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WORLD EMPLOYMENT PROGRAMME RESEARCH

Working Paper

POPULATION AND LABOUR POLICIES PROGRAMME

Working Paper No. 134

PATERNAL COSTS, ROLE STRAIN AND FERTILITY
REGULATION: SOME GHANAIAI EVIDENCE

by

Christine Oppong

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Preface

This is one of a series of working papers concerned with studies of changing roles of women and men in the non-familial labour force and in the domestic domain, looking at aspects of the divisions of labour and resources inside and outside the home in relation to demographic issues (see for example, Anker, 1978; Oppong, 1982a; Nag, Anker and Khan, 1982). It forms part of the work emanating from the UNFPA financed project being carried out by the population and labour policies branch of the World Employment Programme in collaboration with researchers and institutions around the world (see Anker et al., (eds.) 1982).

In most models examining the value and use of household time and family size or fertility related values and behaviour a major focus has been upon women's time and its value, measured in terms of market wages forgone. In many of the studies focusing on opportunity costs or role incompatibilities, the subject had been the choices and stresses of women, who are compelled to choose between paid work outside the home and childbearing and rearing, or who try to assume the roles of mother and producer outside the home and who are subject to associated pressures and strains (e.g. Hein, 1982; Date Bah, 1982). Indeed considerable interest has been shown in the social science literature of several disciplines in establishing and demonstrating links between female labour force participation outside the home and fertility related behaviour and attitudes. In different cultural contexts positive, negative and nil relationships have been established. Informative reviews of large segments of this work have recently been undertaken focusing specifically on the "work"/fertility links or occupational/maternal role conflicts and opportunity costs (see for example Robinson and Stephenson, 1980; Standing, 1978 and in press). There has also been a focus on the maternal role and its potential rewards in relation to women's other roles - conjugal, domestic, kin, community and individual (Oppong, 1982b).

Comparatively less effort has been focused upon male roles in this regard, other than as providers of income - the husband's wage and education being standard items of information used in many economists' models seeking to explain differential fertility and female labour force participation. Thus it might well be argued that there is evidence of a sexist bias in this field of studies!

There is at the same time increasing pressure to consider the dynamic interactions of the male and female roles of begetter and procreator in the reproductive process and increasing stress upon the need to view changes in men's roles as facilitating and determining changes in women's roles in relation to demographic processes (e.g. Marciano, 1979). In addition the realisation is growing that female occupational roles are conditioned by and affect male occupational and familial roles. However certain types of required data for estimation of these dynamic interactions are relatively sparse. These include data on domestic power and decision-making and male activities and expectations regarding household tasks and resource allocation and marriage and parenthood - begetting children and child-caring behaviours and expectations, both with respect to wives and others. The relevance of the latter concern to both economic modelling exercises and to policy formulation has recently been vividly re-emphasised (Oppong and Bleek, 1982).

The present paper is another attempt towards rectifying the imbalance of interest by focusing upon the parental and domestic roles of men with respect to resources and power and the division of labour and demographic issues, in contrast to the stress upon the extra domestic roles of women. The fathers selected for study are Ghanaian primary school teachers. The sample, although relatively homogeneous with respect to occupation, sex and nationality, is found to vary considerably with regard to men's activities and expectations as parents, husbands and kinsmen. These differences are found to have interesting associations with their family size preferences and related behaviours, including aspirations for quality of children, infant mortality and family planning. In particular men's activities and responsibilities in the domestic domain,

are seen to be very relevant to differential and changing fertility aspirations and related behaviours. Implications for research and policy issues are raised including selected effects of migration for work in non-familial settings; the relevance of sexual equality in both provision and enjoyment of resources for consumption by family members and the impacts of the growing "costs" of parenting.

A number of people assisted in the early stages of the collection and analysis of these and related data sets, including Samuel Ocran, Charles Eninful, Jennie Widdowson, Karen Altergott and Louis Lohlé-Tart. The field work was carried out within the scope of the Changing African Family series of projects with modest funding assistance from the Population Council. The larger series was jointly administered by Jack Caldwell of Australian National University and the late Francis Okediji of the University of Ibadan. The data were collected while the author was a Research Fellow of the Institute of African Studies, University of Ghana which gave the major support to the work. Some earlier analyses of related data from this project have already appeared (see Oppong, 1982c). More recently analysis has been inspired by the able interventions of René Wéry and comments from interested colleagues have helped to improve the presentation.

I. INTRODUCTION: FOCUS AND ISSUES

This paper is relevant to several interconnected issues which have surfaced recently in research and action projects concerning sex roles and economic demographic interactions at the household level, in particular connections between work of different types and fertility levels and socio-economic correlates of family planning acceptance and demographic innovation. The first is the potential sexist biases argued by some to exist in fertility studies, including the concentration upon the female maternal and occupational roles, often to the exclusion of all other female or male activities and resources other than male income earning. The second is the problem of how to identify and document the linkages between community and national level economic, political and cultural changes and the reproductive values and behaviour of individuals. Moreover, if familial roles and relationships are a key to providing such linkages, a problem remains how to identify and document changes occurring in these, consequent upon the social and spatial mobility occasioned by "modernisation" - education, migration and wage employment. The third issue is the identification of pressures to innovate in the area of procreation. What spurs people to shift from inertia to action, to ignore or defy custom and to adopt values and practices considered deviant by the majority of their communities; in this case to develop family size values far below traditional pronatalist aspirations and to adopt methods of fertility control for purposes of achieving these new values, not simply in order to maintain customary norms regarding the spacing of births?

Thus in this first section we discuss briefly each of these issues - reputed sexual biases in operations and research regarding fertility and its regulation; changing familial roles and their links with processes of modernisation on the one hand and innovation with respect to reproduction on the other and pressures for demographic change. A permeating theme is the sexual divisions of labour, resources and power in the domestic domain - how these are affected by migration, education and employment on the one hand and on the other how they are linked to changing values and practices relating to fertility regulation.

In section II the segment of the population selected for detailed consideration is described. They are Ghanaian primary school teachers, men working in schools scattered throughout the country during the mid-1970s in rural and urban areas, with higher education and government salaried employment. Their familial roles and relationships are briefly described.

The third section focuses upon mobility and change in the domestic domain, indicating links between migration, education and mobile salaried employment and different expectations and behaviour patterns associated with kinship, marriage and parenthood, noting the implications for changing sex roles. In particular attention is paid to the potential effects upon divisions of household tasks and responsibilities of the relative contributions of resources by spouses and their relative power in deciding the allocation of consumption benefits.

The fourth part links these contrasting patterns of familial roles with potential parental costs, and perceptions of strain, of inadequacies of money and time to fulfil familial responsibilities and aspirations. Finally these perceptions of costs and strain are linked to innovative values and practices regarding family size and birth control. The implications of these findings for research methods and conceptual frameworks and action programme strategies are briefly reviewed.

Fertility Research and Family Planning Programmes: A Female Bias?

Work/fertility linkages

It has recently been argued that a sexist bias is apparent in studies of fertility, with far more attention being paid to female rather than male, parental and occupational roles and fertility (Ware, 1981). Certainly much survey data has been collected and analysed in the past few years with the aim of demonstrating linkages between female labour force participation and fertility (e.g. Standing, 1978; Anker, 1982). Analysis of World Fertility Survey data has shown that women's work status appears to bear a significant relationship with fertility levels in 19 out of 27 populations studied (Rodriguez and Cleland, 1981). But

the same sets of data have not shown clear relationships between employment status and contraception (Mamlouk, 1982) and a recent United Nations analysis has concluded that education accounts for most of the differences in contraceptive use by employment status.

Reviews of major findings have emphasised the difficulty of demonstrating causality and the variety and inconsistency of the results, as well as the methodological problems involved and the ambiguity of the hypothesised relationships (Standing, in press). Significantly, Rodgers and Standing (1980) have stressed that employment status needs to be carefully qualified and broken down into contrasting categories particularly where "work" is of a more informal nature and not necessarily for wages. A critical issue is the extent to which the female occupational role is compatible with mothering activities and indeed the extent to which children assist in the activities associated with the occupation. Thus child-care delegation and child labour are among the issues which have to be addressed in order to understand the female occupational/maternal role links (Oppong, 1982c). Another critical issue is the extent to which work and associated resources and income involved may enable women to acquire sufficient power to achieve their own reproductive goals, whether these be relatively higher or lower than those of their husbands (Safilios-Rothschild, 1982a).

The potential connections between household work and fertility though important have been less extensively examined than those between work away from home and fertility, one reason being the lack of relevant data (Youssef, 1982). Certainly there is a growing amount of evidence of the extent to which children participate in production and income generating labour with potential pronatalist implications (Rodgers and Standing (eds.), 1980).

Given these two simultaneous biases towards the study of women's roles rather than men's roles in relation to fertility and towards official labour force participation rates to the exclusion of informal and domestic activity measures as correlates, it is not surprising that a topic which

has received relatively little attention, particularly in the developing world, has been male domestic and familial roles and fertility. Yet in the past twenty years a number of studies in Europe and North America and a few in other parts of the world have demonstrated apparent associations, both between women's increased labour force participation and men's increasing participation in household tasks (as well as changing expectations with regard to these activities). Moreover, such flexibility and interchangeability of female and male activities and responsibilities in the domestic as well as occupational domain has, in a number of studies in different socio-economic contexts, been correlated with views regarding smaller family size and fertility regulation.² Furthermore recent survey data has provided interesting indications of potential shifts in attitudes and behaviour regarding the participation of men in household tasks and child-care in several countries. Moreover, differences are evidently associated with economic status, occupational, educational levels and income. Significantly the relative educational levels of spouses have been shown to be important, as well as relative contributions to the domestic budget.³ Currently the extent of equality in the division of labour between the sexes, inside as well as outside the home, is the subject of legal changes and social policies in several countries with very diverse political and economic institutions but all characterised by low levels of fertility.⁴

Family planning programmes

It has also been argued that in the past some Family Planning Programmes, like studies of child-care and fertility, have concentrated on mothers and that fathers and potential fathers have often been overlooked and undervalued in considering parenting and responsibilities and contributions to child-care and maintenance (e.g. Young and Hamilton, 1978). Rosen and Benson (1982) have recently reviewed research that has dealt with the male role in family planning decision-making. They conclude that regarding contraceptive decision-making the bulk of studies have concentrated upon women, even prior to the development of the pill and intra-uterine device. More recently studies

of pregnancy resolution decisions, while recognising a male role have tended to use female perceptions of this role. In attempting to assess the reasons for the male role frequently being downplayed, they argue that a major factor appears to have been a general lack of concern with decision dynamics, which frequently would involve couples. They note that a medical model of the pregnant individual patient has been used. In addition they refer to researchers' unconscious acceptance of sex role stereotypes as being a factor. Family and children are assumed to be the sphere of women. They emphasise that there is a need to include the male in all studies of family planning decision-making. They optimistically note that there are indications that family planning researchers are becoming increasingly concerned about including the male directly in their studies.⁵

In view of the female bias, in many cases services have been tailored to meet the needs of women rather than the needs of men. Education likewise is frequently focused on women rather than on couples or families and so may not help to develop favourable male attitudes to family planning. And yet as has recently been re-emphasised, before the advent of modern contraception birth control was based almost totally on male methods of coitus interruptus and the condom. These methods, together with abortion, in the event of failure, were mainly responsible for the demographic transition in Europe, Japan and North America (IPPF, 1981). Indeed male methods are still reckoned to account for one third of the estimated 250 million people of the world currently using contraceptives (Stokes, 1980). Thus many Family Planning Associations and governments do have projects which reach men through the workplace and labour and trade unions, a number of which are currently assisted by the ILO and there is reputed to be a growing realisation among both trade union leaders and employers of the potential contributions of family planning to their members' and workers' well-being.

Some years ago the experience of the Danfa Family Planning Programme in Ghana and its findings illustrated how the male partner in

sexual relations may play a considerable role in the reduction of excess fertility among rural African couples (Lamptey et al., 1978). Indeed literate men were found quite prone to adoption of modern contraceptive methods. Pool (1970) had shown earlier elsewhere in Ghana that educated men may indeed have more positive attitudes towards family planning than their wives. The findings of Lamptey et al. (1978) suggested that male acceptance of contraception was at least as effective in preventing pregnancy as female acceptance, perhaps even more so, given the higher continuation and use effectiveness rates. Thus they concluded that at least half of the fertility reduction in the Danfa project area was related to male contraceptive acceptance and on the basis of these findings they recommended the increase in Family Planning Services specifically for men.

Family and Fertility: Domestic Connections

Change and contrasts in family relations - kin ties, conjugal roles and parenthood have long been given pride of place in several theoretical models of fertility transition theory. They have been viewed as the critical intermediate variables, about which not much is known but which are considered crucial. Thus a special theoretical position in explanations of fertility decline has been given to the declining importance of kinship systems, assumed to accompany economic development and modernisation (e.g. Beaver, 1973). However when it comes to empirical testing of models to explain demographic transition theory, a major problem is the persisting tendency to relate macro-structural variables directly to changing fertility. As Freedman, (1979, p. 65) and others have noted, the looseness of the resulting relationships demonstrated may well be an outcome of the failure to deal empirically with the changes in familial roles and the changing aspirations for self and children, which are in fact intervening links between the macro-variables and fertility in the original statements of the theory.

Blandy (1980) provides an example of a researcher who has emphasised the critical nature of domestic organisation or "family functioning" for any understanding of differential fertility behaviour

and how it is changing in the modern world. Indeed he assembles supportive macro-level evidence from several countries and historical time periods to indicate how the "defunctionalising" of the family and "individualism" - whether occurring as a result of direct political control at the state level, as in China, or incidentally as a result of economic changes - has been associated with declining fertility.⁶

In spite of the fact that the family has featured frequently in ideal models and grand theorising however, there has been a noted lack of empirical evidence available suitable for building such models or even testing limited sets of hypotheses cross-culturally.⁷ This is a lack which has frequently been commented upon.⁸ Recently Miro (1980) re-emphasised strongly the lack of data, in spite of current massive cross-national survey work such as the World Fertility Survey and the great need for data on norms, values and behaviours, particularly in terms of acquisition and allocation of resources between kin, spouses, parents and children and co-residents.

A basic stumbling block in attempts to incorporate domestic variables has been the ambiguity of concepts such as "nuclear" and "extended" family which are generally those used in everyday speech⁹ and the continued reliance of long sustained myths and stereotypes regarding family structure.¹⁰ At the same time the continued attribution by scholars and others of European or North American characteristics to family formation and organisation in other cultures, without adequate investigation of the details of actual family relationships, is a continuing and disturbing phenomenon.¹¹

Contemporary economists studying "household economic-demographic decision-making" in the developing world are not the first to have laboured under such misapprehensions as the perception of "the household" as a single unit of production, consumption and decision-making. They are, however, in the happy position of being able to benefit now from several decades of detailed social anthropological work in the area of comparative systems of kinship and marriage and domestic organisation, some of which focuses upon parenthood and fertility¹² and on a growing

body of historical work which seeks to treat domestic life in terms of processes within a domain continually affected by economic, political and religious changes.

During the past decade a number of attempts have been made to point to the dangers of continued reliance upon old household and family models. The kinds of alarming distortions incorporated into research designs, through researchers' use of inapplicable assumptions about domestic organisation, have been noted on a number of occasions (e.g. Oppong, 1982a). But unfortunately, even more recent sophisticated attempts to include domestic phenomena in complex models of development and demographic change appear to equate "families" with co-resident domestic groups, although recognising that domestic decision-making relating to both economic and demographic phenomena may go beyond the boundaries of such co-resident groups (Birdsall et al., 1979, p. 223 etc.). Even though the value for economic demographic modelling in the next decade of incorporating differences in family structure has been stressed, it is still often in terms of the "nuclear" versus "extended" simplistic dichotomy of former work (ibid., pp. 254-5). As Birdsall et al. admit (1979, pp. 228-9) changes in the way family groups organise themselves, although of contemporary importance to sociologists and social historians are not yet well integrated into the general economic demographic system of thought and analysis. More recent work shows that this may be a development of the eighties (e.g. Ben Porath (ed.), 1982).

Thus one might summarily conclude that in spite of an apparently widespread concern to incorporate family systems into economic-demographic models of fertility change, only a small proportion of fertility studies have actually been formulated within theoretical frameworks current in sociological and anthropological studies of families or domestic groups. Few have sought to measure family properties or even to consider domestic groups or conjugal families or kin groups as variable units of analysis (Cogswell and Sussman, 1979). This lack and the failure to address family theory was noted by earlier writers

(e.g. Hill, 1968; Freedman, 1962 and 1975). An important result is that much aggregate data on individual respondents exists in the fertility literature or pertaining to units which are called "households"; but there is actually very little information on the inter-relationships between fertility variables and social interactions between spouses, parents and children and other family members (Burch, 1979). Such data as has been collected in this area, for instance on caretaking of children by non-parental kin; conjugal communication and decision-making, has shown these to have interesting and significant correlations with fertility related variables. But knowledge of the systems within which these correlations occur is often not spelt out or is completely lacking. Continually there is the misguided assumption that the "family", parenthood, conjugal role relationships and the household or domestic group can be taken as cross-culturally similar and comparable units. If we are to make meaningful cross-cultural comparisons, however, we must look to new and more precise ways of measuring fertility-relevant variables in family systems (Oppong, 1982a, b and c).

Among such variables which have been hypothesised as relevant are conjugal family types or conjugal role relationships. Thus attempts to make connections between different "family types" and fertility have included the examination of descent reckoning and the presence or absence of lineages and residential patterns (whether or not kin co-reside). These several explanations have produced ambiguous, conflicting and unsatisfactory results.¹³ More useful have been attempts to link the relative openness or closure¹⁴ of the conjugal family functioning at either the normative or behavioural level. We return to this issue in the discussion of extension of costs and benefits below. Several Ghanaian studies using this conceptual approach have recently been reviewed (Oppong, 1982c).

With regard to conjugal power, segregation and communication a range of studies have examined hypothesised associations between variations in conjugal power measures and divisions of labour or the relative flexibility of conjugal roles and communication.¹⁵ Again somewhat mixed results have been obtained; jointness is not always

associated with smaller family size desires or greater propensity to contracept and wife dominance or autonomy can be associated with larger family size, just as can husband dominance. It has been argued that more factors need to be taken into account including the simultaneous consideration of closure and jointness required in the calculation of costs and benefits discussed below.¹⁶

Again the social and spatial mobility occasioned by "modernisation" processes has also been linked in various ways with these family types and conjugal differences with disintegration of kin groups, kin dispersal, greater potential flexibility and diversity of conjugal role relationships and greater capacity for individualism. There is thus potential scope here as a number of researchers have shown for linking mobility, migration, urbanisation, wage employment, etc. with changing and contrasting familial roles and fertility: an opportunity and challenge which several researchers have taken up.¹⁷

Pressure to Innovate: Parental Costs: Inertia to Action

In several models of fertility related decision-making, which have an explicit or implicit economic perspective, costs and prices of producing and rearing offspring, form major variables and perceptions of increasing costs in relation to finite or diminishing resources in parental time and money are often implicitly treated as factors triggering change with respect to family size values and contraception (e.g. for a review see Farooq and Simmons (eds.), in press). Aspects of costs and prices which have appeared in a variety of models, in addition to those concentrating upon the levels of maternal time and parental income available or forgone, have included those which have focused upon the vertical flows of benefits in time and money between children and parents and those which have concentrated upon the varying horizontal spread of parental costs in responsibilities between (a) one spouse and the other (an aspect of jointness or segregation of the conjugal role relationship); (b) spouses and kin (including fostering and adoption, an aspect of the "extended" nature of familial roles; and (c) parents and others in the community (including hired nurses, crèches, kindergartens, etc.).

Thus several currently debated hypotheses seeking to identify familial contexts in which pressures to innovate in the sphere of procreation will occur, focus on the shifting loci of material and time costs and benefits involved in parenthood, including divisions of tasks and responsibilities within the domestic domain, a strategy long ago suggested by Ryder (1959).

Vertical flows: from benefits to costs

One set of discussions is concerned with the shift of children from producers to consumers¹⁸ incorporating the findings of child labour studies (e.g. Rodgers and Standing, 1981), wealth flow hypotheses (Caldwell, 1982a) and work on the "value of children" (e.g. Bulatao, 1980, 1981), as well as studies of children in the light of old age insurance providers and pension plan alternatives (Entwistle, in press). Some field work has attempted to measure "actual" economic benefits and costs of children (e.g. Mueller, 1982; Kasarda, 1971).

Horizontal spread: "extended to nuclear"

Similarly some of the studies examining shifts from so-called "extended" to "nuclear" family functioning - the increasing functional boundedness or "closure" of the conjugal family or increasing isolation and sole shouldering of responsibilities by the individual parent - have been conscious of the shifting burden of child-rearing responsibilities and costs from several kin to two or one parent. Traditional fostering practices common in Africa and elsewhere have been viewed as a form of "family planning" for some; a means of dealing with excess births and of reducing costs. The practice and the propensity have been negatively related to family size values and to family planning behaviour and positively related to infant mortality and sickness.¹⁹ "Openness" or "closure" unrelated to scarce resources has been found in some contexts at least to have no connection with family size related expectations and behaviours (e.g. Oppong, 1978a).

Conjugal costs: "segregation" or "jointness"

Again with regard to the conjugal role relationship relative segregation, the division of labour inside and outside the home has been viewed in terms of the costs of particular behaviours and expectations to either wives or husbands and such costs have been related to the likelihood or appearance of role strain on the part of mothers or fathers and thus the propensity to reduce fertility values and to regulate conception (Oppong, 1982c and d).

Strain, conflict and change

Frequently incorporated into hypotheses regarding the processes whereby fertility values and achievements diminish are assumptions about the impacts of role conflict (especially occupational/maternal role conflict for women) and resource strain (especially income strain of men and the relative costs of offspring). Such strain and conflict has in most studies, however, only been imagined or assumed to be an explanation for observed fertility outcomes. Few like Rainwater (1965, etc.) have collected and analysed sufficient qualitative and contextual data to demonstrate evidence for role strain and conflict and the associated pressures to overcome inertia and traditional actions and the move towards more conscious calculated decision-making processes and innovation. Leibenstein (1982) has elaborated a conceptual model of such processes but as yet appears to lack supportive data.

Again social and spatial mobility have been stressed and exposure to heterogenous values and behaviour, as both freeing the individual from conventional constraints of kin and community and thus the capacity to innovate and leading to rising expectations and thus desires for higher levels of living for family members as well as greater "modernity", inner complexity and individualism.

In what follows we propose to address each of these issues through the examination of Ghanaian survey data looking at differences in familial roles in relation to fertility expectations and behaviours; concentrating on male roles in the domestic domain to help in the

redress of proclaimed sexual biases and looking at changing divisions of labour and resources in order to help provide links between education, migration and employment on the one hand and reproduction on the other and to identify pressures for innovation and what signs there are, if any, of shifts from inertia to conflict, strain and action in the field of innovative modes of fertility regulation as a result of such changes.

II. GHANAIAN TEACHERS: EMPIRICAL EVIDENCE

The Ghanaian Context

The setting of this analysis is Ghana in the mid-1970s, a country in which the majority of both men and women were engaged in agricultural production using traditional, labour intensive methods, a minority were engaged in manufacturing and only 6 per cent of men and a third as many women were engaged in professional, administrative, clerical and similar work, the majority of whom were employed in government service in ministries, hospitals, schools, colleges and government trading outlets.

During the decade political crises, economic stagnation and financial instability were common (Bequele, 1980). The cocoa industry declined. The manufacturing sector did not get off the ground and the education and health systems, set up in the early sixties after Independence to cater for the needs of the total population, were constrained by shortages and the need for serious economies. In addition the weak and declining currency values meant that in the mid-seventies and years following, hyper-inflation was a major concern. For example in 1977 the consumer price index rose 116 per cent; such inflation was the cause of a rapid decline in the real income of those on fixed wages and salaries including government employees like those described here. In 1976 local food prices rose by 78 per cent and 139 per cent in 1977. Prolonged drought, limitation of food imports and rising government deficits, largely financed by increases in the money supply, were among the factors blamed.

Demographic Data

Ghana is one of the few countries of Africa which has a relatively long history of population data collection and an array of demographic data are readily available, though relatively less has been done in this field in more recent years. The population is currently estimated to be about 12,000,000 and increasing at a rate of about 3.1 per cent per year. The crude birth rate is about 50 per thousand and the average woman bears about six to seven children. Thus Ghana's fertility rate is among the highest in Africa and the world. In the past two decades the death rate fell (26 per thousand in 1960; 21 per thousand in 1970; 19 per thousand was the estimate for 1980). The outcome of these rates is a youthful population, among whom 35 per cent are under 7 years and 48 per cent are under 15 years. There is also considerable difference in the fertility levels in various cultural and geographical regions of the country and striking differences between various socio-economic subgroups (Gaisie, 1979).

During the 1960s the large family system was noted to remain supported by the high economic value of children who continued to share the work burden on farms, to send remittances to parents as migrants, thus providing security in old age and sickness, as well as social prestige to parents (Caldwell, 1968a). However at that time the declining labour value of children was already recorded in areas of shifts away from subsistence farming to mechanisation and in areas with strong pressures for children's school attendance. Significantly resistance to pressures for schooling were noted to occur in areas in which children's labour inputs in home and farm were still highly valued (e.g. Oppong, 1973 regarding the Muslimised Dagomba in the north). At the same time the economic burden of the large family was beginning to be felt by the urban educated salary earners, who depended upon earned income and entertained high expectations about their children's education and the style of living of their domestic groups (Caldwell, 1968b; Oppong, 1974a). Already in the sixties the small urban elite had shown expectations and behaviour with regard to procreation quite

different from the traditional pronatalist cultures from which they originated. Economic constraints as well as changing expectations for familial roles were noted to be prime factors. Widespread education and employment resulted in massive migration of workers such that over 60 per cent of workers by the end of the seventies were counted as living outside the localities of their birth (Caldwell, 1969).

The National Population Policy and Family Planning Programme

Ghana was one of the first African countries to develop a comprehensive population policy which became operational during the decade. In March 1969 the Government of Ghana published a White Paper entitled "Population Planning for National Progress and Prosperity", establishing a comprehensive population strategy for the country. Its objectives included the reduction of Ghana's rapid population growth rate and giving Ghanaians a choice regarding the size of their families. The policy was largely reputed to be the outcome of work by the newly established Ghana Manpower Board. The paper stated that Ghana was producing more children than it could comfortably provide for, with a rate of population increase that if continued would bring a doubling of the population by 1990. Various advantages of fertility reduction were noted, including health benefits for mothers and children, subsequent labour force effects, reductions in the burden of the educational system and lower dependency ratios. The rationale for the national family planning programme was discussed and the Government proposed to "encourage and itself undertake programmes to provide information, advice and assistance for couples wishing to space or limit reproduction".

Subsequently the National Family Planning Programme was set up. The secretariat was established within the Ministry of Finance and Economic Planning, reflecting the view that family planning was part of the Government's over-all socio-economic development effort and the family planning policy became something of a model for other countries seeking to limit their population growth rates.

From the beginning targets were set for number of contraceptive users. However, achievements fell far short of goals. For example,

at the end of the year 1973/4 only 71,000 users were recorded, only thirty per cent of the target set (Armar and David, 1977, p. 9). However, the number of family planning clinics and attendance increased and by 1976 there were 192 clinics including 82 run by the Ministry of Health and 45 by the Planned Parenthood Association of Ghana. Non-prescription contraceptive supplies were available in Ghana National Trading Corporation shops. At the same time education and information services were given high priority. More than half of the recorded acceptors in 1973/4 were pill users. There was apparently little evidence of serious political or religious opposition to family planning. However, implementation of the goals of the policy and programme proved more difficult than expected. In 1977 Armar and David outlined what some of the obstacles appeared to be. On the one hand many persisted in thinking that the large expanses of apparently uninhabited land in the country meant that Ghana still had much untapped wealth, which would need utilising by future expanding generations of Ghanaians. On the other hand, many children remained a source of economic and social benefits for the majority of agriculturalists and self-employed. Again some were suspicious of the vast amounts of foreign funding coming into the country specifically to promote fertility regulation and among the practical problems encountered during the decade were the terminations of specific programmes when foreign funding ended,²⁰ the shortage of trained staff and the expectation of extra payments by medical personnel expected to introduce family planning.

Armar and David concluded that a considerable amount of success has been achieved by the programme by 1977. Awareness and acceptance of modern methods of contraception had spread to many sectors of the population, especially in urban areas and among the educated. They concluded their report on the state of affairs at that time by noting that the Five Year Plan for 1973-7 claimed that efforts were to be intensified by both direct and indirect means to create the demand for voluntary regulation of fertility by individual couples and to provide the means by which these fertility objectives could be achieved.

Fertility Control

In the 1960s a number of surveys had been carried out which collected data on Knowledge Attitudes and Practices regarding Family Planning (Caldwell, 1968a). Among Ghana's educated knowledge of some method of preventing conception other than abstinence or abortion was already quite widespread at that time, that is before the GNFPP was set up. The majority of women and men with higher education knew of some method of contraception. In the population at large abstinence was revealed to be widely known and used by some in a regular "rhythm" method, as well as longer term conjugal separation to ensure maintenance of traditionally valued birth spacing lengths (Gaisie, 1981). Again coitus interruptus appeared to be in use in the area.²¹

Discussion of family planning was reported to be relatively uncommon among rural populations, prevalent among a quarter of urban populations and among three out of seven among the urban educated. It was found to be most likely in monogamous first marriages (Caldwell, op. cit.).

A number of small surveys were carried out in the late sixties to discover what might be some of the familial correlates of comparatively low family size desires and achievements, especially among those educated and employed in urban areas. Caldwell (1968b) in his study of residents of suburban areas was at pains to note signs of greater separation of the conjugal family from kin, of "closer" more stable marital ties and increasing "child-consciousness" regarding own offspring. However systematic data on use of time, energy or money within and across the boundaries of the conjugal family were lacking at that time. Subsequent sets of data from educated Ghanainans showed interesting correlations between social and spatial mobility, measured in terms of generations of education, occupational status and migration and changing sex roles and family relationships. The results from some of these studies have recently been outlined and summarised (Oppong, 1982c). In these latter enquiries, three significant dimensions of familial role expectations and behaviour were identified and several

different component dimensions measured and compared. These included:

- (i) the openness or closure of the conjugal family in terms of its functional boundedness in several spheres; including financial management and maintenance, socialisation, residence, procreation and provision of household labour. These were regarded in terms of the allocations and spread of costs involved in childbearing and rearing between parents, kin and others.
- (ii) jointness or segregation of the conjugal role relationship, identified in terms of role substitutability between wives and husbands or the flexibility of the division of tasks, responsibilities and resources inside and outside the home. Again these were considered in terms of the allocation of child rearing responsibilities between co-parents.
- (iii) conjugal power and modes of decision-making whether syncretic, autocratic or autonomous - these modes of decision-making were associated with varying patterns of openness and jointness in different spheres of family functioning and also related to the spouses' relative resources in education, employment and income and how such resources were used in supporting the family.

These several dimensions were linked on the one hand to social and spatial mobility (which have elsewhere been labelled "modernisation") and on the other to family size aspirations and contraceptive innovation, as well as to the availability and allocation of scarce resources in money and time and thus to parental costs.

One salient aspect of women's changing roles which was documented was the effect of spatial separation of productive work and domestic responsibilities of paid work and child-care. Women in the urban labour force were seen to be subject to strain and tension, both on the job and in the home if they were inadequately supported by domestic substitutes. The ability for them to share domestic tasks was seen to be critical. At the same time, female autonomy and independence

within marriage were seen to be at risk in situations in which conjugal resources were markedly unequal with observed effects upon the conjugal balance of power (Oppong, 1981). It was accordingly decided to carry out a study in which a model incorporating several types of demographic changes, especially mobility and family size could be inter-related in terms of intervening changes in family relationships; including the domestic division of labour; channels of communication and power and decision-making and access to, and allocation of, finite domestic resources.

Study Design

The population selected for study needed to be homogeneous with regard to some variables and heterogeneous in other aspects such as social and spatial mobility (generations of education and migration status) urban, rural residence and sex. It was accordingly decided to select a national random probability sample of educated women and men in the teaching profession.

In Ghana as in other areas of tropical Africa, school teachers are considered by many to be important models for social change, especially in rural areas. And like the nurses, clerks and other government civil servants and university students studied by the author earlier they were among that sector of the total population most subject to the impacts of education, migration, salaried employment, etc. In addition, although scattered all over the country they were relatively easy to contact, understood and sympathised with social survey research and were willing to respond, since the subject of the questionnaires interested them. The investigation was not designed to cover a massive national sample, but rather to study an analytical sample of people and to use the data to illustrate important social and demographic processes at the micro level, which might be operative among very different sectors of the total population.

The sample was selected so as to include men and women living and working in rural and urban areas, migrants and non-migrants and from several different ethnic groups, with a variety of rearing and

domestic experiences. The first stage of the study was a survey by means of postal questionnaires. The second stage of the project entailed the selection of some individuals from the total sample, many of whom exhibited a marked degree of evidence of deviance; that is, they reported behaviour and attitudes which differed from the norms of the total population with respect to family size and contraceptive practice. (See Appendix I regarding sample selection and questionnaire.)

It was intended that the collection of qualitative data in depth from these "deviants" would help to explain the causes and correlates of their behaviour; how and why and in what way they differed from the norms of this particular population. Thus, both in substantive foci of interest - aspects of changing conjugal and kin relations, family size and family planning and in terms of methodology - the combination of a relatively small analytical sample of survey data and interview materials, this study followed in the wake of earlier studies and, in a sense, partly attempted to combine their hypotheses and methodologies (Oppong, 1982c).

The study of change in reproductive behaviour is increasingly being conducted through the use of micro-level data sets of small, often non-random populations, which are meant to allow a more detailed examination of the behavioural changes underlying the fertility transition. Such micro data sets have included information from German village genealogies (Knodel, 1979), from Ghanaian lineages (Bleek, 1976) and from North American analytical surveys and focused interviewing (Rainwater, 1965).

The value of micro-level household data for the study of fertility differentials has been underlined elsewhere (Anker, in press). They permit the detailed analysis of small cultural and socio-economic sub-groups and the investigation of the extent to which the determinants of fertility are similar or different across contrasting populations. Here we use data from 398 married elementary school teachers who have one or more children.²² They range in age from 21-54 with a mean age of 33 and a modal age of 28. Over 55 per cent are from southern Ghana

of the Akan ethnic group, which comprises over 45 per cent of the total population of Ghana; the remainder include Ewe (20 per cent), Ga (7 per cent) and other minor ethnic groups. Nearly all claim allegiance to a Christian sect, especially the Presbyterian (20 per cent), Roman Catholic (20 per cent) and Methodist (16 per cent) churches. All are trained teachers, mainly with a Certificate A. Fewer than 6 per cent attended a secondary school. Two-thirds were born and raised in farm families in rural environments and are first generation educated migrants to communities within their home regions. Only 21 per cent have educated parents and 11 per cent educated grandparents. Mobility has characterised their occupational careers with nearly half working in three or more different communities; clearly as junior civil servants they are subject to transfer to different schools whenever the need arises. At the time of the study only 12 per cent were living in their home towns, 62 per cent in different towns of their home region and 26 per cent in different regions. They became salary earners at the mean age of 21 and have had on average two different jobs, mainly in the teaching profession.

Resources and Levels of Living

As government employees earning fixed salaries ranging from 500 to 1,000 cedes during a time of chronic inflation, nearly half complained of the very inadequate level of their income. More than one in three assessed their financial situation as declining and only a small minority (13 per cent) were very optimistic about their financial situations after another five years. Only 5 per cent had been able to make any regular savings in the past and 42 per cent none at all. Scarcely any felt that they had adequate resources put by, nearly half considered their financial security to be declining, meanwhile the vast majority (95 per cent) considered savings for the future to be very important. Open ended questioning highlighted the fact that many were preoccupied by financial worries especially the inability to meet the needs and demands of dependants. It is not surprising that subsequently many of these teachers were among those throngs of skilled and unskilled migrant

workers who went to Nigeria to search for more remunerative employment with which to support their families. As we note below, most depend upon their wives to assist them in meeting domestic expenses.

Enquiries about the purchase of various consumer durables revealed a paucity of possessions especially among the young. (Twenty-seven per cent had never purchased a radio, 56 per cent had no sewing machine, 73 per cent had no bicycles, 84 per cent had never bought a cooker and hardly any had a refrigerator (6 per cent). Only 15 per cent had bought land and 9 per cent had bought a house.) Many were in fact living in cramped rented accommodation in the communities of the schools to which they had been posted, in conditions which varied considerably according the resources and opportunities available to them through wives, parents and relatives.

Systems of Kinship and Marriage and Residential Patterns

The characteristic features of the family systems of the ethnic groups from which they come have been described in detail in a number of ethnographic accounts.²³ Even though the systems of kinship and marriage and domestic organisation of the several ethnic groups vary considerably, certain features are relatively consistent. These include the persistence of descent groups which hold land, accommodation and other property and remain influential in arrangement of marriages and funerals and have some responsibility for the maintenance of members, the lack of functional boundedness of the conjugal family and the associated potentially polygynous nature of males' marriages; the frequency of fostering, the spiritual, social and material solidarity of siblings; the salience of parenthood and fertility and the importance of filial piety and support to parents and respect to the elderly and the variety and flexibility of co-residence patterns. In marriage segregation and separation of roles has been emphasised, the frequent duolocality and the large measure of autonomy. All these features are seen to persist to some degree among the population selected, both at the level of expectations and behaviour.

With respect to production, management of resources and maintenance, kin groups and conjugal family members have traditionally worked together in different permutations depending upon culture and task to provide sustenance and cash for family members. Characteristic features have been the active parts played by the young, until the introduction of schooling and even subsequently, and the separation of the long-term financial interests of husbands and wives, in spite of day to day co-operation and assistance, both retaining persisting financial links with kin.

Following the advent of universally available schooling and widespread wage employment, with the migration and social mobility entailed by these, numerous changes have been witnessed and increasingly diversity among different socio-economic groups, some of which have been described for several communities.²⁴ The continuity of many customs in contemporary environments has been documented, including lineage rituals at rites of passage, marriage negotiations, fostering of children and separation of spouses.²⁵

Turning now to the teachers studied, aspects of their familial roles and relationships are outlined based on the survey data. Changes follow similar patterns to those described in earlier studies of educated migrants - including rapid change in expectations and behaviour regarding residence patterns - a shift away from kin to more neo-local conjugal residence. At the same time there is continuity of sharing responsibilities for maintenance of children and kin by husbands and wives, combined with relative segregation of domestic tasks and resource management with some deviant shifts towards greater jointness. There are also marked variations in continued prevalence of fostering, kin support and conflicts regarding inheritance by kin or conjugal family members.²⁶

Kin Ties

With migration for education and employment, access to family farming land and village housing and inheritance rights in these become of decreasing importance, as individuals have access to earned income

and are concerned to send their children to school rather than to prepare them to farm family lands. The exceptions are the few whose parents own personally acquired wealth in plantation crops or housing which they may pass on to them or those who live in their home towns and can supplement their income by farming or take advantage of free family accommodation. Even those migrant salary earners far from home, however, do maintain important economic as well as social links with their relatives back home. They not only maintain interests in joint agricultural enterprises and businesses but the few who have the resources to do so, may achieve the valued ideal of building a house in the home town for when retirement comes with a pension from a government service job. Thus among this set of teachers, though the majority disapprove of relatives living together, they do approve of some amount of financial investment with kin (see table II.1). The issue fraught with the most ambivalence and conflict is that of inheritance by kin - half approve and half do not approve, a conflict which emerged in earlier analysis among the educated (e.g. Oppong, 1975).

Considerable amounts of income are sent to relatives, especially parents, and the majority do approve of giving such financial help to kin. A number of earlier enquiries had shown that wage and salary earners - in contexts in which elderly kin are illiterate, relatively poor and lacking sources for old age financial support other than children - often have obligations to relatives who reared them and to the latter's offspring who need educating. Indeed migrants even though spatially separate from relatives may have considerable financial demands made upon them (e.g. Oppong, 1974a, 1976). In this case three out of four were asked by relatives to give financial help, a third receiving many such demands. The majority were helping to support their mothers and one or more brothers and sisters (table II.2). In 24 per cent of cases the mother is completely dependent on them. Over half have responsibility, mainly partial, for one or more sisters' children who in fact form the largest single category of dependents. More than one in three help to maintain their fathers (only 6 per cent are entirely dependent) and nearly 1 in 3 have responsibility for brothers' children

Table II.1: Kin role expectations

	Absolute agree- ment %	Partial agree- ment %	Partial disagree- ment %	Absolute disagree- ment %
Approve of investments with kin	38	37	9	16
Approve of caring for children of kin	32	52	9	8
Approve of kin caring for children	30	27	11	32
Approve of financial help to kin	23	46	18	13
Approve of inheritance by kin	25	25	9	41
Approve of kin co-residing	13	16	25	46

Source: CAF Survey, Ghana Institute of African Studies, Legon. For this and all subsequent tables unless otherwise indicated the total sample includes 398 married elementary school teachers. Missing values frequently occur, they are mentioned specifically when they are many and have a cumulative effect as in cross tabulations of scale scores e.g. footnote 30.

Table II.2: Percentage with one or more dependent relatives by relationship

	%
Mother	62
Brother	62
Sister	60
Sister's child	51
Father	37
Brother's child	32
In-laws	32
Other kin	27
Mother's sister	25
Father's sister	17

and wife's relatives - mainly partial. A minority in addition give support to dependent sisters of their parents (classificatory mothers) and other relatives. Given the lack of other sources of maintenance such as pensions these are obligations they would find it difficult if not impossible to shirk.

Marriage and Conjugal Roles

Age at marriage was reported to range from 17 to 41 with a mean age of 24 and a mode of 22, 83 per cent being married by the age of 25. By the time of the study they had been married on average for 10 years (mode 7 years).

Marriage for the majority is monogamous though potentially polygynous and celebrated according to customary rites with 30 per cent married more than once by customary law and 21 per cent have been divorced at some time. Fewer than one in ten marriages are celebrated in church or under the marriage ordinance which legally precludes polygyny. Most couples live together, but one in five at the time of the study were living separately, either in different houses in the same community (8 per cent), a customary pattern, or in different communities in the same region.

There is not simply a difference in legal rights and obligations between those married customarily and under the ordinance. Men married under the marriage ordinance are more likely to stress the importance of social paternity and to note the difficulties involved in combining a dual career, marriage and parenthood. They also favour the inheritance of property within the conjugal family more and approve of a more joint conjugal relationship in terms of co-residence and communication. On the whole they also have a lower burden of kin dependency and tend to have wives who contribute more than average to the domestic finances, all features which we shall see below are interwoven with other kinds of changes taking place in family life. Nearly one in four wives have no schooling (11 per cent have primary level education, 47 per cent middle schooling and 8 per cent higher). Twenty-three per cent have no formal employment outside the home.

The majority are working: 7 per cent are farmers, 15 per cent illiterate in unskilled activities, 33 per cent in skilled work, 3 per cent as clerical staff, 9 per cent as semi-professionals (teachers and nurses), .3 per cent as professionals and 3 per cent as students.

Expectations

Earlier investigations of familial role prescriptions had revealed diversity, conflict and lack of congruence and consensus among the mobile and educated (Oppong, 1975). Few norms were observed to be widely supported. In this population the most widely accepted norms regarding conjugal behaviour are co-residence of spouses, shared parental responsibilities and the allocation of housework to wives (see table II.3). Moderate levels of support are given to conjugal equality, joint housing interests, shared domestic tasks and maintenance and inheritance of property by the spouses. Other issues such as the husband's financial responsibility to maintain the conjugal family and the degree of the wife's self-reliance or proportion of her time spent on child-care at home are much more prone to conflict and ambiguity.

Domestic Tasks

By and large husbands profess to spend little time on domestic work (76 per cent) while reporting their wives spend a lot of their time in this way (71 per cent). Husbands' contributions are more frequent in some areas (such as washing shirts and store shopping and major home cleaning exercises) than in others (such as washing up, cooking and sweeping).

Financial Provision

As in earlier studies among salaried government employees, there is considerable variation in the extent to which husbands and wives share the task of providing for material needs of their domestic groups (Oppong, 1981). But the over-all pattern of responsibilities indicates that husbands tend to shoulder certain costs more readily than others, especially educational and housing costs (see table II.4) while wives more frequently contribute to children's clothes and food than other items.

Table II.3: Conjugal role expectations

	Absolute agree- ment %	Partial agree- ment %	Partial disagree- ment %	Absolute disagree- ment %
Spouses should co-reside	82	13	4	1
Child-care is a shared responsibility	73	18	6	3
Housework is the wife's job	71	21	5	2
Spouses should be equal	60	27	7	6
A wife's income is her own	9	15	21	55
Approve couple building	53	26	10	11
Approve joint housework	50	33	8	9
Domestic purchases are a joint responsibility	50	35	9	6
Spouse should inherit	49	32	10	9
Budget is husband's responsibility	37	18	23	22
The husband should be the "breadwinner"	35	21	17	27
Approve of wife's self-reliance	31	30	18	21
Spouses should share child costs	29	32	22	17
Wife should stay home and care for children	28	30	20	22

Table II.4: Spouses' contribution to domestic needs

	% pay nothing	% pay part	% pay all
Children's clothes	24	70	6
Food	35	57	8
Meat	43	49	8
Fuel	52	36	12
School fees	77	11	10
Rent	85	5	10

Parenthood

Fatherhood does not always follow marriage. In fact more than one in ten had their first child prior to marriage, a quarter within twelve months and most of the rest soon afterwards. Procreation for many is still seen traditionally as a process continuing throughout marriage well into middle and late years. Only 36 per cent perceive themselves as stopping begetting children before the age of 40 and many expect to continue beyond the age of 50 and more than 40 per cent have begotten children with more than one woman.

The modal number of children for the sample is 2 with a mean of 3.8 (see table II.5). The majority would like to have 4 or 6 children and the modal ideal is 6. If financial constraints were removed nearly half would want 7 or more. Even if poor the majority would want 2 children, a number which in normal circumstances is perceived to be too few. The acceptable family size ranging between too few and too many covers 3 to 6. Thus while the family size preferences of this set of educated men is significantly below traditionally valued ideals of 6 to 10 or more, they are still far higher than those of men in parallel professional positions in industrialised countries. Analysis of their perceptions of how many children other people think they should have indicates that wives are perceived to have similar aspirations to them-

selves, but mothers, fathers, brothers and sisters want them to have significantly more than they want for themselves. This indicates that if near to kin they may be subject to pressures to produce more than they might otherwise.

Table II.5: Family size preferences

	Number of children (percentage) ^a						
	1	2	3	4	5	6	7+
<u>Own opinions</u>							
no. have	17	<u>24</u>	15	11	8	9	16
desired	-	-	4	<u>29</u>	16	<u>29</u>	20
ideal	-	1	3	33	18	<u>34</u>	7
too few	19	<u>55</u>	16	4	1	2	1
too many	1	-	-	1	3	9	<u>80</u>
would like if rich	-	1	1	11	10	30	<u>47</u>
would like if poor	2	<u>33</u>	26	23	3	6	3
<u>Others' desires (for respondent)</u>							
wife	-	-	3	<u>25</u>	14	<u>26</u>	20
mother	-	1	1	9	4	11	<u>24</u>
father	-	1	1	8	3	9	<u>20</u>
brother	-	1	4	15	7	8	<u>14</u>
sister	-	1	3	<u>13</u>	6	12	<u>13</u>
a Percentages do not add up to 100 as no responses have been omitted.							

Child-care

Fathers' reports vary very much regarding the amount of time they contribute to child-care. The majority help to buy their clothes but only a minority participate actively in feeding and bathing their little ones.

Aspirations of children's educational attainment are high. The majority expect some of their children to go to secondary school and a sizeable minority to go to university (table II.6). Aspirations for sons' education are higher than aspirations for daughters' education.

Table II.6: Educational expectations for children

Percentage will go to	Secondary school		University	
	Daughters	Sons	Daughters	Sons
None	2.6	1.5	2	1
Some	17	17	14	16
All	30	39	12	19
It depends	49	39	69	61

Fostering of children by non-parental kin is a common West African pattern (Goody, 1982) which has been documented in several accounts of both rural and urban communities in Ghana (e.g. Oppong, 1973 and 1974a). Thus it is not surprising to find that more than one quarter of their own children are not living with them at the time of the study (see table II.7). In fact, 44 per cent have one or more of their own children living elsewhere, including 22 per cent who have had a child staying away for more than 3 years. Twelve per cent have one or more children staying with grandparents. Many also have children of kin sent to stay with them. Indeed some have several children of kin living with them. Table II.8 shows a breakdown by relationships. The majority are their own brothers' and sisters' children. Some are their own younger siblings and a few are children of their wives.

Child-care is not always adequate to ensure survival and of the average of 3.8 children born to them, .47 have died in childhood.

Fertility regulation

These fathers come from an educated sector of the population with relatively easy access to family planning services. During the period

Table II.7: Percentage of fathers with children staying elsewhere by location

	Percentage
None elsewhere	73
With grandparents	12
With own sibling	3
With other relative	2
With non-relative	4
With wife	2
With sibling	1

Table II.8: Other children staying with teachers by number and relationship

	Children of		
	Spouses	Siblings	Own parents
0	87	68	83
1	8	19	10
2	3	9	5
3	1	1	1
Mean	.2	.5	.2

of study the National Family Planning Programme was active and modern contraceptives available in family planning clinics, medical centres and commercial outlets. Thus the topics of family planning and family size were not uncommon, the majority having discussed both of these issues with their wives, a few with relatives. In addition, the neighbourhood and workplace appeared to be places where it was common to discuss family planning. Indeed it was at that time a topic for nationwide publicity campaigns and advertising' (see table II.9).

Twenty per cent reported that they had used a method before the first birth. Thirty-three per cent had used some method after the first and second birth and 45 per cent were currently using some measure, while 68 per cent intended to do so in future. Ever users constituted 47 per cent of the population.

The most commonly used methods of preventing pregnancy reported were abstinence and "rhythm" methods (38 per cent); use of chemicals (foams, etc.) (34 per cent); contraceptive pills (28 per cent); condoms (24 per cent) and coitus interruptus (21 per cent). A few have used douches (4 per cent); diaphragms (3 per cent); abortion (4 per cent); IUDs (3 per cent) and local medicines (3 per cent).

Table II.9: Percentage discussing family size and family planning

	Family size	Family planning
<u>With family</u>		
wife	70	69
mother	18	19
sister	16	27
brother	18	27
father	8	15
in-laws	5	8
<u>With others</u>		
neighbours	15	64
colleagues	29	39
friends	34	44
medical personnel	12	23

Conclusion

The traditional family systems of the ethnic groups from which these teachers originate have now been characterised by the presence of descent groups, the openness of the conjugal family (lack of functional boundedness), solidarity of siblings, filial piety and the support of the aged by their offspring and the segregation of the conjugal relationships, with carefully defined activities/areas of responsibility and frequently a lack of intimate and free communication. These are all typical features of African systems of kinship and marriage and as we have indicated many of these features persist today among the teachers studied even though often in contemporary guise. At the same time a number of changes are noted to be taking place.

The task in the next section is to see to what extent the family relationships of some of the men under study have undergone more changes than others, in directions frequently hypothesised to be modern: that is towards greater conjugal family closure, weakening of sibling solidarity and more flexible division of tasks and responsibilities between spouses and to see what are the correlates or apparent causal factors involved. Thus in the next section the focus is the differences in the familial roles and relationships of these men, which appear to be related to levels of education, migration and employment, not only of themselves but of their parents and spouses.

III. MODERNISATION: MOBILITY, RESOURCES AND CHANGING FAMILIAL ROLES

Aspects of modernisation which have frequently been hypothesised as linked to changing familial role systems are the social and spatial mobility associated with migration, educational opportunities and employment openings in non-familial contexts. The latter are associated with residential dispersal, dwindling of kin group solidarity; greater economic autonomy and power of the individual through access to individual wages and the changing aspirations provoked by exposure to heterogeneous life styles. All of these are connected with changes in parental and conjugal roles.

Diverse attempts have also been made to link aspects of the modernity of community institutions and the socio-economic environment with elements of personal autonomous functioning, considered characteristic of personal modernity. These include rejection of external constraints and thus enhanced ability to innovate and act contrary to customary norms and the processes of the individuation of the self, in contrast to the sibling solidarity and obedience inculcated in traditional systems (e.g. Schooler, 1972). Such attempts are based on the idea that an individual raised in a complex multi-faceted environment that does not subject them to a narrow range of strongly sanctioned, prescribed norms, becomes accustomed to enjoying considerable personal freedom of choice and greater potential for innovation or deviance. Among the variables associated with such personal modernity are the social and spatial mobility mentioned above. Constraints of kinship in the tightly knit home village setting are contrasted with the diversity and mobility made possible by education, independent employment and urban life. Thus among the hypothesised effects of being raised in a complex multi-faceted environment are the feelings of freedom to act in non traditional ways and to be responsible for one's own fate - both hypothesised and often demonstrated to be necessary prerequisites for adoption of new expectations and activities associated with familial roles, including changing family size values and fertility regulation.

Ghanaian Evidence

In the southern Ghanaian situation, education in the parental and previous generations with its associated mobility and consequent individualism, in terms of property ownership and income-earning and financial security, has already been demonstrated to be an important factor associated with differences in the expectations and obligations attached to kin roles. A number of examples of civil servants from Accra have been described and the contrast in their situations according to whether they came from agricultural or wage or salary-earning family backgrounds, whether in fact there have been one or two generations in the family subject to modernising influences (Oppong, 1974, pp.

54-65, 1975 and 1978b). Significant variations have been seen in the extent to which customary expectations and behaviour patterns are maintained - variations according to social and spatial mobility, migration and education over three generations.

Indices of Modernity

Using the set of data under consideration, we have several indices of the mobility over two generations which may serve as proxies for modernity including forebears' education (parents and grandparents), mobility during childhood and fathers' mobility) and present migration status. All of these are inextricably linked with migration for training and employment. With successive generations of education, childhood is more mobile and urban and fathers migrate more in the course of their careers. Parents are also more likely to live together in monogamous marriages and nuclear households. Thus for a few, childhood has been spent in educated, mobile, often urban conjugal family settings. For others, mobility may have entailed the residential splitting of the parental conjugal family and residence with kin. These various experiences will be examined to see if they have observable effects upon dimensions of kin, conjugal and parental roles. It is hypothesised that exposure to heterogeneous situations during childhood and youth may be associated with the development of new expectations for familial roles. Distancing from kin may have reduced pressures to conform to customary norms. At the same time with regard to sexual equality and flexibility of tasks and responsibilities within the home, we shall explore the hypothesis (frequently supported in other analyses) that this may be conditioned by relative resources and power of spouses, particularly in situations less subject to the influence of kin, as well as to prevailing norms, values and beliefs.

Kin, conjugal and parental roles will be considered each in turn.

1. Kin role effects

Hypothesis:- Those who have experienced more social and spatial mobility (migration, generations of education and wage employment) will

expect and have less solidary links with kin in terms of financial interdependence, investments, expectations of inheritance and socialisation (i.e. fostering, rearing of each others' children). This array of related hypotheses is supported by several associated sets of measures as the following table demonstrates (table III.1).

2. Conjugal, domestic and parental role effects

Hypothesis:- Those who have experienced more social and spatial mobility (migration, generations of education and wage employment) are (a) more likely to have loosened bonds with kin somewhat (see above); and (b) consequently to be less bound by custom and prone to deviate from traditional expectations and behaviours; and (c) more likely to assume familial roles in an individualistic and innovative manner either through choice or the force of circumstance (e.g. the lack of junior kin to whom to delegate tasks).

Table III.1: Kin role correlates of social and spatial mobility^a

Those with educated forebears	
Have a lower kin dependency burden	*T
Have fewer in-laws come to stay	*T
Those who have migrant status and live away from their home town	
Have fewer problems with kin	T
Have fewer kin come to stay	T
Those who have educated forebears	
Approve less of inheritance by kin	T
Approve less of investing with kin	T
Those over 30 years of age who have educated forebears	
Approve less of fostering children of kin	T

a In this and the following tables non-parametric tests of association have been used.

* Indicates that the level of significance for the X^2 test is $P < .05$ or less.

T Means that the level of significance for Kendall's Tau test is $P < .03$ or less.

Tables III.2 and III.3 indicate the range of changes in familial role expectations and behaviour associated with the modernising influences of social and spatial mobility and consequent distancing from kin. Men are more likely to break customary barriers of sex segregated tasks in the home and to approve of conjugal role flexibility. With regard to parenthood, they have a greater sense of the importance of individual parental responsibility and have non-traditional ideas about how many children they want to have, over what period of the lifespan and a readiness to adopt scientific methods of birth control.

Table III.2: Conjugal and domestic role correlates of social and spatial mobility

Those who migrated more during childhood	
Approve more of conjugal jointness and equality	*T
Those who live away from their home towns	
Are more likely to cook	*T
Have more joint conjugal decision-making	T
Those who have educated forebears	
Are more likely to make meals	T
Those over thirty with educated forebears	
Are more likely to approve of conjugal jointness (housework, child-care and co-residence)	*T

Table III.3: Parental role correlates of social and spatial mobility

Those who live away from their home towns	
Are more likely to disapprove of fostering of children	*T
Have a more positive attitude to the use of contraceptives in future	*T
Expect to stop begetting children at younger ages	*T
Have smaller family size expectations	T
Those who had more mobile fathers in their own childhood	
Have sent fewer of their own children away for fostering	T
Those who have lived more with their own father during childhood	
Approve less of fostering of children by kin	*T

Significantly, approval of fostering of children by kin is also negatively correlated with the extent to which the men themselves have lived with their own fathers at different stages of their childhood indicating the kinds of life experiences leading to changing parental role expectations.²⁸ At the same time there is evidence that separation of interests from kin is associated with more jointness of conjugal role relationships, and flexibility of domestic task participation in both expectations and activities. Such an association was discussed earlier in the context of Akan senior civil servants (Oppong, 1974). There it was argued that greater functional individuation of the conjugal family is a prerequisite for more joint conjugal role relations at least in the economic sphere.

Table III.4: Loosening of kin bonds and jointness of the conjugal role relationship[a]

Those who approve of inheritance, planning and business investments with kin	
Participate less in food preparation	*T
Approve less of joint conjugal and parental roles	T

a The relevant scales are described in the appendix.

Wives' Domestic Resources, Power and the Division of Tasks

It has been frequently hypothesised and demonstrated that the more equal the status of wives and husbands (mainly in terms of resources from education, occupation and kin ties) the more likely are they to have an egalitarian conjugal role relationship and a more flexible division of domestic tasks and responsibilities including the parental.²⁹ Attention has been called to the importance of cultural prescriptions, values and beliefs and the prevalence of sexual stratification or the possibilities for sexual bargaining and the relevance of the translation of such external resources into domestic supplies (Safilios-Rothschild, 1982a and b). Ghanaian evidence from several socio-economic settings

has shown the pervasive extent of conjugal bargaining and the relevance of resources to power, such as the wife's use of her income for maintenance of conjugal family members (e.g. Oppong, 1970, 1974a and Oppong (ed.), 1983).

In this study analysing the husband's perceptions of their wives' contributions to domestic spending, in comparison with their reports of their own domestic purchasing behaviour, together with several indicators of decision making and task performance, these couples are found to provide further supportive evidence of the effects of relative resource contributions on the balance of conjugal power and decision making and the degree of flexibility and equality in the division of domestic tasks.

When examined according to the type of her occupation, wives' contributions to the domestic budget are relatively low among those classified as unemployed (score 1.5 on a Gutman Scale of Financial Contributions); high among the lower professionals who are also those with higher education (mean score 4.1) and vary among the remaining educational and occupational groups (between 2.5 and 3.3).

It is among the couples in which the husband's contributions are classed as relatively low and the wife's as relatively high that the highest mean score of joint decision-making occurs. The lowest score occurs among the set with the greatest apparent gap in the husbands' and wives' contributions and in which the wives appear most financially dependent.³⁰ (See Appendix III for mean scores.)

Similarly, the lowest number of husband autonomous decisions were recorded in the LH set of couples and the highest in the set in which husbands' contributions were high and the wives low. The remaining two groups were intermediate and similar. Moreover, husbands with the low contribution ratings were most likely to approve of equality of spouses.

Husbands with lower relative financial contributions were more likely to participate actively in food preparation. With regard to

unskilled tasks, typically delegated wherever possible to lower status members of the domestic group, husbands' participation was highest in those couples in which both spouses were classified as having low contributions and lowest in those couples, presumably the wealthiest, in which both spouses had relatively high contributions.

Husbands with higher financial contributions also had higher scores on approval of segregated conjugal role relationships. The highest scores for approval of joint conjugal role relationships were found among the category with relatively higher wives' contributions and relatively lower husbands' contributions. The latter also had the highest levels of approval of sharing child-care responsibilities and sharing of child-care costs.

Other findings supportive of these can be found among the links between reports of domestic task participation and conjugal and sex role expectations. Husbands who participate more actively in daily domestic work are more likely to approve of jointness of the conjugal role relationship and to accept female autonomy and independence. Those who go shopping more frequently also tend to show more approval of equality of spouses, approve less of male dominance and also approve of shared child-care. Cooking is associated with lack of assumptions of male dominance.

Thus these analyses support the hypotheses that similarity of spouses' resources from education and occupations will be associated with more equality and syncretic decision-making and that the latter will also be correlated with more flexible divisions of domestic tasks and parenting. In other words, husbands with more resourceful, that is higher status, wives are likely to assume a larger share of domestic and parental activities and responsibilities.

Conclusion

In this section we have indicated the profound impacts for change on familial roles of education, migration, employment and income earning. Shifts towards greater autonomy, individualising and flexibility of

familial roles have been noted: dwindling of traditional patterns of kin solidarity, breaking down of traditional sex segregation of domestic tasks, more personalised child-care and the emergence of deviant notions regarding family size and fertility regulation. The relevance of conjugal power and resources have also been explored, indicating their close associations with domestic divisions of labour and patterns of decision-making.

We turn next to the consideration of parental costs and perceptions of role strain.

IV. PATERNAL COSTS AND ROLE STRAIN

Many social scientists have explicitly and implicitly used a scarcity approach to human resources (in physical and psychic energy, time and money and material resources) in relation to the several demands and commitments of individuals' various roles.

It has been quite common in a number of recent writings to perceive the multiple and conflicting demands of different roles played by individuals in the occupational and domestic domains as resulting in role conflict, stress and strain. A major focus of such studies have been the occupational/familial role conflicts among employed couples with children and the familial problems associated with two parents working far away from home for fixed hours of the day³¹ and as noted earlier assumptions of such conflict frequently underlie attempts to show negative correlations between women's labour force participation and fertility.

The fathers in this study suffer to some extent from such problems in varying degrees, both financial strain and time strain.

Paternal Role Strain

Given on the one hand the low salary levels and minimal accumulation of capital goods and relatively low levels of living and on the other hand, high aspirations for themselves and their children, it is not surprising to find that many express great concern about child

raising. In an analysis of school teachers' assessments of the major causes of problems in their family lives, one in four mentioned the strain of child-care. Ten per cent mentioned specifically the costs of education and 8 per cent mentioned lack of time or people to care for their children.³²

There are several other indicators of role strain, both potential dangers perceived and the reality experienced. Over 60 per cent are of the opinion that bringing up children is a great strain on a teacher's income. Forty-four per cent agree absolutely with the statement that it is very difficult for a couple to look after their small children when they are both employed.³³

These perceptions of the salience of parental role strain are associated with general feelings of lack of resources in money and time, inadequate salary and having too many children to care for (see table IV.1).

In fact, 55 per cent complain at some time of having too many children to care for. Twenty-nine per cent complain specifically of having nobody suitable to care for the baby and nearly 90 per cent complain of problems with children's illnesses.

The feeling of fathers that they have too many children to care for increases with age and family size, reaching its peak among men over 35 with the largest family sizes for their age group (see table IV.2). However, among younger men with average and fewer children there are those who feel the salience of parental strain to a greater extent than their age mates with similar family sizes. These are men who feel a relatively greater general insufficiency of income, money and time.

It has been argued that excuses of scarcity of energy or time are not appealed to nor honoured at random and that those who offer them and those who honour them do so with reference to particular cultural priorities and standards of adequate role performance (Marks, 1977).

In the present context it may be the case that fathers partly use complaints about parental role strain to explain deviant values and

Table IV.1: Correlates of perceptions of salience of parental role strain^a

Lack of resources	
money worries	*T
indebtedness	T
lack of time	T
lack of time to rest	T
income too low	T
Family size	
have too many children to care for	T

a Paternal role strain salience is indicated by scores based on responses to two statements given in the appendix p. 78.

Table IV.2: Mean scores for frequency of problem: too many children to care for by age group and fertility level

Age group	Fertility			Total
	Low[a]	Medium[b]	High[c]	
30	.3 (53)	.5 (48)	1.0 (31)	.5 (132)
30-34	.5 (35)	.9 (24)	1.4 (37)	1.0 (96)
35+	.6 (16)	.9 (33)	1.5 (76)	1.2 (125)

N = 353 Married fathers

a low: 30 years 1 child; 30-34 years 1-2 children; 35+ years 1-3 children.

b medium: 30 years 2 children; 30-34 years 3 children; 35+ years 4-5 children.

c high: 30 years 3+ children; 30-34 years 4+ children; 35+ years 6+ children.

behaviour - their failure to achieve traditionally expected family sizes and their lack of enthusiasm to do so. They may also be the fathers who perceive children as being more costly in terms of their own personal inputs of time and resources, they may seek higher standards of child-care and child achievement. In other words, they may have higher standards of paternal role performance.

We may thus surmise that there are different types of paternal role strain. One type may be the problem already experienced by the more tradition bound, men who have attempted to maintain customary pronatalist values by begetting large number of children and then find that because of their unforeseen situational constraints they have difficulty coping (children's educational demands, fewer kin available to help with child-care than expected, etc.).

Another type may be those who are already more individualistically oriented, anticipating the necessity for more personal parental inputs of time and money - that is higher parental costs if children are to achieve in a changing contemporary world and who show a heightened consciousness of such issues before they are overtaken by events. One might logically hypothesise that those with the least opportunity or propensity to delegate child-care to others and with the least financial support from their wives or others and with more demands from kin would be most cost conscious and under most pressure to innovate. There is evidence supportive of these two hypothesised types of behaviour patterns.

1. Traditionalists

Several traditional traits are found to be associated with perceptions of having too many children and problems in caring for them, found among high fertility fathers. These are openness of conjugal family functioning (i.e. persistence of expectations and practices associated with the "extended" family forms including fostering of children by relatives) and infant deaths.

Problems with child-care are reported more often by those who have lost one or more children (21 per cent have lost one child, 9 per

cent 2 children and 3 per cent more than 2). They more often complain of problems with children, that they have too many children to care for and nobody suitable to care for their babies (table IV.3). Significantly it is these fathers who also more frequently send out their children to be fostered by kin and take in children of their relatives to care for. They also approve more of openness in sex, procreation and marriage - supporting polygyny, polycoity and have less restrictive views regarding births outside a monogamous marriage, all traditionally acceptable. Their solution to problems of parental stress and child-care problems appears to be sharing children with kin. The outcome is unfortunately more infant deaths than their peers who do not delegate their parental responsibilities. Significantly more recent medical evidence has related the incidence of "kwashiorkor" in a Ghanaian hospital to such "substitute mothering" (Waterston, 1982).

High infant mortality has been associated on a number of occasions with "extended" family functioning and more traditional marriage forms and higher fertility (cf. Stone, 1977). With increasing closure of the conjugal family, more individualised parenting, infant mortality rates are argued and demonstrated to fall. The evidence here is supportive of such an interconnected change process.

Table IV.3: Correlates of child mortality^a

PROBLEMS	
Scale of problems with children	T
Too many children to care for	*T
Nobody suitable to care for baby	*T
OPENNESS	
Approval of "openness" with regard to sex, procreation and marriage	T
Own children elsewhere	*T
Other's children co-resident	T

a One or more of own children have died

2. More modern men: Increasing personal responsibility

Some of the processes have already been indicated whereby with social and spatial mobility fatherhood, for the status conscious, upwardly striving and responsible teacher, becomes increasingly costly to him personally in stark contrast to the experience of their rural forebears for whom more children were the joy and responsibility of the wider kin group (often lineage) providing extra labour on family farms and in craft production and trade enabling expansion. This process occurs in several ways as their own resources in money and time required for child-rearing increase and inputs from others may tend to diminish. At the same time expected levels of parental achievement in terms of grades of schooling thought necessary for children increase. Thus it was noted that with social and spatial mobility:

- a. Fewer in-laws who might typically help to care for children co-reside.
- b. Fostering of children by kin is less approved and practiced.
- c. Sharing of domestic activities including child-care with wives is more necessary (because of lack of other forms of household help); is more approved (by those with modern flexible egalitarian expectations); is more demanded by higher status resourceful wives with multiple role commitments who expect assistance.

All of these changes involve potential pressure for greater personal participation in child-care by fathers, who have comparatively high expectations and ambitions for their children's future and want their offspring to move up in the social hierarchy.

Table IV.4: Kin role correlates of perceptions of salience of parental role strain

Too many relatives come to stay	*T
Too many in-laws come to stay	T
Problems with kin	T

Men who have a heightened awareness of the possibilities of parental role strain are also among those who feel overburdened by kin pressures and demands; men likely to be attempting to distance themselves somewhat from kin, contrary to customary norms and practices. On the other hand men who expect to be more involved in domestic tasks and parenting and actually do participate more are also more aware of possibilities for strain.

This picture of increased salience of sentiments of individual responsibility and heightened parental consciousness which these fathers present calls to mind the image of the guilt ridden modern man of Carroll's (1981) thesis on modernisation processes in England, in which progressive stages of cultural evolution are fuelled by increased feelings of guilt or personal culpability - a theme which obviously requires further exploration in this regard.

It was also indicated in part III that men whose wives made relatively higher financial contributions for domestic needs were also more likely to be perceived as participating in decision-making, while the husbands themselves were more likely to participate in domestic tasks and parenting and to approve of more joint conjugal norms. Significantly, these fathers with egalitarian, flexible relationships are among those for whom child-care is perceived as being fraught with the greatest potential strain (see table IV.5).

Table IV.5: Conjugal correlates of perceptions of salience of parental role strain

Approval of equal spouses	T
Approval of conjugal sharing	T
Husband's participation in domestic tasks	T

Significantly men's approval of flexible sharing of conjugal and parental tasks is correlated with their increasing disapproval of financial solidarity with kin (inheritance, investment, etc.). In the same way their increased participation in domestic tasks is associated

with decreasing opportunities for delegation of household tasks and increasing complaints of lack of time.

Perceptions of potential parental strain are thus affected by a complex of changing role expectations and allocations of time and money within the domestic context, all of which serve to impress fathers more with the possible costs of parenting.

We next turn to an examination of the affects of such changes and perceptions upon reproductive aspirations and related activities.

V. FAMILY SIZE AND CONTRACEPTION: INNOVATION AND CHANGE

The economic, demographic and familial contexts of the fathers and husbands selected for study have been sketched at both the societal and individual level. They are recognised as coming from a section of the population which is highly mobile in both spatial and social terms, with heterogeneous life experiences and relatively high status aspirations for themselves and their offspring. At the same time in a period of national economic crisis and stagnation, they are suffering considerable feelings of status deprivation and unexpected constraints. It is difficult for them to achieve the kinds of life styles they had been socialised to expect as training college graduates and secondary school leavers. Many remain firmly rooted in their local cultures, still to a large extent supporting familial role expectations, including high fertility, of the previous generation but changes are observed and those who have moved away most from home areas in this and the previous generation are noted to diverge from a number of traditions to the most marked extent. Migration, education and employment are seen to be associated with changing familial roles.

Subsequently, the factors were examined which appear to be associated with feelings of parental strain, inability to cope with the demands of parenthood, perceptions of inadequacy of resources and factors affecting the increasing costs of fatherhood including the dwindling of kin support, pressures towards conjugal equality, towards assumption of domestic tasks by men and rising expectations for children.

In this fifth section the focus is the expectations and attitudes of these men as they bear upon family size, in particular what are the correlates of lowering family size values and adoption of various methods both traditional and modern to regulate conception? We have already noted that the migrants have smaller family size expectations, expect to stop begetting children earlier and have a more positive attitude to the use of contraceptives. Is there evidence to support the hypothesis specified above regarding flows of benefits and costs between spouses, parents and children and kin? Are male contraceptive practice and changing family size values related in African contexts to the extent of the males' involvement in domestic affairs and growing feelings of conscious, individual parental responsibility? Is it useful to consider male roles as well as female roles in the family and family planning?

Family Size

Given the fact that the men under consideration are mainly young and have not completed their life span of procreation, we shall use two measures as proxies for completed family size. One is family size preferences, the other is use of contraceptive practices.

There is no generally standardised way of measuring family size preferences and the different questions used have included "ideal family size", "desired family size", "intended family size" and "expected family size".³⁴

Recent global fertility studies have shown an interest in family size preferences as being potentially very important in shaping fertility when implemented. From an applied point of view information on reproductive motivation may be useful to population policy makers with possible significant practical implications for action programmes (e.g. Lightbourne and Macdonald, 1982). In countries where an aim of government policy is to reduce fertility, a critical issue is whether existing preferences are compatible with a substantial fertility reduction. If they are, then provision of services may be all that is required. In other contexts the preference data may suggest that until preferences decline there is unlikely to be any significant decline in fertility achieve-

ments. On the other hand at the theoretical level, as they argue, information on reproductive motivation may be helpful in understanding the forces that affect fertility and also in expanding the general knowledge about the links between role expectations and behaviour.

Family Attributes and Family Size

Men with smaller family sizes than their contemporaries tend to come from more educated and mobile backgrounds and in the case of the younger men to have wives with higher levels of education. They also expect more joint and equal conjugal relationships and less solidary kin ties. They are also more likely to think they should bear the costs of child-care and appear less affluent.

Familial Roles and Family Size Preferences

Table V.1: Correlates of smaller family size desires: Role expectations

PARENTAL ROLE	
Disapprove of fostering of children of kin	*T
Disapprove of spouses sharing child-care money costs	*T
Consider an outside child is cause for divorce	T
Higher aspirations for daughter's higher education	(*T)
Ideal age for man/woman to stop getting children	*T
CONJUGAL ROLE	
Higher score on scale of approval of joint budgeting	T
Disapprove male dominance in financial and sexual affairs	*T
KIN ROLE	
Disapproval of financial help to kin	T
Disapprove of kin co-residing	T
() Number of observations in one or more cells below 5. This also applies to several subsequent tables.	

Table V.2: Correlates of smaller family size desires: Role behaviours and resources

PARENTAL ROLE	
Fewer children	*T
Fewer dependent children	*T
Plays more with children	(*T)
No children have died	*T
Have fewer children elsewhere	*T
Fewer children with kin	*T
CONJUGAL ROLE	
Older age at marriage	*T
Spouse more schooling	*T
More monogamous	*T
More discussion of family size with spouse	*T
Self or spouse use contraception more	*T
DOMESTIC ROLE	
More time spent on housework	*
Cooks more often	T
KIN ROLE	
Moved more in childhood	*T
With socially and spatially mobile parents	T
Mother more often dependent	*
Lower dependency burden of "extended" family	*T
Lower dependency index	*T
More discussion family size with mother, brother, sister	T
RESOURCES	
Lower score on self purchase scale	T
More regular savings in the past	*T

The men who state that they want fewer children have currently fewer of their own and fewer dependents. They foster out and take in the children of kin less, often a pattern of which they disapprove. None of their children have died and they more often report playing with their children and have higher educational expectations for their daughters and abhor the birth of outside children. They thus expect and enact a more individuated style of parenting with higher cost and healthier offspring (see table V.1).

With regard to the conjugal role they approve of joint budgeting and disapprove of male sexual prerogatives and dominance and tend to have married monogamously at an older age an educated wife with whom they are more likely to discuss such issues as family size. They are also the couples more likely to contracept and to have a more flexible division of domestic labour (cf. Beckman, 1979).

Examination of husbands' and wives' family size preferences according to their relative inputs into domestic expenditures indicates that the LH category of couples - the most flexible and egalitarian are also the ones in which wives' desired family size is perceived as being the lowest (5.4), as well as similar to her husband's (5.3) (see table V.3). Men's desires are considerably lower in the couples among whom

Table V.3: Number of children spouses would like and relative financial inputs

Wife's input	Husband's input			
	Low		High	
	Husband	Wife	Husband	Wife
Low	4.9	5.5	6.5	6.0
High	5.3	5.4	5.8	5.8

husbands' levels of provision are classed as low. The category with the largest desired family sizes for husbands and wives is that with high contributing husbands and low contributing wives, that is the ones

among whom husband dominance, inequality of resources, inputs and approval of conjugal role segregation are most marked. Significantly, the husbands whose desires are perceived to be lowest and markedly lower than those of their wives are those with low contribution scores for husbands and wives. These are the men most prone to complain of financial problems and indebtedness. These are also among the husbands who most frequently report that they contracept.

Kin

Those with fewer dependent relatives and who disapprove more of kin co-residing and maintaining each other desire fewer children (cf. Bahr, 1976, p. 76; and Salaff and Wong, 1982). Among the latter are also the men who grew up in more socially and spatially mobile families of origin.

Contraception

Those most likely to contracept include men with lower family size preferences whose wives also have smaller family size desires. At the same time they envisage child-bearing and begetting as continuing for a shorter period of their life span and themselves intend to stop getting children at a younger age. They also communicate more freely about family size and family planning issues (see table V.4).

Table V.4: Correlates of contraceptive usage

FAMILY SIZE PREFERENCES	
Spouse would like fewer	T
Lower ideal no.	(*T)
Lower no. too few	T
Lower no. too many	*T
Would like lower no. if rich	*T
BIRTH TIMING PREFERENCES	
Younger ideal age for a man to stop getting children	*T
Younger ideal age for a woman to stop bearing	*T
Intend to stop getting children at a younger age	*T
COMMUNICATION	
More frequent discussion of family size	*T
More frequent discussion of family planning	T*

For every age and fertility category, mothers and other relatives are perceived as wanting them to have more children than they themselves desire. It is thus not surprising to see that those now living away from their home towns and mobile in the past have more positive attitudes to contraception in the future, intend to stop their child begetting at a younger age and have utilised contraceptives more frequently.

The most likely contraceptors include younger men, those monogamously married and for shorter periods with educated young wives. Also men in their early thirties with relatively many children and men over 35 with relatively few children score high on measures of family planning and use of contraceptives. In fact the single highest scoring group is men over 35 with relatively few children. At the same time, contraceptors are distinguished from the rest by their greater propensity to save and yet to perceive that what they have saved is inadequate. Of particular interest is the fact that they differ from non-contraceptors in several aspects of their familial roles and relationships.

Table V.5: Mobility and contraception

Those living away from their home towns have a more positive attitude to contraception in future	*T
Those living away from their home town intend to stop having children at a younger age	*T
Those whose fathers were more mobile (migration and job changes) use contraceptives more often	*T

Contraception and Familial Roles

A number of significant correlations between contraceptive usage and expectations and behaviours associated with familial roles are supportive of hypotheses linking fertility regulation with greater equality and flexibility of conjugal roles; with tendencies towards closure of the conjugal family or a cutting down of obligations and exchanges associated with kin ties and with more individual assumption of parental

tasks and responsibilities. Evidence for such associations are provided in tables V.6 and V.7

Table V.6: Correlates of contraceptive usage: Familial role behaviours and resources

PARENTAL ROLE	
Fewer dependent children	*T
Fewer children	*T
No child deaths	*T
No. children with kin	(*T)
Children with parents	(T)
CONJUGAL ROLE	
Higher score of disagreement (Gutman scale)	*T
Low score on joint decisions	T
DOMESTIC ROLE	
Higher score on Gutman scale of food preparation	T
Higher score on over-all tasks	T ^a
KIN ROLE	
Too many in-laws call	T
Parents more dependent	*T
Lower dependency burden of "extended" family	*T
Higher dependency index	*T
RESOURCES	
More savings in past few years	T

a In this case X^2 was significant at .08 per cent level and T significant at 0.04 per cent level.

Thus husbands who deny male prerogatives and dominance and a home-bound role for women and who play a more active part in domestic tasks, including food preparation are among those more likely to contra-cept. Their higher score of disagreement with their wives could

actually indicate more involvement and discussion of issues, as separation of interests and activities has been noted to be a typical strategy to minimise conjugal conflict (Oppong, 1981).

Table V.7: Correlates of contraceptive usage: Familial role expectations and perceptions of resources

PARENTAL ROLE	
Disapprove fostering	T
Disapprove of spouses sharing child-care costs	*T
Do not think mothers should stay home and care for children	T
CONJUGAL ROLE	
Lower score on male dominance in money and sex	*T
KIN ROLE	
Disapprove financial help to kin	*T
Low score on "openness" scale (approval of inheritance and financial involvement by/with kin)	*T
SAVINGS	
Savings considered more inadequate	*T

Men who contracept also have characteristic orientations to their kin. They are more likely to complain about too many in-laws calling and to have fewer dependent kin beyond their families of procreation and orientation and to disapprove of financial help to and involvement with kin and inheritance by kin.

Data on several aspects of the paternal role show that caring for one's own children oneself rather than sending them to kin is a behaviour associated with contraceptive usage (cf. Lapido, in press). Norms regarding sharing of parental tasks and responsibilities with wife and kin also show that feelings that parental costs and tasks should be individualised and that one should assume them alone are associated

with more frequent contraceptive usage, as is the idea that procreation should not continue past middle age. Significantly those who contracept are less likely to lose children by death. Moreover those with more salient anticipation of child-care strain are more likely to contracept, to abstain from sexual relations and to practice withdrawal (see table V.8).

Table V.8: Perceptions of parental role strain and use of modern contraceptives, sexual abstinence and practice of coitus interruptus

Perceptions* of parental role strain	% use contraceptives	% practice sexual abstinence	% practice <u>coitus</u> <u>interruptus</u>
Low	36	26	10
Medium	51	45	25
High	48	41	23
N	(165)	(140)	(77)

* Score 1, 2, 3 on index of child-care strain (see Appendix)

Linked Hypotheses

A major aim of this paper using Ghanaian data has been to provide supportive evidence for the plausibility of a series of interlinked hypotheses which may help to explicate further some of the indirect effects of employment in the modern sector, migration and education upon fertility regulation and associated values for family size. The intervening variables identified include perceived relative scarcity of resources in material goods or money and time in the domestic domain and changing norms, values and behaviour regarding the allocation and control of these through changing familial role - expectations and behaviours.

Using the results of sets of cross tabulations and simple non-parametric statistical tests of association, comparatively low family size,

lower family size desires and contraceptive usage have been shown to be significantly correlated with a series of norms, behaviours and role indicators relating to aspects of transfers of resources and divisions of tasks and responsibilities between kin, spouses, parents and children. These include elements of increasing closure of the conjugal family in terms of dwindling financial dependence of kin and increased disapproval of it: less fostering of children by kin and increasing disapproval of the practice, as well as of the practice of begetting children outside marriage; markedly higher aspirations for children's education (especially daughters); and aspects of the jointness and equality of conjugal relationships. These have been related to increased perceptions of strain and problems connected with parenting and a stronger feeling of paternal responsibility for the costs of child-care.

These data thus provide supportive evidence for hypotheses connecting lower fertility with the increases in flows of resources from parents to children and the increasingly individuated assumption of the related costs of parenting; the dwindling of flows of resources and responsibilities including child-care and support between kin and increasingly flexible allocation of tasks and equality between spouses.

Figure I links the changing familial role expectations and family size preferences in a model which illustrates how education and the related migration and employment and thus social and spatial mobility, are associated with approval of increasing parental individualism, dwindling of kin solidarity and greater flexibility and jointness in marriage. At the same time these role expectations are themselves linked to lower family size preferences, indicating how changing familial role expectations can mediate between the modernising influences of education, urban migration and salaried employment and family size values.

Figure II indicates how these same influences are linked to increased fertility regulation through the intervening impacts of more individualised, costly parenting, itself a product of a more flexible division of domestic tasks and cutting down of sharing responsibilities with kin.

Figure I: Familial roles, changing norms and values and lower family size preferences

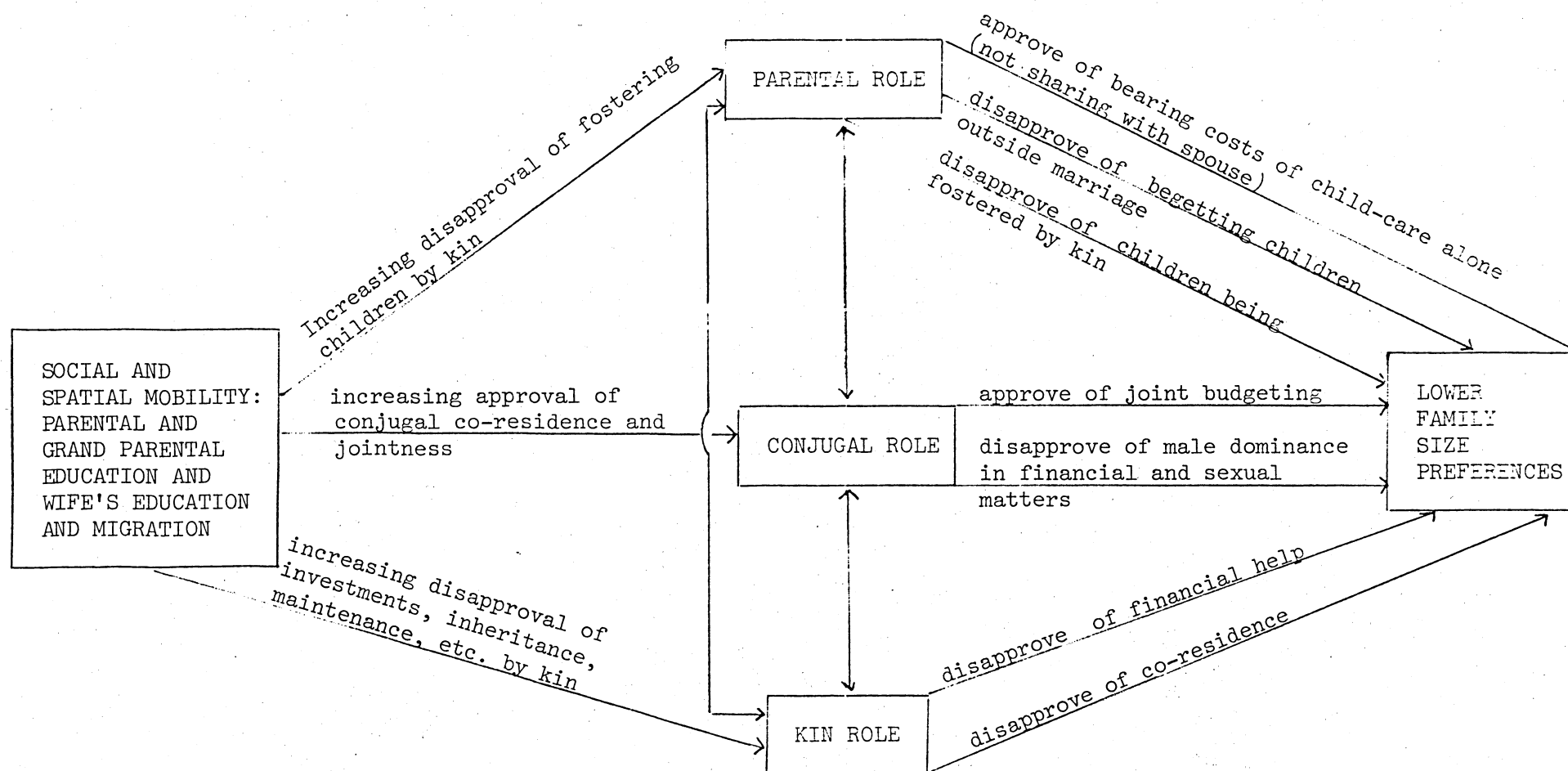


Figure II: Changing familial role behaviours and fertility regulation

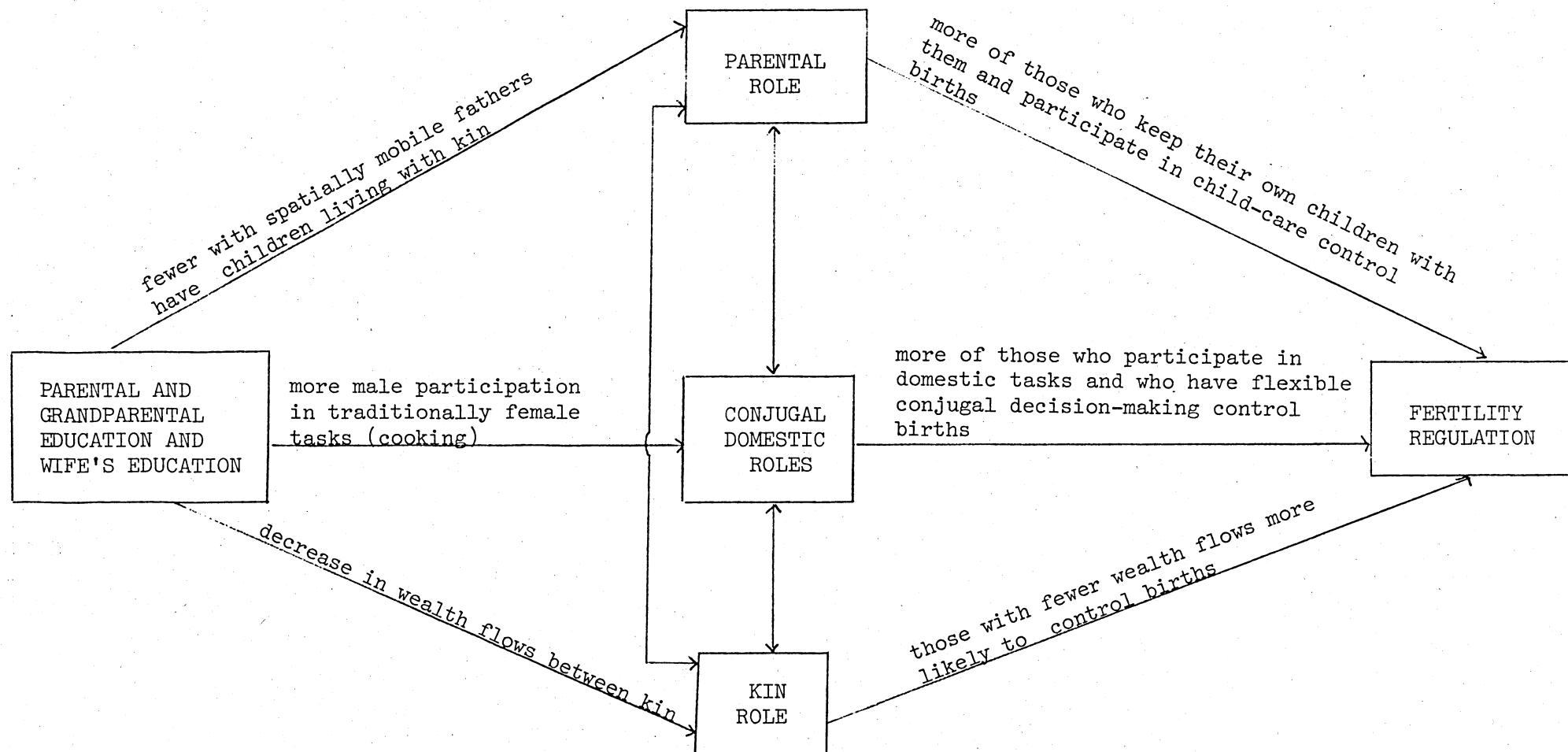


Figure III: Linkages between familial roles, resources, perceptions of parental strain and family size preferences and fertility regulation

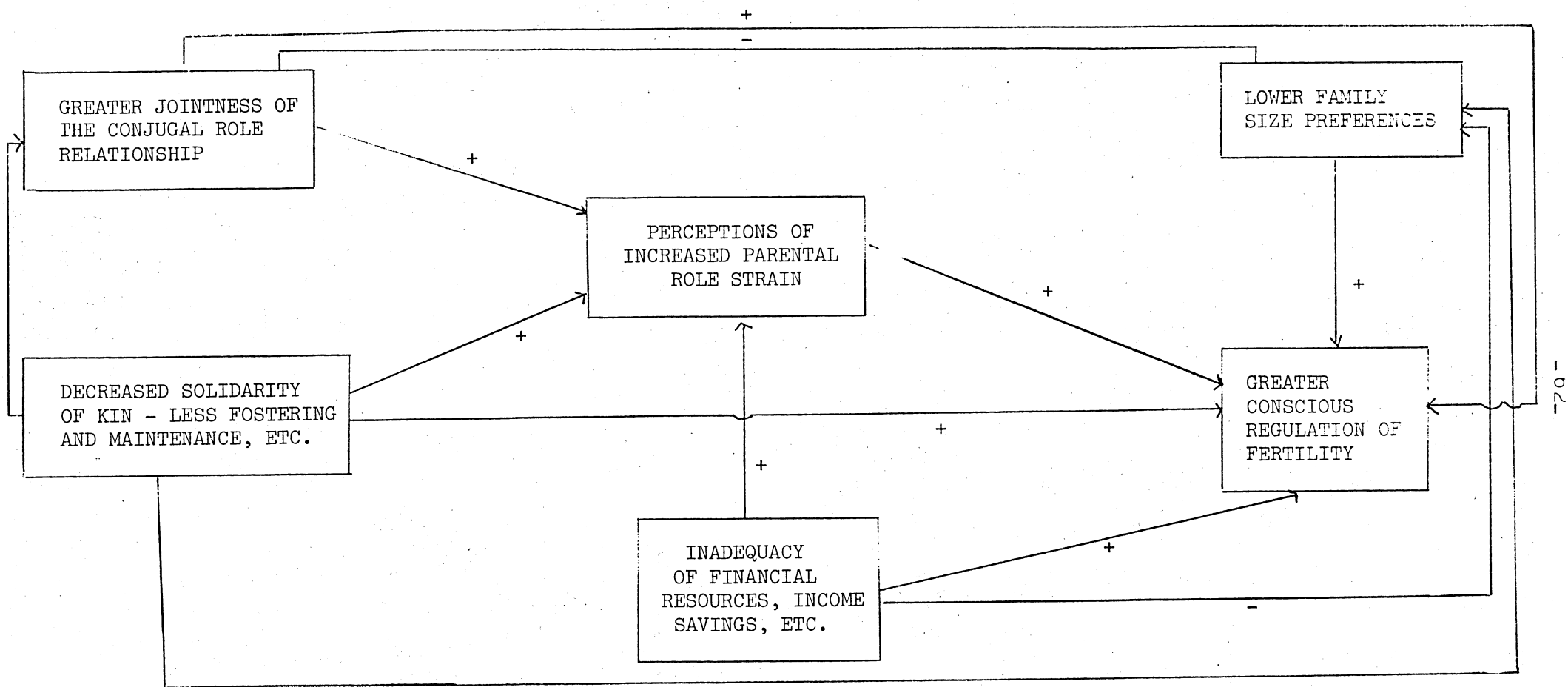


Figure III indicates how perceptions of the salience of paternal role strain are affected by greater responsibilities incurred through assumption of more traditionally female tasks and reduced assumption of parental roles by kin, together with perceptions of inadequate income. All these appear to lead to lower family size preferences and greater conscious regulation of fertility.

Concluding Comment

Within the scope of this brief analysis of a small survey data set from a sample of educated government employees, we have sought to address several issues which have been the topic of much recent theorising and policy discussion. We have attempted to illustrate aspects of the systems of relationships of individuals who are at the same time workers and family members with multiple sets of different and changing role expectations and activities. We have sought to demonstrate how change in one role and its associated relationships and resources has potential impacts upon another. In some circumstances this impact may lead to innovation, a break with customary values and traditional practices. The discussion is relevant to theorising on modernisation, on pressures to innovate, on changing patterns of resource allocation and benefits among parents and other family members and changing expectations or values associated with parenting. In the final section the focus is both the research and policy implications of these findings.

IV. CONCLUSIONS: RESEARCH AND POLICY IMPLICATIONS

We now turn in our concluding summary to the several research and action implications of the discussion so far. The findings and mode of analysis are first seen to be relevant to an array of past and contemporary theorising and empirical evidence about changing family size and occurrence of a fertility transition - including modernisation theories, hypotheses about changing family structures, decision-making processes and the value of children. The final task is to indicate the relevance of the findings to policy formulation.

Theories of Modernisation

It has recently been argued that not only do many past modernisation theories neglect fertility change in their works, but that they provide little explanation of how the changes may occur that lead individuals voluntarily to restrict fertility (Caldwell, 1982)³⁵ Although a few do mention briefly the impacts of migration on kin ties, changing family practices and the shifts in child-care responsibilities and activities to a narrower group the "nuclear" rather than the "extended" family.³⁶ In addition there are a few references attributing fertility decline to mortality decline, nuclearisation of the family, changing attitudes to family size and awareness and availability of contraception. And at least the new household economists note a changing economic calculus, all of which had of course been noted 30 years ago by Notestein (1953) and Davis (1955).

This failure is blamed by Caldwell upon the concentration upon the individual (the characteristics of the modern man) and a lack of interest in traditional society and its institutions and how they might be changing - in particular modes of familial production and patterns of consumption and not to mention the wielding of authority and power at every level and how patterns of reproduction and socialisation might be changing.

There do exist, however, a number of recent studies of situations in transition in which these concerns have been paramount; in which institutional change has been linked to individual changes in role behaviours and expectations. The latter have in turn been correlated with changes in family size preferences and achievements (Oppong, 1982c). Thus in several Ghanaian empirical studies already referred to above, the impacts of migration for training and work and access to salaried employment in government bureaucracies has been linked to both changing familial roles, resources and power and to changing reproductive behaviour and aspirations. Here another detailed set of such data has been discussed, indicating modes of linking institutional changes in the economy with changes in the institutions of kinship and marriage and how these affect individuals' roles as workers, parents,

spouses and kin. In turn these effects have been linked to the changing costs of child-bearing and rearing, showing how pressures may be exerted upon parents, in this case fathers, to innovate and deviate from traditional norms and practices regarding child begetting and rearing. And these changes have been examined in the light of traditional norms and practices and more than one generation of change considered.

Pressure To Change: Inertia To Innovation

A model of the domestic decision-making process and the availability and allocation of resources has recently been proposed by Leibenstein (1982), which takes into account levels of motivation to change, ranging from complete inertia to active innovation and can serve as the bridge linking institutional change and individual change. He sees the key to the shift from one to the other as pressure exerted, envisaging a "flow of stimuli which in part determines whether or not there is enough pressure to activate the explicit decision-making process...most of the time for most people the decision process is not activated" and convention and the culturally prescribed norms are followed. Thus he argues that while it is quite comfortable to follow custom and convention, and the costs of doing so are not too high, individuals will tend to do so. When pressed, however, by such factors as resource lack, role strain or role conflict, individuals will tend to innovate and deviate from accepted cultural norms.

If we take the example of the teachers some are seen to have followed traditional dictates, to have produced the traditionally large numbers of children valued and prescribed by custom. Given the changes in the institutions within which they are situated, however, the changes in their work and attached resources, their children's schooling, its expense and their removal from productive employment and the dwindling of old kinship supports and the increasing demands for flexible equality in the home, they complain of having too many children to care for. These are men who did not perceive or feel the relevant stimuli in time and so have more offspring that they know they

can cope with. They attempt to solve their dilemma by passing on children to relatives, an associated outcome is more child deaths.

It is those who perceive the potential pressures and problems before they act and who have more individualised, and thus costly expectations regarding paternal roles, who adapt more effectively to circumstances and beget the numbers of children they feel they themselves can cope with without too much strain. They innovate. They reduce their desired family size. They contracept.

Free-riding

Leibenstein also addresses a very pertinent issue in his series of discussions with regard to the allocation of resources and costs. That is whether the particular costs or resource constraints are born by the decision maker or by others. They may not be if responsibilities and costs can be borne elsewhere or shifted to others (Leibenstein, 1977, pp. 191-2). He calls this the "free-rider" phenomenon and illustrates his discussion with reference to responsibilities of kin (p. 194).

"In terms of the extended family system if the impact of marginal children falls on the extended family rather than directly on the parents, then a free-rider option exists. And there may be still other institutional arrangements under which costs of children do not fall entirely or even partially on the parents directly."

This is exactly one of the phenomena observed in this case.

Twenty years before similar hypotheses had been stated by Ryder (1959) and Petersen (1961). Ryder had hypothesised a relationship between the use of coitus interruptus in pre-industrial European societies and conjugal familism and limited economic resources and Petersen had regretted the fact that data were not available to check the hypothesis that coitus interruptus, which is presumed to require strong motivation on the part of the male, is not practised as often in social contexts in which economic and social responsibility for the child is borne in part by the broader kin group, rather than mainly or entirely by the father.

Here again we have provided empirical evidence to support this kind of hypothesis, showing that increasingly individual assumption of child-care responsibilities by fathers, a decrease in fostering and a cutting down of financial responsibilities to kin beyond the immediate families of orientation and procreation are associated with lower numbers of children desired, greater propensity to contracept and fewer infant deaths. The last often being associated with high fertility and "extended family" functioning.

Thus following the earlier suggestions of Ryder and Petersen, and more recently Leibenstein and others, the association between conjugal familism and lower family size and increased fertility regulation is essentially linked to the economics of reproductive decisions, the allocation of costs and benefits within the family which was long ago called for.

The Value and Wealth of Children

Again as was noted in the beginning, in the past few years a series of empirical studies and theorising have attempted to hypothesise and demonstrate that as children involve more costs compared to the benefits they bring, the greater is the likelihood of motivation to regulate fertility. Some have concentrated upon the direction of the flow of economic benefits (e.g. Caldwell, 1980). Others have emphasised the ways in which perceptions of value may provide a link between socio-economic factors and fertility decline (e.g. Bulatao, 1980). Four explanations for the fertility transition have been distinguished which appear to involve changes in the perceived costs and benefits (or values and disvalues) of children (Bulatao, 1980, p. 4). These include the vanishing economic roles of children and data from 23 countries support this hypothesis. Indeed a range of sources of child labour support such an explanation. At the same time there is evidence as children become a decreasing source of social security to their parents, family size preferences decrease and with social and spatial mobility and the class formation inherent in such mobility, status aspirations for children entail more expensive inputs in terms of schooling, time, etc.

The data here have provided further evidence supportive of these hypotheses. The children of the teachers are school educated and expected to achieve higher levels of education than their parents for the most part did. Significantly, those with the highest expectations for their daughters have the lowest family size preferences.

Spouses' Division of Parental Costs

Two decades and more ago the division of costs related to parenthood between wives and husbands was already realised to be a potential correlate of family size expectations and related activities of the father as well as the mother. Thus for example, Goldberg (1957, pp. 145-8) and Westoff et al. (1963, p. 91) examining North American data referred to the potential pronatalist effects of the lack of male involvement in domestic matters.³⁷

As in the case of the extended/nuclear family and fertility hypothesis there was a spate of studies reviewed elsewhere (Oppong, 1982d) which had somewhat ambiguous findings, unless as some did they considered the division of tasks in terms of power and allocation of costs. Then results became more logical and evidence indicated that when flexible task sharing or increased participation and involvement for one spouse concerned scarcity of time or money, it might then be related to lowering of family size desires and increased propensity to contracept.

Familial Roles and Parenting Costs: Measurement Issues

Attention has been called to ways of indicating the relative flexibility in the domestic division of labour and responsibilities and allocation of resources; indices which are needed to monitor changes and make comparisons regarding paternal, conjugal and kin roles, thus facilitating a radical shift away from simple dichotomies of "households" and "families" as "extended" or "nuclear". This exercise is critical to any estimation of the levels of costs in child-rearing and who shoulders them.

Hypotheses relating greater individual assumption of costs to lower family size preferences and increased propensity to regulate fertility have not only been supported, but we have also underlined a critical factor intervening in the chain connecting inertia, choice and action - that of parental role strain: the perceived inadequacy of time and money to fulfil rising parental aspirations.

Like the work of Scanzoni (1976, etc.) and Bagozzi and Van Loo (1980, etc.) this study indicates that it is not sufficient and may even be misleading to examine only the impact of economic and social variables on fertility - variables such as employment status and education. Since family size decisions depend upon interactions between wives and husbands and kin and parents and children, these need to be examined as well as external constraints such as income levels and wages and training opportunities. Rather the latter need to be looked at in terms of the ways in which they have an impact on familial roles and shape relationships within different cultural contexts. At the same time we have noted the importance of exploring and indicating changes in individual's expectations and dispositions - the growth of feelings of personal responsibility, culpability and control, which have been placed centrally in recent theories of modernisation (Carroll, 1981).

Policy Implications

In the beginning the issue was raised of the possible sexual bias of family planning programmes as well as fertility research and the fact that recognition is growing of the importance of the "invisible man" and his part in fertility decision-making (Rosen and Benson, 1982). Thus this study, like a number of others, has indicated the need for a closer consideration of male roles in fertility related decisions and family planning (e.g. Marciano, 1979). It has also reiterated the significance of sex roles and the equitable sharing of responsibilities and resources between females and males for fertility decline and the need to provide parallel services for men as well as women.³⁸ An important point to note is that such flexibility and equality of sex roles and, in particular, conjugal roles can occur in societies at different levels of technological

and economic development and is not necessarily a concomitant of modernisation, urbanisation or industrialisation. Howell (1979) provided an excellent example of how parental role strain associated with conjugal family closure and sexual equality produces motivation to limit child-bearing among the Chewong hunters and farmers of the Malaysian rain forest.

In addition this study has re-emphasised the need to break the conceptual barrier posed by viewing work as essentially masculine and family responsibilities as feminine and the division of research efforts into those examining work and labour force and those examining the family (e.g. Gutek et al., 1981). The need for considering simultaneously the occupational roles of husband and wife and their domestic roles - four different roles and how they are articulated and interact has once more been stressed (e.g. Pleck, 1977).

Again with regard to conceptual frameworks, the lack of coherent models to show how macro and micro level factors in cross section and over time interact to explain fertility change has been noted (Hauser, 1979, p. 19). We have in this paper supported the contention that to devise any such model it will be necessary to improve upon current conceptualisations and measurement of family phenomena. We have pointed to ways in which some of this might occur and again indicated the usefulness of small-scale, local, empirical studies of the changing functioning of family systems in conditions of altering resource constraints, highlighting causes and consequences of familial change.

Whatever decisions and plans are made at the national or community level, it is at the level of the family that the vital decisions concerning family size and contraception occur (Ware, 1978). Knowledge of how these decisions are made and the nature of the critical pressures triggering reproductive innovation are necessary prerequisites for the design of appropriate population programmes.

Furthermore, this analysis has underlined an important point made by Leibenstein (1977, p. 195) that policy design should involve examination of the free-rider effects, that is the allocation of child

costs and responsibilities. As he notes certain kinds of family legislation may help to shift the locus of responsibility toward the nuclear family or in the African case of polygyny and frequent free marriage and out of wedlock births, one might emphasise rather the parents, making genitors as well as mothers legally responsible for their offspring and enforcing child maintenance payments where necessary. Also as he notes to the extent that economic developments encourage rural urban migration they are likely to alter mutual obligations between kin and to increase nuclear family or individual responsibilities. However, such mobility may result in mothers alone bearing the brunt of burdens and fathers opting to be free-riders, a situation which may not be conducive to fertility regulation (e.g. Oppong and Bleek, 1982). One potential key to change as we have seen in this analysis is increasing individual responsibility within a context of rising aspirations and personal control.

APPENDIX I

The Sample and the Questionnaire

(i) Sample

Respondents for the survey were selected by the proportional stratified probability sampling method, so that teachers were selected from rural and urban areas and from each region in the country. Schools were selected from rural and urban areas including educational districts of each regional capital and from the surrounding rural areas. Lists of all schools in each region were obtained from the Ministry of Education in Accra. In each region 30 schools were randomly selected, 15 in the regional capital and 15 in the rural areas. Teachers of classes 1 to 6 in each school were included in so far as they existed. Unqualified pupil teachers were omitted. The mailed questionnaires were posted to the head of each school selected. The head was given the responsibility of distributing and collecting them. The questionnaires from each school were returned in self-addressed envelopes, one small sealed envelope per questionnaire and one large bag envelope per school.

Before the survey was carried out the questionnaire was pre-tested on three local schools in the vicinity of the University of Ghana. On the basis of the responses from these questionnaires the coding instructions were prepared.

In selecting both female and male respondents we avoided the omission of numerous earlier African fertility-related surveys which have concentrated on women alone. Indeed, our concern was not simply to collect information on individuals as such but to elicit information from them which would reveal important aspects of the sets of role behaviours and norms and values significant for their daily domestic lives.

The investigation was essentially into factors of change related to social and spatial mobility, education and "white collar" employment

which lead consciously or unconsciously to greater fertility control and/or reduced fertility.

(ii) Questionnaire

The questionnaire included a core of two sets of basic questions - those to elicit cross-cultural comparable responses as regards the respondents' origins, age, fertility, etc. and those relating to knowledge, attitudes and practices regarding family planning and size.

In addition, questions concerning attitudes and behaviour determining the content of conjugal and kin relationships and family rearing experiences were also included and were based on experience with similar investigations carried out in earlier studies. These included attitudes and behaviour regarding jointness/segregation of the conjugal role relationship; the degree of nucleation or boundedness of the conjugal family termed openness/closure; communication between spouses, conjugal power and decision-making and the adequacy of resources and feelings of stress, conflict and tension. The critical family variables included data both about reported behaviour and expected norms, preferences, values, perceptions, beliefs and aspirations in relation to five roles, occupational, parental, domestic, conjugal and kin. The dimensions of behaviours and expectations documented included:

1. Role flexibility and substitutability,
2. Relative availability and scarcity and allocation of resources (time and money);
3. Role conflict and strain.

Socio-economic and demographic information collected included migration data on self and parents; own and parents' and grandparents' education. The coded data covered information on the spouses' norms, finances, problems, tasks and attitudes, children and family planning and contraception and problems.

In this data set our definition and measurement of fertility is admittedly weak. Moreover, not only is our data set small but comprises a majority of people in the early stages or the middle of their

reproductive histories. Several proxies for fertility are used, including current parity, ideal family size and desired family size. In addition, data was collected on behaviour and expectations regarding family planning (spacing and termination of pregnancies) and traditional and modern contraceptive usage.

Since a major concern of the study was parental and conjugal relations in a situation of mobility, education and employment, all respondents in the sample of data examined have at least one child and spouse. This thus omits respondents suffering from infertility and those whose reproductive and marital careers have been temporarily postponed for one reason or another.

Relative homogeneity of the population has also been achieved by the fact that all have reached a certain relatively high level of education (unqualified pupil teachers were omitted from the original enquiry) and all are in the same teaching profession. The sample was purposely selected in this way so that by holding these important factors constant other variables could be examined with greater ease, even in a relatively small data set, and using relatively unsophisticated techniques of analysis. These critical variables included generation educated, relative educational and occupational resources of the spouses, social and spatial mobility and the type of conjugal relationship, kin ties and modes of child rearing.

APPENDIX II
Some Indices and Measures

I. Kin Role: Expectations

(1) Approval of financial assistance to kin.

Responses to:-

"A teacher must be prepared to give financial assistance to his relatives whenever they ask for it."

Absolutely agree AA(3) Partly agree PA(2)

Partly disagree PD(1) Absolutely disagree AD(0)

(2) Score of approval of "openness" of conjugal family functioning.
(A combination of responses to four statements below.)

"If a teacher dies without making a will most of his/her property should go to his/her parents, brothers and sisters who may see to it that the children are cared for."

AA(3) PA(2) PD(1) AD(0)

"A teacher must be prepared to give financial assistance to his relatives whenever they ask for it."

Coded as above.

"It is sensible for a teacher to discuss all his/her important plans with parents or brothers and sisters."

Coded as above.

"It is a good idea to invest money jointly with brothers or sisters to set up a business or start a farm."

Coded as above.

Range of scores 0-4 (0 or 1 = 0; 2 or 3 = 1) High score denotes approval of "openness" of conjugal family functioning: "extended family" norms.

II. Conjugal Role Relationship: Expectations

(Soldarity, flexibility, division of tasks, decision-making and equality)

(1) Approval of conjugal equality in decision-making

Responses to:

"In the household husband and wife ought to have an equal say in making important decisions."

AA(3) PA(2) PD(1) AD(0)

(2) Approval of joint financial responsibility of parents in child-rearing

Responses to:-

"Husband and wife should share equally the financial costs of bringing up their children."

AA(3) PA(2) PD(1) AD(0)

(3) Approval of joint budgeting and building-

Formed by the sum of the pre-coded responses to the following statements.

"A teacher and his wife should both put their incomes together and plan jointly how to spend money for the good of their family."

AA(3) PA(2) PD(1) AD(0)

"It is a good idea for a teacher and his wife (or her husband) to build a house together."

AA(3) PA(2) PD(1) AD(0)

Range of scores 0-6

A high score denotes a high level of approval of joint budgeting, planning and building by spouses.

(4) A score of male responsibility for controlling money and sexual relations

Formed by the sum of the pre-coded responses to the following statements:-

"How the family budget is organised is entirely the husband's responsibility."

AA(0) PA(1) PD(2) AD(3)

"It should always be the man who takes the initiative in proposing sex in marriage."

AA(0) PA(1) (PD(2) AD(3)

Low score denotes high approval of male responsibility and control.

III. Parental Role: Individualisation of Responsibilities and Activities and Aspirations

1. Time spent playing with children

Response to:-

"Do you spend any time playing games with your children?"

Coded responses: none; some; a lot; N.A.

2. Conjugal division of parenting costs

Responses to:-

"Husband and wife should share equally the costs of bringing up their children."

AA(3) PA(2) PD(1) AD(0)

3. Acceptance of procreation outside marriage

Responses to:-

"A teacher's wife should not think of divorce just because her husband gets a child with another woman."

AA(3) PA(2) PD(1) AD(0)

4. An assessment of approval of fostering of children - score

Formed by the sum of the pre-coded responses to the following statements:-

"A teacher should be prepared to educate some of his relatives' children."

AA(3) PA(2) PD(1) (AD(0)

"A teacher's relatives or in-laws should be able to look after his small children while he and his wife are both working."

Responses scored as above.

A high score denotes approval and acceptance of fostering.

5. Parental role strain

Perceptions of how burdensome child-rearing may be

Formed by the sum of the pre-coded responses to the following statements

"Bringing up and educating children is a great strain on a teacher's income."

AA(3) PA(2) PD(1) AD(0)

"It is very difficult for a couple to look after their small children when they are both employed."

Responses scored as above.

High score denotes great concern with strains of child-care.

APPENDIX III

Spouses' Perceived Relative Financial Contribution

Four groups of couples were identified according to the husbands' perceptions of each one's financial contributions:

- LL (Husband Low/Wife Low)
- HL (Husband High/Wife Low)
- LH (Husband Low/Wife High)
- HH (Husband High/Wife High)

The husband's contribution was rated low or high according to his scores on a self purchase scale [Low = 0-3, 41 per cent; High = 4-8, 59 per cent]. The wife's contribution was rated low or high according to her score on a Gutman Scale of spouses' financial contributions [Low = 0-2, 42 per cent; High = 3-6, 58 per cent]. For each of these sub-groups, mean scores for a variety of variables were calculated using a breakdown programme as follows:

Scores	Means			
	Both low	Husband high wife low	Husband low wife high	Both high
	LL	HL	LH	HH
Joint decisions	2.7	2.3	3.1	2.6
Husband autonomous decisions	1.1	1.4	.9	1.2
Husband's food preparation	4.9	4.1	4.8	4.1
Approval of joint syncratic conjugal relationship	6.9	6.8	7.2	6.8
Husband's participation in unskilled tasks	4.0	3.0	2.7	2.2
Approve sharing child-care	4.5	4.0	4.8	4.2
Approve sharing child-care costs	1.7	1.5	2.1	1.4
Problems with children	3.8	3.7	3.3	3.1
Wives did not contribute enough	1.4	1.1	.7	.9
Indebtedness	1.0	.9	.8	.8

Footnotes

¹ Many such studies are enumerated in Oppong, 1982d.

² See op. cit. for discussion of evidence including Rainwater, 1965; Eriksen et al., 1979; Scanzoni, 1976a and b; and Howells, 1979.

³ Thus for instance it was discovered in Hungary that whereas in almost four-fifths of households where wives had up to six years of schooling the traditional division of domestic labour still continued, this proportion declined with higher levels of education of the wife such that among households where the wife had college or university education, less than two-fifths still maintained the traditional forms of division of labour (Szalai, 1977, p. 395). Again for instance in Finland men with higher education participated more in child-care. However, no over-all positive association was observed between male occupational status and housework, rather the opposite. There is evidence from diverse sources that as women's contributions to the family income increase there is more pressure for men to share in domestic activities. Observations have been made of shifts to more symmetrical organisation in domestic life (e.g. Young and Willmott, 1973).

⁴ See ILO (1975) Equal Opportunities and Equal Treatment for Men and Women Workers. Governments of several countries such as Finland, Sweden and Cuba have stated that equal responsibility of both parents for household tasks should be an accepted principle. In the case of Cuba, the Constitution of the Republic and the Family Code grant women the same rights and opportunities as men in the economic, political, social and family spheres. In order to ensure that these rights, especially women's work rights, are enforced, the Government not only offers paid maternity leave before and after birth, organises institutions such as child-care centres and partial and full boarding schools and promotes women's educational improvement through workers' and farmers' schools (pre-university institutions for workers and members of the Federation of Cuban Women), but at the same time the Family Code supports sexual equality in the division of labour within the home. It is noteworthy that these policies are associated both with massive increases in the number of women in the labour force and with a demographic revolution in terms of fertility decline over the past twenty years.

⁵ They cite as evidence American Public Health Association (1980) and Psychosocial Factors in Population Research (1980).

⁶ For instance he cites McNeill (1963, p. 357) who contrasted the demographic behaviour of ancient Roman and Han elites, the former being characterised by comparatively radical "individualism" and the latter by strong family "solidarity" and filial piety.

7 The Committee on Population and the Family of the United Nations World Population Conference held in Bucharest in 1974 concluded after its deliberations that the interrelationships between family structure and demographic change were poorly understood and that connections between family structure and fertility were obscure.

8 For example see Mason et al., 1971; Bagozzi and Van Loo, 1978; Kuznets, 1978; and to take into consideration socio-cultural differences, Beaujot et al., 1978.

9 The ambiguity of the concept "family", its multiple referents in everyday language and lack of usefulness in precise analysis, has been noted by a number of writers (e.g. Flandrin, 1979).

10 E.g. Buvinic and Youssef (1978) have noted need for critical evaluation of long sustained myths and stereotypes regarding family structure, including recognition of the fact that many are "headed" by women.

11 Malinowski (1963) complained about it with regard to ethnographers and the Australian aborigines in 1913 and called for "a careful and detailed analysis of family life and of different aspects of the family unit in connection with other social phenomena" (see Yanagisoko, 1979).

12 See Oppong, 1978 and 1982a; also Caldwell, 1977 who in "The economic rationality for high fertility" points to the distortions incorporated in research projects by the use of a bounded solidary nuclear family model. He writes of the nuclear family as being a "creation of the researcher" and notes that the World Fertility Survey module recommends obtaining data distinguishing between the earnings of husbands and wives but not distinguishing their expenditures and obligations and budgets. Certainly African evidence points to the necessity for doing so (e.g. see Oppong, 1981 and Karanja Diejomaoh, 1978).

13 See for example Burch and Gendell, 1971; and Nag, 1975.

14 The concepts openness and closure with respect to conjugal family functioning have been discussed and illustrated at length in Oppong, 1981 and 1982a with respect to procreation, socialisation, financial provision and management, inheritance and domestic tasks.

15 For a review of some of the hypotheses tested and references to relevant work see Oppong, 1982d, section III Sexual Equality and Autonomy: Changing Conjugal Roles.

16 See for example, data from Ghana (Oppong, 1977a and c).

17 See for example, Rosen and Simmons (1971) on Brazil.

18 See the section "Status of the young and old: Changing parental roles" in Oppong, 1982c.

19 See for example the Ghanaian evidence regarding Kwashiorkor (Waterton, 1982) and Stone (1977) on three centuries of English family life.

20 During the seventies several foreign governments and agencies were generous in their assistance to the programme. These included USAID through direct grants, supplies, research and training. The Population Council also did much to support and develop research and training programmes. Nine other donors giving specific forms of help included the British Overseas Development Administration, the Canadian International Development Agency, the Ford Foundation, the International Planned Parenthood Federation and UNFPA. Two major research enterprises included the Law and Population Project, in which Tufts University assisted the University of Ghana and the Rural Health and Family Planning research project (DANFA) at the University of Ghana Medical School with the collaboration of the University of California, Los Angeles. During the period the Regional Institute for Population Studies was set up with support from UNFPA and the Population Dynamics research programme was set up for English speaking West Africa which was assisted by the University of North Carolina with USAID support. It was thus a period of intense population related research and action activities in which there was much scope for collaboration between foreign and local institutions and individuals.

21 Caldwell (1968a) reports one eighth of couples in a 1968 survey in nearby Lagos reporting use of this method.

22 The total sample of men and women from which they come has been briefly described elsewhere (Oppong, 1974b).

23 On the Ewe see Nukunya (1969); on the Ashanti, Fortes (1950 etc.); on the Dagomba, Oppong (1973 etc.). For general features of kinship and marriage in the West African region relevant to parenthood and fertility, see Oppong et al. (eds.) 1978.

24 See Bukh 1979 on the Ewe; Bleek, 1976 on the Kwahu (Akan); and Church 1978a on the Ashanti (Akan).

25 See for example many of the essays in Oppong (ed.) (1983).

26 Compare the earlier detailed analysis of continuities and changes in students' expectations regarding familial roles (Oppong, 1975).

27 There is an average of 1.29 children of kin living with them including .51 who are children of their brothers and sisters and .27 who are younger siblings.

28 While 82 per cent of those with minimal residence with their fathers when children show approval of fostering, 77 per cent of those with intermediate lengths of residence and 67 per cent of those with maximum lengths of residence with the father - differences which are statistically significant ($N = 332$; $X^2 = 5.6517$ $P < .05$; $\text{Tau} = -0.12331$ $P < .009$; $r = -0.1271$ $P < .01$). Interesting parallel evidence of such changes in expectations came from an earlier study of Ghanaian university students (Oppong, 1975) in which the percentage reared by parents only was negatively correlated with a scale of approval of openness of conjugal family functioning, including fostering. Thus of those approving conjugal family closure, 60 per cent had been reared by parents only; in intermediate levels of the scale percentages were 41 per cent, 40 per cent, 36 per cent, while at the open ("extended") end of the scale the percentage reared by own parents only sank to 24 per cent ($N = 653$ male students).

29 For example, Lemennicier (1979) has noted the economic logic of how more equal productive capacity of husband and wife through similar training and education and similar wage opportunities in a labour market not segregated by sex, is likely to increase labour force participation of wives and to increase pressures for husbands to share domestic tasks through time pressures (the data on which he bases his analysis are urban French). See Oppong (1982d) for examples of further studies and hypotheses of this nature and Scanzoni (1979) for a review of much of the earlier literature on conjugal power (cf. Slocum and Nye, 1976, p. 91).

30 The number of respondents in this particular part of the analysis are lower than elsewhere due to the no response on one or other of the scaled items: LL - $N = 34$; HL - $N = 67$; LH - $N = 54$; HH - $N = 76$, Total $N = 231$.

31 Such studies include for example Bohen and Viveres Long (1981) in which measures for stress are constituted and the potential effects of flexitime examined. See extensive bibliography on these issues. See also Kamerman and Khan (1980) on the policy implications of such situations in industrialised European countries.

32 Source, "Teachers' problems, work in progress", Report No. 2, Family relationships and family size, Ghanaian primary school teachers, Changing African Family Project (Legon, 1975; mimeographed). This analysis combined data from this set of teachers with a parallel sample of women teachers.

33 It should perhaps be noted here that what are referred to as "perceptions of parental role strain" are not actual statements that the individual has necessarily already experienced a lack of resources or that he already has problems with children, but that he is conscious of the likelihood of strain in this role and aware of his own vulnerability. Thus lack of resources and perception of caring for too many children are correlates but not necessary precursors of the perceptions.

34 Some have argued that the concept of family size is so meaningless in developing countries that it is useless pointing out that in many settings people may have a quite fatalistic up to God or fate attitude about how many children they have. Others have claimed that a preferred range can be elicited by careful probing. Ware (1974) discussed some of the relevant issues in the context of the World Fertility Survey exercise. One important point to note is that in most surveys the World Fertility Survey included only female respondents interviewed about their fertility preferences. Studies which have examined parallel samples of husbands and wives or men and women have often found differences.

35 He reviews the writings of Lerner (1964), Hagen (1962), Inkeles (1974), Lewis (1955), Rostow (1956 and 1960), Myrdal (1957), Bendix (1964, 1967), Weiner (1966) and Levy (1966).

36 He quotes Black (1966, p. 23), Moore (1961, p. 77), Clark (1967, p. 187).

37 Twenty-five years ago reporting on Detroit data, Goldberg (1957, pp. 145-8) admitting that a more thorough investigation of husbands' allocation of time might yield more positive results, noted that it seemed likely that since a large part of the husbands' activities were peripheral to the child-rearing process and therefore have no particular importance for decisions concerning family size, which he felt in the case of men were rather ruled by status considerations. However, he did go on to admit a little later in his discussion that the role of the father as household help, if not purely an imaginary one, might prove to be relevant to family size norms and behaviour. Again Westoff et al. (1963, p. 191) wrote with respect to North American fathers that "presumably families...in which the male separates himself from the family and is not involved in domestic affairs are the more prolific families and those with poorest contraception".

38 See pp. 33-35, "Male and female roles in family planning" in Challenges and Opportunities, Background document, International Conference on Family Planning in the 1980s, April 1981 Jakarta, Indonesia Family Planning in the 1980s.

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Selected Publications of the Population and Labour Policies

Research Programme¹

1. General Material on the Research Programme

ILO: World Employment Programme: Population and development - A progress report on ILO research with special reference to labour, employment and income distribution (Geneva, April 1982), 4th edition, Reference WEP 2-21/PR.7. (*)

This report includes a full bibliography. This publication (3rd edition, summer 1981) is available in French. (*)

2. Books and Monographs

[A number of free copies are available for individuals and institutions in less developed countries. Requests for these should be addressed to the Documentalist, Population and Labour Policies Branch, Employment and Development Department, ILO, CH-1211 Geneva 22, Switzerland.]

R. Anker: Research on women's roles and demographic change: survey questionnaires for households, women, men and communities with background explanations (Geneva, ILO, 1980). (*)

R. Anker and M. Anker: Reproductive behavior in households of rural Gujarat: Social, economic and community factors (New Delhi, Concept Publishing Co., 1982). (***)

R. Anker, M. Buvinic and N. Youssef (eds.): Women's roles and population trends in the Third World (London, Croom Helm, 1982). (***)

R. Anker and J.C. Knowles: Determinants of fertility in developing countries: A case study of Kenya (Liège, Ordina, 1982). (***)

R.E. Bilsborrow: Surveys of internal migration in low-income countries: Issues of survey and sample design (Geneva, ILO, 1981). (*)

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S. Braganca et al.: The simulation of economic and demographic development in Brazil (Geneva, ILO, 1980). (*)

M.G. Castro, L.M. Fraenkel et al.: Migration in Brazil: Approaches to analysis and policy design (Brussels, Ordina, 1979). (***)

L. Goldschmidt-Clermont: Unpaid work in the household, Women, Work and Development No. 1 (Geneva, ILO, 1982). (**)

W.J. House and H. Rempel: The Kenya employment problem (Nairobi, Oxford University Press, 1978). (***)

M. Molyneux: State policies and the position of women workers in the People's Democratic Republic of Yemen, 1967-77 (Geneva, ILO, 1982). (**)

A.S. Oberai: Changes in the structure of employment with economic development (Geneva, ILO, 1978). (**)

¹ Availability code: * available on request from ILO, Population and Labour Policies Branch; ** available for sale from ILO Publications; *** available for sale from a commercial publisher.

- A.S. Oberai: Demographic and social information in migration surveys: Analytical significance and guidelines for data collection (Geneva, ILO, 1981). (*)
- : Migration, production and technological change: Analytical issues and guidelines for data collection and analysis (Geneva, ILO, 1981). (*)
- P. Peek and G. Standing (eds.): State policies and migration: Studies in Latin America and the Caribbean (London, Croom Helm, 1982). (***)
- G. Pyatt and A. Roe: Social accounting for development planning, with special reference to Sri Lanka (Cambridge University Press, 1977). (***)
- M. Rasevic, T. Mulina, Milos Macura: The determinants of labour force participation in Yugoslavia (Geneva, ILO, 1978). (**)
- G.B. Rodgers, M.J.D. Hopkins, R. Wéry: Population, employment and inequality: Bachue-Philippines (Farnborough, Saxon House, 1978). (***)
- G.B. Rodgers and G. Standing (eds.): Child work, poverty and underdevelopment (Geneva, ILO, 1981). (**)
- G. Standing: Labour force participation and development (Geneva, ILO, 1978). (**)
- : Income transfers and remittances: A module for migration surveys (Geneva, ILO, 1981). (*)
- : Migrants and the labour process: A module for migration surveys (Geneva, ILO, 1981). (*)
- : Unemployment and female labour: A study of labour supply in Kingston, Jamaica (London, Macmillan, 1981). (***)
- : Conceptualising territorial mobility in low-income countries (Geneva, ILO, 1982). (**)
- : Analysing inter-relationships between migration and employment (Geneva, ILO, 1982). (*)
- G. Standing and G. Sheehan (eds.): Labour force participation in low-income countries (Geneva, ILO, 1978). (**)
- G. Standing and R. Szal: Poverty and basic needs (Geneva, ILO, 1979). (**)
- M. Todaro: Internal migration in developing countries (Geneva, ILO, 1976). (**)

3. Articles

- I. Adelman, M.J.D. Hopkins, S. Robinson, G.B. Rodgers and R. Wéry: "A comparison of two models for income distribution planning", in Journal of Policy Modeling, 1979, Vol. 1, No. 1.
- R. Anker: "The effects of group level variables on fertility in a rural Indian sample", in Journal of Development Studies, October 1977, Vol. 14, No. 1.
- : "An analysis of fertility differentials in developing countries", in Review of Economics and Statistics, February 1978, Vol. 1x, No. 4.
- R. Anker and G. Farooq: "Population and socio-economic development: The new perspective", in International Labour Review (Geneva, ILO), 1978, Vol. 117, No. 2.
- R. Anker and J.C. Knowles: "An empirical analysis of mortality differentials in Kenya at the macro and micro levels", in Economic Development and Cultural Change, October 1980, Vol. 29, No. 1, pp. 165-85.
- W.J. House: "Occupational segregation and discriminatory pay: The position of women in the Cyprus labour market", in International Labour Review, Jan.-Feb. 1983, Vol. 112, No. 1.

- W.J. House and H. Rempel: "Labour market pressures and wage determination in less developed economies", in Economic Development and Cultural Change, 1978.
- J.C. Knowles and R. Anker: "An analysis of income transfers in a developing country: The case of Kenya", in Journal of Development Economics (Amsterdam, North Holland), 1981, Vol. 8, pp. 205-226.
- A.S. Oberai: "Migration, unemployment and the urban labour market", in International Labour Review (Geneva, ILO), March-April 1978, Vol. 115, No. 2.
- : "State policies and internal migration in Asia", in International Labour Review (Geneva, ILO), March-April 1981, Vol. 120, No. 2, pp. 231-44.
- A.S. Oberai and H.K. Manmohan Singh: "Migration, remittances and rural development: Findings of a case study in the Indian Punjab", in International Labour Review (Geneva, ILO), March-April 1980, Vol. 115, No. 2.
- : "Migration flows in Punjab's Green Revolution belt", in Economic and Political Weekly, March 1980, Vol. XV, No. 13.
- : "Migration, urbanisation and fertility: The case of the Indian Punjab", in Artha Viinana, Sep.-Dec. 1981, Vol. 23, Nos. 3-4, pp. 260-298.
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- C. Oppong and W. Bleek: "Economic models and having children: Some evidence from Kwahu, Ghana", in Africa, 1982, Vol. 52, No. 4.
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- P. Peek and G. Standing: "Rural-urban migration and government policies in low-income countries", in International Labour Review (Geneva, ILO), November-December 1979, Vol. 118, No. 6.
- J.L. Petrucelli, M.H. Rato, and S.L. Bragança: "The socio-economic consequences of a reduction in fertility: application of the ILO-IBGE national model (BACHUE-Brazil)", in International Labour Review (Geneva, ILO), September-October 1980, Vol. 119, No. 5.
- G.B. Rodgers: "Demographic determinants of the distribution of income", in World Development, March 1978, Vol. 6, No. 3.
- : "Income and inequality as determinants of mortality: An international cross-section analysis", in Population Studies, 1979, Vol. 33, No. 2.
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4. Recent Working Papers in print¹

WEP Working Papers are preliminary documents circulated informally in a limited number of copies solely to stimulate discussion and critical comment. They are restricted and should not be cited without permission. A set of selected WEP Research Working Papers, completed by annual supplements, is available in microfiche form for sale to the public; orders should be sent to ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland. Many, but not all, of the papers in this series exist or may be issued in microfiche form.

- WEP 2-21/WP.70 A demographic-economic model for developing countries: BACHUE-International
- by R. Scott Moreland, December 1978.
- WEP 2-21/WP.71 Approaches to the analysis of poverty
- by G.B. Rodgers, May 1979.
- WEP 2-21/WP.72 Migration and modes of exploitation: The social origins of immobility and mobility
- by Guy Standing, June 1979.
- WEP 2-21/WP.73 Semi-feudalism, migration and the State in Guyana
- by Guy Standing, September 1979.
- WEP 2-21/WP.74 Transmigration and accumulation in Indonesia
- by J.P. Perez-Sainz, September 1979.
- WEP 2-21/WP.79 Family structure and women's reproductive and productive roles: Some conceptual and methodological issues
- by Christine Oppong, September 1979.
- WEP 2-21/WP.82 Feasibility study for the construction of an economic-demographic model for Indonesia
- by Andrew Elek, January 1980.

¹ These working papers are available free, while stocks last, from ILO, Population and Labour Policies Branch, CH-1211 Geneva 22, Switzerland.

- WEP 2-21/WP.84 Bachue modules: Population, household income and labour market
- by René Wéry, January 1980.
- WEP 2-21/WP.86 Endogenising demographic variables in demo-economic models: The
Bachue experience
- by René Wéry and Gerry Rodgers, April 1980.
- WEP 2-21/WP.87 The exploitation of children in the "informal sector": Some
propositions for research
- by Alain Morice, May 1980.
- WEP 2-21/WP.89 Labour market structure, child employment, and reproductive
behaviour in rural South Asia
- by Mead Cain and A.B.M. Khorshed Alam Mozumder, June 1980.
- WEP 2-21/WP.90 Household and non-household activities of youths: Issues of
modelling, data and estimation strategies
- by Mark R. Rosenzweig, June 1980.
- WEP 2-21/WP.93 The Labour Market of Bachue-Brazil
- by Maria Helena da Cunha Rato and Sergio Luiz de Bragança,
September 1980.
- WEP 2-21/WP.101 Patterns of migration in Tanzania
- by Henry Bernstein, March 1981.
- WEP 2-21/WP.102 Concept and measurement of human reproduction in economic models
of fertility behaviour
- by Ghazi Farooq, March 1981.
- WEP 2-21/WP.103 The political economy of investment in human capital
- by Irma Adelman and Jairus M. Hihn, March 1981.
- WEP 2-21/WP.106 A field guide to research on seven roles of women: Focussed
biographies
- by Christine Oppong and Katie Church, May 1981.
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and society
- by V.N. Yagodkin, July 1981.
- WEP 2-21/WP.110 The impact of public policies on migration and development in
Ghana, with special reference to the Asutsuare sugar cane
project area
- by N.O. Addo, August 1981.
- WEP 2-21/WP.115 A guide to anthropological study of women's roles and demographic
change in India
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- by William J. House, April 1982.
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- Patricia D. Lynch, with Hoda Fahmy, February 1983.
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- by G.B. Rodgers, December 1982.
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- WEP 2-21/WP.130 Poverty ten years on: Incomes and work among the poor of rural Bihar
- by Gerry Rodgers, May 1983.
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- WEP 2-21/WP.133 Les sept rôles et le statut des femmes: Ebauche d'une approche conceptuelle et méthodologique
- by Christine Oppong, May 1983.
- WEP 2-21/WP.134 Paternal costs, role strain and fertility regulation: Some Ghanaian evidence
- by Christine Oppong, May 1983