tend to share their idea with their spouse.

2.3.7 Satisfaction with family planning information

There are not many studies concerning the relationship between satisfaction with family planning information and couple communication. However, in a study in India, it was found that husband-wife communication regarding the use of contraception was very poor and quality of the knowledge among people in study areas was superficial and characterized by misinformation and suspicion (Misra et al., 1981). On the other hand, a four countries study showed that use of mass media was highly correlated with husband-wife communication (U.N, 1974). One possible explanation for this finding is that when

people who obtained family planing information from mass media, they tend to share with their spouses.

Thus, the satisfaction with family planning information had effect on couple discussion. Logically, when people want to know more information, they need to discuss in order to satisfy their information need.

2.3.8 Number of children desired

Most of the research evidence points to a negative relationship between the desire for children and couple communication. It might be assumed that a desire to limit childbearing encourages discussion of family planning, which in turn leads to contraception, although whether communication was really a necessary link in this process remained an unanswered question (Beckman, 1993). Thus, husband-wife communication about family planning was significantly related to family planning attitude and knowledge and was associated with a small desired family size (Hagar, 1988). Moreover, when preferences and actual fertility were compared, it was found that family planning communication was higher among couple who have reached or exceeded their desired family size (U.N,1974).

Therefore, when couples desire small family size then in order to limit family size by using contraception, they need to discuss with their spouse about what method they should use and how. So, number of desired children influence the intraspouse communication.

2.4 Conclusion

Although there were different arguments on intraspouse communication and its effects on contraceptive use as well as the association between demographic, socioeconomic factors and couple communication, most studies supported the idea that higher the discussion between spouses on family planning issues, greater the tendency to be a current user of family planning. There were factors such as age of husband and wife, duration of marriage, number of living children, education, occupation of husband and wife and knowledge of contraceptive use contributing to the variation in couple communication. However, in different societies, the influence of these factors on couple communication varied. In generally, it may be concluded that young couples with shorter duration of marriage, higher level of education level, more knowledge of family planning are more likely to discuss about family planning than old couples, high duration of marriage and low education.

CHAPTER III

METHODOLOGY AND SOURCE OF DATA

3.1 Conceptual framework

Since couple communication has an influence on contraceptive use, the nature of that communication will be examined. The nature and extent of husband-wife communication will be indicated in terms of whether or not couples had discussed with each other about family planning issues and what topics they talked about. Furthermore, the consistency of husband and wife responses will be analyzed.

To confirm the influence of couples' communication on contraceptive use, crosstabulation techniques will be applied. The determinants of couple communication will be examined using logistic regression.

Relating to couple communication, there will be five dependent variables which are classified into categories: discuss and not discuss. They are:

1. Having discussion (couple had discussed to each other about family planning issues in generally).

2. Couple discussion about contraceptive methods (topic 1)

3. Couple discussion about limiting family size (topic 2).

4. Couple discussion about general reproductive issues (topic 3).

5. Couple discussion about maternal health/child care (topic 4).

The independent variables are: age of husband, age of wife, duration of marriage, education of husband, education of wife, occupation of husband, occupation of wife, number of living children, number of contraceptive methods ever heard by husband and wife, satisfaction with the present level of knowledge about family planning of husband and wife, number of desired children, number of desired boys and number of desired girls. All independent variables are classified into more than 2 categories.

It is noted that this study is not mention about residence variable because this survey conducted in provinces where family planning programs had been funded by both Government and UNFPA, so the population and family planning program have been achieved certain success, especially in rural areas of some provinces. Furthermore, the results of this KAP survey showed that there were not significant differences between urban and rural areas on percentage of respondents who discussed about family planning as well as percentage of respondents who discussed about specific topics (ISS, 1993).

Figure 1: Figurative presentation of couple communication factor influencing the F.P practice

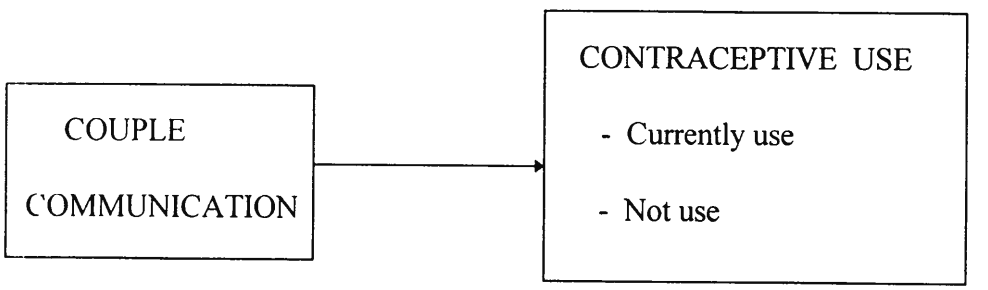
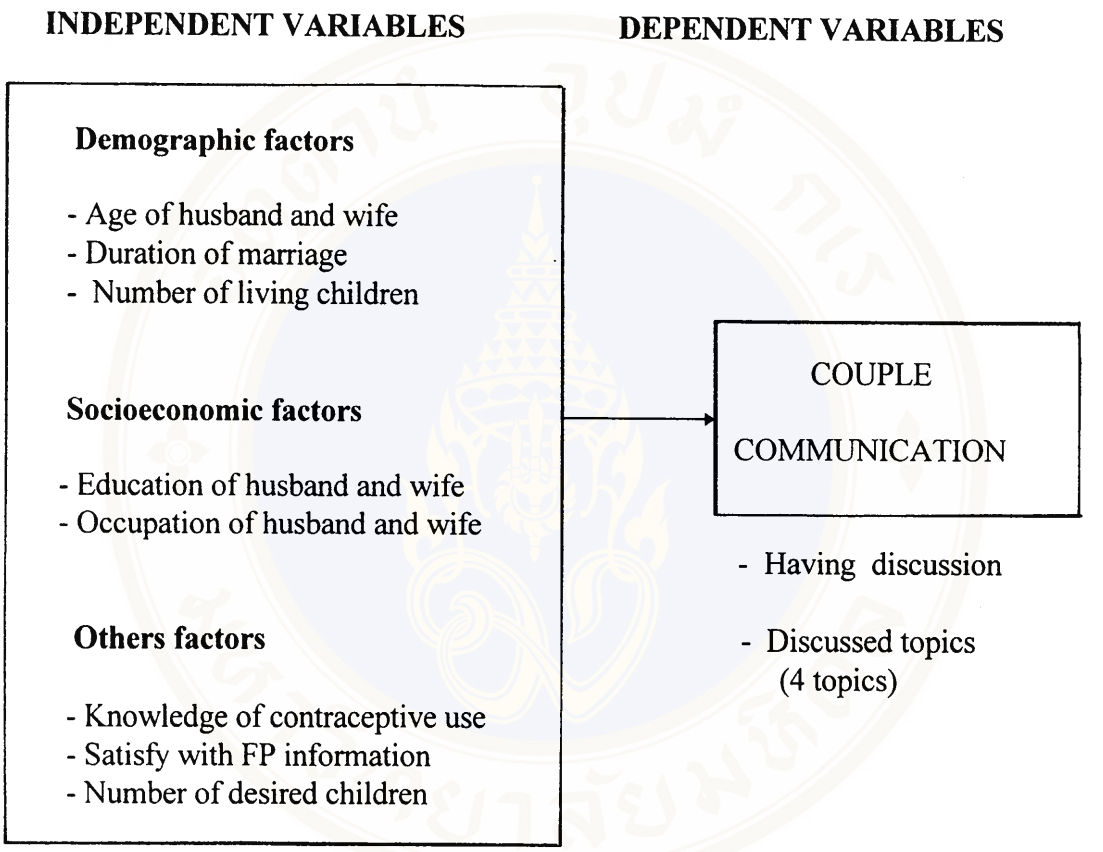


Figure 2: Figurative presentation of socio-economic and other factors influencing couple communication



3.2 Hypotheses

1. Couples who discuss about family planning are more likely to use contraceptive methods than couples who do not discuss about family planning.

2. Couples who have higher education are more likely to discuss family planing than those who have lower education.

3. Couples with more knowledge of contraceptive use are more likely to discuss family planning than others.

4. Couples who want to know more information about family planning are more likely to discuss family planning than those who are satisfied with their information.

3.3 Sources of data

This study used the data from the Family Planning KAP survey in Vietnam which was conducted in seven provinces where family planning programs have been supported by both Government and UNFPA. This survey was conducted in July 1993 by the Institute of Statistical Science (ISS) of The General Statistical Office (GSO) and Institute of Sociology (IOS) of the National Center for Social Science.

The sampling procedure used a multi-stage probability technique, following the PPS (Probability Proportional to Size) procedure. The 1989 Population Census was used as the sampling frame. In each of the seven provinces, around 660 currently married women at reproductive ages and 330 of their husbands were interviewed. The sample size of this survey was 7226. However, only 4,984 cases which consisted of 2492 couples were used in this study.

The instrument used for data collection was a standard questionnaire for individual interviews which sought information regarding socio-demographic characteristics; attitude, opinions and knowledge of family planning; family planning and

fertility history; mass media use; etc. This version of the questionnaire was made up of about 80 questions.

3.4 Method of analysis

Frequency distribution and cross tabulations of variables of interest are presented to describe and summarize the data. Chi-square test is employed to test the hypothesis of relationship between couple communication and contraceptive use as well as the influence of socio-economic and demographic factors on couple communication.

Logistic regression is used to determine the predictors of dependents variables (which are dichotomous) from a set of independents variables (Hosmer, 1989). In this study, there are 3 logistic regression models for 3 dependents variables which have the same set of independent variables. The equation for the logistic model in terms of the log odds is as follows:

$$\text{Log } Yj \text{ (prob DIS./prob Not DIS.)} = Bj + \sum_{i} Bji * Xi$$

Where: j is order of the dependent variables, taken from 1 to 3.

i is order of the in dependent variables, taken from 1 to 14.

Bj is intercept of j^{th} equation.

Bji is coefficients of j^{th} equation.

Xi is an i^{th} independent variable.

From above equation, logistic coefficient can be interpreted as the change in the log odds associated with a one-unit change in the independent variable. Since it's easier to think of odds, rather than log odds, the logistic equation can be written in term of odds as follows:

$$\text{Prob DIS/Prob Not DIS} = e^{Bj + \Sigma Bij * Xi}$$

If Bij is positive, the factor e^{Bij} will be greater than 1, which means that the odds are increased; if Bij is negative the factor will be less than 1, which means that the odds are decreased; if Bij=0, the odds are unchanged.

3.5 Limitations of the study

As mention above, this survey was conducted in provinces where family planning programs had been funded by both Government and UNFPA, so the population under study is highly selective in the sense of contraceptive use. The rate of current use of contraceptives under study areas is higher as compared to the whole country.

Another limitation is that this study is confined within the boundaries of the questionnaire and questions previously asked. Questions about couple communication were limited to analyze in more detail about the nature and extent of couple communication. Only couple discussion (whether they discuss or not) and some discussed topics were examined. In addition, the number of topics of discussion are limited. The questionnaire

did not express frequency of discussion, so we can not estimate degree of communication as well as extent of agreement of husband and wife and the nature of decision making (whether the wife share equal power in decision making or whether the husband dominates). However, in line with our interest in undertaking this study, we believed that results may provide useful information for policy makers, especially for IEC program managers in the building IEC strategy. The findings may also be used as a baseline data for further studies on couple communication.

CHAPTER IV

RESULTS OF THE STUDY

4.1 Background characteristics of couples

4.1.1 Socio-economic and demographic characteristics

This was the first time that both husbands and wives were interviewed in the KAP survey. In previous surveys, husbands' awareness and attitude as well as behavior on family planning were studied through wives' responses which were effected by wives' attitudes and opinions.

Knowledge of the background characteristics of couples such as age, education, occupation, duration of marriage, number of living children are essential for the study. Table 1 shows that at the time of the survey, more than three-fourths of husbands and wives were in age group 20-39, where most reproduction usually occurs. Average ages of husbands and wives were relatively young (34.5 and 31.6 respectively).

Looking at education level, it can be noted that two thirds of husbands and wives had 'some elementary' or 'finished elementary'. About 30% of husbands and 20% of wives reported that they had 'some middle school' or 'finished middle school'. Few respondents hold a high school or college education. Only a few of them had never attended school. As is known for the whole country, education levels of both males and females is exceptionally high compared to those of other developing countries.

Table 1: Percentage distribution of the background characteristics of couples.

Characteristics	Husband	Wife
Age of respondents		
15 - 19	1.2	1.2
20 - 29	27.0	39.3
30 - 39	50.6	46.6
40 - 49	19.3	12.8
50 - 59	2.7	-
60 +	.2	-
Total (Cases)	100.0 (2492)	100.0 (2492)
Mean	34.5	31.6
Education		
Never studied	1.4	3.4
Some elementary	32.5	39.8
Finished elementary	32.4	33.8
Some middle school	10.4	5.7
Finished middle school	19.2	15.0
High school	1.4	1.7
College	2.7	.6
Total (Cases *)	100.0 (2482)	100.0 (2475)
Occupation		
Housework	.2	12.6
Farmer/fishermen	60.4	56.8
Small business	14.7	16.9
Government Cadre	15.6	11.5
No profession	1.4	.4
Other	7.6	1.8
Total (Cases *)	100.0 (2487)	100.0 (2488)
Duration of marriage		
< 5 year		28.5
5 - 10 years		25.7
11 - 15 years		22.5
16+ years		23.3
Total Cases (*)		100.0 (2492)
Mean		10.3

(*) Not included 'No answer'

From table 1, it is also observed that the majority of husbands and wives are reported as manual workers in agriculture (60.4% and 56.8% respectively). Husbands and wives who are working in small business were not so high (14.7% and 16.9%). Only 11.5% of female and 15.6% of male respondents are engaged in government employment.

With regard to duration of marriage, the proportion of couples having duration of marriage under 5 years, 5-10, 11-15 and 16+ years were relatively equal. The mean duration of marriage was 10.3 (table 1).

From table 2, it is observed that among couples, 3.7% reported that they have no children, 54.1% of them have 1 or 2 children and 42.3% have 3 or more children. This indicates that the percentage of couples having 3 or more children is still high, it is a challenge to the government's family planning programs target of reducing the percentage of couples who have a third child. The number of living children which couples have is determined by their fertility rate, by their duration of marriage and by their ages. The mean number of living children of a couple is 2.5. Moreover, it should be noted that this study is using data of duration of marriage and number of living children from the wives' responses because they are the actual childbearers and they are more knowledgeable about their past fertility behavior than their husbands.

Table 2: Percentage distribution of number of living children of couples

Characteristics	%
Number of living children	
No children	3.7
1	22.6
2	31.5
3+	42.3
Total	100.0
Mean	2.5
Cases	2492

Regarding the number of desired children, table 3 indicates that the percentages of couples in which the husband's opinions on number of desired children as well as number of desired boys were different from those of his wife were 22.1% and 24.0% respectively. Meanwhile only 9.2% of couples have different opinions about the number of desired girls. The low percentages of couples who have differences of opinions toward desired numbers of children may suggest that there was high degree of couple communication because it would seem that if husbands and wives would frequently discuss family planning issues, then they would tend to agree on opinion about family size. Table 3 also shows that the majority of couples want 2 children and only 17.4% of them want 3 or more children. So, although there are many couples whose number of living children are higher than the government's target, they still desire only 2 children which include one boy and one girl and consider this as ideal model. This suggests that the model of two children per couple would be accepted in study areas. Moreover, some couples still want more boys than girls because it is

shown in table 3 that the percentage of couples wanting 2+ boys was higher than those wanting girls. In fact, the ideological norms for preference for boys are still rooted in the Vietnamese people. Many couples, especially husbands, realize that they should have fewer children but in fact they often have more than their desired number because they fell the need for sons (Hong,1990). Children, especially sons are the agents for the continuity of family name as well as the support sources for parents in their old age (Uche,1994).

Table3: Percentage distribution of numbers of desired children of couples

Characteristics	%
Number of desired children	
- Both disagreed	22.1
- Both agreed:	
Less than 2	2.4
2	58.1
3+	17.4
Total	100.0
Cases	2492
Number of desired boys	
- Both disagreed	24.0
- Both agreed:	
Less than 2	53.7
2	17.0
3+	5.3
Total	100.0
Cases	2492
Number of desired girls	
- Both disagreed	9.2
- Both agreed:	
Less than 2	83.4
2	7.2
3+	.2
Total	100.0
Cases	2492

4.1.2 Couple communication

In this study, having discussion is defined as both husband and wife answering that they had discussed family planning with their spouse during the past six months. Couples which only the husband or wife reported having discussed family planning with their spouse were considered as not having discussion.

Table 4: Percent of discussion about family planning.

Respondent	Ever discussing with		
	Others+spouse	Spouse	Spouse with spouse agree(*)
Husband	72.2	61.5	56.9
Wife	72.8	62.1	56.9

(*) Both husband and wife answered they had discussed F.P

As presented in table 4, the overall percentages of husbands and wives reporting discussion about family planning issues were similar (72.2% and 72.8%, 61.5% and 62.1% respectively). Those whom respondents had discussed family planning with during the 6 months before the time of the survey included spouse, father, mother, mother in law, relatives, friends, neighbors etc. Though the percentages of husbands and wives who had discussed family planning were very high, only 56.9%

of both the husband and wife reported having discussion about family planning with each other. However, this shows that there was a high degree of consistency in reporting between husband and wife.

Table 5: Percentage of discussed topics of couples.

Topics	Husband	Wife	Couple (*)
Methods of Contraception	31.9	30.5	26.4
Limiting Family Size	31.2	31.5	26.1
General Reproduction	7.4	7.4	4.7
Maternal health/Child care	13.7	13.5	9.3
Cases	2492	2492	2492

Note: Multiple answers are allowed.
(*) Both husband and wife answered they had discussed about this topic

In respect to discussed topics, table 5 reveals that the percentage of couples who discussed about methods of contraception and limiting family size were the highest (26.4% and 26.1% respectively) when compared to other topics. Only few of couples had discussed about general reproduction and maternal health/child care (4.7% and 9.3% respectively). This indicates that contraceptives and limiting family size are of most concern among family planning matters, probably because husbands and wives need to discuss with each other desired family size and what contraceptive methods are convenient for them to apply and where they can get them. However, this also demonstrates that under study areas, IEC messages on maternal and child health

care or general reproduction were less distributed and people may be regard family planning as contraceptive use and limiting family size.

As mentioned above, although there was little difference in overall percentage of responses about topics between husbands and wives (31.9% and 30.5% respectively, for example), couples where both husband and wife had the same answer were lower than when comparing husbands' or wives' responses separately. This is not due to sampling errors because husbands or wives may have forgotten that they had discussed the topics with their spouse and had different answers.

Table 6: Percentage distribution of those satisfied with knowledge about family planning

Satisfied with knowledge	Husband	Wife
Satisfied	64.3	63.6
Want more knowledge	29.5	29.5
Don't know/Not sure	6.2	6.9
Total	100.0	100.0
Cases(*)	2489	2484

(*) Not include 'No answer'.

In terms of opinion about being satisfied with knowledge about family planning which may be the result of couple discussion, it can be observed from table 6 that more than half of the couples were satisfied with their knowledge about family planning. However, there was still around 30% couples who want to know more information family planning. It indicates the lack of family planning information in the

study area. On the other hand, it suggest that the desired for more knowledge lead to the motivation couples to discuss on family planning. Besides obtaining knowledge about family planning by discussion with spouse, husband and wives may improve their knowledge through family planning staffs, health workers, and mobile teams at the grass-roots. Therefore, IEC program should provided more information about family planning issues, including maternal and child health care through mass media as well as personal contacts.

4.1.3 Status of contraceptive use

This survey interviewed both husbands and wives about contraceptive methods. Since responses of husbands and wives were not vary different and family planning behaviors of couple are the same for husband and wife, only the wife's report on contraceptive use will be discussed.

Table 7: Percentage distribution and number of users of contraceptive method

Method	Using	Number
IUD	54.2	1052
Pill	3.3	64
Condom	8.7	169
Female Sterilization	4.3	84
Male Sterilization	.6	12
Rhythm	10.7	209
Withdraw	16.2	313
Others	2.0	39
Total	100.0	1936

Looking at the different methods (table 7), it realized that the most commonly used method was clearly the IUD which is used by more than a half of all currently users of contraception. This was due to the effectiveness of program management and leadership which have played an important role in the family planning program (FPP). For many years, the efforts of the FPP have been focused on promoting this method, especially in rural areas. The result is that rural people sometime regard family planning as synonymous with IUD use (U.N,1989). Recently, efforts have been made to promote the 'cafeteria approach' but the current situation can not be altered overnight.

Relating to other modern methods, it is observed that percentage of couple using them were very low when compared to other countries in the region. Only 3.3% of couples are currently using pill. Reasons for low pill users were little promotion by providers and a low level of demand from potential users (Knodel et al, 1995). With regard to permanent methods, 4.3% of women or less than one percent of their husbands have opted for sterilization .

It is important to recognize, however, that a substantial share of the prevalence of contraceptive use is due to reported use of rhymth (10.7%) and withdrawal (16.2%), two methods that are likely to be relatively ineffective compared to modern methods. The high of these rates reflects the availability of only a limited selection of modern methods for contraception and the fact that Vietnamese couples have a little choice of methods of contraception, though the trend toward the 'cafeteria approach' is

increasing (NCPFP, 1995). According to this evidence, it could be said that the recent policy to widen the method mix has not yet been reflected in this study.

4.2 The influence of couple communication on contraceptive use

One of the goals of this study is to find the influence of husband-wife communication about family planning on the adoption of family planning. Data in table 8 shows that 83% of couples who had discussion about family planning are currently using contraceptives. This rate is higher as compared to 'not discuss' group. Thus, when couple have the discussions, they can improve their knowledge from each other and be more likely to accept a small family size, this can lead to the decision to practice family planning. The hypothesis that couples who discuss about family planning are more likely to use contraceptive methods than couples who do not discuss about family planning is therefore accepted.

Table 8: Percentage distribution of contraception use status by couple discussion and topic of couple discussion.

Couple communication	Use	Not use	Total
Having discussion			
- Discuss	83.3	16.7	100.0 (1418)
- Not discuss	70.3	29.7	100.0 (1074)
Total	77.7	22.3	100.0 (2492)
P value < .00001			
Discussed topics			
1. Methods of contraception (topic 1)			
- Discuss	87.1	12.9	100.0 (658)
- Not discuss	74.3	25.7	100.0 (1834)
Total	77.7	22.3	100.0 (2492)
P value < .00001			
2. Limiting family size (topic 2)			
- Discuss	85.1	14.9	100.0 (651)
- Not discuss	75.1	24.9	100.0 (1841)
Total	77.7	22.3	100.0 (2492)
P value < .00001			
3. General reproduction (topic 3)			
- Discuss	67.5	32.5	100.0 (117)
- Not discuss	78.2	21.8	100.0 (2375)
Total	77.7	22.3	100.0 (2492)
P value = .00681			
4. Maternal health/child care (topic 4)			
- Discuss	83.2	16.8	100.0 (232)
- Not discuss	77.1	22.9	100.0 (2260)
Total	77.7	22.3	100.0 (2492)
P value = .03457			

Note: Chi-square test is employed.

Related to topics of discussion it was found that discussed topics had positive influence on contraceptive use, except topic 3. A possible reason for the negative influence of topic 3 may be that some couples had not yet reached desired family size, and they want to have more children. So, although they had the discussion about this topic, they were not using contraceptive methods. An other possible reason is only 4.7% of couples had discussed this topic as shown in table 5 and these couples are living in areas in which contraceptive methods are not available or couples would not chosen method suitable for them, so they were not using contraception.

In summary, the percentage of couples who were practicing family planning at the time of the survey was higher for those who had ever discussed family planning with their spouses as well as for those who had ever discussed on specific topics compare to those who had never discussed such topics. The results of the study are in accordance with findings in the Asia, Africa and Latin America (Salway, 1994; De Silva, 1994; Mahmood and Ringheim, 1993; Kabir et al., 1988; U.N, 1974). This confirms that husband-wife communication is linked to the adoption of family planning in Vietnam and it is a major factor affecting contraceptive use. This suggests that family planning programs should give a high priority to stimulating such communication and consider as important communication channel on family planning.

4.3 The influence of socio-economic and demographic characteristics on couple communication

4.3.1 The influence of socio-economic and demographic characteristics on having discussion

In order to study an influence of socio-economic and demographic characteristics on couple communication, bivariate analyses with Chi-square test will be examined.

Regarding an influence of socio-economic and demographic variables on having discussion of couples, table 9 presents the significant impacts of age of husband and wife upon couple communication. The percentage of couples at age 25-39 who had been discussed on family planning were highest as compared to other age groups because in that age group, most reproduction usually occurs and family planning is still a big issue that they need to be concerned with. After age 40, most of couples had completed their family size or wives were approaching menopause, so the percentage discussing declined.

Education level of both husband and wife is an important variable influencing couple discussion. Table 9 shows that the percentage of couples communicating increased by level of education. In generally, the higher the education attainment of a couple, the higher the couple communication. However, the difference were pronounced between 'never study' and those who had at least elementary education.

In terms of occupation, it is observed that the percentages of couples where either spouse is employed in a government office were higher than other professions because they may have higher education level and most of them are living in urban areas which are less influence by traditional norms, they also motivated by IEC campaigns, so couples have more freedom and more frequency to discuss family planning. It is noted that the percentage of discussion among couples in which husband's occupation belong to 'housework/no profession' is very high. In fact, there are only 6 cases for this group.

Looking at influence of duration of marriage on having discussion, it demonstrated that 62.4% of couples who have 5-10 marital years had discussed each other while the rates for couples at other duration of marriage were less than 60%.

According to number of living children, as displayed in table 9, percentage of couples who had discussed about family planning was lowest for those who have no children (39.6%) and the peak was for couples who have 1-2 children with 58.5%, because as mentioned above, many couples accept family size with 2 children, after having child or reaching to desired family size, couple need to spacing or limiting birth, they need to discuss with their spouse to decide their family planning practice. This rate declined for couple who had 3+ children. This result is similar as findings from some Asian countries (U.N,1974).

Table 9: Percentage distribution of having discussion by demographic, socio-economic and other characteristics

Variables	Discuss	Not Dis.	Total
Age of husband			
<25	55.9	44.1	100.0
25 - 39	58.9	41.1	100.0
40 +	50.5	49.5	100.0
Total	56.9	43.1	100.0
P value = .00220			
Age of wife			
< 25	56.1	43.9	100.0
25 - 39	59.4	40.6	100.0
40 +	44.2	55.8	100.0
Total	56.9	43.1	100.0
P value < .00001			
Education of husband			
Never studies	22.5	77.5	100.0
Some elementary	53.2	46.8	100.0
Finished elementary	59.7	40.3	100.0
Some middle school	57.6	42.4	100.0
Finished middle school	61.8	38.2	100.0
Higher	56.0	44.0	100.0
Total	56.9	43.1	100.0
P value = .00001			
Education of wife			
Never studies	31.5	68.5	100.0
Some elementary	54.5	45.5	100.0
Finished elementary	60.6	39.4	100.0
Some middle school	59.4	40.6	100.0
Finished middle school	61.7	38.3	100,0
Higher	56.1	43.9	100.0
Total	56.9	43.1	100.0
P value < .00001			
Occupation of husband			
Housework/no profession	83.3	16.7	100.0
Farmer/ Fishermen	56.5	43.5	100.0
Small business	59.1	40.9	100.0
Government Cadre	61.5	38.5	100.0
Other	45.8	54.2	100.0
Total	56.9	43.1	100.0
P value = .00817			

Table 9: (continued).

Variables	Discuss	Not Dis.	Total
Occupation of wife			
Housework/ no profession	53.2	46.8	100.0
Farmer/ Fishermen	57.5	42.5	100.0
Small business	55.1	44.9	100.0
Government Cadre	62.7	37.3	100.0
Other	42.2	57.8	100.0
Total	56.9	43.1	100.0
P value = .03327			
Duration of marriage			
< 5 year	55.6	44.4	100.0
5 - 10 years	62.4	37.6	100.0
11 - 15 years	59.4	40.6	100.0
16+ years	50.2	49.8	100.0
Total	56.9	43.1	100.0
P value = .00013			
No. of living children			
No children	39.6	60.4	100.0
1-2	58.5	41.5	100.0
3+	56.4	43.6	100.0
Total	56.9	43.1	100.0
P value = .00169			
Knowledge on contraceptive methods			
H. & W. know different	44.9	55.1	100.0
Both husband and wife:			
Know less than 3 methods	31.6	68.4	100.0
Know from 3 to 4 methods	47.8	52.2	100.0
Know more than 4 methods	60.2	39.8	100.0
Total	56.9	43.1	100.0
P value < .00001			

Note: Chi-square test is employed.

Table 9: (continued).

Variables	Discuss	Not Dis.	Total
Husband's satisfaction with knowledge about F.P			
Satisfied	56.0	44.0	100.0
Want more	63.7	36.3	100.0
Don't know/Not sure	34.4	65.6	100.0
Total	56.9	43.1	100.0
P value < .00001			
Wife's satisfaction with knowledge about F.P			
Satisfied	56.2	43.8	100.0
Want more	64.8	35.2	100.0
Don't know/Not sure	28.7	71.3	100.0
Total	56.9	43.1	100.0
P value < .00001			
No. desired children			
- Both disagreed	50.0	50.0	100.0
- Both agreed:			
≤ 2	59.5	40.5	100.0
3+	53.0	47.0	100.0
Total	56.9	43.1	100.0
P value = .00092			
No. of desired boys			
- Both disagreed	54.8	45.2	100.0
- Both agreed:			
< 2	57.8	42.2	100.0
2	54.5	45.5	100.0
3+	65.2	34.8	100.0
Total	56.9	43.1	100.0
P value = .09848			
No. of desired girls			
- Both disagreed	47.4	52.6	100.0
- Both agreed:			
< 2	58.6	41.4	100.0
2	50.3	49.7	100.0
3+	25.0	75.0	100.0
Total	56.9	43.1	100.0
P value = .00128			

Note: Chi-square test is employed.

Looking at knowledge on family planning methods, it is worthy of knowing that there was an influence of couple's knowledge of contraceptive methods on having discussion. The corresponding percentage for couples who knew more than 4 methods rose sharply to a much higher level as compared to the others. Couples in which both husband and wife knew the same number of method are more likely to discuss than those where husband and wife knew a different number of methods.

Considering satisfaction with knowledge on family planning, it is found that those who want more information about this field are more likely to discuss family planning with each other.

The agreement of couples on number of desired children is also displayed in table 9. It shows that there were significantly differences in the percentage of discussion between couples who both husband and wife agreed on the same number of desired children and couples who did not. Those couples with agreement tended to discuss more. This pattern was also observed in the case of desired number of girls but not in desired number of boys.

In summing up, the findings confirmed that these factors influenced couple communication in Vietnam.

4.3.2 The influence of socio-economic and demographic characteristics on discussed specific topics among couples

The results of analyzing the influence of socio-economic and demographic factors on four discussed topics such as contraceptive methods, limiting

family size, general reproduction and maternal child health care presented in table A1 (appendix 1). It is found that there were 12 variables which had significantly influenced on couple discussion about contraceptive methods (topic 1). They are age of both husband and wife, duration of marriage, number of living children, number of desired children, number of desired girls and boys, education of wife, occupation of wife, knowledge of contraception, satisfaction of both husband and wife. The results of study also indicated that seven factors such as age of wife, duration of marriage, number of living children, number of desired children, number of desired girls and satisfaction with knowledge of family planning of both husband and wife influenced the couples' discussion about limiting family size. Topic 3 was influenced only few factors such as number of living children, education of wife, knowledge of contraception, husband's satisfaction with knowledge of family planning. And lastly, there were eight variables such as number of living children, number of desired children, education of husband and wife, occupation of husband, knowledge of contraception, satisfaction with knowledge family planning of both husband and wife which have effected couples' discussion about maternal/child health care. For all the significant relationships, the p values were less than .05. It is observed that the direction of influence of socio-economic and demographic factors on the above four topics is the same as the influence of these factors on whether couple had discussion.

4.4 Multivariate analyses of factors affecting couple communication

In an attempt to better understand the contribution of socio-economic and demographic variables on variation of couple communication as well as to determine the most important factors influencing couple discussion, the multiple analysis using logistic regression has been used.

Three models were used in this study, they are having discussion (model 1), discussion on contraceptive methods (model 2), and discussion on limiting family size (model 3). Two other discussed topics: discussion on general reproduction and discussion on maternal health and child care were left out, because only few couples had discussed these topics (4.7% and 9.3% respectively). All dependent variables are dichotomous: code 1 for couple who had discussed and 0 who had not.

There were 14 independent variables which were used for the logistic regression analysis models. They are age of husband; age of wife; education of husband; education of wife; occupation of husband; occupation of wife; number of living children; number of desired children; number of desired boys; number of desired girls; duration of marriage; knowledge on contraceptive methods of couples; wife satisfaction with knowledge on family planning; and husband satisfaction with knowledge on family planning. All independent variables have more than two categories.

The findings indicated that out of the 14 independent variables, there are 6 important (significant) factors for model 1; 6 important (significant) factors for model 2; and 6 important (significant) factors for model 3. The followings discussion will

include only those with statistically significant. Logistic regression coefficients for all independent variables of 3 models are in appendix 2. These coefficients can be explained as the change in log odds when a change in the independent variables of one unit occurs while holding value of other variables as constant.

4.4.1 Factors affecting having discussion (Model 1)

Table 10 presents odds ratios of logistic regression in relation to having discussion. If Bji coefficient is positive, the factor is greater than 1 which means that the odds are increased; if Bji coefficient is negative, the odds are less than 1 which means that the odds are decreased; if Bji = 0, the odds are unchanged. For instance, the odds for age of wife at 40+ were .5863 indicated that couples in which the wives were in the age group 40+ were 41% less likely to discuss family planning than those couples which wives were in the age group 25-39. This is because family planning is not an issue to extremely old couples who are approaching or have passed menopause. So, compared with young couples, older couples tended to discuss family planning less because some of them had become sterile, some were already implementing family planning decisions without discussion or because they may have been more traditional and less committed to family planning. This result corresponds to the findings of Singapore and Kenya (U.N, 1974; Renne, 1978).

Table 10: Odd ratios of significant variables on having discussion (model 1) (# cases 2460).

Variables	Odds ratios
Age of wives	
(Ref: 25-39 years old)	
< 25	.9933
40+	.5863*
Duration of marriage	
(Ref: 5-10 years)	
< 5	.9285
11-15	.8091
16+	.6833*
Number of living children	
(Ref: No child)	
1-2	1.8757**
3+	2.6135***
Education of husband	
(Ref: Never studies)	
Some elementary	2.5678*
Finished elementary	2.5944*
Some middle school	2.4550*
Finished middle school	2.8926*
Higher	2.1258
Knowledge of contraceptive methods	
(Ref: Know <3 methods)	
Husband and wife know different	1.4927
Know from 3 to 4 methods	1.7118
Know more than 4 methods	2.2537***
Wife satisfied with knowledge about F.P	
(Ref: Satisfied)	
Want more	1.2543*
DN/Not sure	.4958**

* P value < 0.05 ; ** P value < 0.01 ; *** P value < 0.001.

Duration of marriage show that couples with 16+ years of marriage were 32% less likely than couples with 5-10 years of marriage to discuss contraceptive methods. One possible explanation is that after 15 years of marriage, some couples had completed family size and they have used permanent methods already, so they did not discuss any more.

Regarding the number of living children, couples who had 1-2 children were 88% more likely than couples who had no children to discuss on family planning. Meanwhile couples with 3+ children were more than two and a half times more likely to discuss family planning as compared to reference group. The reason for high discussion percentages of both groups is that they were target groups for family planning programs and they had been motivated by IEC campaigns at the local level to have discussion with their spouses on family planning issues. In general, the greater the number of living children which a couple had, the greater the tendency for them to discuss family planning. This result is accordance with the study of Misra (1966) and De Silva (1994). The result reveal that this variable is still significant after controlling for other variables.

The table 10 also demonstrated an influence of education of husband on couple communication. Couples whose husband had some education were around two and a half time more likely than to those whose husband was "never studied" to discuss family planning. The higher education level of husband, the higher discussion family planing issues between husband and wife. So, the husband's education was a major factor in determining couple communication. The hypothesis that couples who have

higher education level are more likely to discuss family planing than those who have lower education level is therefore accepted.

The effect of number of known contraceptive methods confirm an influence of this variable on couple communication. Couples who both husband and wife knew more than 4 methods are more than two times more likely than those who knew less than 3 methods to discuss family planning with each other. The hypothesis that couples with more knowledge on contraceptive use are more likely to discuss on family planning than others is therefore accepted.

Wife's satisfaction with knowledge on family planning had effect husband-wife communication. Couples whose wife wanted more information were 25% more likely to discuss family planning than those who were satisfied because the lack of information will encourage them to have conversation with their spouse in order to improve their knowledge. The hypothesis that couples who want to know more information on family planning are more likely to discuss family planing than those who were satisfied is therefore accepted.

In this multivariate analysis, it is observed that some independent variables which have significant influence in the bivariate analysis are not significant. It can be explained that when we use only one variable in the simple logistic regression model, the result will follow the same trend as found in crosstabulation. However, in the social context, there are many independent variables which affect the dependent variable. Several independent variables may have effects on the dependent

variable through others, for example, occupation of husband may have effects to couple discussion about family planning through education of husband.

4.4.2 Factors affecting couple discussion about contraceptive methods (Model 2)

After simultaneously controlling for other variables, duration of marriage, number of living children, number of desired children, number of desired girls, occupation of wife and wife satisfied with information on family planning were significant in explaining couple communication on topic 1 (contraceptive method) (see table11).

The number of desired children indicated that couples who husband and wife had different opinion toward numbers of desired children were 42% less than couples whose both husband and wife desired less than or equal 2 children to discuss contraceptive methods. This is because as mentioned earlier that most couples had accepted small family size, and they wanted to limit family size and wanted to use contraception, so they needed to discuss with their spouse what method they should use and how. If they had different opinion about numbers of desired children, they might not feel easy to discuss on this topic because husband or wife still want more child. The agreement between husband and wife regard to the number of desired children reflects a mutual understanding of these couples and perhaps indicates that they freely discuss fertility behavior.

Table 11: Odds ratios of significant variables on discussion about contraceptive methods (model 2) (# cases 2460).

Variables	Odds ratios
Duration of marriage	
(Ref: 5-10 years)	
< 5	.9240
11-15	.7323*
16+	.5452**
Number of living children	
(Ref: No child)	
1-2	3.8535***
3+	5.8748***
Number of desired children	
(Ref: Both H.& W. want ≤2)	
H.& W. want different	.5788*
Both H.& W. want 3+	1.2511
Number of desired girls	
(Ref: Both H.& W. want ≤ 1)	
H.& W. want different	.6921
Both H.& W. want 2	.6007*
Both H.& W. want 3+	.0198
Occupation of wife	
(Ref: Agriculture)	
Housework/no profession	.8909
Small business	.8121
Government Cadre	1.4764*
Other	.5783
Wife Satisfied with knowledge about F.P	
(Ref: Satisfied)	
Want more	1.1082
DN/Not sure	.4347*

* P value < 0.05 ; ** P value < 0.01 ; *** P value < 0.001

The table 11 also shows couples who both husband and wife want 2 girls are 40% less likely to discuss this topic than those who both husband and wife want less than or equal 1 girl. This is because they have not reached their desired family size yet or they may be living in area where IEC activities are inadequate, especially information on family planning.

As regarding occupation of wife, the result shows that couples with wives who are working in Government offices are 48% more likely to discuss contraceptive use as compared to couples with wives are engaged in agriculture.

Looking at the satisfaction with knowledge of the wife, it is found that couples whose wives answered that they were not sure whether or not they needed to know more information on family planning were 57% less likely to discuss contraceptive method with their husband than the reference group.

In brief, the results from model 2 suggest that IEC activities might encourage couples to accept small family size and encourage help them to overcome traditional barriers, hence that they can discuss about contraceptive methods without hesitation.

4.4.3 Factors affecting couples communication on limiting family size (Model 3)

Holding other variables constant, there are 6 most important determinants of couple discussion on limiting family size. They are number of living children, number of desired children, number of desired boys, education of wife,

occupation of husband and wife's satisfaction with knowledge about family planning (see table 12). Those are similar to findings in models 1 and 2.

Table 12 also indicates that couples whose both husband and wife want 2 boys are 91% more likely to discuss this topic than those whose both husband and wife want less than or equal 1 boy. This is because among couples desired 2 boys, many of them reached their desired family size, so they are more likely to discuss with their spouse about this topic.

According to education of wife, the results display that only couples whose wife's education level is 'higher' are 66% less likely to discuss this topic than couples whose wife's education level is 'never studies'.

Occupation of husband also has a significant influence on discussion about this topic between husband and wife. Couples whose husbands are government cadres are 54% more likely to discuss about limiting family size than couples whose husband engage in agricultural sectors. This can be explained by the fact that most of them have high levels of education and living in areas where IEC activities have been strengthen. Another explanation is that couples who are working in agricultural sector may want large family size because children can help them in the fields or because of agriculture policies which encourage couples to have more children in order to have more land. So, they did not want to discuss about limiting family size.

Table 12: Odds ratios of significant variables on discussion about limiting family size (model 3) (# cases 2460).

Variables	Odds ratios
Number of living children	
(Ref: No child)	
1-2	1.8720*
3+	2.6630**
Number of desired children	
(Ref: Both H.& W. want ≤ 2)	
H.& W. want different	.6604*
Both H.& W. want 3+	.3847**
Number of desired boys	
(Ref: Both H.& W. want < 2)	
H.& W. want different	1.2198
Both H.& W. want 2	1.9183*
Both H.& W. want 3+	1.1282
Education of wife	
(Ref: Never studies)	
Some elementary	.6889
Finished elementary	.6681
Some middle school	.7185
Finished middle school	.5498
Higher	.3423*
Occupation of husband	
(Ref: Agriculture)	
Housework/no profession	1.4649
Small business	1.1207
Government Cadre	1.5413*
Other	1.1098
Wife's satisfaction with knowledge about F.P	
(Ref: Satisfied)	
Want more	1.1091
DN/Not sure	.4650*

* P value < 0.05 ; ** P value < 0.01

In summary, it appears that couples in agriculture are less likely to discuss about limiting family size than those in government cadres. So, IEC programs should put more efforts for couples in agriculture sector. The message on limiting family size based on the benefits of having few children should be emphasized.

4.5 Conclusion

The results of study indicated that most couples were in 20-39 age group with about 10 years in duration of marriage. Many of them had elementary education. They are engaged mainly in agriculture sector. The number of living children of a couple was 2.5. In addition, due to effects of family planning program, rate of current use of contraceptives was relatively high (77.7%).

There was a high percent of couples discussing about family planning issues, especially about contraceptive methods and limiting family size. This suggest that both spouse are potentially important sources of information about family planning. Regarding the discussed topics, it was indicated that contraceptive methods and limiting family size was most concerned family planning issues. However, few couples had discussed about general reproduction and maternal and child health care. Furthermore, 30% of couples still want more information about family planning.

The results confirmed that husband-wife communication was linked to the adoption of family planning and was a major factor affecting contraceptive use. The hypothesis that couples who discuss about family planning are more likely to use

contraceptive methods than couples who do not discuss about family planning is therefore accepted.

This study also indicated that wife's age, duration of marriage, number of living children, husband's education, knowledge of contraceptive methods and wife's satisfaction were significantly influenced couple communication. The hypothesis that couples who have higher education are more likely to discuss family planning than those who have lower education is therefore accepted. In addition, the data also supported the hypotheses about the influence of knowledge of contraceptive methods and wife's satisfaction with information about family planning on couple communication.

CHAPTER 5

SUMMARY AND RECOMMENDATION

5.1 Summary

The aims of this study are to identify and explore the nature and extent of couple communication and the influence of couple communication on family planning practice. In addition, this study also aims to investigate factors affecting couple communication among couples in reproductive age. This study used the data from KAP survey which was conducted by the Institute of Statistical Science in 1993. Total of 2492 couples were used in this study.

In generally, average ages of husbands and wives were relatively young (34.5 and 31.6 respectively), average duration of marriage of couple was 10.3 years. The mean number of living children of a couple was 2.5. Looking at education level, nearly 70% of couples had "some elementary" or "finished elementary". Majority of husbands and wives are reported as manual workers in agriculture with around 60% of total respondents.

Major findings concerning to the objectives of the study are as follows:

5.1.1 There was high consistency of responses between husband and wife on family planning issues (having discussion and discussed specific topics).

5.1.2 There was a high percentage (nearly 60%) of couples discussing family planning issues to each other. Regarding the discussed topics, the study indicated that the topics which most couples discussed were contraceptive methods and limiting family size. Others topics such as general reproduction and maternal and child health care were less discussed among spouses. It is also found that nearly 30% of couples still want more information about family planning.

5.1.3 There was a higher prevalence of contraceptive use among couples who discuss family planning (83%) compared to couples who did not discuss family planning (70%). Thus, the data support the hypothesis that couple who discuss about family planning are more likely to use contraceptive methods than couples who do not discuss about family planning. This confirms that husband-wife communication is linked to the adoption of family planning.

5.1.4 The most important factors influencing couple communication were wife's age, duration of marriage, education of husband and wife, number of living children, number of desired children, occupation of husband, knowledge of contraceptive methods and satisfaction with information about family planning. However, the effects of these independent variables on each discussed topic were different. In general, couples whose wife's age at 25 -39 and a duration of marriage of 5-10 years were more likely to discuss family planing, especially topics about limiting family size and contraceptive method, compared to older ones with longer duration of marriage. The higher the number of

children, the higher the level of couple communication. The results also displayed that couples whose husbands had high education were more likely to discuss family planning when compared to those whose husbands never studied. Thus, the data support the hypothesis about the educational influence on couple communication.

In terms of knowledge of family planning methods, it is worth knowing that couples whose both husband and wife knew more than 5 methods were more likely to discuss family planning than those who knew less than 3 methods. Thus, the data support the hypothesis about the influence of knowledge of contraceptive methods on couple communication.

The findings of this study also reveal that those who accept a norm of a small family would also be more likely to have family planning discussion with their spouse. On contrary, couples whose husband and wife have different opinions on the number of desired children are less likely to discuss contraceptive methods than couples whose both husband and wife accept a family size of 1-2 children.

The unsatisfactoriness of information on family planning will encourage couples to have conversation with their spouse in order to improve their knowledge. The results of this study support the hypothesis that couples who want to know more information on family planning are more likely to discuss family planning than those who have satisfied.

5.2 Further study

Questions relating to couples communication should include frequency of discussion, degree of agreement of discussion, nature of decision making (whether the wife share equal power in decision making or whether the husband dominates). Discuss topics should be more broadly including contraception, limiting family size, maternal and child health care, knowledge of preventing HIV/AIDSs, safe sex, sex education to children. In such way, it would be possible to provide more in detail useful information about nature and extent of couple communication, its influence on adoption family planning as well as important factors contribute to variation of couple communication.

5.3 Policy implications

Findings from this study have implications for IEC policy and program building. Specific policy recommendations are as follows:

5.3.1 Family planning programs should give a high priority to stimulating husband-wife communication and consider couple communication as an important part of family planning IEC activities.

5.3.2 In order to encourage intraspouse communication, the distribution of IEC materials to each household should be increased. IEC materials should be presented in a way so that couples which low education can understand easily.

5.3.3 Despite the finding that majority of respondents were adequately satisfied with their present knowledge of family planning, it appeared that there was a strong need for more detailed on specific family planning information, especially information on maternal and child health care because nowadays family planning is not only contraceptive use but also concentrates on quality of life, especially for mother and children.

5.3.4 IEC program should make strong attempt to provide more information on family planning for target audiences, particularly for couples in reproductive age. The target audience for campaigns to promote intraspouse communication should be primarily young couples, person who are engaged in agriculture, and those of low education. Couples who has more than two children should be given attention to encourage them to discuss family planning.

5.3.5 In order to encourage intraspouse communication about family planning, family planning program should pay more attention to women, especially women who engaged in agriculture sector. Beside improving status of women, family planning programs should help them overcome barriers of traditional values so that they can discuss freely about family planning issues with their husband which lead to joint decision making.

5.3.6 Since husband's education also had a strong effect on intraspousal communication, involvement of male in family planning activities should be encouraged, especially in communicating about family planning with their wives. In order to increase

male participation, the program should seek to promote an attitudinal and behavioral change to small family norm, and should encourage joint husband-wife decision making regarding family size and contraception. The involvement of men in family planning will give these programs a better chance of success in the future.

5.3.7 From the fact that beside one's spouse, friends, other family members, peer and family planning workers at the grassroots are also effective sources of information. So, both personal contact and mass media communication should be emphasized in order to provide more family planning information to couples.

REFERENCES

Beckman, Linda J.
1993 Communication, power, and the influence of social networks in couple decision on fertility. In Rodolfo A. Bulatao and Renald D. Lee, **Determinants of Fertility in Developing Countries.** Vol 2. Fertility Regulation and Institutional Influences. New York, Academic Press, Studies in Population, p415- 443.

Centro Latimoamericano de Demografia, and the Community and Family Study Center(CELADE).
1972 **Fertility and Family Planning in Metropolitan Latin America**, (Chicago, Community and Family Study Center, University of Chicago), chap.11.

De Silva, W.I.
1994 "Husband-wife communication and contraceptive behavior in Srilanka". **Journal of Family Welfare**. June; 40 (2): 1-13.

Dubey, D.C. and A.K. Devgan.
1969 **Family Planning Communication Studies in India**, CFPI monograph series N.8, New Delhi Central Family Planning Institute.

General Statistical Office (GSO).
1991 **Vietnam Population Census 1989: Detailed Analysis of Sample Results**. Hanoi.

General Statistical Office (GSO).
1995 **Vietnam Intercensal Demographic Survey 1994: Major findings**. Statistical Publishing House Hanoi, May.

General Statistical Office (GSO) and NCPFP.
1995 **Results of Intercensal Demographic and Family Planning Survey 1.4.1993**. Statistical Publishing House, Hanoi.

Hagar, T.M.
1988 "Correlates and determinants of husband-wife communication about family planning in Egypt". **Studies in African and Asian Demography**: CDC Annual Seminar, 1987. Cairo, Egypt, Cairo Demographic Centre,1988. :77-109. CDC Research Monograph Series No. 17.

Hill, R., J.M. Stycos and K.W. Back.
1959 **The Family and Population Control: A Puerto Rican Experiment in Social Change,** Chapel Hill, University of North Carolina Press: pp 241-249.

Hosmer, Davit W. and Stanley Lemeshow.
1988 **Applied Logistic Regression**. A Wiley-Interscience Publication, New York, USA.

Institute of Statistical Science (ISS).
1993 **Basic Results of 1993 KAP Survey**, Central KAP Survey Committee,Hanoi

Kabir, M., M. Moslehuddin and A. A. Howlader.
1988 "Husband- wife communication and status of women as a determinant of contraceptive use in rural Bangladesh". **Bangladesh Development Studies**. 16 (1); 85-97.

Kane, T.T. and S. Sivasubramaniam.
1989 "Family planning communication between spouses in Sri Lanka". **Asian and Pacific Population Forum**. June, 3(1-2): 1-10,33-35.

Hong, Khuat Thu.
1990 **Rural Women in North Vietnam: Attitudes Towards Family Planning.**

Knodel, J., Phan Thuc Anh and Dao Xuan Vinh.
1995 **Vietmnam's Population and Family Planning Program as Viewed by its Implementers.** Regional working papers (South & East Asia). No. 2, Bangkok, Thailand.

Li, L.
1993 "Chinese women's participation in fertility discussion". **International Journal of Sociology of the Family**, 23(1):33-42.

Macwan'gi, M.
1990 **Effects of Husband-Wife Communication on Family Planning Intention and Behavior: a cross-sectional study of husbands and wives living in union in Lusaka, Zambia.** Doctoral dissertation, University of North Carolina at Chapel Hill,1990.

Mahmood, N. and K. Ringheim.
1993 **Five Factors Effecting Family Planning Use in Pakistan: an analysis of husbands and wives**. Unpublished. Presented at the International Population Conference, Canada, August 24-september 1, 1993.

Makomva, R., S. Falata and T. Johnston.
1991 "Fertility-related, Husband wife communication in Zimbabwe: an indicative qualitative analysis". **In: Africa Research Studies in Population Education and Communication**, compiled and edited by Tony Johnston, Aart de Zeeuw, and Waithira Gikonyo. Nairobi, Kenya, UNFPA: 1-12.

Misra, B.D.
1966 "A comparison of husbands' and wives' attitudes toward family planning". **Journal of Family Welfare.** Jun;12(4):9-23.

Misra, G.D., A. Ashraf, G.B. Simmons, R. Simmon, ed.
1981 **Knowledge and Use of Contraception by Individuals. Organization for Change: a systems analysis of family planning in rural India.** New delhi, Radiant Publishers, 155-180.

Mitchell, R.E.
1972 "Husband wife relationship and family planning practices in urban Hongkong", **Journal of Marriage and the Family:** pp 139-146.

Mukherjee, B.N.
1975 "The role of husband-wife communication in family planning". **Journal of Marriage and the Family**. Aug;37(3):655-67.

National Committee for Population and Family Planning Vietnam (NCPFP).
1990 **Demographic and Health Survey, 1988**. (Hanoi, Socialist Republic of Vietnam).

National Committee for Population and Family Planning Vietnam (NCPFP).
1993 **Population and Family Planning Strategy to the Year 2000.** Hanoi, May.

National Committee for Population and Family Planning Vietnam (NCPFP).
1995 **Vietnam: Reproductive Health Survey 1995**. Hanoi, June.

Nyblade, L. and J. Menken.
1993 "Husband- wife communication: mediating the relationship of household structure and polygyny to contraceptive knowledge, attitudes, and use. A social network analysis of the 1989 Kenya Demographic and Health Survey". In: **International Population Conference, Montreal 1993, 24 August-1st September.** Vol 1, p 109 120.

Oh, Y.H.
1988 "Impact analysis of husband-wife conversation about number of children". **Journal of Population and Health Studies.** Jul; 8(1);58-72.

Oni G. A. and J. Mc Carthy.
1991 "Family Planning Knowledge, Attitude and practices of males in Ilorin, Nigeria". In: **International Family Planning Perspectives**. June; 17(2): 50-64.

Poffenberger, T.
1968 "Motivational aspects of resistance to family planning in an Indian village". **Demography.** 5: 757-766.

Raju, S.
1987 "Husband-wife communication and contraceptive behavior". **Journal of Family Welfare**. Jun; 33(4):44-8.

Renne, E.P.
1993 "Gender ideology and fertility: Strategies in an Ekiti Yoruba village". **Studies in Family Planning**. Vol.24, No.6: 343-353.

Salway, S.
1994 "How attitudes toward family planning and discussion between wives and husbands affect contraceptive use in Ghana". **International Family Planning Perspectives**. Jun;20 (2):44-7,74.

Sujatha, D.S and M.S. Murthy.
1993 "Husband-wife communication and fertility among two sects of Brahmins". **Journal of Family Welfare**. Dec; 39(4):26-30.

Uche, I.C.
1994 "Reproductive motivation and family size preferences among Nigerian men". **Studies in Family Planning**. 25(3):149-161.

UNFPA.
1990 **Vietnam: Program Review and Strategy Development Report.**

United Nations (U.N).
1989 Knowledge and Attitudes of Grassroots Family Planning Workers about Contraceptive Method. **Asian Population Studies Series**, No. 86-D, ESCAP, Bangkok.

United Nations (U.N).
1974 Husband-wife communication and practice of family planning, **Asian Population Studies Series No.16**.

Utomo Budi, Sujana Jatiputra, Muhamad Riduan Joesoef, Meiwita B.Iskandar and Sabarinah B. Prasetyo.

1984 **The Indonesia Contraceptive Prevalence Survey Report 1983**, Jakarta, Indonesia.

APPENDIX 1

Table A1: Percentage distribution of discussion by independent variables and discussed topics

Variables	Topic1		Topic 2		Topic 3		Topic4	
	Dis	Not dis.	Dis.	Not dis.	Dis.	Not dis	Dis.	Not dis.
Age of husband								
< 25	28.7	71.3	22.4	77.6	7.0	93.0	6.3	93.7
25- 39	28.3	71.7	27.3	72.7	4.4	95.6	9.7	90.3
40+	19.7	80.3	23.3	76.7	5.1	94.9	8.7	90.3
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00273		.09850		.33390		.32876	
Age of wife								
< 25	27.7	72.3	22.2	77.8	5.7	94.3	7.8	92.2
25-39	27.6	72.4	27.9	72.1	4.5	95.5	10.0	90.0
40+	18.5	81.5	21.0	79.0	4.4	95.6	7.2	92.8
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00273		.00581		.57107		.15884	
Education of husband								
Never studies	10.0	90.0	10.0	90.0	2.5	97.5	2.5	97.5
Some elementary	24.9	75.1	24.3	75.7	4.5	95.5	8.2	91.8
Finished elementary	28.9	71.1	28.7	71.3	3.7	96.3	7.1	92.9
Some middle school	25.7	74.3	25.7	74.3	5.1	94.9	10.1	89.9
Finished middle school	27.5	72.5	27.1	72.9	6.5	93.5	14.1	85.9
Higher	23.0	77.0	25.0	75.0	6.0	94.0	15.0	85.0
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.07342		.07978		.31044		.00014	
Education of wife								
Never studies	16.9	83.1	22.5	77.5	3.4	96.6	7.9	92.1
Some elementary	24.6	75.4	25.2	74.8	5.0	95.0	8.2	91.8
Finished elementary	28.3	71.7	27.8	72.2	4.4	95.6	8.6	91.4
Some middle school	30.8	69.2	28.7	71.3	2.8	97.2	9.8	90.2
Finished middle school	9.4	70.6	27.2	72.8	4.3	95.7	12.9	87.1
Higher	17.5	82.5	15.8	84.2	14.0	86.0	17.5	82.5
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.02509		.30401		.02352		.02973	

Variables	Topic1		Topic 2		Topic 3		Topic4	
	Dis	Not dis.	Dis.	Not dis.	Dis.	Not dis	Dis.	Not dis.
Occupation of Husband								
Housework/no profession	19.0	81.0	31.0	69.0	7.1	95.9	9.5	90.5
Agriculture	26.4	73.6	25.2	74.8	4.4	95.6	7.8	92.2
Small business	25.6	74.4	25.6	74.4	5.2	94.8	13.6	86.4
Government Cadres	30.5	69.5	30.5	69.5	5.2	94.8	14.4	86.6
Others	21.6	78.4	23.7	76.3	4.7	95.3	4.7	95.3
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.14239		.22610		.84375		.00006	
Occupation of wife								
Housework/no profession	24.3	75.7	24.9	75.1	4.3	95.7	8.6	91.4
Agriculture	27.0	73.0	26.3	73.7	4.4	95.6	8.6	91.4
Small business	22.4	77.6	27.2	72.8	5.0	95.0	9.5	90.5
Government Cadres	33.4	66.6	25.8	74.2	5.9	94.1	12.5	87.5
Others	15.6	84.4	20.0	80.0	6.7	93.3	13.3	86.7
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00595		.84405		.76197		.27022	
Duration of marriage								
< 5 years	26.2	73.8	23.8	76.2	5.1	94.9	7.8	92.2
5-10 years	31.8	68.2	27.0	73.0	4.8	95.2	10.1	89.9
11-15 years	27.4	72.6	30.8	69.2	4.8	95.2	11.1	88.9
16+ years	19.8	80.2	23.5	76.5	4.0	96.0	8.6	91.4
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00004		.01522		.80098		.17159	
No. of living children								
No child	8.8	91.2	14.3	85.7	17.6	82.4	2.2	97.8
1-2	28.0	72.0	25.6	74.4	4.5	95.5	10.1	89.9
3+	25.9	74.1	27.9	72.1	3.9	96.1	8.9	91.1
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00027		.01398		.00000		.03604	
Knowledge of contraception								
H. & W. know different	19.7	80.3	25.5	74.5	3.7	96.3	4.4	95.6
Both H. & W. know:								
Less than 3 methods	23.5	76.5	17.3	82.7	1.0	99.0	4.1	95.9
3-4 methods	21.7	78.3	24.6	75.4	-	100.0	5.8	94.2
5+ methods	27.7	72.3	26.7	73.3	5.2	94.8	10.4	89.6
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.02201		.22315		.04648		.00158	

Variables	Topic1		Topic 2		Topic 3		Topic4	
	Dis	Not dis.	Dis.	Not dis.	Dis.	Not dis	Dis.	Not dis.
H. satisfied with knowledge FP								
Satisfied	27.3	72.7	25.1	74.9	3.9	96.1	7.9	92.1
Want more	28.0	72.0	30.5	69.5	5.9	94.1	13.7	86.3
DN/not sure	9.7	90.3	16.9	83.1	7.8	92.2	2.6	97.4
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00001		.00057		.01936		.00000	
W. satisfied with knowledgeFP								
Satisfied	27.1	72.9	25.7	74.3	4.0	96.0	7.5	92.5
Want more	29.2	70.8	30.3	69.7	5.9	94.1	14.5	85.5
DN/not sure	8.2	91.8	12.3	87.7	6.4	93.6	3.5	96.5
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00000		.00001		.07449		.00000	
No. of desired children								
Both disagree	16.5	83.5	23.4	76.6	3.2	96.8	5.1	94.9
Both agree:								
≤ 2	29.1	70.9	28.3	71.7	4.9	95.1	10.5	89.5
3+	24.0	76.0	21.0	79.0	5.1	94.9	8.2	91.8
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00001		.00180		.38195		.00636	
No. of desired boys								
Both disagree	21.7	78.3	25.5	74.5	4.0	96.0	7.7	92.3
Both agree:								
< 2	29.1	70.9	26.9	73.1	4.7	95.3	10.3	89.7
2	24.5	75.5	23.6	76.4	4.5	95.5	8.3	91.7
3+	25.9	74.1	28.9	71.1	8.1	91.9	9.6	90.4
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00509		.47931		.23836		.26917	
No. of desired girls								
Both disagree	17.0	83.0	20.0	80.0	4.3	95.7	6.5	93.5
Both agree:								
< 2	28.2	71.8	27.3	72.7	4.7	95.3	9.9	90.1
2	17.9	82.1	20.7	79.3	5.0	95.0	6.7	93.3
3+	-	100.0	100.0	-	-	100.0	100.0	-
Total	26.4	73.6	26.1	73.9	4.7	95.3	9.3	90.7
P value	.00006		.01705		.95909		.19393	

APPENDIX 2

Table A2: Logicstic regression coefficients of independent variables for 3 Models[1] [2]

Variables	Model 1	Model 2	Model 3
Age of husband			
(Ref: 25-39)			
< 25	.1086	.3003	.0377
40- 49	.0441	- .1903.	- .1224
Age of wife			
(Ref: 25-39)			
< 25	-.0067	.0567	- .1925
40- 49	-.5338**	- .1644	- .2727
Duration of marriage			
(Ref: 5-10 years)			
< 5	-.0742	- .0791	.0521
11-15 years	-.2119	- .3116*	.0997
16+	-.3808*	- .6066**	- .1641
No. of living children			
(Ref: No child)			
1- 2	.6290**	1.3490***	.6270*
3+	.9607***	1.7707***	.9795**
No. of desired children			
(Ref: Both H.&W. want≤ 2)			
H. & W. want defferent	-.3248	- .5468*	- .4150*
Both H. & W. want 3+	-.0462	.2240	- .9553**
No. of desired boys			
(Ref: Both H.&W. want <2)			
H. & W. want defferent	.1107	- .0244	.1987
Both H. & W. want 2	.0017	- .2017	.6514*
Both H. & W. want 3+	.3870	- .1274	.1206
No. of desired girls			
(Ref: Both H.&W. want <2)			
H. & W. want defferent	-.1168	- .3681	- .0791
Both H. & W. want 2	-.0153	- .5096*	.0091
Both H. & W. want 3+	-.4942	-3.9220	-3.0349

[1] * P value < .05; ** P value < .01; *** P value < .001.

[2] Note: Model 1. dependent variable is having discussion.
Model 2. dependent variable is couple discussion about contraceptive method.
Model 3. dependent variable is couple discussion about limiting family size.

Variables	Model 1	Model 2	Model 3
Education of husband			
(Ref: Never studies)			
Some elementary	.9431*	.7913	.8085
Finished elementary	.9534*	- .7761	.9287
Some middle school	.8981*	.6322	.7816
Finished middle school	1.0622*	.7035	.8506
Higher	.7541	.4113	.7103
Education of wife			
(Ref: Never studies)			
Some elementary	.3451	- .1066	- .3727
Finished elementary	.4382	- .0985	- .4033
Some middle school	.3899	.0543	- .3306
Finished middle school	.4041	- .1408	- .4311
Higher	.2576	- .8219	-1.0720*
Occupation of husband			
(Ref: Agriculture)			
Housework/no profession	.0847	- .3519	.3818
Small businnes	.2057	.1501	.1140
Government Cadre	.2008	.2397	.4326*
Others	-.2576	.0109	.1042
Occupation of wife			
(Ref: Agriculture)			
Housework/no profession	-.2239	- .1156	- .0521
Small businnes	-.2171	- .2081	.0419
Government Cadre	.1041	.3896*	- .1114
Others	-.4229	- .5477	- .3550
Knowledge on contraception			
(Ref: H.&W. known < 3 methods)			
H. & W. know defferent	.4006	- .3738	.2689
Both H. & W. know 3 -4	.5375	- .2808	.1425
Both H. & W. know 5 +	.8126***	- .0702	.1701
H. satisfy with knowledge on F.P			
(Ref: Satisfy)			
Want know more	.2040	.0078	.2338
Don't/not sure	.0571	- .5545	.2734
W. satisfy with knowledge on F.P			
(Ref: Satisfy)			
Want know more	.2266*	.1027	.1036
Don't/not sure	- .6962**	- .8331*	- .7657*