

Demographic Studies in Education and Population Education

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INTRODUCTION

Demographic studies in Education and Population Education have occupied a centre stage position in view of the increasing recognition being accorded to the linkage of demographic issues to the citizen's right to life with dignity, on the one hand, and the role which education can play in empowering the citizen to make rational choices in matters of family size, on the other.

The Census Surveys of 1981 and 1991 have triggered signals of alarm at the rapidly growing population in India. The decline in the sex ratio (1971-930; 1981-933; and 1991-929) has placed in sharp focus the dehumanising impact of such practices as female infanticide and the amniocentesis tests, on the one hand, and the widespread neglect of the girl child, on the other.

While demographic studies have generally been concerned with fertility, mortality, labour-force participation and structural distribution of population between age-groups and geographic areas, knowledge-generation processes as reflected in available research have advocated support for the inclusion of additional issues such as gender and malnutrition as significant variables.

The National Health Policy, as adopted by the Indian Parliament in 1983, laid down certain targets for balanced population growth. These

included the following:

Specific issue

Targets to be achieved by A.D. 2000

Current level of achievement

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|----|------------------------|-------------|----------------------|
| a) | Population Growth Rate | 1.2% | 2.03 % (1989) |
| b) | Crude Birth Rate | 21/thousand | 30.6/thousand (1989) |
| c) | Crude Death Rate | 9/thousand | 10.3/thousand (1989) |
| d) | Infant Mortality | 60/thousand | 91/thousand (1989) |
| e) | Couple Protection Rate | 60% | 44.1% |

According to current projections, it should be possible to bring down the Crude Birth Rate to 9 per thousand and infant mortality to 60 per thousand as a result of improvement in the quality of services. However, it does not seem possible to achieve a substantial reduction in the

other areas in a short span of time.

Social comment on the policy and programme responses to demographic issues has substantially grown in the last few years. There is growing dissatisfaction with the manner in which the family welfare programmes continue to lay emphasis on the targets in contraceptive prevalence and acceptors of terminal methods.

The implementation process of the various family welfare programmes, including population education programmes, has been beset by a number of shortfalls, both in terms of outreach and in terms of quality of services. It is being increasingly felt that the outreach services would receive much greater support with community participation through a process of information dissemination, education and social mobilisation. A committee appointed by the National Development Council has recommended the adoption of a differential approach in family welfare programmes to meet area-specific requirements. Special attention has been favoured for such states as Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh in terms of accelerating the pace of socio-economic development, removal of the gender gap in literacy and health care, diversification of the roles of women to support their enlarged participation in the remunerative employment sector. The Government of India have favoured the decentralised planning approach for meaningful responses to area-specific social and health indicators, especially in the 90 districts where the Crude Birth Rate (CBR) is relatively higher than the other districts.

The high rates of infant, child and maternal mortality continue to have an adverse influence on any educated analysis concerning the need for a small family. The quality of health and family welfare services, which varies markedly from state to state, continues to raise nagging doubts in the minds of families placed in geographic clusters characterised by poverty and backwardness. While the birth rates have come down in states like Goa, Kerala and Tamil Nadu (15.7 to 23.1 per thousand), the four large states

of North India cited earlier continue to remain in the zone of higher birth rates (34.2 to 37 per thousand).

Both the government and the social activists recognise the need to respond to social factors, including female literacy, age at marriage of girls, status of women, strong male-child preference, employment of women, communication between husband and wife, etc. The role of the community in generating pressure for improvement in the quality of health and social services is also being increasingly recognised.

DEMOGRAPHY-EDUCATION INTERFACE

The above-stated scenario appears to have received meaningful responses from the knowledge-generation processes insofar as the demographic issues continue to have an interface with education both at the macro and micro levels. Education is being increasingly recognised as a significant variable, among a few others, having substantial bearing on both demographic issues and demographic goals. The educationally backward states and districts seem to have by and large adverse demographic, social and health indicators as well. It is now being argued that the achievement of demographic goals in India would largely depend on the extent to which socio-economic support is available to the process of empowerment of the family in tribal, rural and urban slums. The empowerment of the family is manifest in access to information concerning development opportunities for it in its immediate ecological and socio-economic contexts and in the decisions which the family is called upon to take for seeking maximum gains from the process of planned development. The family located in these often neglected situations needs information, education through organised interaction in its own contexts and language, and services supporting such development information. Education is thus expected to orient itself to a movement for change in the family and articulation of the need for a change in the models and strategies for development planning.

Population Education

Population Education has been steadily growing, both in the curricular domain and the co-curricular domain. At the school level, it has been seen in terms of incorporation/integration in the existing textbooks of population values and concepts. The textbooks pertaining to various knowledge areas have thus shown sensitivity to population concepts and values either in the form of inclusion of certain learning units or in the form of rewriting of existing lessons with a view to internalising these concepts and values in the socio-cultural contexts of these lessons. Again, at the school stage, there have been attempts to provide community-based experiences for students by organising field visits and by creating opportunities for them to study and analyse life in various socio-economic and demographic groups.

Population Education in the Adult Education programme seeks to promote interaction among adult learners on critical issues relating to population and quality of life. Such interaction would provide the adult learners with a body of information and data, offer them opportunities for analysis of such information and data in both synchronic and diachronic conditions, and, ultimately enable them to take decisions concerning family life. Population and quality-of-life issues have found place both in the literacy materials and in oral interactions planned with and by the group of adult learners.

Focus On Adolescents

Adolescents are beginning to receive much greater attention in educational programmes planned in support of the national demographic goals. Several studies have documented discrimination against girls causing, in turn, deprivations in terms of growth opportunities. It is being recognised that there are adverse psychological consequences for girls placed in adult roles from a very young age.

The adolescent learners constitute a group

which is significant in terms of size, age (close to family formation), and the demonstrative influence it has on others in the same age-group already having entered work situations and those in the older age-groups with their pre-fixed socio-cultural prejudices and preferences. Apart from being learners, the adolescents have also cast themselves in the role of change agents for formation of attitudes favourable to better family life. They form part of the vast Indian network of such change agents. This network includes extension workers in the health sector (Traditional Birth Attendants, Auxiliary Nurse Midwife, Aanganwadi Worker, etc.), multipurpose workers in the rural development sector, worker motivators in the organised industrial sector, Mahila Mandal members in the social welfare sector, mass media functionaries in both modern and traditional media, etc.

This has been possible largely on account of a shift from the earlier "clinical" approach to achieving demographic goals to an "extension" approach wherein Information, Education and Communication have begun to receive critical attention. This shift in approach to extension education through use of various communication media has been guided by the realisation that decisions (taken by individuals, families and communities) based on scientific information would generate more qualitative participation on their part. Access to development information in their own situations enables people to take decisions which tend to be supportive of demographic goals envisaged for the entire nation. People begin to take greater interest in family life education since it enables them to think of and work towards a better family life.

Information, Education and Communication (IEC)

Knowledge-generation processes, as evidenced in published research, indicate that the IEC strategy is beginning to receive substantive research attention both at the level of policy formulation and programme management. As

part of the knowledge response to the issue, the need for trained IEC personnel in the field, educational materials sensitive to local socio-cultural contexts and oriented to specific audience groups, and adequate and working audio-visual equipment at rural centres has been repeatedly articulated.

NATIONAL STATUS OF RESEARCH

Research in demographic studies in education generates knowledge which is supportive of efforts to understand the interface between demography and education and the consequences it is likely to generate for a just and equitable development process. Such research enables us to undertake efforts at education-demand projections, impact of education on the demographic situation and vice versa, education as an integral element of the entire social services sector, and the structural distribution of population and its impact on the embedded values in development planning in terms of sensitivity to gender, child rights, etc.

Research in Population Education enables us to understand the changes created by an organised educational effort in the young learner; such changes may be observable in terms of knowledge, attitudes and behaviour. It also enables us to work towards better ways of planning and management of such educational efforts through a meaningful deployment of human resources, communication strategies, and aspects of monitoring and evaluation.

A set of forty research studies have been identified for review in this chapter. These studies represent a period of about five years. Some studies were completed much earlier; these could not, however, be included in the Fourth Survey of Research.

Studies relating to demography-education interface (in all, three) provide some general insights into the conditions prevalent in some of the states in India.

Family planning studies (in all, six) deal with two sub-areas: small family size, and responsible parenthood.

Population Education research (in all, thirty-one) seems to have grown in India along the lines of traditional research in education. Such studies could be categorised in terms of Attitude studies (in all, twenty-six), Learning Material studies (in all, four), and Evaluation of School Level Population Education programme (one). The Attitude studies could be further categorised in terms of studies dealing with school students (in all, seven), teachers (in all, nine), parents (in all, three), college youth (in all, two), community members (in all, one) and workers (in all, three).

DEMOGRAPHY-EDUCATION INTERFACE RESEARCH STUDIES

Two of the three research studies in this section deal with the nature and effect of educational expansion on population growth (Karajgwaker 1989) and the impact of population growth on educational development in Bihar (Verma, A. 1989). Karajgwakar (1989) uses a self-constructed questionnaire to assess the impact of educational expansion on population growth. Families with formal education tend to have fewer children; have higher age at marriage than families with illiterate parents. Similarly, families which are engaged in agriculture tend to have more children than those in other vocations.

Verma, A. (1989) also uses a self-constructed questionnaire to assess the impact of population growth on educational development in Bihar. The researcher finds that after a certain level of education no significant differences exist in attitude towards family planning on account of income, educational level, religion, sex, age, marital status and size of family. What is that threshold level of education where these variables cease to exercise any influence? The researcher does not seem to analyse the question, though the choice of sample for the study (college students) provides some clue to it.

The third study deals with the socio-psychological determinants of urban fertility. Reddy, J.P. (1982) has compared the fertility

behaviour of non-slum and slum dwellers and the value they attach to preference for the male child, level of modernisation, age at marriage of females, etc. Basing the study on a self-made interview schedule, the researcher notes variance in fertility behaviour in slum dwellers due to the perceived economic capacity to raise children, among other factors. The fertility behaviour among the non-slum dwellers is characterised by, among other factors, value of son, education of husband, perceived economic capacity to raise children, etc.

The studies provide varying comments on the socio-psychological and demographic factors. Reddy, J.P. (1982) seeks to state that the demographic factors offer meaningful insights into the fertility behaviour of slum dwellers, whereas socio-psychological factors tend to interface with the demographic factors in the case of the non-slum dwellers.

Family Planning Research Studies

Research studies in this section deal with attitudes to small family size (in all, four) and responsible parenthood (in all, two).

Kundu, A.S. (1988) assesses the psychological attributes of adopters and non-adopters of family planning, psychological correlates of high and low fertility, and psychological factors associated with spacing and terminal methods. The researcher, using a self-constructed socio-demographical schedule and other tests, finds significant differences among adopters and non-adopters, and variability in size of family, age at marriage, and early and late adopters.

Sharma, P.C. (1990) offers a meaningful insight into the area of inter-spouse communication, while comparing the attitudes of students and workers. The researcher points out that both male and female workers assign the money management role to the male members (husbands to be specific), while the students are inclined to favour equality between husband and wife.

Sodhi, H. (1992) assesses the impact of the Adult Education programme on the women learners' attitude towards small family norm. The women learners in the age-group 26-35 years seemed to have a more favourable attitude towards the small family norm as compared to women in the 1-25 years age-group. Education did seem to promote a positive attitude towards the acceptance of the small family norm.

Sodhi, T.S. and Multani, N.S. (1990) have studied the attitude of middle-aged Scheduled Castes parents towards the population problem. Using an attitude scale, the researchers found that differences in attitude seemed to exist in terms of levels of education and place of residence (urban-rural).

Lakshamma, T. (1989) finds that education of the mother is a helpful predictor for responsible parenthood. Panda, E. (1989) suggests that while knowledge concerning child rearing increases through educational levels/grades, experiences do not seem to be influenced by increase in knowledge.

Research in Population Education

Despite large scale educational intervention, population education is still a development programme. Attempts to give it a theoretical base and critically examine it through empirical and descriptive research methodologies is yet to grow substantially. The main focus in research appears to be in the area of programme management and the impact that such educational interventions have made on schoolgoing learners and adult learners. Research in population education would thus need to show adequate sensitivity to the nature of educational interventions and their relevance to the day-to-day realities of the learning situation in schools, colleges, and the literacy centres. It would also need to relate to the differentials in demographic factors as these pertain in different regions of the country. At the moment, research in population education seems to be confined to the universal parameters of the educational situation—the attitudes of the

persons involved in the programmed, educational materials, and the IEC strategies.

It must be stated at this stage that the limited body of research in demographical studies in education and in population education could be due to the recency of interest in the subject. The school level population education is barely ten to fifteen years old; the other two programmes—higher education and adult education—have yet to acquire a desired measure of infrastructural adequacy and programme planning processes.

Kanitkar, R.K.T. et al. (1990), in their evaluation of the National Population Education Project at the school stage, have also drawn attention to research and evaluation as a weak component in the total programme. The comment should apply to all studies relating to the school-based programme included in this chapter. There appears to be a critical need for an agenda for Priority Research Needs in Population Education among the various population education projects.

Despite these limitations the available body of research offers some very meaningful insights into the knowledge, attitudes and practices of the learner group, the value preferences of the educators and other programme managers, and the growing concern for the education of the adolescents in matters of sexuality. The available body of research, with its limited coverage, draws attention to some critical or priority requirements of research in the near future.

The studies under review reveal the following:

- (i) A large number of studies under review in the present chapter seek to develop understanding concerning the knowledge, attitudes and practices of students, teachers, parents, industrial workers and extension functionaries working at the grass-roots level.
- (ii) The choice of samples for such studies is happily expanding to rural and tribal communities, from the initial concentration on the urban populations.
- (iii) While some researchers have made use of standardised tests (knowledge, attitude, modernity, etc.), most researchers are still inclined to use self-constructed interview schedules, tests and scales.

Knowledge and Attitude Studies

Research studies relating to the baseline level of knowledge and attitudes prevalent among different segments of the learning population—school-children, college students, and the adult learners—are beginning to find interest in the micro situations. Each researcher has drawn on a small segment of population and attempted to assess or assume a given level of knowledge and attitudes for the purpose of assessing the impact of the knowledge or attitude variable. However, there have yet to be research attempts on baseline levels of knowledge, sources of information and transmitters of information at the macro level. In the Indian context, the macro situation must be seen at the level of a district or sub-district since even at this stage there are in evidence marked heterogeneities among the population.

Teachers

The attitude of secondary school-teachers towards the population problem has attracted much greater research attention than the attitude of teachers working at the other levels. Akhtar, S. (1988) found that while knowledge had significant relationship with the teachers' attitudes towards population education, the income levels of teachers and the degree of exposure to mass media were significant variables in the process. Kumari, S. (1991) also found that knowledge was significantly related to attitudes towards Population Education. The teachers and demographers seemed to favour it most. Among the parents, the female parents seemed to be much more positive than the male parents. Kulshreshtha, S. (1990) concluded that the younger female teachers (untrained and unmarried) seemed to have a more favourable

attitude towards Population Education than the others.

Aggarwal, S. (1990) found that the caste variable seemed to be significant in the formation of attitudes towards Population Education; the teachers belonging to the high castes had a more favourable attitude than the others.

Students

Murthy, M.S.R (1991) found that caste and religion were significant variables in concept formation concerning sex and reproduction. The caste Hindu girls seemed to have better perception and concept of sex and reproduction as compared to Harijan and Muslim girls.

Abraham, U.P. (1991) found that religion, sex and education are significant variables in performance scores on knowledge test. Amrithagowri, R. (1983) found the place of residence (urban-rural), education and income as significant variables in awareness, attitudes and skills. Kathuria, R.P. (1988) found mother's education to be a significant variable in population awareness.

Patnaik, R. (1989) noted that the level of education seemed to be a significant variable in determining attitude towards population education. Surprisingly, doctors and students seemed to have expressed unfavourable attitudes towards family planning education and mass awareness education in this regard.

George, K.V. (1991) noted that sex as a variable among youth had no significance among the range of social aspects; it did, however, seem to cause variation in perception on sex education in physical, physiological and psychological aspects. On a further sub-division of social aspects, it was found that residence, family size, socio-economic status and religion did cause variability in perception among both boys and girls.

Extension Functionaries

Reddy, V.L.M. (1990) found that population education functionaries at the college level were

largely male, married, with two children, and adopters of spacing and terminal methods of family planning. Among the adult education instructors, Thambidurai, K. (1989) found that marital status and caste were significant variables in population awareness and attitudes.

Teaching-Learning Materials

Kanitkar, R.K.T. et al. (1990), in their evaluation of the National Population Education Project, have reviewed the teaching-learning materials used in the school-based population education programme. They found that while aspects such as health, environmental resources, nutrition and population were well covered, family size and its implications were not so well-covered. The teaching materials debate has centered round the choice between "direct" and "indirect" approaches on the one hand and "integration" and "addition" of population concepts among the existing textbooks on the other.

The "direct" approach to the choice of content for Population Education would involve the linkage of its basic concepts to the National Family Welfare Strategy. The "indirect" approach would dictate the linkage of issues relating to quality of life of the people to the population concepts in the educational process. The school stage of education appeared to be inclined to favour the "indirect" approach, hesitant, as it were, to touch socially explosive issues like adolescent sexuality, AIDS, etc. Those entrusted with the task of preparation of teaching materials seemed to posit faith in adding lessons relating to population concepts in the educational materials, rather than integrating population concepts and values in the existing educational materials in the form of a backdrop of locally relevant experiences and values.

Evaluation

Kanitkar, R.K.T. et al. (1990) have also devoted some attention to the evaluation of the National Population Education Project; in the process, their study has provided some insights into the management of any large-size project. Lack of

trained personnel, inadequate attention to certain aspects of the programme (such as family size and its implications), and lesser emphasis on co-curricular activities as against curricular activities. These findings have been articulated in various efforts aimed at monitoring the progress of the various population education projects.

INTERNATIONAL STATUS OF RESEARCH

Research studies undertaken in the 1960s and the 1970s have endorsed the view that individuals communicate more freely and frequently with persons who are close to them. Friends and relatives have often exercised considerable influence towards acceptance of new knowledge and practices. Based on such a generalisation, Population Education, in terms of the source of knowledge and the receivers of such knowledge, is likely to be most effective in situations of shared common values—religion, language, patterns of aspiration, social class, etc.

In the formal educational system in India, the sources of knowledge are the teacher, the physician, the peer group and the media. Apart from the authority that flows from the expertise acquired, the social class distance tends to adversely influence empathy and identification. There has been a general lack of research in the role of peer group communication, community-based opinion leaders, religious leaders and the grass-roots level extension educators, including the Auxiliary Nurse Midwife, the Traditional Birth Attendant (*Dai*), link-workers, friends, relatives and neighbours in fostering attitudes of modernisation among the target audiences for educational efforts.

Research studies have also suggested that interpersonal (both group and individual) communication can be more effective than a one-way communication in changing attitudes and behaviours. The effectiveness of this approach is probably a function of individual attention, empathy and willingness of the receiver.

The dominant concerns in international research in Population Education have been with Information, Education and Communication issues; such issues have covered the channels of transmission and reception, sources of knowledge concerning population socialisation, gaps in urban-rural perceptions on account of variability in access to scientific information, and the manner in which mass media can be supportive of the interpersonal channels of communication in formal and non-formal public education programmes.

RESEARCH NEEDS

It has already been pointed out earlier in the chapter that an agenda for priorities in research in population education would need to be formulated to ensure the coordinated growth of research in this area of knowledge and practice.

Population issues would need to be made part of non-formal and informal education situations to reach out to the out-of-school youth. This would necessarily require the growth of the co-curricular activity base in the formal stage of education and extension activities in schools and colleges, on the one hand, and the community based organisations, on the other.

Programme management still appears to be one sector which could benefit a great deal from operations research in population education with a view to gaining insights concerning solutions to problems arising out of setting up large infrastructures for a nation-wide programme and achieving coordination among the various agencies managing the programme.

Manpower training is yet another area where the available research seems to reveal too little to make any useful application base. Training methodologies in Population Education have yet to go beyond lectures and discussion, or, at best, garnished with a tinge of field visits and case studies. These have yet to be tested against the activities that the manpower is expected to provide support to and the sensitivities it must sharpen for such manpower to make population

goals a part of their lives.

The value of research in family welfare communication or population communication is steadily growing along with the research on population issues placed in educational settings. In curricular contexts, available research has recorded a growing interest in the teachers, the students and the learning materials. Educational research has yet to evince interest in population communication or in Information, Education and Communication (IEC). Curiously enough, the IEC aspect continues to attract efforts in applied research from non-university based research agencies as a response to an increasingly felt need of the family welfare projects in different states in the country. The next five years' review of research in population education should also include a review of research in population communication—both university based and non-university based. Population Education research in India is yet to demonstrate adequate sensitivity to the ongoing debate on population policy and goals and the manner in which population issues should be linked to the quality of life of the people. We seem to know so little about the beliefs and attitudes that are tending to support female infanticide in some parts of the country. The traditional explanation in terms of son-preference or the cumulative financial pressures on the birth of a girl are certainly not sufficient explanations of this phenomenon. There would certainly be a lot more to it than that; researchers need to explore it through case studies of women who have been compelled to take recourse to this evil practice with a view to finding out the content and cultural ethos that needs to form part of the instructional package for the mothers of tomorrow.

Similarly, we seem to know very little about the factors which have helped reduce the fertility span of young women in the urban organised sector, while the same has shown slow paces in the rural sector. Education and participation in work may be surface level explanations for this phenomenon; there appears to be much more to it.

Despite the fact that print materials have considerably improved in quality and content, there is still insufficient research on the subject of curricular load being passed on to the already harassed teacher through a process of addition of lessons representing population education content. The teacher in such settings tends to attach secondary importance to such content, guided by the pressures of examination, and recommends self-reading to the students. If addition, as a curricular strategy to represent population issues in the educational programme, is not paying off, there is need to undertake experimental work in preparation of population education materials through the strategy of integration into the existing learning materials without adding to the number of lessons or the number of pages. Population concepts would thus form both a value and an experiential base for such materials.

Would family life education or sex education find acceptance in our school system? Would adolescent sexuality be treated as a legitimate concern for the population-education content in our schools? Lack of such programming in the form of action research continues to deprive us of our response to the problem of the growing population in a direct manner.

SUMMING UP

Population Education Research is still in its infancy in the Indian educational scenario. It is considerably influenced by the nature of research studies in other sectors and sub-systems of education with KAP studies predominating and marginal attention being paid to the IEC studies.

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