Carol Vlassoff

Educating Female Adolescent : Possibilities and Limitations for Social Change and Population Learning in Rural India

THE National Programme of Minimum Needs has as its central aim "the provision of a minimum level of social consumption for different areas and sections of the "community" (India 1973 : 87). One of the seven priorities[1] of the Programme is a substantial increase in educational opportunities, including the provision of universal[2] elementary education and expanded secondary school facilities[3] at nearest possible places, by the end of the Fifth Five Year Plan.

One area of increasing concern, however, is the marked disparity in the utilization of educational facilities by boys and girls. While there has been a steady increase in female education since 1951, only 66% of girls aged 6-10 were enrolled in school in 1973-74, compared to 100% of boys *(Ibid. :* 194). The reasons for this inequality are partly cultural, since social approbation for the education of girls is a relatively recent phenomenon,[4] and partly circumstantial, such as the potential danger to girls in walking long distances to

1, The other priorities are rural health, expansion of clean drinking water facilities, housing for landless labourers, slum improvement, rural roads and rural electrification.

2, The objective of the Fifth Five Year Plan is to provide elementary education to 97% of children aged 6-10, representing a 15% increase over the end of the Fourth Five Year Plan,

3, The Fifth Five Year Plan provides for educational facilities for 47% of children aged 11-13, a 31% increase over the end of the Fourth Five Year Plan.

school and the inadequate supply of women teachers *(Ibid. :* 197). **By** tackling these problems, the Fifth Plan envisages progress in female education as an important milestone in the fulfillment of minimum needs.

The question therefore arises, "What will be the effect of a rise in female education upon overall socioeconomic development and population growth ?" What, specifically, will be the impact in rural areas where females are particularly underprivileged ? The present paper seeks to provide a modest answer to this question by presenting evidence from a micro-study of adolescents in a Maharashtrian village. Although the number of respondents is small, the study provides an insight into a relatively unexplored area which may be crucial for future social change. Moreover, studies of adolescent attitudes in India[5] and elsewhere have been limited to school-going youth, whereas the present survey includes non-school-going adolescent as well.[6]

The main questions to be asked are :

(1) What impact docs education have upon the cultural attitudes of rural adolescent females ?

(2) What impact does education have upon the ideals and expectations of these girls ?

(3) Do educated youth have greater general knowledge and population awareness than uneducated youth ?

(4) Is there a disparity between adolescent boys and girls with regard to general knowledge and population learning ?

The **Data**

During 1975-76, the author conducted a study on the relationship between cultural traditionalism and contraception among females in a village in Satara

4. Most historians (see e.g. Altekar 1938 : 22) agree that up to the end of the Vedic period :(500 B.C.) girls received equal education to boys, but after this time female education was associated with dancing and prostitution, and it was not until the British rule (in the early 1850's) that education of girls once again became respectable.

5. Chahill (1972); Poffenberger (1971); Pohlman and Rao (1969).

6. The need for investigation of "population learning" among non-school-going youth is stressed by Poffenberger (1971 : 174).

District, Maharashtra.[7] As part of the survey, a questionnaire was administered to all unmarried adolescent girls aged 13-18 in the village, covering four main areas : the respondent's (1) daily activities, (2) cultural attitudes, (3) ideals and expectations, and (4) general knowledge and population learning. Frank, informal discussions with the girls followed many of the interviews. These were facilitated by the researcher's familiarity with them through nine months' continuous residence in the community.

Of the 88 "eligible" girls listed in background information on village households from the earlier census, only 70 could later be located for interviewing, due mainly to, non-availability because of marriage. The questions on general knowledge and population issues were also asked to a random sample of 40 boys in the same age group in order to compare the overall awareness of rural boys and girls,

The village itself formed part of a random sample of 6 rural communities surveyed previously by the Gokhale Institute of Politics and Economics (Dandekar and Bhate 1976). It has a population of 2100 and is located 14 kilometers from the city of Satara. It is accessible by dirt road for about 5 months during the dry season. Comparisons with other Satara District villages of roughly the same size revealed that the village was typical of the District, with 36% of females, and 63% of males literate, and 84% of household heads engaged primarily in agriculture.

The educational attainment of all girls and boys, aged 6-19 years, in the village is given in Table 1. There are two schools in the village, a primary school and a high school. Table 2 shows the percentage distribution of students enrolled in these schools in 1975-76. From both tables it can be seen that, firstly, the percentage of girls attending school is markedly less than that of boys and secondly, that this percentage declines greatly after the fourth standard. Girls drop out early : while in the 6-10 years age group 96% of village boys and 88% of girls were attending school, in the 11-13 years group, 86% of males but only 63% of females were still in school.

Of the female adolescent respondents 10% had never attended school, 60% had left school and 30% were still studying. Of the male respondents, only

7. See **Ph.D.** dissertation **by Carol** Vlassoff, *The Significance of* ***Cultural Tradition for Contraceptive Change • A Study of Rural*** *Indian Women* **(submitted to** University of **Poona, January, 1978).**

TABLE 1—EDUCATION BY AGE GROUP BY SEX FOR INDIVIDUALS AGED 6-19 IN SURVEY VILLAGE : PERCENTAGE DISTRIBUTIONS

Age Group	Number of Years of Education						Total	
	0	1-4	5-7	8-10	SSC complete	Beyond SSC	Percent	No. of individuals
Females								
6-9	59	41	0	0	0	0	100	122
10-19	19	41	30	8	2	0	100	259
Males								
6-9	38	62	0	0	0	0	100	125
10-19	5	37	38	18	2	0	100	266

TABLE 2—GIRLS AND BOYS ENROLLED IN SURVEY, VILLAGE SCHOOLS 1975-76 : PERCENTAGE DISTRIBUTIONS[8]

	Percent of Students Enrolled in Standards :			Total
	1-4	5-7	8-10	
Girls	45	27	25	36
Boys	55	73	75	64
Total	100	100	100	100
No. of students	202	153	120	565

2% had no education, 38% had left school and 60% were still in school. The average educational attainment of the adolescent female respondents was 5.8 years, and that of the boys, 7.2 years. The age compositions of the male and female samples were somewhat different because of the attrition of girls through marriage : the average age of female respondents was 14.8, compared to 16.2 for boys.

8. These figures include children from four surrounding communities and only 58% were from the survey village itself.

Results

The Female Adolescent Survey

(1) DAILY ACTIVITIES. The daily routine for most village girls consisted of household chores and, during certain seasons, of field work. Apart from hours spent in school, the activities of school-going girls were little different from their non-school-going cohorts. The monotonous routine reported by most of the girls which, in their own words, consisted of "sweeping, washing dishes, washing clothes, cooking and cleaning", highlights the lack of social and recreational outlets for rural females, even during adolescent years.

Less than half the respondents had a hobby, such as sewing or embroidery. Lack of training and unavailability of materials were cited as the main reasons for this. However, as Table 3 shows, educated girls were more likely to have a hobby than less educated girls, probably indicating that education stimulates an interest in creative activities and other diversified tasks.

TABLE 3—HOBBIES BY EDUCATION FOR ADOLESCENT GIRLS : PERCENTAGE DISTRIBUTIONS

Number of hobbies	*Education*			*All girls*
	0-4 Yrs.	*5-7 Yrs.*	*8+ Yrs.*	
None	73	63	19	53
One or more	27	37	81	47
Total percent	100	100	100	100
No. of girls	22	27	21	70

Tau $c = 0.45$ (significant)[9]

In order to determine the value orientations of adolescent girls, they were asked to recall their favourite experience. Most remembered a special function such as a school trip, wedding or village festival. Several said that they enjoyed Mondays, a day when men and women alike visited the local Shiva temple. For girls, such events afforded freedom to partake in activities outside the habitual restrictions of their closed society. Many respondents, however, had difficulty

9. The .05 level of significance is used throughout this paper.

in naming a favourite memory and five girls could think of none at all. In no case did a girl refer to a personal achievement such as winning a prize or attaining a certain grade; in fact, personal success was never mentioned in any context during the interviews. This may reflect greater social integration of rural Indian youth than one would find in a more achievement-oriented society. On the other hand, it may merely indicate a recognition of societal restrictions upon adolescent girls : individual freedom is a precondition for nurturing personal goals and the drive for self-fulfillment. Such freedom is conspicuously absent in the village context.

(2) CULTURAL ATTITUDES. A number of attitudinal questions were included in the questionnaire, of which only four will be discussed here,[10] namely :

(a) Do you approve of parents giving dowry for their daughters ?

(b) Suppose a young woman wishes to remain single. Would you approve of this?

(c) Suppose a woman produces only daughters and no male children. Should her husband remarry ?

(d) Suppose a woman produces no children at all. Should her husband remarry ?

More than half the girls approved of dowry and, of those who did not, 94% said that they would condone the giving of some other gift. As can be seen from Table 4, approval was significantly related to educational level, with educated girls less likely to favour this custom.

Generally, respondents felt that it was desirable for a woman to marry, giving pragmatic reasons :

"If a girl remains single, people will give her a bad name. It doesn't matter how well she behaves; they will still talk."

"An unmarried girl can never be happy. There will be no one to continue her line and no one to look after her in old age."

10. These were selected because they relate to demographic issues including beliefs about marriage and the need for children.

Nonetheless, over 40% of the girls said they would approve of a woman remaining single if she chose to do so. Once again, this attitude was significantly related to educational level, as shown in Table 4.

TABLE 4—ATTITUDES TOWARDS DOWRY, FEMALE CELIBACY, MAN'S REMARRIAGE IF NO SONS AND MAN'S REMARRIAGE IF NO CHILDREN BY EDUCATION FOR ADOLESCENT GIRLS: PERCENTAGE DISTRIBUTIONS

Attitude	*Education*			*All girls*
	0-4 Yrs.	*5-7 Yrs.*	*8-10 Yrs.*	
Dowry				
Favourable	68	52	45	55
Unfavourable	32	48	55	45
Tau $c = 0.20$ (significant)				
Female Celibacy				
Unfavourable	70	63	43	59
Favourable	30	37	57	41
Tau $c = 0.23$ (significant)				
Remarriage if No Sons				
Favourable	52	41	33	42
Unfavourable	48	59	67	58
Tau $c = 0.16$ (significant)				
Remarrige if No Children				
Favourable	100	82	71	84
Unfavourable	0	18	29	16
Tau $c = 0.24$ (significant)				
Total percent	100	100	100	100
No. of girls	21	27	21	69

Questions (*c*) and (*d*) probed the perceived necessity of children among respondens. In a male dominated society, one might expect strongly positive

replies to these questions. While this was the case with question *(d)*, where 84% of the girls felt that a husband is justified in remarrying when there were no off-springs, it was not true of the former question. The majority of respondents did not feel that the failure to produce sons justified remarriage, saying that girls could be equally valuable. The remaining, however, said that such a man "would have no other choice."

Educated girls were significantly more likely to disapprove of remarriage in both the hypothetical situations than relatively uneducated girls. This again illustrates the role of education in changing traditional values. Nonetheless, the fact that only 29% of respondents in the most educated group would censure remarriage of a childless male indicates that a great deal of traditionalism still prevails even among educated female youth. It may also be the case that even latently modern girls are prevented from expressing such opinions by the predominantly backward environment in which they live.

(3) IDEALS AND EXPECTATIONS. Several questions concerned the respondent's expectations regarding marriage. Generally, village girls held no romantic illusions about married life. For example, to the question, "which period in life do you feel is most enjoyable—childhood, adolescence, early marriage, motherhood or old age ?", only two girls mentioned early marriage. Eighty percent felt that childhood was the most pleasant stage of life and 16%, early adolescence. An overwhelming majority (95%) gave as their reason the relatively carefree atmosphere of permissiveness and security characterizing childhood and early adolescence, compared to later periods of responsibility and submission to others ;

> "I think childhood and early teenage years are nicest because there are no responsibilities. When you are married there is no freedom. There is always someone-like your mother-in-law or husband—to give you trouble."

Respondents who were soon to be married expressed no joy about the event, only sorrow, regret and apprehension.

The average age at which the girls expected to marry is 17.1. There were no significant differences in anticipated age at marriage by educational level. When asked whether they considered their likely age at marriage desirable, 64% said they would prefer a later marriage. Those who were prepared to marry soon

Were generally older girls, realistic about the necessity of fulfilling social expectations. In short, for adolescent rural females, the prospect of early marriage gives rise to a number of complex and sometimes conflicting feelings—on the one hand, the need to satisfy social obligations and, possibly, physical needs; on the other, the frustration of many personal goals and desires.

Respondents had fairly high ideals about the amount of education desirable for a prospective husband. Only 4% of the girls said they would be content with primary education or less and 68% preferred a minimum of complete high school education. Desired education for a husband was significantly associated with the respondent's own educational level (correlation coefficient *(r* = 0.77). Moreover, educated girls were more likely to prefer husbands with non-farming occupations and urban residence. These results are similar to those reported by Chahill (1972 : 87 ff.) for rural youth in northern India.

Since family planning ideas were diffused throughout the village as a result of the ongoing government campaign,[11] it was possible to inquire what adolescents considered an ideal family size, firstly, for others and secondly, for themselves. The average ideal stated for others was 3.9 children, compared to 3.6 for themselves. Although the reason for lower personal ideals is not clear, it is possible that respondents believed that most people wanted larger families and hence were more "generous" in stating an ideal number for others than for themselves.[12]

As Table 5 indicates, ideals on family size were significantly associated with education. For example, the most educated girls desire an average of only 3,1 children compared to 4.2 for the least educated. This indicates the role that education may have in shaping fertility norms even in adolescent years.

(4) GENERAL KNOWLEDGE AND POPULATION LEARNING. In order to determine the awareness of village girls about the world outside the narrow confines of the village, some general knowledge questions were included. A number of ques-

11. Seep. 185 para 3.

12. This phenomenon was also noted in the 1960 U.S. Fertility Survey (Whelpton, Campbell, Patterson 1966:33-38) where women gave smaller ideals for themselves than for the average American family. The reasoning behind these results probably differs, however. **In** the American study, respondents were older women who gave practical, economic constraints as the reason for not wanting the larger (ideal) number themselves. In the present study, the respondents had probably given little serious thought to this question.

TABLE 5—IDEAL FAMILY SIZE FOR OTHERS AND FOR SELF BY EDUCATION FOR ADOLESCENT GIRLS : PERCENTAGE DISTRIBUTIONS

Desired No. of Children	*Education*			*All girls*
	0-4 Yrs.	*5-7 Yrs.*	*8-10 Yrs.*	
For Others				
2-3	32	52	71	51
4+	68	48	29	49
Total percent	100	100	100	100
No. of girls	22	25	21	68
Mean value	4.8	3.6	3.3	3.9
Tau $c = -0.34$ (significant)				
For Self				
2-3	47	60	84	63
4+	53	40	16	37
Total percent	100	100	100	100
No. of girls	19	25	19	63
Mean value	4.2	3.4	3.1	3.6
Tau $c = -0.31$ (significant)				

tions on population were also asked, to assess understanding of population matters and their relevance to national goals.

Generally, female adolescents knew little about the geography of India or its immediate region. To the question, "What Asian countries can you name ?", 91% could name none at all. Further, only three girls were able to name any countries bordering upon India. Knowledge of Indian states was somewhat better, with one-third giving at least one state correctly. What knowledge does exist, moreover, is somewhat confused. Among those who named some states accurately, there was a tendency to mix states, cities, countries and continents. This is perhaps not surprising, given the limited range of experience of most village girls. For those who have never travelled beyond Satara, and perhaps never expect to do so, it may be difficult to grasp the idea of larger geographical units and their interrelationships. On the other hand, with adequate instruction, such concepts could be learned even in the absence of practical experience.

The girls were also asked how many religions they could name. In spite of the fact that there were three religious groups in the village, only 53% of the respondents were able to name even one religion correctly. Again, religions were not clearly distinguished from castes, languages and states. General knowledge was positively associated with education in all the above cases. Yet the fact that so much ignorance exists even among school-going youth indicates the low quality of instruction in rural society.

To digress slightly, it was also found that adolescent girls were poorly informed about the processes of menstruation, sex and reproduction. Parents generally assumed that "girls will learn for themselves", and village teachers shied away from such subjects. Forty percent of menstruating girls, for example, said that they knew nothing about menstruation before its onset. Though this was probably an exaggeration, since pollution customs were so openly observed in the village that even children were aware of "differences" among women at certain times of the month, young girls were largely ignorant about the physical changes occurring, and their relationship to other bodily functions. Significantly, educated girls were no better informed in this regard than uneducated girls.

The population awareness of village girls must be seen against the background of the family planning programme in the village. This consisted mainly in the work of village leaders who encouraged couples with three or more children to undertake sterilization. Family planning messages were painted on village buildings and slogans were learned by the children in school. Although there was a family planning sub-centre in a neighbouring area, the nurse rarely visited the survey village, and thus birth control communication from official sources was minimal. Nevertheless, sterilization was widely known and discussed in the community.

Respondents were asked the following questions concerning population knowledge :

(a) What is the population of this village ?

(b) What is the population of India ?

(c) Which of the following conditions is most desirable from the point of view of India's progress : (I) a rapidly growing population, (2) a slowly

growing population, (3) a stationary population (neither growing nor declining), or (4) a declining population ?

(d) What is the current population trend in India (with regard to the above) ?

(e) On an average, how many (live-born) children does a woman in this village bear ?

(*f*) Suppose that today in this village ten children are born. Of these, how many do you think will live to age 15 ?

It should be noted that the purpose of these questions was not so much to see whether respondents answered correctly as to obtain an indication of adolescent perceptions of population dynamics.

As was the case with general knowledge, only a small number of girls (4%) could correctly estimate the village population (i.e. within the range of 2000-2500 population) and only 7%, India's population (i.e. within the range of 600-700 million). To these questions, several respondents answered, "How would I know ? I never go anywhere." Hence, the lack of salience attached to such matters becomes apparent.

With regard to question *(c),* slow population growth was favoured by 50% of the respondents, 28% felt that a stationary population was best and 22% desired rapid growth. Thus, slow growth is deemed preferable to a situation of rapid growth or no change. Only four respondents were able to justify their feelings about desirable population change by specifically mentioning the connection between slow growth and economic development. Half the respondents were aware of the present situation of rapid population increase (question *(d)* above) and 39% said that family planning efforts had already succeeded in reducing population growth to a desirable level. Thus, family planning was recognized by a substantial number of respondents as instrumental in affecting the rate of population growth.

There were no significant differences in knowledge of any of the above population issues by education. For example, 41% of girls with 0-4 years of schooling were aware of current rapid growth compared to 38% of those with 8 or more years of education. Moreover, least educated girls tended to prefer a situation of no population growth more frequently than the most educated

girls, though the difference was not statistically significant. This finding supports Poffenberger's argument (1971 : 173) that population learning takes place through informal (non-school) channels. Such matters have relevance not only to adults but also to adolescent youth. This is an important finding since it illustrates that it is not necessary for India to reach an advanced stage of educational development for the spread of population awareness.

Table 6 presents findings on questions (*e*) and (*f*) according to education. Educated girls have lower perceptions of fertility and mortality patterns in the village than uneducated girls. Had the respondents interpreted question (*e*) to

TABLE 6—PERCEPTION OF FERTILITY AND CHILD MORTALITY IN THE VILLAGE BY EDUCATION AMONG ADOLESCENT GIRLS: PERCENTAGE DISTRIBUTIONS

Perceived Fertility and Mortality Levels	*Education*			*All girls*
	0-4 Yrs.	*5-7 Yrs.*	*8-10 Yrs.*	
Fertility of Village Women				
0-4 Children	29	54	76	53
5+ Children	71	46	24	47
Total percent	100	100	100	100
No. of girls	21	24	21	66
Tau c = —0.41 (significant)				
No. Surviving out of 10				
7 or fewer children	79	63	60	67
8-10 children	21	37	40	33
Total percent	100	100	100	100
No. of girls	19	24	20	63
Tau c = 0.16 (significant)				

refer to older women who had completed child-bearing, the uneducated girls would have had the more accurate perception. However, in general girls seemed to have younger women's fertility behaviour in mind in their answers. In the survey village younger women planned to have an average of 3.3 children. If this interpretation is correct, education heightens girls' awareness of nascent low fertility norms in their surroundings.

Comparison of Male and Female Adolescents on General Knowledge and Population Learning

(1) GENERAL KNOWLEDGE. As already mentioned, some of the factual questions from the adolescent female survey were administered to a sample of village boys. Boys were more knowledgeable than girls on all questions asked.

TABLE 7—EXTENT OF GENERAL KNOWLEDGE AMONG MALE AND FEMALE ADOLESCENTS

	Mean No. of Asian Countries Named	*Mean No. of Bordering countries Named*	*Mean No. of Indian States Named*	*Mean No. of Religions Named*	*No. of respondents*
Male	1.4	1.3	3.5	3.1	40
Female	0.2	0.1	0.8	1.5	70

Since it seemed likely that part of this discrepancy was due to the greater education of males, this variable was controlled by selecting only boys and girls with more than seven years of education (Table 8). Even when this was

TABLE 8—EXTENT OF GENERAL KNOWLEDGE AMONG MALE AND FEMALE ADOLESCENTS WITH MORE THAN 7 YEARS' EDUCATION*

General Knowledge Questions	*Mean for Males*	*Mean for Females*	*Student's for Difference of Means*
No. of Asian countries	3.1	0.6	3.2**
No. of bordering countries	2.5	0.4	4.58**
No. of Indian States	6.6	2.1	3.84**
No. of religions	4.1	3.1	1.94**
No. of respondents	17	21	

*The mean number of years of education for both girls and boys was 9.1 years.
**Statistically significant.

done, significant differences still obtained in three of the four categories. The fact that, with such a small sample (38 in all), significant differences prevail,

indicates a fundamental discrepancy in general awareness between male and female adolescents.

The explanation may lie in the different role expectations of rural girls and boys. Girls are not expected to further their education; few even finish high school. Boys, on the other hand, have higher expectations and many anticipate, though perhaps unrealistically, post-secondary education. For girls, then, there is little incentive for the retention of 'academic' knowledge; for boys there are stronger inducements in the form of advanced education and future occupational goals. Boys, moreover, spend their free time loitering in the village and listening to conversation of outsiders and older men whereas girls, especially as the age for marriage approaches, are mainly confined to the house. Boys, more frequently than girls, accompany their fathers on trips outside the village, giving them wider experiential reference points for concepts learned in school.

Differences in the number of religions named were not statistically significant, although once again girls named fewer religions than boys. This reinforces the observations made above concerning the selectivity involved in learning. In the case of geographical knowledge, boys have more personal interest and practical experience than girls; religious differences, on the other hand, can be learned within the village itself. Girls, therefore, are relatively better informed about such immediately meaningful facts than about remote or abstract concepts.

Turning to knowledge of population matters, boys could estimate the population of both the village and India significanlty more accurately than girls. Nonetheless, a mere 18% of boys gave the village population correctly and only 25%, that of India. Estimates of India's population ranged from 2000 to 700 million, showing the lack of comprehension of this concept by rural adolescents.

With regard to the remaining two questions on population, namely (1) the desirable population trend for India and (2) the present trend, it was predicted that male and female awareness would be similar, since both boys and girls had some exposure to family planning ideas in the village. As Table 9 shows, this was in fact the case. Female adolescents thus displayed considerably more understanding of population problems than of more general matters, indicating, perhaps, the greater relevance of this subject to village girls.

Discussion

We are now in a position to answer the questions at concerning the impact of education upon the attitudes, ideals and knowledge of rural adolescents, particularly females. Education is significantly associated with progressive, modern attitudes and future expectations as well as general knowledge.[13] Personal family size ideals, and perception of actual fertility and mortality patterns in the village, are also significantly lower among educated adolescent females. On the subject of present population trends, however, no significant differences were found between educated and less educated girls, indicating the informal yet effective spread of family planning communication at the village level. This illustrates the possibility of population learning in the absence of formal education; thus, more intensive campaigns should be devised, stressing not only the availability and use of contraceptive methods, but also the role of family planning for personal and national well-being. Female instruction on the life processes from menstruation to menopause could also be incorporated. Among rural youth, such programs could find a ready, receptive audience.

From our analysis, a number of problems in rural education become apparent. In the first place, there is a wide disparity not only in school enrolment between male and female children but also in the retention of the concepts learnt. Even among boys and girls with similar education, boys are significantly more knowledgeable about world affairs. This can be attributed to the lack of salience of such questions to rural girls whose opportunities and scope for outside contact is limited. On questions of greater personal relevance, giris are not significantly less informed than boys. This indicates the importance not only of advancement in female education, such as the Minimum Needs Programme proposes, but also the need for change in the female social role. Girls, and rural society as a whole, must become conscious of the many inequalities between the sexes—male dominance, the low age at marriage for females, dowry, bigmay, desertion by husbands and other forms of maltreatment after marriage—and of the need for personal action and commitment in their abolishment. Such problems should be openly acknowledged and discus-

13. It should be noted that, following other commentators on the education-modernization interaction, the direction of the relationship has been assumed : i.e. that education helps to produce modern attitudes, ideals, etc., rather than the other way around. It is also possible, though perhaps less likely, that modern factors are actually prior, leading to greater pursuit of education, i.e. a relationship opposite to that inferred here.

TABLE 9-COMPARISON OF ANSWERS OF MALE AND FEMALE ADOLESCENTS ON DESIRABLE AND PRESENT POPULATION TRENDS FOR INDIA : PERCENTAGE DISTRIBUTION

Population Trend	*Males*	*Females*	*All respondents*
Desirable			
Rapid growth	21	*22*	*22*
Slow growth	61	30	53
No change	18	28	25
Nagative growth		0 0	0
Toia) percent	100	100	100
No. of respondents	33	68	105
Chi sq. = 1.41, d.f. = 2 (not significant)			
Present			
Rapid growth	55	46	49
Slow growth	40	39	39
No change	5	14	11
Negative growth	0	2	1
Total percent	100	100	100
No. of respondents	38	65	103
Chisq. = 1.21, d.f. = 6 (not significant)			

sed in schools.

Educated girls have lower fertility ideals both for society as a whole and for themselves. Also, a great deal of ignorance prevails about processes such as menstruation, sex and reproduction, even among the more educated youth. Without change in prevailing conditions of false beliefs and superstition concerning these matters, fertility reduction, at early ages at least, can hardly DB expected. For girls to put their low fertility ideals into action by means of intelligent decisions on birth spacing and fertility limitation, they must understand the basic facts of reproduction. Since parents are reticent to discuss such matters with their daughters, they should be incorporated as a compulsory part of the teaching curriculum, along with related subjects such as health and nutrition.

The non-rural bias of village education is also apparent, Educated girls are

more likely to prefer husbands engaged in urban, non-agricultural occupations. Unfortunately, there is a gap between the desired and the potential—in spite of rising aspirations, economic opportunities are limited and rural youth are often unable to attain their goals. Thus while a broad general education is no doubt important, more thought should be given to adapting rural education to local needs and circumstances. Part of the academic curriculum, for example, could be devoted to teaching crafis to the students, as well as skills in managing small-scale business enterprises. This would provide a background for the possible development of village industries. Moreover, virtues of rural life could be emphasized, such as the lack of pollution, open spaces and peace of mind which cannot be found in the city.

Finally, it seemed that the quality of education imparted in rural areas is rather inferior, in that general knowledge, even of educated adolescents, was surprisingly limited. Thus, tbe importance of raising the quality of education generally (another aim of the Minimum Needs Programme) becomes apparent. Moreover, greater emphasis on broad social problems and development goals could be usefully combined with this approach.

To conclude, this study, though exploratory in nature and using a limited sample, tentatively proposes a twofold answer to the question of the importance of education for social change and population learning among rural adolescents:

(1) Education plays an important role in shaping modern attitudes, ideals and behaviour among rural adolescent females.

(2) On the other hand, formal education is not a prerequisite of population Knowledge intensive family planning Campaigns can be independer effective.

Thus while increased government support in the area of education is fully justified, separate efforts are desirable for the spread of population awareness and family planning communication.

References

1. **Altekar. A. S., 1938,** ***The*** *Position of Women in* ***Hindu*** *Civilization,* **The Culture Publishing House, Benares,**

2. Chahill, R., 1972, Rural elite : between tradition and modernity, pp. 84-91. In : Indian Social Institute : *The Indian Family in the Change and Challenge of the Seventies: Selected Papers of a Seminar Organized by the Family Life Centre of the I.S.I.*, New *Delhi*, Sterling Publishers, New Delhi.
3. Dandekar, K. and Bhate, V., 1976, *Socio-economic Change During Three Five-fear Plans (Based on a study of rural communities during 1953-1966)*, Gokhale Institute of Politics and Economics, Poona.
4. India, 1973, Planning Commission, *Draft Fifth Five Year Plan 1974-79.* Government of India Press, New Delhi.
5. Poffenberger, T., 1971, Population learning and out-of-school youth in India, *Studies in Family Pluming. 2*, 171-175.
6. Pohlman, E. and Rao, K. S., 1968, Children, teachers and parents view birth planning. I. Plan of the study as a whole, and data for teachers, *Journal of Family Welfare*, 15(2), 59-68.
7. _____ 1968, Children-, teachers and parents view birth planning. U. Children's family size preferences and their reasons, *Journal of Family Welfare*, 15(3), 54-66.
8. Pohlman, E., Rao, K. S. and Khullar, S., 1969, Children, teachers and parents view, birth planning. TV. Marriage age preference and reasons for preference, *Journal of Family Welfare*, 16(1), 57-66.
9. „_____,____and Bhatnagar, K, M., 1969, Children, teachers and parents view birth planning. V. Birth timing and spacing preferences and reasons for preferences, *Journal of Family Welfare*, 16(2), 58-64.
10. Whelpton, P. K., Campbell, A. A. and Patterson, J. E., 1966, *Fertility and Family planning ing in the United States*, Princeton University Press, Princeton.