

DOCUMENT RESUME

ED 068 244

RC 006 528

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TITLE Husband and Wife Interaction and Family Regulation in Rural Uruguay.  
PUB DATE Aug 72  
NOTE 35p.; Paper prepared for Third World Congress for Rural Sociology (Baton Rouge, Louisiana, August 1972)

EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS Economic Development; \*Family Attitudes; \*Family Planning; \*Health Services; Population Trends; Question Answer Interviews; \*Rural Areas; \*Socioeconomic Influences; Sociology  
IDENTIFIERS \*Uruguay

ABSTRACT

Decision-making and family planning were studied in the rural city of Durazno, Uruguay, by means of answers to questions by both husbands and wives. A sample size of 268 couples in which at least one partner was between 21 and 50 years of age was used. Data were collected by means of a pretested and precoded interview schedule. Major conclusions were that the interactional variables were relatively important for the use of family planning methods; that husband-wife interaction variables were more important than socioeconomic variables; that the higher the degree of perception of equality of men and women on the part of couples, the more likely they are to use family planning methods; that the perception of equality of men and women on the part of couples is more closely related to the use of preventive family planning methods than their level of education; and that the level of education is more closely related to fertility than is perception of equality of men and women and the level of intimate communication. (PS)

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HUSBAND AND WIFE INTERACTION AND FAMILY REGULATION  
IN RURAL URUGUAY.

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Paper presented at the Third World Congress  
for Rural Sociology, Baton Rouge, August 1972.

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HUSBAND AND WIFE INTERACTION AND FAMILY REGULATION  
IN RURAL URUGUAY.

There is a growing conviction that family regulation including family planning and abortion policies is a part of Health and Welfare's policies and responsibilities( Gray, 1964:487-493; The University of Costa Rica, 1968; Pelrine, 1971).

A research project on family regulation in rural Uruguay could therefore be relevant for Uruguay's Health and Welfare policies since the conceptual framework and the practical insight of policy makers can be enlarged by research(Leichter and Mitchell, 1967:301).

A basic assumption is that the concrete findings of a particular study do not necessarily have direct application for practice, but the empirically derived propositions from a geographically defined research project can be incorporated in strategies for universalistic rural development policies.

While one cannot assert that rural Uruguay presents a geographically over-populated area vis-a-vis North America and Western Europe, one can argue that high rates of population growth constitute impediments to the processes of social and economic development. Uruguay has been some years now in the throes of a severe economic crisis resulting in considerable degeneration and recession parallel with a decline in the industrialization process in the period 1957- 1970(Instituto de Economia, 1969; Rama, 1969; Solari, 1967; Canon, 1966; Oddone, 1966).

Those in favor of family planning as a part of Health and Welfare programs point at Uruguay's high abortion rate. International sources (Aurelius, 1969:27; I.P.P.F., 1969:17) state that there are 3-4 abortions for every birth in Uruguay. Induced abortions with their high human and economic costs, they argue, are a welfare problem and Health and Welfare policies ought to help in solving this problem (Rozada, 1964; Alvarez, 1967:9-24; Camacho, 1968).

The adversaries of family planning policy in Uruguay point at Uruguay's low annual growth rate and at its possibilities and necessities for absorbing a larger population. The average annual growth of Uruguay was 1.2 between 1963 and 1967. Its birth rate has dropped from 3.67% in 1908 to 2.19% in 1963 and for the period 1968-1973 it is estimated to be 2.05% (Statistics and Census Bureau, 1969). Therefore, they argue, Uruguay's population dynamics are in sharp contrast to those of other Latin American countries, and Uruguay's territory could maintain four times more people and it needs young people for its socioeconomic development (Yelpo, 1969; Critica, 1970; Rosenhouse, 1970). In their view family planning policy promoting family limitation would be unnecessary and even detrimental for Uruguay's welfare.

A second problem consists in the fact that those in favor of family planning policy and services want to know whether family planning services should be directed to women in child-bearing ages only or to both husbands and wives. This problem is being reflected

in several studies on attitudes toward family planning in Latin America, which have reported favorable attitudes toward family planning on the part of wives, but at the same time a low use of family planning devices( Waisanen and Durlak, 1966). Stycos(1955:259;1965) regards the Latin American husband as a true impediment to family planning and he found that the husbands are more important than the wives in deciding matters of family size. Where the husband feels that family planning is his exclusive prerogative and responsibility, the wife's attitudes toward family planning may be irrelevant and family planning programs concentrating on women only would seem to be less efficient than those directed to couples.

Questions of how husband-wife interaction affects family regulation in rural Uruguay, reflects the researcher's interest in causes and the social development planner's search for remedies.

#### Husband-wife Interaction and Family Regulation.

The relationship between husband-wife interaction and family regulation has scarcely been submitted to an empirical test. The empirically verified propositions in this area can, however, serve as hypotheses for further research as well as for enlightened Health and Welfare policy concerning rural development.

Two aspects of husband-wife interaction have been studied in relationship with family regulation: the degree of equalitarianism and of communication between husbands and wives.

In a survey in Chile with a sample of 749 women between the ages of 15 and 50, married or living in a common law marriage and belonging to the marginal population of Santiago, a statistically significant relationship was found between communication of husband and wife about the number of children to have and the practice of family planning( Losada de Masjuan, 1968:52). It was also found that the communication of husband and wife about sex matters and family planning methods was positively associated with the use of family planning methods( Losada de Masjuan, 1968:58).

Stycos, Back and Hill concluded from their study of 3,000 lower class Puerto Ricans that there was a positive and statistically significant relationship between the communication scores on the general issues of marriage and the use of family planning methods(1955). They also found that a large proportion of husbands and wives never discussed the size of family they would like to have(1956) and they hypothesized that the lack of inter-spousal communication was accompanied by a tendency not to adopt family planning methods and, if adopted, to practice them somewhat ineffectively.

A survey in the urban metropolitan area of San Jose, Costa Rica with a probability cluster sample of 2,132 women of all marital statuses and between 20 and 50 years of age showed that 60 per cent of the lower educated women against 25 per cent of those with some university education declared not to have discussed family regulation topics with their husbands. This might partially explain that the average number of children of the women with some university

education was 2.45 but the number of children of the illiterate women was 5.24 (M.B. Gomez, 1968:88), and that 55 per cent of the illiterate women of this sample had never used any family planning methods as against 19 per cent of the women with some university education.

Two Costa Rican surveys inquired about the communication between husbands and wives on family planning matters in rural populations. Gonzalez Quiroga (1965) interviewed 60 couples sampled from 2,440 rural families who had visited a local health center in Turrialba, Costa Rica. It was found that 69 per cent of these respondents had not discussed family planning questions with their spouses and that only 16 per cent reported to have used family planning methods. De Winter(1970) interviewed 110 couples from the same town and he found that 77 per cent of the respondents had discussed the use of contraceptives with their spouses and that 88 per cent had communicated with their partner about the number of children they wanted to have. Furthermore, 10 per cent of the variance in the use of family planning methods could be explained in a partial correlation analysis by the degree of communication between the spouses.

It seems therefore justified to hypothesize that the degree of communication between husband and wife is positively associated with family regulation. If these relationships held in Chile, Puerto Rico and Costa Rica, then it can be expected that they will also be found in other regions of the world.

The first nationwide fertility study of the United States in 1941, found that if husband and wife agree that their decision making is equalitarian, then those who plan their families will have greater success in the eradication of excess fertility( Kiser and Whelpton, 1958: 1353).

Hill, Stycos and Back (1965(2):241) analyzed the relationship between husband-wife interaction and the success of family planning and found that equality in decision making was more important in the eradication of excess fertility than the husband's level of education or income.

Blood(1960:133) has also found that equalitarian families were characterized by comparative success in reaching their childbearing goals.

Rainwater found that couples living in a joint conjugal relationship tend to prefer small or medium sized families as against those living in relationships of intermediate segregation which prefer large families( Rainwater, 1965: 191-192).

Heer( 1958:260) reported also a positive relationship between the number of children in a family and the husband-wife decision making process. Holding constant both social class and wife's work status, a statistically significant positive association was found between the influence of the husband in family decision making and the number of children in the family.

Scott(1967:530) found that in Puerto Rico the equalitarian type family had the lowest fertility rates. Similar results were



obtained by Weller(1968:437) who found that among working wives with more impact in the family decision making the fertility rate was lower.

Michel's French survey allows for the conclusion that an equalitarian couple or a dominant wife is more often associated with the realization of family planning goals and with the eradication of excessive fertility than a dominant husband(Michel,1967:623).

It is most interesting to note in this context that the results of surveys in North American and Puerto Rican families have been corroborated and confirmed in France, the main finding being that interaction variables are important factors in family regulation.

It seems therefore justified to hypothesize that not only the degree of communication between husband and wife but also their degree of equalitarianism is significantly related to family regulation. This review of the literature suggests also that interactional variables are more important than socioeconomic variables in the explanation of family regulation, although interactional variables have scarcely been included in family planning surveys( De Winter,1971).

#### Methodological Procedures.

One aspect of husband-wife interaction, namely decision making has been studied with different subjects and with different degrees of sophistication. This will be briefly indicated in order to justify that in this survey the decision-making process is being measured with questions about final decision making obtained from couples.

Most researchers trying to measure family power structure through decision making between husbands and wives( Straus, 1964; Herbst,1957; Heer,1963; Nye and Rushing, 1969; Komarovsky, 1964(2); Rodman,1967; Blood,1963; Wolfe,1959; Olson,1969) have taken wives as their subjects( Blood and Wolfe,1960; Wilkening, 1958,1968; Rothschild,1967; Weller,1968; Mowrer,1969; Heer,1958).

Some authors( Burchinal and Bauder, 1965; Wilkening and Bharadwaj, 1966, 1967, 1968; Smith, 1967) have taken husbands and wives as their subjects interviewing them separately or together( Heer, 1962) and reporting the husband's and wife's view on their decisionmaking process. We know, however, of no study in the literature that was specially designed to study the decision making process between husbands and wives based on couple answers. It seems theoretically important to obtain the couple view of the family power structure rather than the wife's or husband's view only since Heer found that each spouse taken separately has a tendency to minimize his own influence in decision making and that husbands are more likely than wives to report the greater influence of the wife as against wives who report more frequently that the husband has the same influence as herself( Heer,1962). Rothschild( 1969) indicated the insufficiency of the wife's answers only to obtain a reliable picture of the family power structure. Although the validity question has not as yet been fully tested, it is assumed in this survey that the couple's view of the family's decision-making process should reflect more precisely the reality than one partner's view or both views taken separately and consequently couple scores of equalitarianism and communication between husband and wife have been constructed for this research project.

The questions used in the study of family power structure through decision making have varied between: "Who generally makes the decisions?" or "Whose opinion usually prevails in each of the decisions?" to "Who makes the final decision?". The number of decisions ranged from one (Elder, 1965) to six (Hill, 1965; Lupri, 1965, 1967, 1969) and eight (Blood and Wolfe, 1960; Rothschild, 1969) and eighteen (Smith, 1967; Michel, 1969, 1970). The degree of equalitarianism between husband and wife was measured in this research project with questions about final decision making in 16 areas and with 5 questions about the perception of equality of man and woman. It was furthermore asked whose decision is followed most of the time in disagreement between husband and wife, and it was asked who rules the family and who spends more money for personal things. Since both partners in marriage usually contribute to some extent in all decisions, questions about who generally makes the decisions are not considered to be as discriminating as questions about who makes the final decision. Therefore questions about final decision making are used in this survey, assuming that they have more discriminative power than general questions, although no objective criterion for testing the validity of this assumption has as yet been developed in this area of research.

Family regulation was measured by questions about the use and non-use of family planning methods and by the number of induced abortions and by the number of pregnancies which had occurred in the family. The number of pregnancies reported by husbands and wives was checked

by questions about the number of children alive, the number of children who had died, the number of miscarriages and the number of induced abortions. By asking the same basic questions from both husband and wife separately and simultaneously two independent sources of information with regard to the same family history and interaction are obtained. This procedure enhances the likelihood of obtaining the real facts of both the independent and the dependent variables and it serves as a built-in control mechanism for the validity and the reliability of the answers.

Husbands and wives were asked the same questions concerning intra-familial communication and equalitarianism and these husband and wife answers yielded couple scores for each question separately as well as total couple scores by the method of summated ratings. The couple scores were factor analyzed employing the principal component solution and the varimax criterion with eigen values of 1.00 or more. Eight rotated factors lent themselves to interpretation. For each of the eight dimensions of husband-wife interaction subscores were computed with the method of summated ratings and total couple scores were derived from the factors.

It was possible to use the correlation techniques in the analysis of the data since most of the variables yielded interval or ratio data, such as the number of pregnancies, the number of induced abortions and other variables have been dichotomized and may be treated as an interval scale with scores of 0 and 1, such as the use and non-use of family planning. Pearson's product-moment correlations are used and a 95 per

cent confidence level was considered necessary to reject or fail to reject a hypothesis. Zero order correlations are used as well as partial and multiple-partial correlation coefficients. Multiple-partial correlation analysis allows for determining the effect of both equalitarianism and intra-familiar communication taken together as a measure of husband-wife interaction controlling for other variables which might obscure the relationships between husband-wife interaction and family regulation( Cfr. Blalock, 1960:351; Ezekiel and Fox, 1959(3): 192).

Sampling and Data Gathering Techniques.

The universe of this research project is found in the urban area of the rural city of Durazno, which is the Capital of the Department of Durazno, Uruguay. It is located in the very heart of Uruguay at a distance of 125 miles from Montevideo. The main resources of this Department are cattle breeding and agriculture( Aljanati, 1970:19). Its limits were established in 1873 and its territory since 1915 has been divided into 13 judiciary sections, the first of which was established in 1879 and the 13th in 1915 (Durazno,1965). This survey was undertaken in the first judiciary section of Durazno, which includes the city of Durazno. This rural city of Durazno numbered 22,203 people in 1963. It accounts for 41.61 per cent of the total population of the Department of Durazno and for 95 per cent of the total population in the first judiciary section. The people in this rural city lived in 6,191 dwellings and the average number per dwelling was 3.59, 48 per cent being men and 52 per cent women( Durazno, 1965:19).

The population is predominantly white of Spanish and Italian descent. It is a predominantly adult population because of the migration of the young population to places with more resources and non-agricultural sources of occupation. Between 1908 and 1963 the Department of Durazno has grown at a rate of 0.42 per cent per year as against 2.5 per cent of the Department of Montevideo (Solari, 1966:47). The streets are mostly paved. There are no street lights in the suburban areas and only 70 per cent of the dwellings were connected with piped water mains, all indicators of its relatively underdeveloped welfare situation (Durazno, 1961). The general characteristics of Durazno make it quite representative of rural Uruguay.

For census purposes the urban areas of Durazno are divided into 23 segments. These segments contain a total of 5,162 dwellings. Since the average number of people per dwelling according to the 1963 National Census was 3.59, the total population of the urban areas of rural Durazno was estimated to amount to 18,532 people by the end of 1969. For sampling purposes the city map of Durazno and lists of all the dwellings in each of the 23 segments were used.

In order to secure answers from people who had been married for a certain number of years out of which some would have reached the end of the childbearing period, the unit of analysis in the survey was determined to be couples currently living together from which at least one partner should be between 21 and 50 years of age.

In order to be able to generalize from the sample to the whole universe with a known degree of precision, it was decided to take a 95% probability sample. In view of the statistical analysis

and taking into account the possibility of a 15 per cent non-response rate and the requirement of becoming a 95 per cent probability sample, a total of 300 couples had to be selected from the universe (Slonim, 1967:78). The popular observation that the upper strata of Durazno live around the main square and the lower strata further away from the center was estimated not to be a sufficiently scientific basis to allow for a stratified sample. It was decided not to take a cluster sample either because a cluster sample is less precise than a simple random sample and the formulas used in the statistical analysis of data obtained with a simple random sample can not be used with data obtained with a cluster sample without having to introduce a correction factor (Blalock, 1960: 409). Furthermore, it did not appear to be more efficient to take a cluster sample than a simple random sample because of the geographical limitations of Durazno. It was therefore decided to take a 95 per cent simple random probability sample.

It was estimated from the 1963 National Census data and allowing for an average of 0.4 per cent yearly population increase in Durazno, that a couple of which at least one partner would be between 21 and 50 years of age and currently living together could be found in one dwelling out of every 3.67 dwellings of the universe. Giving every dwelling equal opportunity for being selected 1,266 dwellings were randomly selected with the use of a table of random numbers. Each unit of these 1,266 dwellings was visited after being located by counting houses until the randomly selected number was reached, in order to find out whether a couple with the aforementioned requirements for being included in the sample was living there. The estimations based

upon the available data had been successful since indeed 300 couples with the necessary requirements could be located. A complete list of addresses of the 300 selected couples was prepared and they were grouped according to city blocks and segments so that interviewers could be driven directly to the addresses in the same area of Durazno. The interviewers were driven to and from the survey subjects in jeeps from the local Health Center which had announced by radio that a randomly selected group of families would be interviewed about family matters.

Two interviewers would visit one family simultaneously. Husbands and wives were interviewed separately and in most cases simultaneously by a male (medical student) and female (nurse) interviewer, respectively.

Out of the 300 families in the sample, 280 have been interviewed in January 1970, which represents 93.3 per cent of the total sample. In 268 families, both husband and wife were interviewed. In twelve cases the couple interview remained incomplete because one partner did not come home on the established date. Since it is not possible to build couple scores of husband-wife interaction if only one member of the couple could be interviewed, the analysis of the data is performed with 268 couples, which represents 89.2 per cent of the total sample.

A pretested and precoded interview schedule was used. Practically all the questions were closed questions with precoded possible answers and an open category coded as "other". The interviewers were pretrained not to suggest any of the possible answers.



Major Findings.

The husbands and wives of the 268 families in the survey gave identical answers with regard to their family income per month, which is made up of salaries, wages, and all other sources of income. Table 1 shows the ranges of that income.

Table 1. Monthly Family Income of 268 Durazno Families, 1971.

<u>Income Range</u>	<u>Per Cent</u>
Under 60 dollars	16.07%
60-99. 99	28.60%
100-139.99	25.61%
140-179.99	14.02%
180+	15.70%
<hr/>	
Total	100.00% (N=268 Couples)

About one-half (44.67%) of the families had a monthly family income of less than \$100.00, the model family income range per month being from \$60 to \$100, closely followed by the 25.61 per cent of the families with a monthly income ranging from \$100 to \$140. It was calculated at the time of this survey that a typical Uruguayan family (of two parents and two children) would need an average monthly income of \$180 (45,000 Pesos Uruguayos) and by this criterion only 15.70 per cent of the families of Durazno would reach this minimum average.

Other indicators of the socioeconomic situation of the families in Durazno are questions about the size of the house, remunerative work for women, family allowances, and major family problems. The main findings will briefly be indicated.

23 per cent of the families lived in a one-bedroom dwelling, 52 per cent in a dwelling with two bedrooms, and 25 per cent had a larger house.

Only 16 per cent of the wives said they had remunerative work, but 26 per cent of the wives reported having some income, which was included in the amount of monthly family income, and 88 per cent of the wives expressed their desire to have a remunerative job. It is furthermore interesting to note that a total of 48 per cent of the respondents of the survey thought it necessary that the wife work outside the home to make ends meet.

27 per cent of the families did not receive family allowances and of those who did receive them, almost two third (63.3%) said that these allowances were not sufficient.

While these indicators of the socioeconomic situation of the families in Durazno point to welfare problems, a specific question concerning the major problems they had experienced after living together revealed that 24 per cent had money problems, 19 per cent health problems, 14 per cent housing problems and 6 per cent occupational problems, whereas alcoholism and mental illness counted for only 2 per cent of the problems, and marital imperfections for 8 per cent. Only 27 per cent of the husbands and wives reported no major problems in their families.

The average family in the sample had an actual number of children of 2.74 according to the husband's answers and 2.80 according to the wives' answers, whereas the number of children ever born amounted to an average of 3.00 from the husbands' answers and 3.00 from the wives' answers. The difference in husbands' and wives' answers could be explained by the answers on the question whether all children belonged to the same couple: 15 children were said not to belong to both husband and wife interviewed. Some women may have experienced conceptions before their union with their actual husband and they may have had abortions without telling their husband.

According to the wives' answers they had experienced an average of 3.90 pregnancies, while 85% of the women were still less than 46 years old.

One or more induced abortions were reported by 24 per cent of the wives. 13 per cent of the pregnancies had ended in induced abortions. The average ratio was one abortion for every 7.85 pregnancies. Although 0.49 induced abortions were reported per wife, the average number of abortions of the wives reporting one or more abortions was 2.23.

58 per cent of the couples reported the use of preventive family planning methods. The use of the condom was reported by 61 per cent of the users of preventive methods, whereas only one third of the users mentioned other chemical and mechanical devices.

66 per cent of husbands and wives said they did not want any more children and 69 per cent wanted more information about contraceptives. 61 per cent rejected abortions under all circumstances.

Husband-wife Interaction.

Of all the questions about communication between husband and wife, the lowest scores were recorded for communication on family planning. As is shown in table 2, 42.91 per cent of the husbands and 39.32 per cent of the wives said that they had never conversed with their spouse about the methods they would like to use to avoid children, and an average of 32.71 per cent said that they discussed this issue often vs. 26.17 per cent who had discussed it a few times.

Table 2. Communication of Durazno Spouses about the Use of Family Planning Methods.

Degree of Communication	Husband	Wife	Total
Often	34.70%	30.71%	32.71%
A few times	22.39%	29.96%	26.17%
Never	42.91%	39.32%	41.12%
Total	100.00% N=268	100.00% N=268	100.00% N=536

The distribution of the answers to the question "Have you conversed with your spouse about the number of children you would like to have?" is presented in table 3.

Table 3. Communication of Durazno Spouses about Desired Number of Children.

Communication	Husband	Wife	Total
Yes	70.52%	73.41%	71.96%
No	27.61%	25.09%	26.36%
Not ascertained	1.87%	1.50%	1.68%
Total	100.00% N=268	100.00% N=268	100.00% N=536

It results from the data presented in table 3 that an average of 71.96 per cent of husbands and wives had conversed with their spouse about the number of children they would like to have.

It was assumed that the perception of equality of men and women on the part of husbands and wives reflects the degree of equalitarianism between the spouses. Their degree of equalitarianism was also measured by the configuration of interpersonal participation in the making of decisions. The most direct question about equalitarianism in Durazno families was : "Who rules in your family?"

The distribution of the answers on this question is presented in table 4.

Table 4. Distribution of Power in Durazno Families.

Power	Husband	Wife	Total
Husband	36.57%	26.97%	31.78%
Wife	0.75%	1.50%	1.12%
Both	61.94%	70.41%	66.17%
Not ascertained	0.74%	1.12%	0.93%
Total	100.00% N=268	100.00% N=268	100.00% N=536

An equalitarian distribution of power was reported by 62 per cent of the husbands and 70 per cent of the wives, or by a total average of 66 per cent of the respondents. These findings were corroborated by the fact that 65 per cent of the respondents also said that husband and wife spend equally for personal items and no significant differences between husband and wife answers have been observed. Furthermore, 60 per cent of the final decisions in economic as well as non-economic family matters were said to be taken by both husbands and wives and 61 per cent of the respondents did not consider men superior to women.

Results of Analysis.

The following three research hypotheses were tested:

1. The degree of equalitarianism between husbands and wives is positively related to family planning and negatively to fertility.
2. The degree of communication between husbands and wives is positively related to the use of family planning methods and negatively to fertility .
3. Family interaction variables, namely, the degree of equalitarianism and the degree of communication of the couples, are more closely associated with family planning and fertility in Durazno, Uruguay, than socioeconomic variables, namely, the level of education of husbands and wives, their family income and their degree of religiosity.

Zero-order, and multiple-partial correlation techniques are being used in testing the hypotheses. The analysis is divided into two parts employing couple scores of husband-wife interaction based on factor analysis.

Table 5 shows zero order correlations of equalitarianism and intimate communication factors with family regulation variables.

/ Table 5 about here/

These results based on factor analysis in husband-wife interaction variables show the existence of statistically significant associations between the perception of equality of men and women and the number of pregnancies(.22) as well as between the perception of equality of men and women and the use of preventive methods of family planning as reported in the wives' answers. The intimate communication factor

also shows a statistically significant association with fertility and with the use of preventive family planning methods as well as a negative association with the practice of induced abortions.

Table 5. Zero-order Correlations of Equalitarianism and Intimate Communication Factors, Number of Pregnancies, Use of Preventive Methods of Family Planning, and Induced Abortions in 268 Durazno families.\*

Interaction Factors	Zero-order Correlations (r.)					
	Number of Pregnancies		Preventive Methods		Abortions	
	Husband	Wife	Husband	Wife	Husband	Wife
Equalitarianism	-.22	-.22	.10	.14	-.06	-.06
Communication	-.16	-.14	.38	.29	-.13	-.12

\* Correlation coefficient of .12 or higher significant at .05 level

The relative magnitude of the correlation coefficients and their direction indicate the importance of husband-wife interaction in relation to family regulation.

Research hypothesis number three is tested through the following two research propositions: (1) Educational variables, religious variables and economic variables, controlling for age, years of union, number of pregnancies, number of children, frequency of intercourse, and desired number of children are less strongly related to the use of family planning methods than interactional variables if controlling for the same variables. (2) Educational variables, religious variables and economic variables are less strongly associated with the number of pregnancies than interactional variables, controlling for age, years of union, the use of family planning methods, the desire for more children, frequency of intercourse and the desired number of children.

These control variables are introduced because they are theoretically related to family planning and fertility and as such obscure the importance of the relative association of socioeconomic and interactional variables with the same dependent variables.

The results of the tests of these two propositions are presented in tables 6 and 7, expressed in multiple-partial correlations.

/ Table 6 about here /

Considering the multiple partials corresponding to the husbands' answers about the use of family planning methods, we can observe that all but one multiple-partial coefficient of interactional variables and family planning are found to be significant at the .05 level. On the other hand, religiosity and occupation with individual income are not significantly related to family planning, but education and economic variables are significantly related to family planning, although the magnitude of these socio-economic variables is smaller than the average magnitude of the multiple-partial of interactional variables. We therefore conclude that the first research proposition has been supported by the data as far as the answers of husbands are concerned regarding the relationships of the use of family planning methods, interactional variables and socioeconomic variables.

The multiple-partial related to the wives' answers concerning the use of family planning methods are found to be lower in magnitude than the multiple -partials corresponding to their husbands' answers. All but two of the multiple-partial of interactional variables and family planning are found to be significant at the .05 level and only economic variables are found to be significantly related with family-planning, but with coefficients of lower magnitude than the average



multiple-partial correlation coefficients of interactional variables. We conclude therefore that also for the wives' answers concerning family planning the first research proposition has been supported by the data. Based on the magnitude of the multiple-partials it is suggested that husband-wife interaction is still more important for husbands than for wives in relation to the use of family planning methods. This finding by itself ~~is~~ indicates the importance of including husbands in family planning policy and action.

Education, religiosity and socioeconomic variables are universally associated with fertility in differential fertility research and they are therefore expected to be relevant in this analysis as well. Table 7 gives the multiple-partial correlation coefficients between fertility, socioeconomic variables and some interactional factors.

/ Table 7 about here /

As is shown in table 7, the selection of interactional variables is found to be significantly related to fertility. The multiple-partial correlation coefficients of the education variables is found to be significantly related to fertility for both husbands' and wives' answers. The religious variables and part of the economic variables are significantly related to fertility for wives only. Furthermore, the magnitude of the multiple-partials of the education variables is larger than that of the interactional variables. The second proposition is therefore not clearly supported by the data, but there is not sufficient evidence to reject it.

In order to test whether the education variables, are more closely related to fertility and family planning than the equality

factor and the intimate communication factor, a partial correlation analysis has been performed, the results of which are presented in table 8.

/Table 8 about here/

The level of education is still significantly related to fertility even controlling for the equality factor and it is still significantly associated with fertility even controlling for the intimate communication factor. On the other hand, the equality factor and the intimate communication factor show no significant association with fertility if controlled for education. On the basis of these data it may be concluded that husband-wife interaction variables are not more closely associated with fertility than education variables.

The level of education of wives is not significantly related to family planning if controlled for the equality factor and for the intimate communication factor. The level of education of husbands is not significantly related to family planning if controlled for the intimate communication factor, but is significantly related to family planning if we control for the equality factor (partial.133).

On the other hand, the equality factor remains significantly associated with family planning even after controlling for the effect of the level of education of husbands and wives. The intimate communication factor does not show a significant relationship with family planning after controlling for the level of education of husbands and wives. Since the partial correlations between the equality factor

controlling for education are higher (.238 and .242) than the partial correlation between the husbands' level of education and family planning (.133), it may be concluded that the degree of equalitarianism between husband and wife is more closely related to family planning than their level of education.

#### Conclusions and Recommendations.

The results of the analysis showed the relative importance of interactional variables for the use of family planning methods as well as their significant relationships with the number of pregnancies. The data and the directions of the correlations suggest furthermore that communication between husband and wife leads to reduction in the number of induced abortions.

The multiple-partial correlation analysis showed the relatively higher importance of husband-wife interaction variables than of socioeconomic variables concerning the use of family planning methods.

In a final attempt to test the third hypothesis using the most significant variables of the study in a partial correlation analysis the following propositions were verified: (1) The higher the degree of perception of equality of men and women on the part of couples, the more likely they are to use family planning methods; (2) The perception of equality of men and women on the part of couples is more closely related to the use of preventive family planning methods than their level of education; (3) The level of education of husbands and wives is more closely related to fertility than is their perception of equality of men and women and their level of intimate communication.

If interactional variables have been proved to be important for family regulation, then it should logically be concluded that Health and Welfare policies concerning rural development and including family regulation, should be directed to couples and not to wives only.

Differential fertility research in the future should include interactional as well as socioeconomic variables, since part of the variance in family regulation may be explained by interactional variables.

This survey suggests furthermore that educational policy directed to rural development is likely to lead to improvement of husband-wife interaction and consequently to a higher degree of family welfare.

a)

**Table 6. Multiple-partial Correlations Between Family Planning, Interactional Variables, Educational Variables, Religious and Economic Variables of 268 Durazno Couples, Controlling for Age, Years of Union, Number of Pregnancies, Number of Children, Frequency of Intercourse and Desired Number of Children.\***

Variables	Multiple-partial Correlations	
	Husband	Wife
<u>Husband-wife Interaction Factors</u>		
Equality + Intimate Communication	.138	.079
Equality + Problem Communication	.013	.025
Social Decisions + Intimate Communication	.141	.068
Childrearing Decisions+ Intimate Communication	.135	.069
Economic Decisions+ Problem Communication	.014	.003
External Resource Decisions+Problem Communication	.023	.003
Total Decision-making +Total Communication	.137	.052
Disagreement Decisions + Intimate Communication	.143	.067
Economic Decisions + Intimate Communication	.146	.069
External Resource Decisions+ Intimate Communicatin.	.154	.068
<u>Socioeconomic Variables</u>		
Level of education + Sex education	.015	.007
Importance of religion+frequency of Church service.	.006	.007
Occupation + Income	.010	.018
Family Income + Number of bedrooms	.019	.046

\* Multiple-partial correlation coefficients of .014 and higher are statistically significant at the .05 level.

b)

Table 7. Multiple-partial Correlations Between Fertility, Interactional Factors and Socioeconomic Variables of 268 Durazno Couples, Controlling for Age, Years of Union, Use of Family Planning Methods, Desire for more Children, Frequency of Intercourse and the Desired Number of Children.\*

Variables	Fertility	
	Multiple-partial Correlations Husband	Multiple-partial Correlations Wife
<b><u>Husband-Wife Interaction Factors</u></b>		
Equality + Intimate Communication	.027	.019
Equality + Problem Communication	.028	.018
External Resource Decisions + Problem Communication	.019	.014
External Resource Decisions + Intimate Communication	.018	.014
<b><u>Socioeconomic Variables</u></b>		
Education + Sex education	.096	.045
Importance of Religion + Frequency of Churchservice	.011	.026
Occupation + Individual Income	.005	.015
Family Income + Number of Bedrooms	.003	.002

\* Multiple-partial correlation coefficients of .014 and higher significant at the .05 level.

c)

Table 8. Partial Correlations Between Fertility, Family Planning, Level of Education, Equality Factor and Intimate Communication Factor in Durazno Survey.

Variables	Partial Correlations			
	Fertility		Family Planning	
	Husband	Wife	Husband	Wife
Equality Factor. Education	-.115	-.101	.238	.242
Intimate Communication Factor. Education	-.112	-.086	.078	.079
Education. Equality Factor	-.116	-.249	.133	.039
Education. Intimate Communication Factor	-.141	-.276	.104	.024

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This research project was made possible by the University of Wisconsin through grants from the Ford Foundation and the Population Council.