CHAPTER - I
REVIEW OF LITERATURE AND METHODOLOGY

Review of Literature

The study of the factors influencing family planning behaviour assumes great importance in view of the high growth rate of population, which is a major problem faced by most of the developing countries, including India. The knowledge of various determinants of contraceptive behaviour may contribute to the advancement of precise theoretical conceptualization and policy formulation in the field of family planning programme. In this field, so far, a number of factors have been identified as directly or indirectly responsible for the adoption of contraception. They include socio-economic, demographic, cultural, ecological, health and other input variables responsible for the adoption of family planning. Though, these studies have identified considerable factors responsible for the adoption of contraception, knowledge is not adequate for explaining all the major and complete causes for the performance of family planning programme in rural areas, where the growth of population is very high. Further there is a dearth of studies on scheduled caste population among whom the family size is large due to non-adoption of family planning. Generally the schedule caste population is mostly concentrated in rural areas. Therefore, in order to take stock of the status of determinants of adoption and non-adoption of contraception, an attempt is made in this chapter to review the existing literature related to this problem.
Socio-economic Variables

Among various determinants of contraceptive behaviour, socio-economic status variables occupy an important place. However, the traditional positive relationship between socio-economic status and adoption of contraception is relatively disturbed in the recent past, due to the influence of urbanization, industrialization and social change. As socio-economic status is a complex variable, it is necessary to examine each one of its component independently.

Religion

In India and in other developing countries, religious and other cultural diversities have contributed to definite fertility and family planning differences. A number of studies, conducted in different parts of India, bring out the religious differences in family planning behaviour of the two major religious groups (Hindus and Muslims).

Studies conducted by (Somu and Sengupta, 1960; Ayalvi and Jothi, 1965; Planning, Research and Action Institute (PRAI), 1966 and Rao and Mathen, 1970) revealed that many people opined that the use of contraceptives is sinful and sacrilegious and it has become a primary impending factor in the acceptance of family planning in India. Nag (1965) and Akhtar Singh and Islam (1972) found that factors such as loss of sexual potency, loss of mental equilibrium, psychological and physical effects of the irreversibility of sterilization are the barriers to family planning. Ayalvi and Jothi (1965) have studied that certain social customs, taboos and sexual continence have become strong impediments to the acceptance of family planning.
U.N., (1961) survey conducted in India revealed that the religion is associated with fertility. Every married Muslim woman on an average has given birth to large number of children than a Hindu woman. The average in Christians is less than that of the Hindus. Driver (1963) has found that in the Central India the average number of children born to Hindu and Muslim wives (Standardised for age) were 4.5 and 4.6 respectively. Mukherjee and Singh, (1961) have revealed that in the Lucknow area, the number of pregnancies per wife is 3.9 for Muslims and 3.6 for Hindus and that the proportion of pregnancies resulting in live births is higher among the Muslims than the Hindus. Bradley (1967) found that, the Muslim wives have a significantly higher average parity than the Hindu wives in Bombay. Kurup and George, (1965) have found that in Kerala the average number of children born to wives who had completed their fertility was 6.4 children for Hindus and 7 children for Muslims.

Education

Higher educational status increases the knowledge and changes the attitude towards family planning, which in turn leads to the use of contraceptives. Several studies (Barbara et al., 1981 ; Sathar and Chidambaram, 1984 ; Oni and Mc Charthy 1986) conducted around the world have reported a positive association between the educational status and the adoption of family planning methods. Rainwater (1965) and Whelpton et al., (1966) inferred that "while some form of fertility limitation is nearly universal in the United States, wives with little formal education are less likely to use contraceptives especially in the early stage of family formation". Sathar and
Chidambaram, (1984) concluded that the higher the number of years of schooling, greater is the prevalence of contraceptive use.

In India, also several studies have reported a positive association between the educational status and the adoption of family planning methods (United Nations, 1961; Muleitha and Kaur, 1962; Sarupriya, 1964; Jha et al., 1969; Nayar and George, 1972; Operations Research Group, 1972; Mukherjee, 1973; Kaur, 1974; Khan, 1979; Rele and Kanitkar, 1980; Danda, 1984; Zachariah, 1983; Rao et al., 1986; Kaur et al., 1988 and Shuklarani 1989). Mysore Population study (U.N. 1961) revealed that the use of family planning methods increased with educational status. Operation Research Group, Baroda (1972) concluded that the effect of education on family planning practice was statistically significant at one per cent level.

Morrison (1961) studied a sample of industrial workers of Bombay and some people from nearby villages found that in both groups, education was positively related to adoption of family planning. In another study, Minkler (1970) studied the sample which consisted of 70 school teachers and 70 unskilled workers found that education was positively correlated with family size and acceptance of family planning practices.

Rao, Kulkarni and Rayappa, (1986) in their rural study of three districts in Karnataka also found that education had a positive effect on the adoption of family planning. For instance in Karnataka, the practice of family planning was comparatively higher (32 per cent) in the educated husband upto middle classes (school) whereas it was lower (26 per cent) in those who are educated upto primary
level and only 21 per cent of them are illiterates. When women's education is taken into consideration the corresponding percentages among those who are at higher, Primary and illiterate levels are 39, 31 and 23 per cent respectively. Further, they concluded that education is one of the most determinants of contraceptive use especially in the use of temporary methods. More or less similar pattern was also observed by Sinha and Gupta (1983) in Patna study, Kaur et al., (1988) in Haryana State and also by Shakilarani (1989) in a Tamilnadu study. Thus, almost all studies quoted above have revealed that there is a positive relationship between educational status and adoption of family planning methods. Krishna Reddy and Raju (1996) in their case study observed that education is significantly related to family planning methods. For example the percentage of adopters are more among (59.26 per cent) literates as compared to illiterates (40.74 per cent).

Bhuyan (1980) concluded from his study that significant number of Muslim respondents were aware of the basic need for family planning, but they were less agreeable to adopt it. However a high proportion of educated people practised it.

Hence, education has been considered in the present study as one of the independent variables influencing the contraceptive behaviour of the respondents.

Occupation

Occupation of a person is one of the good indicator to measure the socio-economic status. Generally, higher occupational status is associated with higher education and income, which in turn leads to higher rate of adoption of family planning. Several studies conducted around the world have established that the
Adoption of family planning would be higher among working as against non-working, among agricultural workers and among white collared workers and higher professionals as compared to lower professional workers. (Korean Institute of Family Planning (KIFP) 1979; Brown & Brown, 1980; Tsui et al., 1981; Knodel et al., 1984; Abdullah et al., 1986 and Oni and McCharthy, 1986).

Brown and Brown (1980) found in rural Zaire, that the acceptance of family planning was higher among the 'white collar' workers (clerks, teachers and nurses) than the general population. Sathar and Chidambaram (1984) did not find any consistent pattern between work status of women and contraceptive use based on the world fertility surveys of 28 developing countries. Interestingly, looking at the differentials in the contraceptive use by occupation of their husbands they arrived at the following conclusions. "Invariably, the use of contraception is highest among the wives of men engaged in professional and clerical occupations. At the other end of the spectrum, women whose husbands report no work are less likely to use contraception than those engaged in work, but there are many exceptions to this in Malaysia, Haiti, Thailand, Kenya, Syria, Sudan, Bangladesh, Nepal and Pakistan.

In India, several studies have confirmed the positive relationship between occupational status and adoption of family planning (Goyal, 1965; Sengupta and Roy, 1969; ORG, 1972; Kaur, 1974; Khan, 1979; Rele and Kanitkar, 1980; Kanitkar and Murthy, 1983; Danda, 1984; and Shakilarami, 1989). According to Sengupta and Roy, (1969) study the percentage of adopters among the manual workers was only 35 per cent, but it was 40 per cent among the technical workers and 42 per cent among the professional groups. Similar pattern of results was noticed by Kaur (1974) and Khan (1979).
Rele and Kanitkar (1980) observed that the highest use of contraception was noticed among wives working in administrative, professional and technical cadres (53 per cent) followed by clerical and sales professions (38 per cent each), whereas, the lowest rates were observed among the housewives (23 per cent) and also among those women who are engaged in other skilled or unskilled and primary sector. Singh and Gupta, (1983) observed that the higher level of occupation, greater the rate of adoption and further they found a significant correlation between these two variables. Based on these studies, it may be concluded that differential occupational status of both the husbands as well as wives will lead to significant differentials in contraceptive use.

Chandramouli et al., (1993) found that the adoption of family planning is higher among the agricultural labourers and agriculturists compared to those who are engaged in miscellaneous jobs.

Raju et al., (1994) studied the acceptance of family planning by occupation and found that the adoption of family planning was higher when a woman was engaged in other work in addition to household chores. In this regard, the woman's role as a mother appears to complete with her economic activity resulting in higher acceptance of family planning.

Sandhu et al. (1967) studied that a large proportion of adopters of the family planning of the government employees were middle age with at least two children. Agarwal (1968) studied the Lucknow University Teachers and found that all of them preferred a small family. Pohlman et al., (1968) studied the teachers from villages and towns around Delhi and Rohtak, found that the respondents generally favoured
family planning. Rural teachers, however, favoured an early marriage and larger families than urban teachers. In another study (Prasad et al., 1971) found that 70 per cent of school teachers of Bhagalpur favoured family planning. Tiwari et al., (1972) studied the different categories of staff of the Banaras Hindu University (such as ministerial workers, class IV staff and teachers). They found that younger people preferred small families and that socio-economic status was significantly related to preference for small families.

Akhtar et al., (1972) conducted a survey among the graduate teachers of the Patna Division and found that only 15 to 20 per cent opposed family planning on the grounds of injury to health, prohibition in religion and hesitation in discussing with doctors.

Illuminating information on the relationship between occupation and attitudes and between attitudes and the practice of family planning is available in a study by Jha et al., (1969). They also found that white collar women had better knowledge of and a more favourable attitude to family planning than women sweepers. Kar and Bhatia (1969) has studied government employees and came to similar conclusions. Zaheer et al., (1969) studied the class IV employees of Aligarh Muslim University and found that although most of the employees had knowledge of family planning, but few practised it.

Hence, in this study occupation has been considered as an independent variable to see its nature of relationship with the adoption of family planning.
Income

Income of the family is a good indicator of socio-economic status. Several studies conducted in India and abroad conclusively proved that there exists a positive association between the income and use of contraceptives (U.N., 1961; Sarupriya, 1964; Kaur, 1974; Carvajal and Gaithman, 1976; Khan, 1979; Singh and Gupta, 1983; Govt. of India, 1986 and Shakilarani, 1989). Carvajal and Gaithman (1976) observed that "not only does the use of contraception tend to increase with the level of income, but also adoption of more sophisticated contraceptive techniques is more likely to occur among higher income couples".

In India also several studies have reported a positive association between the income and adoption of family planning (Agarwala, 1961; Rainwater, 1960, 1965; ORG, 1972; Mukharjee, 1973; Khan, 1979; Shakilarani, 1989). Muleitha and Kaur (1962) observed that among the higher income group, 57 per cent of wives were practising family planning, while this percentage was very low among the lower income group (20 per cent).

A number of studies (Agarwala, 1962; Govindachari, 1967; Krishnamurthy, 1968; ORG, 1973; Shaktawat, 1974 and ORG, 1978) found that in rural as well as urban areas of India, income and economic status have a significant effect on the acceptance of family planning. That is, higher income is positively and significantly associated with higher adoption of family planning.

Kaur (1976) study on the industrial units of India did not reveal any association between income and adoption of family planning. But in one factory higher income was positively and significantly associated with higher adoption of family planning.
Singh and Gupta (1983) inferred that respondents belonging to the higher income categories are more inclined to sterilization than those belonging to the lower income group. The association was further supported by the significant values of 't' ratio \( (t=25, \text{ df}=198, \text{ significant at } 0.005 \text{ level}) \).

Chandramouli et al., (1993) studied the marginal difference as far as income level of both adopters and non-adopters. Though 5 per cent more of adopters claimed to be belonging to the higher income group, this was negligible as calculated \( \chi^2 \) was 0.11 which was not statistically significant.

Type of family

Studies conducted to know the influence of the type of the family on fertility and family planning have revealed the following findings. Lorimer (1954) and Davis (1956) found that joint families in India had higher fertility than nuclear families. Contrary to these studies, Driver (1963), Nag (1965) and Pakrasi and Malakar (1967) revealed uniformly higher fertility in nuclear families than in joint families.

Driver (1963), Coale et al., (1965) and Nag (1965) studied that the kinship system of extended families, where marriage does not necessarily imply the formation of a separated household. In joint families young couples are frequently separated, so that coital frequencies are minimised and the chances of use of contraception correspondingly reduced.

Many studies (Menon, 1967; Dubey and Govilla, 1968 and Majmudar and Das, 1975) revealed that even today significantly higher percentage of the
respondents in nuclear families are favouring family planning compared to the joint families as well as the extended families.

Nag (1962) studied in Todas of Nilgiri Hills in Tamilnadu and the Jaunsari of Uttar Pradesh and reported that, there is no difference in the fertility of polyandrous and nonpolyandrous married women.

Raju et al., (1994) studied that family planning acceptance is high when women live in nuclear families and when they are engaged in economic activity. This may be due to the fact that women living in nuclear families are unable to cope with household chores and agricultural works on the one hand and the burden of bearing and rearing children on the other. Therefore, one should study the work schedule of women living in different types of family settings in order to understand the role of the family in her fertility decision making.

Demographic Variables

Several studies have been conducted around the world to understand the influence of demographic factors on family planning. A good number of studies explained the influence of age, age at marriage, duration of married life and number of living children on the adoption of family planning.

Age of the Respondent

Age seems to be an important demographic variable in influencing the adoption of family planning. Ross et al., (1972) found that the acceptance of sterilization appears to be occurring normally after 30 years in the case of men but
around 30 years in the case of women. Rastogi (1975) studied the age at which sterilization was adopted is higher among men than women. Ross (1979) studied the rural areas, where the acceptors are typically at higher ages and parities than those from the urban areas.

Rahaman et al., (1980) observed that the contraceptive acceptance rates and rate of current use increased through 30-34 age group, remained fairly stable through the 35-39 age group and then declined substantially in Bangladesh. Sooradji and Hatmadji (1981) studied the current use increases with age, until it reaches a peak at the ages of 30-34, remains high between 35 and 44 and then declines.

Sathar and Chidambaram (World Fertility Survey, 1984) concluded from the data of 28 developing countries, that during the early part of the reproductive life the incidence of contraceptive use is low, it increases in the middle ages and again falls at the older ages. More or less, similar type of association between the present age of women and use of contraceptives was noticed in the countries of Malaysia (Peng and Abduahman 1981), Bangladesh (Bhatia, 1982) and Nigeria (Oni and Mc Charty, 1986).

Some of the studies in India have exhibited the similar trend between the age of women and use of contraceptives, whereas some others have expressed a positive association between these two variables. For instance, U.N., 1961 suggested that the use of family planning methods increased with the age of women but on the contrary, Indian Institute of Public opinion (1964) highlighted that there exist an inverse relationship between the age of women and practice of family planning.

Age at Marriage

Age at marriage of woman is a starting point in the reproductive process, which is traditionally low in developing countries like India. Increase in female age for marriage not only reduces duration of marital life, but provides an opportunity to acquire more educational status develops modern outlook, also, which in turn reduces fertility level. Further, higher age at marriage effectively increases their awareness, knowledge, interest and favourable attitude towards family planning. Inspite of the fact that age at marriage is a major demographic variable, affecting family planning behaviour, only few studies have discussed it as an independent variable to explain its influence on the family planning behaviour of the people.

Morrison (1956) studied in a village of Maharastra found that age at marriage was directly related to the favourable attitude to family planning. Similarly, the studies of Fatima (1977); Reddy (1984) and Bhatia (1984) observed that, age at marriage of wives has a positive influence on the knowledge about family planning.

Government of India's (1976) survey revealed that the postponement of marriage to late age beyond 20 years biologically tends to reduce the birth rate. Sociologically speaking, it gives women time to get better education and develop favourable attitude towards contraception and finally leads to adoption of family planning.
Regarding the influence of age at marriage on contraceptive behaviour, a few studies conclusively proved that there exists a significant positive association between the wife's age at marriage and the adoption of family planning (Rindfali and Westoff, 1974; Bhatia, 1979; Arora, 1983 and Bhatia, 1983). Audinarayana (1986) in his Rural Andhra Pradesh Study noticed that the percentage of family planning adopters increased from a lower level of 33 to a higher level of 52, as the wife's age at marriage increased from 13 or less to 18 years and above. Shakilarani (1989) has also concluded that age at marriage of females has a significant positive influence on the current use of contraception. Chand Basha and Lakshmaiah Naidu, (1993) revealed that there exists a significant (at 1 per cent level) positive relationship between age at marriage of wives and adoption of family planning methods. On the basis of these findings, it may suggested that increase in age at marriage of females will certainly give a positive increase in the rate of adoption of family planning, which will have a greater influence in the reduction of fertility for the future.

**Number of Living Children**

The number of living children seems to be an important demographic variable in influencing the adoption of family planning. Couples who ever achieved the desired or the preferred number of children will be in a better position to accept family planning than those who have yet to achieve the desired number of children. Further, married individual status in society can be enhanced only when an individual has traditionally been regarded as one of the greatest misfortunes. Under these circumstances, we may expect a positive association between the number of living children and use of contraception. Most of the studies conducted both in India and
all over world has established this fact (Agarwala, 1961; Kivlin, 1968; Sengupta, 1969; ORG, 1972; Kaur, 1974; Khan, 1979; Rele and Kanitkar, 1980; Sivaraju, 1982; Danda, 1984; Reddy, 1984; Oni and McCharthly 1986; and Chandra, 1987).

Chandramouli et al., (1993) studied the average parity of adopters was 4.27 live births for a marital span of 13.19 years while it was only 3.70 live births for 12.87 years in non-adopters. The study also indicates that the average number of living children was more (3.69) for adopters than non-adopters (2.96).

Many studies have been conducted to know the influence of the family size norms on family planning behaviour. Some studies like ORG (1970); Varma and Sadanand (1971); Rastogi (1975); Nag (1976) in rural areas of India revealed that a minimum number of four surviving children are regarded as a precondition for the couples to accept sterilization. A few studies (Dandekar, 1959; Agarwala, 1961; and Kaur, 1976) observed that the adoption of family planning increase was consistent with added number of children in India.

Ross (1979) indicated that those with more number of living children were for sterilization, those with less number of children were for pills and those with neither too many nor too less number of children were for intra-uterine devices (IUDs). Nortman (1974) and Ross (1979) conducted a survey among the acceptors of family planning in India and found that there has been decline in the mean number of children living.

Chandramouli et al., (1993) studied the ideal size of a family among the adopters and non-adopters of family planning. In this study, majority of the adopters
desired 3 or less than three children, while only 30.4 per cent of the non-adopters expressed this similar family size.

Blake (1965) feels that unless the advantage of a large family are reduced, the small family norm will never be widely accepted, whatever the extension of input and the density of family planning services. The most clearly perceived variable discouraging the small family norm according to him was high infant mortality. But, now-a-days the general public should be willing to change their traditional attitude and behaviour towards large families and accepting the small family norm. Hence in the present study, this variable has been considered as one of the independent variable.

Number of children died

Several studies in India and other developing countries indicates that infant and child mortality have a negative association with adoption of family planning. According to studies conducted by Coale and Hoover (1958), Tylor (1965), Heer and Smith (1968), Wyon and Gordon (1971), Chandrasekhar (1972), Government of India (1976) and W.H.O (1977) have revealed that as in other nations, in India also decrease in the infant mortality rates has resulted to increase child survival rate and this in turn has led to parallel increase in the use of different family planning methods. Tylor (1965) and Wyon and Gordon (1971) have studied the acceptance of family planning by couples without any experience of infant deaths is significantly higher than others. Women just achieved the desired family size, and whose family had no previous experience of infant mortality would straight away undergo for
sterilization. Chandramouli et al., (1993) observed that infant mortality rate was greater among the non-adopters than the adopters.

In the Mysore Population Study (1961), it is quoted that the fear of losing children was one of the spontaneous reasons given by the respondents for their desiring more children. Wyon and Gordon (1971) in Khanna area of Punjab found that women who were over 44 years of age, lost more than a third (37.2%) of the children they had born. Hence, they concluded that, "until they (villagers), have good assurance that their live born children will survive, then only couples are likely to be interested in restricting the present number of children (4.7 living children)". In a study on family planning, Mishra et al., (1973) concludes that in Uttar Pradesh State a parent would have at least 4 children, to be sure that three children may be survive to the age of fifteen years. All these, evidently confirmed the importance of infant and childhood mortality in influencing fertility decision-making and contraceptive behaviour. Hence, this variable is highly relevant and therefore, considered for the present study.

**Family Size Norm (Ideal Family Size)**

The norms of family size are likely to be in terms of a range of children that are desirable (Freedman, 1968). No doubt, this range must be widely existing and social sanction should also prevail in a society for a normative pattern to function. This definition fully concurs with the desire expressed for number of children in India. Very often people belonging to different cultural groups in India would say that they would like to have, 2-3, 3-4, 5-6, children, and only with in depth probing, respondents could be made to pin point to a definite family size. The existence of
a range for the number of children desired widely is found in the most of the rural areas. Ryder (1971) has pointed out that normative patterns play an important role although the patterns may be difficult to identity and measure.

In addition to the many factors contributing to the family size, decision process is the possible confounding effect of sex composition. Westoff, Potter and Sagi come to the following conclusion about the influence of sex composition of family size: "It seems safe to conclude that sex preference operates to affect family size if the desired sex composition is not readily achieved. Implicit to this is the couple's model of an ideal family size and composition. If they fail to achieve desired composition within the number they want, there is pressure to raise the number originally wanted in order to achieve the desired composition". According to Freedman (1968), norms about various aspects of sex, reproduction and marriage are found in all societies and profoundly affect fertility and behaviour of family planning. They may be based on superstition or sounding based on scientific knowledge. Further, he adds that stated preference for sex of children (personal ideal) varies considerably among population. So, in this study family size norm has been considered as an independent variable to see its nature of relationship with the adoption of family planning.

Value of Children

Very few studies have so far been conducted to study the influence of values attached to children on fertility and family planning. Fred Arnold, (1977); and Nag et al., (1977) observed "as in many developing countries the fertility is a emotional satisfaction (love), the fun of playing with children and companionship, happiness and
satisfaction to the parents, continuation of family name and tradition, providing help to their parents in their old age, and self satisfaction of parents but the negative values that influence the fertility, and financial cost of rearing children, emotional and opportunity costs, the cost on education, noise and disorder caused by children, health problems of children, the problem of raising and disciplining children, physical work and fatigue caused by children and lack of freedom to do as they wished, restrictions on parents time and careers. Fertility and family planning behaviour can be brought to the desired level by manipulating both positive and negative values of children cherished by the parents.

Mathur (1976) conducted a study in India where husbands were found to have children for different reasons than their wives. In the case of the latter, the religious and social motives played a significant role while for their husbands, personal, economic and social motives were important.

Caldwell (1968) rightly pointed out that "the large family system is buttressed by three main causes. Children are either economically valuable or at least share the work burden, they provide assistance much needed in societies without Governmental social services during old age and to a lesser extent sickness and they add by their numbers to the parental prestige".

Generally, in traditional and rural societies children are valued and sons are preferred. Robert et al., (1965) noticed that among the 69 couples with children but without any male child, greater proportion desired additional children before accepting contraception. They also found that couples with three or more living
children are over represented among the adopters and early adopters had more living children than later adopters.

Mahadevan (1988) conducted a nation wide survey in India and confirmed the principal importance of value of children as the most important determinant of fertility behaviour in Uttar Pradesh, Andhra Pradesh and Kerala states. However, its importance was greater in Uttar Pradesh and Andhra Pradesh and much less in Kerala. Hence, in the present study, this variable has been considered as a major independent variable.

**Sex Preference**

Very few studies have been conducted to know the influence of sex preference over fertility and these studies highlight how does people's preference either for sons or daughters influence the fertility and family planning behaviour. Freedman and Takeshita (1969) studied the son preference in developing countries, and found that in India there is reasonably clear preference for sons. Lahiri (1975) studied that there is preference at least for one son. This does not mean that the desire for sons is not to the exclusion of daughters in India.

Kirk (1966) concluded that among the Muslim Population, sons are viewed as having religious utility through the religious intervention before and after death. Freedman (1968) concluded that sons in present day societies are considered to have economic utility in terms of assistance in agricultural production and provision of security in parental oldage.
Many studies (Chan, 1973; Lee and Lee, 1973; Freedman et al., 1974; and Lahiri, 1975) highlight that as in many developing countries, including India is the most frequently assigned reason for wanting a son is continuity of the family tree apart from social and economic security during old age of parents.

Mamdani (1972) observed that the strong preference for sons stems from a variety of social, economic and religious reasons and every family in India aspires for at least one son. Sarma et al., (1974) conducted a similar study and stated that most of the wives believe that one must have a son mainly to carry on the lineage and to support the family. Many studies (Morrison, 1956; Goode, 1963; Poffenberger, 1968; Kaur, 1974; Khan, 1979; Rele and Kanitkar, 1980; Sivaraju, 1982; Reddy, 1984; Reddy, 1985; and Shakilarami, 1989) have proved the influence of son preference on the adoption of family planning.

Several studies in India (Agarwala, 1961; Dandekar, 1963; Ross and Smith, 1968; Takur and Patel, 1972; Kohli and Goel, 1974; Mathur and Srivastava, 1976; Kaur, 1976; and Nag, 1976) observed that the acceptance of family planning methods increased with the increase in the number of living sons regardless of the number of living daughters. In other words, a highly significant association existed between the number of living sons and adoption of family planning by the respondents.

Raju et al., (1994) found that the adoption of temporary methods were very few in number. On an average, acceptors of sterilization had 3.0 and non-acceptors had 1.9 living children. While the average number of female living children were more or less similar among family planning method, acceptors and non-acceptors
with regard to various characteristics, the average number of male living children were twice as high among acceptors as compared to non-acceptors.

**Family Planning Communication**

Communication play a predominant role in the field of family planning. Among different methods of communication, interpersonal communication is generally found to be more effective in propagating the information about the family planning than other communication channels. In developed countries, due to modernization and high socio-economic status, communication play a greater role which make people more rational in their outlook to discuss freely about contraception.

**Inter-Personal Communication**

Several studies (Saxena, 1965; Govindachari, 1967; Anand, 1967; Pillai, 1968; 1971; Gopalan, 1971) reported that, neighbours, friends, relatives and other informal sources from the major sources of information on family planning. Health and family planning workers are not a frequent source of information according to a few studies (Pethe, 1959; Chandrasekaran and Debarta, 1963), while other studies indicate them as major sources (Arora, 1966; Anand, 1967; Pillai, 1968). While some studies revealed, relatives as a source of information in decision-making (Pillai 1971). On the contrast Govindachari's (1967) study observed that relatives play a less important source of information for men. Canvassers were also found to be effective by Repetto (1966) and Pillai (1968). A few studies also reported local leaders as an effective force in decision-making (Pillai 1971; Ross 1952; Coleman et al., 1957; Park and Tinker 1959; Sheppard 1960; Pareek 1966; Vidyarthi; 1967 and Rogers
et al., 1971). In the study of Kantner and Stykos (1962) observed in Pureto Rica that opinions of leaders were effective in making contraceptive available and in developing effective lines of communication for family planning. A few studies emphasized that the potential usefulness of local leaders in family planning programmes were done in Indonesia (Sampoerno, 1975), Iran (Gillcspic, 1973 and Liberman, 1973), Pakistan, (Khan, 1967), Pureto Rica (Stykos, 1965), Turkey (Palmor, 1967) and the United States (Burns and Stalker, 1961).

On the other hand, many rural sociologists have warned against a heavy reliance on local leaders to act as agents for change of programmes, including family planning. A few sociologists (Burns and Stalker, 1961; Dube, 1956; Jackson, 1959; Larsen and Hill, 1958 and Mencher, 1970) observed that the status hierarchy between the leaders and the audience produce communication barriers and this may trickling down of new ideas from the source to the receiver. Stykos (1952), discussing the patterns of interpersonal communication in a Greek village states that in an underdeveloped country like India the opinion leaders importance is greatly magnified due to this monopoly on certain skills. This effect may be limited, however, due to status barriers between them and their audience". Dube (1956) argued that the opinion leaders are elites at the local level. These local elites would act in such way as to preserve the native culture against external threat. Hence, it is possible that these leaders may actively oppose the technological and ideological innovations that may affect the native social system.

Anthropologists like Marshall (1971) and Mencher (1971) based on their field experience in Indian villages, have questioned the wisdom of placing reliance on
village leaders to promote family planning. University of Kerala (1967) studied the family planning programme in the Kerala State and found that local leaders were not very useful in reaching couples with family planning message. Bogue (1957) observing the nature of communication in family planning in various parts of Asia, concluded that the theory of opinion leadership may be less applicable in family planning than in other issues.

Friends and relatives were more often reported as a source of information for permanent methods (Govindachari, 1967). On the other hand, satisfied users as an effective source of information has been mentioned by several studies (Vasa, 1967; Mandke, 1968; Halder, 1968; Bhagat et al., 1968; Chowdhary et al., 1972; Pillai et al., 1977). According to Pillai (1971) canvassers, friends and adopters are the main sources of communication for men, while relatives were a major source of information for women. Further Pillai et al., (1977) proved that satisfied adopters are the most important and successful change agents in promoting family planning. Halder and Sivaraman (1969) also found that vasectomized persons have considerable influence in motivating others for vasectomy. The use of acceptors as promoters was found to yield good results in getting more clients (Gopalan and Nayar, 1969). A study conducted by the department of Statistics, University of Kerala (1967), concluded that the most effective means of reaching eligible couples is through house-to-house canvassing.

Intra-spouse Communication

Husband-wife communication is an important factor in the field of family planning communication because spouses are the key persons to decide about their
family size. Sufficient evidence exists from the studies conducted in abroad to substantiate the dominance relations and the segregation roles which may affect the decision of the husband and wife jointly to practice family planning. Rainwater (1965) found that couples living in urban areas of the U.S. with little role differentiation practised contraception more effectively than couples with sharp role differentiation although the result was true only for the working class. He also found some support for his hypothesis that families in which there is an emphasis on joint role organisation, the wife tended not to orient herself to a larger family.

Michel (1967) in his French urban family study found that equality or wife dominance among the couples were directly related to the couple's realization of the goals of family planning. Also, the more frequently there was equality or wife dominance, the more frequently had the couple avoided excessive fertility. These data agree with the findings of the Hill et al., (1959) and Liu et al., (1970), in their study of husband-wife relationship among Puertorico and Phillippino couples and observed that greater equality and affection between husband and wife were associated with both lower family size desires and higher contraceptive practice, even when socio-economic status is controlled. In Brazil, equality in decision-making was significantly associated with fertility (Rosen and Simmons, 1971). Weller (1968) also found a similar relationship in Puerto Rico. He found that while knowledge of contraception was not related to the type of family decision-making, its effective use was greatest among couples with less dominant husbands. Ibrahim (1968) found that "high congruency between husband and wife resulted in high effectiveness in family planning and is predicted by the degree of powerlessness the wife manifests".
Studies conducted in India (Dubey, 1967; Arora, 1966; Sengupta, 1969; U.N., 1975; Khan, 1979; Sivaraju, 1987; Shakilarami, 1989; Poffenberger, 1969; Pillai 1971; Mukherjee, 1973) indicated a significant positive association between husband-wife communication and the adoption of family planning. Generally, in rural India, both the husband and mother-in-law play the key role in making family decisions. Vasanthini (1957) found that many mothers-in-law were the deciding factors in matters relating to the acceptance of family planning. Rao's study (1959) in Bangalore city also shows how male dominance might have weakened the motivation for family planning. Husbands were reported to be important in the decision-making process connected with the adoption of contraceptives for urban middle class couples in New Delhi (Dubey and Choldin, 1967). The dominance of the husband precludes the wife taking part in the decision-making and consequently, effective practice of contraception becomes a much more difficult task than where the decision to practice contraception is mutually agree upon. Mukherjee (1962) found in his Tamil Nadu and Haryana fertility surveys that about 6 per cent and 4 per cent of female respondents from these two states could not practice family planning because of the objections raised by their husbands. These findings reinforce the belief that status difference between husband and wife and the position of the husband as the prime decision-maker in most rural areas can be a serious obstacle to the adoption of family planning programme in India. Dubey (1967) found that in most cases of IUD acceptance, "both the wife and husband were involved in decision-making. Only in the case of 7 per cent, the wife made the decision, took the advice and informed the husband later". Arora (1966) found in her study of 70 women who had accepted IUD that in most cases, it was mostly husband and wife who made the decision jointly. In almost all the cases, the other family members were not even aware of
the decision. Khan (1979) inferred that the best source of family planning information for females is their husbands. He also found that husband-wife communication and empathy played an important role in the adoption of family planning. A significant association between reference group attitude towards contraception as perceived by the husband and the acceptance of family planning was observed. Similar strong influence of the peer group on the acceptance of contraception was observed among the industrial workers of Bihar, Gujarat and Maharashtra (Khan, 1975). According to Mukherjee (1973) husbands were found to play a more important part than wives in deciding whether to practice contraception or not. Further suggests that there exists need for shifting the emphasis of family planning education programmes from a female oriented approach to an effort aimed at both sexes. Seththalakshmi (1969) observed in her Tamil Nadu study that wives were never mentioned as source of information by the husbands, while wives more often mentioned their husbands as source of information. Further, husbands under-estimated their wives' knowledge, while wives over-estimated their husband's knowledge. Some studies on intra-spouse communication and the sources of information at different stages in the adoption process have reported (Arora, 1966 and Dubey, 1967).

Mass Media

Mass media communication play an important role in the field of family planning. Though all types of mass media sources such as, telephones, mailings, newspapers, films, radios and televisions are predominant in developed countries, the
prevalence and the influence of only three sources like, newspapers, films and radio mostly exist in developing countries, including India.

In recent years, family planning organisations have used newspapers in a variety of ways: as a medium for family planning stories placed in the newspaper through public relations method, for advertisements ranging from a few lines in classified sections to full page advertisements, and in advertising campaigns to support the commercial distribution of contraceptives. The advantages of newspapers are that they are highly visible media, often considered them authoritative, have a predetermined audience based on circulation patterns, and even have secondary readership. According to Sweeney (1977) studies, conducted in 22 countries had rightly concluded as follows: "advertisements in newspapers that offer materials for contraceptives are sufficiently successful to warrant continuing programmes in India, Sri Lanka and Taiwan. In one case, there is evidence of increased clinic attendance after heavy use of newspapers in a campaign carried out in Ghana and a fairly high recall of press advertisements observed after a campaign in Nigeria. On the otherhand, press advertisements resulted in low recall of family planning information in a number of studies carried out in India, Iran and USA. Newspapers did not rank particularly high in most cases.

It is evident from the review done hitherto there are no large scale studies on the impact of mass media on rural population. Previously most of the studies are concentrated only on urban population. Operations Research Group (1973) is the only organisation has made large scale effort in this direction and which investigated this problem on a large probability sample. Mukherjee (1976) has synthesized the
information contained in the ORG report, which clearly projects the poor impact of mass media efforts in the rural areas where it is needed most. Thus, from the existing findings it may be safely concluded that family planning communication, inter-personal as well as mass media, play a significant role in the adoption of contraception.

Status of Women

The degree of personal autonomy of women in India varies from state to state. Several studies have noted the regional variations in the status of women in India (Karve, 1965; Srinivas, 1978; Mitra, 1979; Dyson and Moore, 1983). Women's personal autonomy is manifested in practices such as veiling (Purdah or ghungat), pressures to get girls married at a very young age (partly to protect their virginity and partly to ensure compliance with parent's wishes in respect of the choice of spouse), denying or limiting educational or employment opportunities to girls, attaching differential values to sons and daughters, restricting the ability of women to control their fertility by pressuring them to produce children (particularly male heirs), restricting their access to information, and economic and health resources etc.

The afore mentioned studies indicate that there is greater autonomy for women as one moves from the north of India to the south and from west to east. Regional variations in fertility are fairly consistent over time and follow a more or less similar pattern, the northern states of India having higher fertility than the southern ones, and the western states having higher fertility than the eastern ones (Dyson and Moore, 1983).
In determining the status of women, factors such as the role of women in decision making in the family and in the community, their educational status, their participation in social, political and economic activities and their position in the various professions as well as their legal status in terms of marriage, divorce, inheritance etc., should be taken into consideration (ESCAFE, 1973). In the present study, status of women has been considered as one of the independent variable, to examine whether it has any influence on the adoption of family planning among the scheduled caste women.

Modernisation

Modernisation is a term generally used to describe the movement of socio-economic systems towards a higher level of development as revealed by cross-national comparisions and by changes in socio-economic indices overtime, whereas individual modernity is a pattern of psychological characteristics related to societal modernisation (Fawcett, 1970).

In a recent study, Miller and Inkeles (1974) examined the effect of modernisation on acceptance of family limitation in some of the developing countries including India. They found positive correlation between acceptance of family planning and experience with modern institutions, but of low magnitude. The study of Korean family planning behaviour by Chung, Palmore, Lee and Lee (1973) also showed a positive relationship of modern attitudes to contraceptive practice.

Studies conducted in India also revealed the shift in family size norm from large to small particularly among the modernised people. Studies on inter-relationship
between modernisation and family planning, however, are few in India. Most of these studies have examined family planning differentials on the basis of societal modernity. A recent study by Moni Nag (1982) revealed that certain elements of modernisation viz., education of men and women, employment of females in non-familial activity etc., are associated with raise in the adoption of family planning, while other elements viz., declining breast feeding, improved health etc., often cause low in the adoption of family planning.

A good amount of work on modernisation was done by Biswanath Mukherjee (1975). He found three core dimensions of modernity viz., subjective efficacy, openness to change and propensity to plan are contributing substantially to the prediction of knowledge about attitudes toward family planning as well as favourability toward small family size. Majority of the other micro level studies had included one or few questions particularly on mass media exposure and possession of household modern articles (Mahadevan 1979; Reddy 1982). In India, studies conducted on modernisation, so far had covered only a few dimensions of modernisation. Hence in the present study, this variable has been considered as one of the independent variables.

All the research studies conducted on variations in performance of family planning discussed above have two main limitations. They were conducted at the macro level at the State and the District level. Secondly, very limited variables were analysed, possibly due to the lack of availability of uniform data from secondary sources. Therefore there is a dearth of micro level studies (rural areas) on family planning particularly, in scheduled caste population. This is an important target group
for family planning among whom the acceptance of family planning is not only low and they have large families. Hence, the present study is planned since no such worthwhile study has been conducted, hitherto, among them to study the knowledge, attitudes and practice of family planning to plan programmes to change the existing situation among them.

Methodology

"Methodology" gives an outline of the procedure adopted for execution of the present research. The major aim of the survey is to understand the determinants of acceptance of family planning methods by eligible couple among the scheduled caste women in rural Andhra Pradesh. It is generally believed that the level of acceptance of contraception among scheduled caste women will be low, and hence the present study attain much significance, because of its attempt to identify the factors responsible for limited acceptance among them. The details regarding objectives and hypothesis, study area, sample frame and size, data collection, data analysis and development of indices are presented in this chapter.

Objectives of the Study

I. The general objective of this study is to comprehend and understand the influence of socio-cultural factors either promoting or restraining the adoption of contraceptive in a rural area.

II. The specific objectives of the study are:

1. To study the socio-economic characteristics of the eligible couples belonging to scheduled castes.
2. To get a comprehensive picture of the prevailing knowledge, attitude and practice of family planning among the Scheduled Caste rural women of Andhra Pradesh;

3. To study the influence of socio-economic, cultural, and demographic variables on KAP of family planning among the Scheduled Caste rural women;

4. To study the role of communication variables in contraceptive behaviour.

5. To attempt an in-depth insight into the fertility experiences of Scheduled Caste rural women, with a view to generate valid generalisations for helping the policy makers.

Hypotheses

Based on the review of literature and discussion with the experts, the following hypotheses are proposed for testing in the present study.

1. The adoption of family planning will increase with improvement in socio-economic status of the people.

2. Higher the status of women, higher will be the adoption of family planning.

3. The adoption of family planning decrease with increase in value for children.

4. Higher the level of modernisation, higher will be the adoption of family planning methods.

5. Emphasis on highly accessible and acceptable communication strategies lead to increase in the adoption of family planning methods.

6. Greater autonomy in decision-making to the couple leads to increase in adoption of family planning methods.

7. The level of adoption of family planning is higher in nuclear families as compared to joint families.
1. Higher the knowledge and attitude of family planning which in turn leads to higher practice of family planning and vice versa.

2. Regular urban contacts leads to higher practice of family planning.

3. Higher the traditional belief about reproduction the practice of family planning behaviour will decrease.

4. The perception of infant mortality will be different among the adopters and non-adopters of family planning.

5. Preferred ideal family size may influence family planning behaviour of the sample.

Area of the study

The study was carried out in the rural areas of Chittoor district, Andhra Pradesh. In general the acceptance of family planning is low among scheduled caste women. Therefore, villages in Chittoor district were chosen for the present study due to proximity and financial constraints for an individual research. This district has a strong agricultural base. Chittoor district is one of the quartlets of Rayalaseema region. Rayalaseema is one of the three regions of Andhra Pradesh, the other two being coastal Andhra and Telangana regions. Chittoor is the southern most district of Andhra Pradesh sharing borders with the states of Tamilnadu and Karnataka. According to 1991 census Chittoor district ranks 7th in area (15,152 sqkms) and 3rd in population in Andhra Pradesh (32.56 lakhs). Among the four Rayalaseema districts, Chittoor is the most densely populated (215 persons per sq km), and the rate of literacy is high (42 per cent) and the least urbanised (20 per cent). It has the highest number of villages electrified (87 per cent in 1990) and the largest live stock.
population. Main sources of irrigation is tanks (42 per cent) and wells (48 per cent). The normal rainfall in the district is 908.1 milli metres.

Chittoor district has 66 mandals, of which, Chandragiri mandal (study area) forms as its north-eastern extremity. Chandragiri mandal covers an area of 95.88 sq kms and contains 50,151 people in 1991. It has 23 Revenue villages and a little more than 94 per cent of the area in the mandal is rural. Out of it’s total population 79 per cent are living in rural area. More than 70 per cent have rural occupied residential houses. The mandal has 21.1 per cent of scheduled caste and tribal population in which 3.8 per cent is scheduled tribes in 1991. The literacy rate in the mandal was 51.2 per cent in 1991. According to 1991 census 30.7 per cent of the people in the mandal were farmers and agricultural labourers. Among them 13.3 per cent were farmers and 17.4 per cent were agricultural labourers. The total labour force in the mandal constitute 41.3 per cent and the remaining (51.2 per cent) were dependents. This shows that in the study area majority of the people were dependents according to 1991 census.

Sample Frame and Size

Sampling unit for the study is a woman, who is in the reproductive age group of 15-49 years and who have at least two or more living children. In Chittoor district Chandragiri mandal is selected for the study. Proportionate stratified random sampling technique was adopted in selecting the women (15-49 years) from this mandal. Chandragiri mandal has 23 revenue villages. Based on the size of the population, the villages are classified into large (1001 - 3000) and small (1000 and below) villages. From these villages, three large villages and three small villages are
selected at random giving weightage to the proportion of large and small villages to total villages in this mandal. A list of all the eligible couples in the selected villages are prepared from the recently up-dated voters list, separately for the adopters and non-adopters. From these lists a total of 600 eligible women (15-49 years) comprising of 300 adopters and 300 non-adopters are selected at random.

In the case of households having more than one eligible couple (15-49 years), only one eligible couple was randomly selected as the most of the background characteristics are the same. Thus, a total sample of 600 respondents comprising of 300 adopters and 300 non-adopters are selected at random for the present study.

<table>
<thead>
<tr>
<th>Sample size</th>
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<td>(N=600)</td>
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<table>
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<tr>
<th>Adopters (N=300)</th>
<th>Non-adopters (N=300)</th>
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</table>

Interview Schedule

For collection of data on the various dimensions of knowledge attitude and practice of scheduled caste women an elaborate schedule is developed. This schedule broadly consists of ten sections. They included personal information, household particulars, economic-status, activities of the respondents, status and modernisation, family size norm, value of children, communication, knowledge, attitude and practice of family planning. Most of the questions are structured, a few of them are open ended and multiple choice statements.
Interview process

With the help of the interview-schedule, primary data are collected, from the 600 scheduled caste women (respondents). The investigator visited the field centres and established good rapport with the respondents through the prominent persons in the villages such as teachers, village ward members, and health visitors. The informants were interviewed according to their convenience and leisure. This helped the investigator to gather some important information concerning the personal background of the informants. Since most of the respondents are illiterates, the data was gathered with the help of interview schedule. Outward feelings of the informants are also recorded to understand the real attitude of the respondents.

Data Analysis

The data analysis is carried out with the help of computer analysis. The collected data is posted into self-explanatory, one-way, two-way and three-way tables. A multivariate step-wise regression analysis technique is used to sharpen the understanding of the influence of different variables on contraceptive behaviour. $\chi^2$ (chi-square) test is adopted for testing the association various independent variables and contraceptive behaviour.

Operational Definitions

We have adopted the following operational definitions to some of the concepts which have a great bearing on the present study.
1. **Adopters**: A person (women) who is in the reproductive age group of 15-49 years, and have at least two or more living children and who have adopted permanent family planning method in order to prevent conception or birth.

2. **Non-adopters**: A person (women) who is in the reproductive age group of 15-49 years and have at least two or more living children and who have not adopted any family planning method in order to prevent conception or birth.

**Measurement of Variables**

Adopters and non-adopters of the family planning or contraceptive behaviour is the main dependent variable for the present study. Throughout the analysis, the classifications of the respondents into adopters and non-adopters is controlled to see the differential influence of the independent variable. All other variables viz., social, cultural, economic, status, modernisation, communication, value of children and family size norm, etc. are treated as independent variables.

**Indices**

In order to ascertain the cumulative effect of the related independent variables on the family planning behaviour three indices have been developed in the present study.

1. **Index on role in decision-making**:

   For measuring the role of the women in decision-making in family matters an index is constructed. This index covered various aspects such as agriculture,
finance, marital-decision, education, employment, family planning, purchase of durable, travel, pilgrimage / festivals. The respondents are divided into "low status" (limited freedom), "moderate status", (moderate freedom) and "high status" (full freedom), on the basis of the total scores secured by them on the above aspects. The minimum score is 9 and the maximum score is 27.

<table>
<thead>
<tr>
<th>Index</th>
<th>Score Range</th>
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<tbody>
<tr>
<td>Low status (limited freedom)</td>
<td>9 - 15</td>
</tr>
<tr>
<td>Moderate status (moderate freedom)</td>
<td>16 - 21</td>
</tr>
<tr>
<td>High status (full freedom)</td>
<td>22 - 27</td>
</tr>
</tbody>
</table>

2. Index on women roles

In order to assess the women roles (traditional, moderate, and new roles) an index is developed. This index is based on two important roles such as (1: traditional roles viz., household work, child rearing, care of husband and other familiar activities and (2) the new roles are: work outside home, social service membership of voluntary associations and such other activities. Based on the composite scores assigned to them, the sample respondents are stratified into 'traditional roles', 'moderate roles', and 'high roles'. The minimum score is 7 and the maximum score is 15.

<table>
<thead>
<tr>
<th>Index</th>
<th>Score Range</th>
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<tbody>
<tr>
<td>Traditional roles</td>
<td>7 - 9</td>
</tr>
<tr>
<td>Moderate roles</td>
<td>10 - 12</td>
</tr>
<tr>
<td>High roles</td>
<td>13 - 15</td>
</tr>
</tbody>
</table>
3. Index on respondent's perception towards family planning

The combined effect of variables on respondent's perception such as family planning keeps family happy, family planning increases small families, and family planning is the best development etc. is examined by developing an index. This is constructed by assigning individuals score values to each of the independent statements. The sum of total score ranges from 1 to 6. Accordingly respondents are stratified into two levels, level-1 represents low status and level-2 represents high status. These questions are helped to make wider generalizations.

<table>
<thead>
<tr>
<th>Index</th>
<th>Score range</th>
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</thead>
<tbody>
<tr>
<td>Low status (level-I)</td>
<td>1-3</td>
</tr>
<tr>
<td>High status (level-II)</td>
<td>4-6</td>
</tr>
</tbody>
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