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Family Type and Fertility : A Review of Literature

- I. Introduction
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ABSTRACT

It is generally believed that extended family encourages high fertility. This paper summarizes the theoretical discussions and the empirical research to examine the relationship between family type and fertility. The studies reviewed in this paper do not provide any support for the proposition that extended family leads to high fertility. However, it is felt that more studies are needed before we can draw any valid conclusions on this subject.

I. INTRODUCTION

Given a general consensus on the centrality of familial institution in the preindustrial societies, the role of family structure as a determinant of fertility has reasonably been an important topic in fertility research. Some studies examine the extent to which transition in the structure and functions of family can be linked to fertility transition while the others have looked into the variations in membership structure of families for explaining the fertility differentials which exist in a certain developing country. The literature on the relationship between family type and ranges from the primarily theoretical to the empirical. This paper reviews a number of studies on this subject to examine if any conclusive statement can be put forth on the relationship between family type and fertility.

Families are generally grouped into 'nuclear' and 'extended' on the basis of membership and residential characteristics. More specifically, nuclear family (also referred to as the "conjugal family") consists of husband, wife, and their immediate children. The extended family is broadly defined as any group of related persons living together which includes but is larger than the nuclear family of parents and their unmarried children (Nag, 1975).

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Table 1. Distribution of Household Types, Selected Asian Countries

Place	Number of Households Studied	Findings with Respect to Household Comparison (percentage)	
		Nuclear	Extended
India: Rampur Village, Delhi States, Northern India	150	Jats and Brahmans	
		32.2 1.0	66.7
India: Nakor, Desert Village near Jodhpur, western Pajasthan	Simple Random Sample of 405	Other Castes	
		64.8 1.7	33.7
Japan (1966 Census)	23,085,393	41.0 68.1	49.0 31.9
Java: Modjokuto District	467 Towns	57.8 9.8	32.4
	153 Village	74.5 4.6	19.9
Philippines (1968 National Demographic Survey)	Stratified Multistage Survey of 7,237	79.1	19.6
Republic of Korea (1966 Census) . .	Sample of 4,900	66.8	33.2
Singapore (1966 Sample Household Survey)	13,273	Among Households with One Family Nucleus	
		80.0	20.0
Thailand (National Longitudinal Study of Social, Economic and Demographic Change, 1968-1972)	Multistage Sample of 3,655	63.8	33.9
		63.6	25.3
		56.1	28.3

Source: Mercedes B. Concepción and Felipe Landa-Jocana. "Demographic Factors Influencing the Family Cycle", *The Population Debate: Dimensions and Perspectives*. Papers of The World Population Conference, Bucharest, 1974. Vol. II. New York. United Nations. 1975. p. 254.

Table 1 presents the extent to which each household predominates over the other in selected Asian countries. This table shows that nuclear households are predominant in all the countries except India for which the differential trend by caste is noticed. It is also noted that the percentage of nuclear households is higher in villages as compared to urban centers for Java and Thailand.

II. THEORETICAL LITERATURE

The main theoretical discussions of the relationship between extended family and fertility are those of Davis (1957), Davis and Blake (1956), Lorimer (1954), and Goode (1963; 1964).

Davis (1957) identified family as key for explaining institutional patterns favoring high fertility in 'underdeveloped' areas. He emphasized that the structural features of extended families are conducive to early and universal marriage and hence high fertility. In support of this proposition, he argued that economic solidarity of the extended family system permits the children to marry earlier than they could if they had to support themselves. Furthermore, the economic cost and inconvenience of rearing children does not impinge directly on the parents alone but is shared by all the members of family. In patrilocal extended family, the wife is highly motivated to have offspring as early as possible to strengthen the family line and her own status in the household. Less intense and less intimate interspousal communication precludes the possibility of discussion on fertility-related problems and planning of family. All these factors are responsible for the influence of extended family in direction of younger age at marriage and higher marital fertility.

Davis and Blake (1956) have attributed almost all the effect of family structure on societal fertility to its influence on age at marriage as an intermediate variable. They also suggested that in a truly joint household the authority of the elders continues after marriage and as such the reproductive behavior of a couple is subject to the influence extended by elder members of the household.

Lorimer (1954) also maintained that the whole cultural content in which extended families tend to be idealized is likely to be conducive to high fertility. His major work has placed emphasis on kinship organizations but especially on the role of corporate kinship organizations but especially on the role of corporate kinship system (such as clans and organized lineages) in African societies. According to Lorimer, the influence of extended family system on fertility is not as strong as that of corporate kinship groups. He, however, did not elaborate how the corporate kinship structures operate through particular intermediate variable (such as political and economic norms and activities and decision making processes) to affect fertility.

A similar view was expressed by Chandrasekhar (cited in Nag, 1975) who suggested that the large family units (extended or joint) in India are culturally equipped to accommodate any "extra baby" of the young parents, and thus serve as an incentive

to more births. As we shall see in the section on India and Pakistan, no support for this proposition is shown by the empirical research.

Goode (1963; 1964) has discussed the effects of modernization on family patterns and the relationship between family type and fertility. He also identified the lack of an internationally accepted definition of family as a sociological and anthropological concept because of the existence of a wide variety of forms of family organizations in the world.

Goode suggested that important changes in family structure were produced by industrialization and modernization which led to the breakdown of the traditional role of the extended family system. Modernization and increasing prevalence of nuclear families, however, do not necessarily lead to lower fertility. It could increase the fertility in certain circumstances. Such was the case in certain African countries where internal migration and urbanization had created a new milieu, incompatible with traditional birth control practices, and modern methods had not replaced them.

The connections between family structure and fertility, according to Goode, are obscure. Goode asserts that a married couple may choose to live as a nuclear family unit because of such reasons as modern attitudes, migration and demand of urban employment. These reasons should be studied with a multidimensional approach taking family as the intermediate agent between individual behavior and society.

Extended family type, according to Goode, is characterized by the prevalence of more rules for behavior, more conformity to norms, and high prestige of and great deference for elders. While, the nuclear families emphasize the conjugal bond and most affinal and consanguineal kins are excluded from the day to day decisions. This results into weaker reciprocal controls.

From these discussions, it is easy to draw that the extended family implies higher fertility. However, it is not clear whether this proposition applies to individual couples who live in extended and nuclear families or to societies with certain predominant type of family. There is also a curious neglect with regard to the fundamental question how does extended family influence fertility. It should be noted that there are several interrelated factors which are potentially capable of reinforcing or dampening the effects (if any) of extended family on fertility. For example, extended family may motivate a woman to have greater number of children as well as to participate in the labor force because of the convenience in child caring which can motivate the woman to have fewer children. Similarly, the extended family may produce a less use of contraception as well as a longer duration of breastfeeding and greater observance of taboos with regard to abstinence. Thus, the theoretical framework needed to take into account these factors and specify how would the extended family interact with them.

III. EMPIRICAL STUDIES

Since the work of Davis (1957), Davis and Blake (1956) and Lorimer (1954), a number

of attempts were made to examine the hypothesis that extended family leads to higher fertility. Studies were mainly conducted in Asian societies where the norms of extended family are prevalent. Some of these studies are summarized as follows:

India and Pakistan

Nag (1967) examined the relationship between family type and fertility by using data collected in 1960-61 from 3,725 ever-married women living in seven villages of West Bengal. All families with more than one ever-married person related to one another were classified as joint families, and the rest as simple families. He found that average number of children ever born in joint families to be less than that in simple families when women of all ages were considered. Nag based his conclusions on the comparison of simple averages. His findings do not indicate the "true" fertility performance of the group or the fertility differentials between groups because of the differences in the proportion of women in different age groups. When Pakrasi and Malaker (1967) computed age standardized averages from the same data, the differentials in average number of children were reduced for all but one of the three Muslim and Hindu groups. (see Table 2) However, the important finding of Nag's study was related to the differential in coital frequency by family type. He noted that the average coital frequency for simple families was consistently higher than that for joint families.

Pakrasi and Malaker (1967) used the data collected from 1,018 married couples living in Calcutta to study the relationship between family type and fertility. Controlling for marital duration and social class, they concluded that, in general, women living in joint families have fewer number of children ever born than those in simple families. However, women belonging to the lower class revealed an opposite trend—that is, the number of children ever born was higher for those who lived in joint families than those of simple families. (see Table 3) This finding may be taken to imply that the benefits associated with children are far greater than the cost and inconvenience for rearing them in joint families of lowest class which motivate couples to have higher fertility.

Studies conducted by Poti and Datta (1960) in West Bengal and Bebartta (1964) in Orissa, also revealed that the women living in joint families had fewer children on the average than women living in simple (nuclear) families. However, Mathen (1962) and Leobner and Driver (1970) have concluded on the basis of their empirical studies in different parts of India that there is no significant relationship between family type and fertility. It is interesting to note that none of the studies conducted in India supports the classical hypothesis that extended (joint) family is associated with high fertility.

The results obtained in the Indian studies, according to Nag (1975) were somewhat unexpected but, more or less consistent. They showed that, in general, the women

Table 2. Age Standardized Average Number of Children Ever Born Per Ever-Married Women Aged 10+, By Family Type, Religion, and Caste, Seven Village, West Bengal, India, 1960-61

Religion and Caste	Simple Family	Joint Family
Hindu		
Brahmin	4.32 (64)*	3.93 (113)
Satchasi and Ghosh	4.04 (125)	3.97 (160)
Others	3.32 (107)	3.31 (105)
Muslim		
Sheikh	4.74(147)	4.54 (98)
Non-Sheikh	3.04 (1,296)	2.76 (1,222)
Fishermen	2.26 (224)	2.40 (64)

* Number of women in parentheses.

Source: Kanti Pakrasi and Chittaranjan Malaker, "The Relationship Between Family Type and Fertility", *Milbank Memorial Fund Quarterly*, XLV (4). October, 1967. Table 1. p.455.

Table 3. Marriage-Duration Standardized Average Number of Children Ever Born Per Couple, By Social Class and Family Type, Calcutta, India, 1956-57

Social Class **	Simple Family	Joint Family
Class I	2.9 (107)*	2.5 (131)
Class II	3.4 (176)	3.1 (238)
Class III	3.5 (173)	3.8 (148)

* Number of couples.

** The three socio-economic groups, which were identified jointly on the basis of the husband's occupation and educational status, were;

- I. High professions and services: physicians, engineers, office executives, wholesale businessmen.
- II. Clerks, supervisors, retail traders.
- III. Manual laborers, skilled and unskilled.

Source: Kanti Pakrasi and Chittaranjan Malaker. "The Relationship Between Family Type and Fertility", *Milbank Memorial Fund Quarterly*, XLV (4). October, 1967. Table 3.p. 457.

living in the extended families have lower cumulative fertility than those in nuclear families, although in some cases the difference is very small.

For the neighboring country-Pakistan, Karim (1974) using National Impact Survey Data for 2,910 currently married women aged 15-49 years, found no statistically significant difference in age-standardized cumulative fertility of women living in different family type. He also found no difference in the mean age at marriage and ideal family size among women living in nuclear and joint families. It is interesting to note that there was greater privacy of independent sleeping arrangements for the couple in joint families than in nuclear families in both rural and urban areas. He suggests that the relative lack of privacy in nuclear families may be due to the older age and higher parity of such couples. Though the findings were not statistically significant, women living in nuclear families, on the average, had 1.3 more children than women in joint families in rural areas and 1.4 more children than joint families in urban areas. Hashmi (1965) found from a survey conducted in Karachi that the crude birth rate for nuclear families was 54 as compared to 43 for extended families. The general fertility rate and marital fertility rates were also substantially higher for women living in nuclear families as compared to those in extended families.¹⁾ Hashmi suggests that the lack of privacy and crowded living in extended families account for a relatively lower frequency of sexual intercourse and thus lower fertility. Another possible explanation of this difference may be that the higher fertility might have led to the formation of independent nuclear families.

Alam (1975) studied the relationship between family type and knowledge about and attitude towards family planning among 1,102 rural women of Luliani (District Lahore, Pakistan) He hypothesized that the presence of wife's mother-in-law is constant reminder for wife's fertility and casual remarks may serve this purpose. If the head of the household is in the oldest generation, the younger couples are more liable to be influenced by the desires of older parents who are in charge of household affairs and, the mother-in-law, generally, holds supreme authority in an extended family.

Using Chi-square test of significance, Alam, however, found no statistical relationship between 14 attitude variables and the family type. The same was true for the relationship between knowledge about family planning and family type. He concluded that there was no evidence for traditional view which holds that attitude of daughters-in-law towards family planning are influenced by the presence and superior position of the mother-in-law.

1) General fertility rates were 247 and 203 for women living in nuclear and extended families, respectively. Marital fertility rates were, respectively, 292 and 263 for women living in nuclear and extended families.

The norms for extended families are also found in Far Eastern cultures. Freedman et al. (1964) report survey data for 1,367 currently married women 29-39 years old living in Taichung City during 1962-63. They found that for all women, with the exception of those 35 to 39 years of age, living in a nuclear family (rather than in a stem or joint family²) was related to lower cumulative fertility, smaller desired family size, and greater use of fertility control including abortion and sterilization. The largest differences were found in the use of fertility control including abortion and sterilization. (see Table 4)

It was noted that among couples with at least three living children and two sons, those in nuclear units had made use of some method of limitation twice as often as those in joint families. Further analysis by Freedman and Takeshita (1969) revealed that family type was not a powerful variable in comparison to other independent variables in explaining the use of birth control. They also found that fertility differentials by family type were negligible over the first five years of couple's marriage. Freedman and Takeshita suggest that living in a nuclear family was most likely to represent a desire to live in this way among high status families because of modern attitudes and necessity among those with lower status because of high mortality and poverty. It is interesting to note that the nuclear family was most common in the lowest and least modern strata which also had lower fertility, generally characterized as modern fertility behavior.

Using the same data, Chu studied the socio-economic correlates of extended family type in Taichung City. He found that migration (rural-urban) was the most important determinant of family type. Couples who migrated from rural and other areas to Taichung City were found to be living in nuclear families. A second important determinant of family type was the employment status of husband. Both migration status of couple and the husband's employment status explained about 90 per cent of the total variation in family type predicted by the four variables-migration, employment, education, socio-economic status. Chu also noted that an overwhelming majority of couples who had lived with parents began doing so immediately after marriage. Over 90 per cent of the couples had lived or were living with parents and husbands of younger ages were more likely to live in extended families than older husbands.

Another study by Liu (1967) also presented similar findings to those of Freedman et al., regarding the relationship between family type and fertility. Data from an island-wide survey in 1966 was used. The findings indicated that age-standardized rates of children ever born to ever-married women 15-49 years of age are only slightly different among women living in stem, joint and nuclear families for the total island,

2) Joint family was defined as a nuclear unit with lateral extension and stem family was defined as nuclear unit with vertical extension only.

Table 4. Measures of Actual and Desired Fertility, Proportion Using Various Contraceptives by Family Type for Wives, 35-39 Years Old, Taichung City, Taiwan, 1962-63

Measures of Fertility and Contraception	Nuclear	Stem	Joint
Number of Couples	475	117	27
Mean Number of Live Births	5.1	5.4	5.2
Mean Number of Living Children	4.5	4.8	4.8
Mean Number of Children Wife Wants	4.0	4.3	4.4
Percentage Using			
Sterilization	16	19	7
Abortion	16	13	—
Contraception	30	20	15
Any of Three	49	40	22
Percentage of those with Abortion, Never Using Other Methods	15	14	*

* Base less than 10.

Source: R. Freedman, J. Y. Takeshita, and T. H. Sun. "Fertility and Family Planning in Taiwan: A Case Study of the Demographic Transition", *American Journal of Sociology*. 70. 1964. Table 6. p. 24.

cities, urban townships or rural townships. (see Table 5) When the data are presented by separate age groups, however, there is a clear tendency for older women (40 and over) in nuclear families to have lower cumulative fertility than those in joint families. Since the measure of family type was derived from the observation at the time of survey, the older women might have changed their affiliations over time.

Table 5, however, indicates a different pattern when the measure 'own children under 5 years of age' rather than 'children ever born' is used. The age standardized number of own children under 5 years of age per married women 15-49 years old is highest for women in joint families and lowest for women in nuclear families, with women in stem families in an intermediate position. The differences are not large, but they are consistent for types of areas, and the sample sizes (n's) are large to assure statistical significance. Liu has reported inconsistencies in this pattern when separate age groups were considered, particularly among younger women.

Table 5. Age Standardized* Average Number of Children Under 5 and Children Ever Born Per Women Aged 15-49, By Type of Family, For Cities and Townships, Taiwan, 1966

Sample Size (Number of Families)	Nuclear (30,000)	Stem (14,500)	Joint (4,500)
Own Children Under 5			
Total	.76	.84	.88
Cities	.67	.79	.87
Urban Townships	.82	.84	.85
Rural Townships	.88	.90	.93
Children Ever Born			
Total	3.5	3.7	3.7
Cities	3.2	3.5	3.4
Urban Townships	3.6	3.8	3.7
Rural Townships	3.9	3.9	4.0

* Standard population was ever married women aged 15-49 years in the total sample.

Source: Paul K. C. Liu. "Differential Fertility in Taiwan", in I.U.S.S.P. Contributed Papers, Sydney Conference. Australia. August, 1967. Table 1. p. 368.

Republic of Korea and West Malaysia

Palmore and Ariffin (cited in Palmore, 1972) found in a research on West Malaysia that married women 15-44 years old who were living in extended families at the time of survey, had lower cumulative fertility than women who had never lived in extended families. However, women who previously lived in extended family for some time and then formed nuclear family, had the highest cumulative fertility. Presumably, high fertility might lead to separation of one family from an extended unit. This proposition was also supported in one of the studies conducted in India (Driver, 1963), where the investigator found that the couples with high fertility were pressured out of the extended household. Thus, the wives living in extended families were motivated to have fewer children.

Palmore and Ariffin further investigated the findings by using Multiple Classification Analysis (MCA) for the Statistical adjustment of the differences in place of residence, age at first marriage, number of times married, educational attainment of woman and race. The findings noted earlier, however, did not change. (see Table 6 and 7) They reported that taking migration and geographical mobility into account does modify the magnitude of fertility differences among women living in different family types, but does not change the direction of the relationship.

In another study, Palmore (1972) also examined the same relationship in the Republic of Korea. Using data from a sample survey of the whole country (conducted in 1971), he found little difference between the cumulative fertility of women living in extended families and those living in nuclear families within each of three broad age groups of 15-29, 30-34, and 35-44. Somewhat larger differences were found in family planning behavior. (see Table 8)

The data from Korea and West Malaysia do not support the proposition that the females who marry young are more likely to be found in extended families. Palmore suggests that the classification of family structure may be the reason for the inconclusive results. The actual living arrangement of family members, for example, may not be of as much importance as the frequency and types of social interaction that they have with one another. Even though family members may live somewhat removed from one another, they may interact socially both frequently and intensely. He also suggests that the existence of intervening variables between family structure and fertility have not been measured adequately in studies.

Table 6. Mean Number of Live Births by Family Type and Age for Married Women 15-44 Years Old, West Malaysia, 1966-67

Type of Family Structure	Mean Number of Live Births for Women of Ages			
	15-24	25-34	35-44	All Ages 15-44
Unadjusted				
Living in Extended Family Now	1.5	3.8	5.6	3.0
Previously Lived in Extended Family but Not Now	2.3	4.5	6.5	4.8
Never Lived in Extended Family	2.0	4.4	5.6	4.2
Adjusted*				
Living in Extended Family Now	1.6	3.9	5.6	3.2
Previously Lived in Extended Family but Not Now	2.2	4.9	6.4	4.7
Never Lived in Extended Family	1.9	4.3	5.6	4.2

Source: J. A. Palmore. "Population Change, Conjugal Status and the Family", Population Aspects of Social Development, *Asian Population Studies, Series, No.11. Bangkok. ECAFE. p. 61.*

* Adjusted for place of residence, age at marriage, number of times married, education and race.

Table 7. Mean Number of Live Births by Type of Family Structure and Respondent's Age for Women (a) with at least one parent or parent-in-law alive (b) with at least one parent-in-law alive and living in the same Kampong, estate, town or city, West Malaysia, 1966-67

Type of Family Structure	Mean Number of Live Births for Women of Ages			
	15-24	25-34	35-44	All Ages 15-44
At Least One Parent or Parent-in-law Alive*				
Living in Extended Family Now	1.5	3.8	5.4	3.0
Previously Lived in Extended Family but Not Now	2.3	4.5	6.5	4.7
Never Lived in Extended Family	2.0	4.3	5.5	4.3
At Least one Parent or Parent-in-law Alive and Living in Same				
Living in Extended Family Now	1.5	3.8	5.4	3.0
Previously Lived in Extended Family but Not Now	2.3	4.5	6.1	4.3
Never Lived in Extended Family	1.9	4.3	5.4	3.9

* All figures are unadjusted.

Source: As for table 2.5

This review of empirical studies has shown that available evidence of the relationship between family type and fertility is either contradictory from one country to another or inconclusive. Most of the studies from India, Pakistan, West Malaysia and Korea report lower cumulative fertility for women living in extended or joint families than the women living in nuclear families. By contrast in Taiwan, women living in extended families had more children in comparison to those living in nuclear families. However, the adjustment of age of respondent and the consideration of other socio-economic explanatory variables of fertility greatly diminish the association between family type and fertility.

Commenting on these findings, several authors suggest explanations and alternative propositions for examining the relationship between extended family type and fertility. Some of these are briefly described as follows:

Table 8. Adoption Stage of Births Control by Type of Family Structure and by Number of Live Births, Republic of Korea, 1971

Family Structure (Current Living Status)	Percentage Heard of At Least One Family Plan- ning Method	Percentage Know How to Use At Least One Family Planning Method	Percentage Used Contra- ception Before Third Live Birth	Percentage Ever Used Induced Abortion	Percentage Ever Used either Contracep- tion or Induced Abortion
Less than Three Live Births					
Living in:					
Extended	79	30	19	6	27
Nuclear	84	45	20	19	36
Four or More Live Births					
Living in:					
Extended	86	61	1	23	57
Nuclear	90	62	3	30	59
Total, All Women					
Living in:					
Extended	83	50	10	15	42
Nuclear	37	53	12	25	47

Source: As for table 2.6.

Back and Hass (1973) proposed that family type by itself is not a main determinant of fertility patterns. Rather, they proposed that it exerts its influence only in interaction with other factors, such as religious or cultural ideals regarding continuation of lineage, which are subsumed as part of an individual's motivation for marriage and reproduction. Family structure is a mechanism through which the social values are transferred into the planning of a couple and fertility goals are dependent on the larger values of society.

Back and Hass were interested in explaining the variation in fertility patterns on a societal level. They theorized that a society with male-dominant family systems will have high fertility. In such a society, high prevalence of husband's authority, economic utility of male, separation of husband from involvement in childbearing routines, low status of women and limited opportunities for women for experience in nondomestic roles lead to high fertility. Back and Hass, however, restrained in drawing any parallels between extended family system and male-dominant family systems because both, unclear and extended families could be equally male-dominant in a society.

On the basis of empirical studies in Puerto Rico, Hill (1967) concluded that parents of couple participate in decision making processes with regard to crucial fertility resolutions. However, it is inappropriate to presume that the influence of parents is always in the direction of increasing fertility. Palmore (1972) has also referred to the often raised spectre of the mother-in-law problem in family planning action programs. He, however, questions the hypothesis that family planning is likely to be practiced less in situations where there is greater involvement of extended kin. According to Palmore, the extended family may also influence reproductive behavior in more indirect ways, for example, by serving as a communication channel through which birth control information is filtered.

In his review of literature on fertility, Freedman(1961-62) documented that the idea that neolocal nuclear family systems may lead to relatively lower fertility levels in preindustrial societies has been discussed mainly with reference to preindustrial Europe and especially in connection with various economic arrangements leading to late marriage. His own position on this subject is that the causal relationship between extended families and fertility may have operated in the past, but, modernization has repealed it. Freedman also raised a question about the 'level of analysis', that is, whether the effect on fertility of variation in family type within a society will correspond to the effects of variation among societies with differing family systems.

According to Westoff (1975), the importance of the family as a social institution has not decreased despite the process of modernization, transfer of major economic and educational functions from family to other institutions, high divorce rates and some redistribution of the family's remaining functions to other institutions. Westoff, however, challenged the proposition that extended family type is the pre-modern form which encourages high fertility, while the nuclear form is the family of modern industrial society with low fertility. He noted that it was plausible to hypothesize that extended kinship system probably operates to reduce the necessity for economic autonomy prior to marriage and thus encourages early marriage. But, there is mixed evidence on whether extended families imply higher marital fertility than nuclear families. Fertility has declined among Western societies with nuclear families and in some Far Eastern societies (Japan, Singapore, Hong Kong, and the Malay Peninsula) with more extended families. Yet, high fertility remains unchanged in Java, where nuclear families prevail and among Bengali women with extended families.

IV. CONCLUSION

Having summarized the theoretical discussions and empirical studies, we are baffled as to what can be drawn for the relationship between extended family and fertility. It is, however, straightforward that the empirical studies do not support the traditional hypothesis that extended family encourages high fertility. Whether this imply a valid generalization depends to a great extent on the methodological adequacy of the

studies discussed above. Burch and Gendell (1970) have shown that most of the studies on this subject area are far from adequate.

Drawing any satisfactory conclusion for the relationship between family type and fertility necessarily involves improvements in the existing theoretical knowledge and the methodology used in the empirical studies thus far. An appropriate theoretical framework needs to (a) distinguish between the aggregate and individual levels of analysis, (b) define the criterion to be used for classifying family types, (c) specify the mechanisms through which family exerts its influence, and (d) consider the factors which may interact with family type in such a way that confounding effects are estimated.

The choice of appropriate technique of analysis would greatly enhance the credibility of research findings. Thus, we should be able to determine with confidence the magnitude and direction of the relationship between family type and fertility.

REFERENCE

- Alam, Z., *Knowledge of and Attitude Towards Family Planning of Lulliani Residents as Related to Household Type*, Doctoral Dissertation, Baltimore. The Johns Hopkins University. 1975.
- Back, K. W. and Hass, P. H., "Family Structure and Fertility Control" in Fawcett, J. T. (ed.) *Psychological Perspectives on Population*. 1973.
- Bebarta, P. C., "Family Structure and Fertility", Proceedings of the 51st and 52nd Sessions of the Indian Science Congress, Part III, Calcutta. Indian Science Congress. 1964.
- Burch, T. K., and Gendell, M., "Extended Family Structure and Fertility: Some Conceptual and Methodological Issues", *Journal of Marriage and the Family* 32(2). 1970.
- Chu, S., The Nature of Extended Kinship and its Socio-economic Correlates in a Chinese Community. Working Paper No. 17. Michigan. Taiwan Population Studies Center.
- Conception, M. B. and Landa-Jocana, F., "Demographic Factors Influencing the Family Cycle", in United Nations *The Population Debate: Dimensions and Perspectives*. Papers of the World Population Conference, Bucharest, 1974. Vol. II. 1975.
- Davis, K., "Institutional Patterns Favoring High Fertility in Underdeveloped Areas", in *Underdeveloped Areas: A book of reading and research*, New York. Harper and Brothers. 1957.
- _____, and Blake, J., "Social Structure and Fertility: An Analytical Framework" in *Economic Development and Cultural Change* IV(3). 1956.

- Driver, E. D., *Differential Fertility in India*, Princeton. Princeton University Press. 1963.
- Freedman, R., *et al.*, "Fertility and Family Planning in Taiwan: A Case Study of the Demographic Transition", *American Journal of Sociology* 70. 1964.
- _____, and Takeshita, J. Y., *Family Planning in Taiwan: An Experiment in Social Change*. Princeton. Princeton University Press. 1969.
- _____, "The Sociology of Human Fertility: A Trend Report and Bibliography", *Current Sociology* 10/11(2). 1961-1962.
- Goode, W. J., "Industrialization and Family Change", *Industrialization and Society*. Hoselitz and Moore *eds.* 1963.
- _____, *The Family*, New York. Prentice-Hall, Inc. 1964.
- Hashmi, S. S., *The People of Karachi: Demographic Characteristics*. Karachi, Pakistan Institute of Development Economics. 1965.
- Hill, R., "Hypotheses From a Family Theory and Trial in Action Programs", *Mass Communication and Motivation for Birth Control*, Bogue, D. J. (ed). Chicago. Community and Family Studies Center. 1967.
- _____, "Putting 'the Family' in Family Planning," *Mass Communication and Motivation for Birth Control*, Bogue, D. J. (ed). Chicago. Community and Family Studies Center. 1967.
- _____, "The Family and Population Change", *The Family in Transition*. Frogarty International Center Proceedings No.3. 1971.
- Karim, M. S., "Fertility Differentials by Family Type", *Pakistan Development Review* 13(2). 1974.
- Leobner, H., and Driver, E. D., "Differential Fertility in Central India : A Path Analysis", *Demography* 10(3). 1973.
- Liu, P. K. C., "Differential Fertility in Taiwan", Contributed Paper, International Union for The Scientific Study of Population (IUSSP), Sydney Conference. 1967.
- Lorimer, F. *et al.*, *Culture and Human Fertility*. Paris. UNESCO. 1954.
- Mathe, K. K., "Preliminary Lessons Learnt From The Rural Population Control Study of Singur", *Research in Family Planning*. Kisser, C. V. (ed). Princeton. Princeton University Press. 1962.
- Nag, M., "Family Type and Fertility", *Proceedings of World Population Conference 1965*, Vol. II. New York. United Nations. 1967.

- , “Socio-cultural Patterns, Family Cycle and Fertility” *The Population Debate: Dimensions and Perspectives*. Papers of the World Population Conference, Bucharest, 1974. Vol. II. 1975.
- Pakrasi, K., and Malaker, C., “The Relationship Between Family Type and Fertility”, *Milbank Memorial Fund Quarterly* 45. 1967.
- Palmore, J. A., “Population Change, Conjugal Status and the Family”, *Population Aspects of Social Development: Asian Population Studies Series No. 11*. 1972.
- Poti, S. J., and Datta, S., “Pilot Study in Social Mobility and Differential Fertility”, *Studies in Family Planning*. New Delhi Government of India, Director General of Health Services. 1960.
- Westoff, C. F., “Population and the Family: Overview”, *The Population Debate: Dimensions and Perspectives*. Papers of the World Population Conference, Bucharest, 1974. Vol. II. 1975.

〈抄録〉

出産力과 家族形態

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一般的으로 傳統的 家族形態(大家族)가 높은 出産力을 圖謀하고 있다고 믿고 있다. 本 研究에서 家族形態와 出産力의 關係를 試驗한 理論的 討論 및 實際研究를 통하여 考察하였다. 그러나 本 研究에서 考察된 모든 "研究結果"에서는 大家族이 높은 出産力을 誘導하고 있다는 主張을 뒷받침할 만한 根據를 보여주지 못하고 있다.

따라서 大家族과 高出産力間의 關係에 대한 結論을 내리기 앞서 이에 관한 보다 適切한 研究가 要求되고 있다.