Chapter I

INTRODUCTION

1. The Problem of Research

National development plans of several developing countries have emphasized that rapid population growth acts as an impediment to development. These countries have formulated national population policies to curb the rate of population growth. Recognizing the potential of education in providing solution to this problem, some countries have worked out population education policies and programmes. Population education is thus being recognized as an important component of education and is being considered in some countries as an integral part of the educational planning and budgeting. It is envisioned that population education will contribute to the achievement of national development goals, particularly population policy. ¹ It is increasingly being realized now that there must be systematic attempt to educate the youth, both in the formal school system and outside it, to bring home to them the grave dangers of population growth.

The Draft World Plan of Action has emphasized that educational institutions, both in the more developed as well as less developed countries should expand their curricula at all levels to extend the study of population dynamics and policies including, where appropriate, education in family life and responsible parenthood.

New orientations in attitudes and behaviour have their strongest roots not in the adult adoption behaviour but in the early formative years of life. This is particularly so in the context of personal, social and cultural influences where a conscious or unconscious response to different educational stimuli can heighten awareness of various phenomena. Such stimuli may either be provided by home and community environments or school and formal institutions.²

The innovation of bringing home to youth a type of knowledge not within the traditional boundaries of educational curricula and to relate it positively with their lives and thinking involves a vital and imaginative approach to the whole range of subjects to be covered (the teaching techniques demanded by problem-solving presentations; the classification of the age groups and the grading of materials to suit them; and the practical questions of curriculum infusion or units;

teacher-training and educational administration). A reorientation and redefinition of the content and structure of education system is required in order to create a sense of social responsibility among youth, emphasize national development needs, avoid imbibing a sense of elitism among them, and offer useful and valuable as well as socially and culturally relevant values.

We know that in most societies, young people between the ages of 14 and 24 years of age, in or out of educational institutions can make or have made for themselves a series of decisions which have a major impact on the population growth and the pace of urbanization. In a cumulative way, these decisions determine individual and family population life-cycles and very much determine an individual's or family's quality of life.

In the above backdrop, the recent efforts to evolve and introduce education in the dynamics of population for the younger generation assume a crucial role. Obviously, the young people of today are tomorrow's parents, and they have a right to acquire knowledge and awareness of what the future holds.

5. Ibid.
holds for them. Then again, in countries with rapid population growth, the young form a high proportion of the population and therefore, are an important sector which must not be kept in ignorance.

Population awareness and sex education are of vital importance as they constitute topics that are fundamental for the understanding of current population problems and for developing a positive attitude towards small family norms especially among youth and young adults.

It has been observed that the question of sex when discussed with young people or any instruction pertaining to it when given to them, usually arouses suspicions, fear, prejudice, and doubt among the olders, mainly parents and teachers. The various issues related to sex are often discussed in an impressionistic and closed manner with overtones of out-of-date social morality expressed in the form of the so called pragmatic concern for keeping children uncontaminated by the knowledge of sex.

In recent years, many studies have been conducted on various aspects of sex such as physiological, psychological,

anthropological, sociological, etc., since sex has been recognized as a basic biological and strong instinctual need that derives a person to a certain specific behaviour. This strong, natural impulse of man or woman, in the absence of proper knowledge of sex and unless regulated, may eventually give way to unhealthy sexual habits which in turn, may lead to socially disapproved sexual perversions. As long as an individual is controlled by the norms and set standards of a society in which the individual lives, he or she should be able to adjust in a healthy socially approved way.

The lifestyle of an individual is well reflected in the manner in which the individual strives to accomplish relationships with others and particularly with the opposite sex. The nature of the striving depends largely on his or her knowledge and attitude regarding sex. With a growing awareness of the significance of sex education, particularly where sex has been considered as taboo for centuries, it would be essential to determine the levels of knowledge and attitude towards sex, so as to help curriculum planners to structure existing curricula on sex education or to find out new openings for introducing sex education in a socially desired way.

10. Ibid.
Among the new generation of Indians, traditional taboos are crumbling before the new onslaught. Inevitably, the new sexual trends are being recorded in revealing surveys on male and female sexuality in India. While the younger generation looks upon the changed attitude towards sex as an emancipation, the elders regard it as an erosion of values. In fact, most parents find themselves unable to comprehend the dramatic changes in their children's behaviour; and as the generation gap really widens, conflicts at home are common.

Of late, mass communication has been widely used in the field of family planning with a view to educating the larger population --- through the radio, television, movies, posters and advertisements in newspapers and magazines. But it is very likely that some population to which the message is not

11. Chengappa, Raj, "The Changing Scene," India Today, Vol. X, No. 23, December 15, 1985. In 1983 sexologist Narayan Reddy sent out questionnaires to 9,000 students in 9 Colleges in conservative Madras and surprisingly 1,200 (or 11 per cent) of the students replied. The replies shattered the myth of southern conservatism. When India Today (Magazine) conducted a poll in the same city in 1978 only 11 per cent of the students admitted having pre-marital sex; in Reddy's survey the number had risen to an astounding 52.4 per cent. Further, slightly over half said they learnt the facts of life from friends and books and only a few from parents.

12. Ibid.
targeted may also learn about the methods of contraception etc. This might lead to the abuse of the knowledge. It is to this type of risk that the present day youth are likely to fall in. Besides, they may have many unexpressed and unclarified doubts and a temptation to test their knowledge. It is at this stage that an intervention is desirable so that what is misconstrued could be rectified and proper knowledge be imparted.  

As such, the scope for population education has been demarcated into the major categories of formal and non-formal education, the latter including the out of school and general community network. Already the immense potential of population education has led to a spill-over from the groups who are the normal targets of educational measures, namely, children, adolescents and university youth, to young adults falling into many other sectors such as industrial workers, and those influenced by various community organizations like welfare centres, women's associations, youth clubs, co-operatives, agricultural societies etc.  

Although the entire youth is of utmost importance and needs proper education, yet out-of-school population

of youth is widely distributed and may not be easily amenable for the purpose of studying. Alternatively, in-school youth which forms relatively an organized group becomes the main focus. Even out of this large dispersed group, the potentiality of university youth to enter into family life after the completion of their studies, makes it imperative to look into this group and examine their behaviour towards population education and sex education.

The present study is an attempt in that direction.

2. Conceptual Framework

A controversial issue often debated and discussed is whether sex education is different from population education or both are identical. A lay person's belief is that sex education has been re-christianized as population education, whereas scholarly pursuits have indicated that population education and sex education are altogether different concepts. This controversy necessitates a clarification of these unidentical though closely related concepts.

(i) Population Education

The subject of population education is claiming the attention of different disciplines such as Statistics, Economics, Applied Economics and Sociology. In these
circumstances, population education may convey different meanings to different academicians. Generally speaking it may mean, making people aware of the population problem and educating them to recognize the economic significance of a planned family.  

However, the correct concept and connotation of population education still appears to have not been grasped by many. Population education involves a complete programme of education designed to help people understand the nature, causes and consequences of population growth. The words "population" and "education" in this context evoke the totality of the problems of life. It is a programme of education in changing socio-cultural styles with available economic resources.

"After over a decade of undertaking population education programme in quite a large number of countries in Asia and the Pacific, population education is still suffering from identity crisis. People are still asking, what is population education? Is it family planning? How does it differ from sex education? Is it another name for teaching demography? Is it another term for population studies?"

16. Ibid.
"To many people, population education is family planning, to some others, it is euphemism for sex education, further to many academicians, population education is synonymous to the teaching of demography or population studies."

"Taken in isolation most of the concepts subsumed under population situation are the concerns of demographers, those on human reproduction of medical practitioners, and on family planning, of those who want to arrest population growth through birth control. Population education, however, is an educational programme designed to study the population situation, human reproduction and family planning and their impact on quality of life in the family, community, nation and the world."

Population education, therefore, is not family planning as latter is associated with such terms as birth control, birth planning child spacing, fertility control/regulation, planned parenthood, etc. The fact that population education is being juxtaposed with family planning stems from the

18. Ibid.
observation that many population education programmes especially in the out-of-school groups are, addressing serious population problems arising from unplanned population growth and from massive numbers, posing grave danger on the carrying capacity of some countries. However, this is not to say that family planning has no place in the population education programme. Family planning as a means to enhance quality of life is very much a part of population education programmes in many countries. 20

Population education is not sex education, as the latter is mainly concerned with human sexuality reproduction and often treats the ethical issues relevant to sex related morality. Again, many population education programmes include sex education but are certainly not to be used interchangeably with population education. 21

Population education is not demography, as the latter deals with "the qualitative study of human populations and the changes in them that result from births, deaths, and migration." 22 Again, demographic contents are part of population education programme as quantitative changes of human population affect quality of life.

20. Cruz, Leonardo de La, op. cit.
21. Ibid.
Population education is not population studies as the latter is more academic and research-oriented. It "covers the body of knowledge concept and theories which describes and attempts to explain the dynamics of human population and their relationship with the social, cultural, economic, political and biological environment" (UNESCO, 1978). Like demography, again population studies is a source of content for population education programmes.

What then is population education? What are its distinguishing attributes?

- it is an educational programme designed to make learners understand the interrelationship among population change/situation, development, and aspects of quality of human life.

- its ultimate goal is to make learners contribute to the improvement of the quality of human life now and in some time in the future.

- it is population problem-centred, tending itself to discovery and inquiry into learning processes.

- it is value laden hence more open to the use of values clarification approach to learning, that is, to pose realistic alternatives, and to enable learner to make sound decision for action on population issues.

23. Cruz, Leonardo de La, op. cit.
- it derives content from demography and population studies.
- it may include family planning and sex education.¹⁴

The National Seminar on Population Education held in Bombay in August 1969 made the following recommendations which have close bearing on the conceptualization of the term.

(a) The objective of population education should be to enable the students to understand that the family size is controllable, that population limitations can facilitate the development of a higher quality of life in the nation and that a small family size can contribute materially to the quality of living for the individual family. It should also enable the students to appreciate the fact that, for preserving the health and welfare of the members of the family, to ensure the economic stability of the family and to ensure good prospects for the young generation, the Indian family of today, should be small and compact.

(b) Students at all levels have a right to accurate information about the effect of changes in family size and in national population, on the individual, the family, and the nations so that this body of knowledge is utilized to control family size and national population with beneficial

¹⁴ Ibid.
impact on the economic development of the nation and the welfare of the individual families.²⁵

Population Education, as the name indicates, has come to be understood as an educational process seeking to change knowledge, attitudes and actions of the people on population matters in such a way that it improves the quality of human life. It includes both formal and non-formal education on aspects like demography (Demo.), biology of human reproduction (BHR), family planning methods (FPM), and socio-economic implications of over and under population (SEIOP). In a way, Population Education is education about the dynamics of human population.²⁶

A much used definition, proposed at a 1970 workshop in Asia sponsored by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) states: "Population education is an educational programme which provides for a study of the population situation in the family, the community, nation and world with the purpose of developing in the students rational and responsible attitudes and

behaviour toward that situation."^27

The 1981 Conference of African Parliamentarians on Population and Development devoted considerable attention to population education. The Conference defined population education as

"an educational programme which helps individuals and groups--- to define for themselves the nature of the problems involved in demographic processes ------ and to determine the means which society as a whole, and they themselves as individuals and/or groups, could use in order to react to those processes and influence them with a view to improving the quality of life, both present and future."^28

Population education, therefore, is essentially related to human resource development. Thus population education is not only concerned with population awareness but also with developing values and attitudes so that both the qualitative and the quantitatives aspects of life of people are taken care of.

(ii) Sex Education

It is a popular belief carried by many people that sex


28. Ibid.
instinct is one of the most strong hungers. We may even say that it gives direction to our character and orientation for building up a total personality. Conflicts arise if this impulse is not harmonised with the individual's other impulses and with the standards and conventions of the society in which he or she lives. It is the function of education to channelise and direct the individual's sex instinct so that it may contribute appropriately to the individual's self development. One of the most important aims of all education should be to help boys and girls to adjust to each other and hence a specific programme of sex education is a must for the youth.29

Regarding the sex education, Kirkendall (1965) states, "The purpose of sex education is not primarily to control and suppress sex expression, as in the past, but to indicate the immense possibilities for human fulfilment that human sexuality offers." Calderone (1969), the Executive Director of Sex Information and Education Council of the U.S., gives two reasons for sex education: (1) children need to be given simple, honest information at appropriate times in their lives, regarding human body and its functioning in reproduction; (2) human sexuality - the quality of being sexual must be

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Schulz and Williams (1969) state, "helping young people to find well thought out and comfortable patterns for expressing their sexuality is the ultimate goal of sex education." According to them sex education refers to human reproductive system, patterns of sexual intercourse, marriage and bringing up their own families.

Sex education is not, and cannot be limited merely to acquiring all the information related to human reproduction and sexuality. It goes beyond information mongering to a more comprehensive development of the individual. Personality development and character training in respect to sex are very important. Sex education is calculated to bring about wholesome adult attitude and behaviour that assure desirable home-making, the establishment and building of families.

Through sound sex education, boys and girls can be made to feel more secure in what it means to be "man-in-the making" or "woman-in-the-making". Sex is so soften considered as something we do, when it actually is what we are. We are male or female-man or woman. And if being man or woman is what we are, then sex education in its broad sense should be


education which helps us to learn about being men and women and becoming what we can become to the best of our ability. Meaningful sex education should recognize sexual development as an integral part of the total personality development of the individual. Therefore sex education is a life long process. It includes the knowledge, skills, attitudes, and values involved in being boys and girls, in maturing into men and women, and in finding one's personal role as a member of one's own sex, in marriage, family life and the community. Sex education is not merely the unfolding of the physiological facts. These facts must be intelligently absorbed to develop a wholesome attitude, a well-balanced emotional life and a well-integrated personality.32

At a programme on "Human Sexuality - counselling and family life education", Dr. Watsa referred to sex as an 'explosive' subject which parents did not want to discuss with their children. He said, not enough attention was being paid to the 138 million youngsters in our country who fell in the age group of 15 to 25. They had to be educated about various sexual matters ranging from masturbation to sexually transmitted diseases.33


Furthermore, the influence of the parents, the school and social milieu contribute to the sexual education of youth. Sexual problems have been for centuries disregarded in discussions among adult people and omitted in talks between children and grown ups. Sexual life has until now been considered sinful by many social milieu. The sacrament of marriage legalises its existence, but even from this point of view it is merely tolerated and finds itself on the margin of social life. This boorish attitude creates a specific atmosphere which quite often exists even at home and influences the psyche of a child. The greatest possible stress should be laid on the need for changing this atmosphere at home and outside it, in the cinema, press and literature as well as in the society as a whole.\(^\text{34}\)

Such education should start early in life and proceed in easy, progressive stages throughout one's life. Our youth should be instructed in the control of sexual impulses as this is responsible for individual behaviour and development. Correct knowledge and understanding of sexual matters should be imparted to children, depending on their age, so that when they grow up to adulthood, they will be prepared to accept the fact that a small limited family invariably produces better citizens, and that therefore, they should have a

wholesome, positive attitude towards sexual behaviour, which is compatible with the demands of the society.  

Development of behaviour on sound lines is a matter, again, of great importance. Teen-agers, in particular, are very anxious to know how to behave and intermingle as they make the transition into the adult heterosexual world. It is very important that the norms of behaviour that an individual youth encounters at home, in the school, college and in society in general, should not be fraught with contradictions. In fact, an important aspect of sex education is to clarify for the young people in schools and colleges, as well as for the out-of-school youth, wherever this is possible as to how they are expected to behave as boys or girls and in relation to the opposite sex.  

It is evident that the educational activities with regard to school children, adolescents, teachers and parents have to be developed on a holistic approach where sexuality and family planning have to be integrated into all other fields of human activity. Sex should not be regarded as a specific item but as an integral part of human life. Programmes related to sex education for parents of prepubertal children and adolescents,  

36. Marker, Nargis S. op. cit.
couples engaged to be married and expectant mothers need to be drawn up. 37

3. Theoretical Framework

Human behaviour is a very complex phenomenon due to the interaction of various factors such as social, psychological, environmental and so on. In order to understand the behaviour of an individual with regard to population education it is desirable to understand some of the perspectives on behavioural change from different fields.

A decision made by an individual reflects the acceptance of change on his or her part. But decision-making is again a complex phenomenon and is a resultant effect of so many factors. An individual in order to make up his or her mind to adopt an innovation, has to do an introspection of his or herself as well as to analyse his or her external environments. The individual attempts to weigh the pros and cons of the innovation before adopting the same. There are positive motives which accelerate his or her tendencies to adopt whereas there are negative motives which retard his or her tendencies to adopt the innovation. The interaction of

37. Sandell, J., et al., op. cit. (It is also now time for our Boards of Education and Universities to formulate comprehensive courses on family planning and sex education and introduce them in the regular curriculum for the training of teachers, doctors, nurses and school and college children.)
these conflicting motives, often result in ambivalence. The individual tends to resolve this by acquiring additional information or knowledge, developing rational orientations and through his or her interaction with his or her environments. He or she reorients his or her goals and values. In the above backdrop, one can say that communication effects produce additional change which in turn affects the direction of his or her decision. 38

Some of the undercurrent feeling, ideas and thinking of an individual are associated with the expectations arising out of a particular action. Therefore, before an individual makes a decision on a particular social situation, he or she has to keep in view the benefits he or she has to derive from that action as well as to the probable consequences, that may, to a greater extent be in his or her favour. These probable results would, by and large, be subjective depending upon the individual's perceived notions as well as the physical and the socio-cultural environments in which he or she is interacting. So, the individual makes efforts to derive maximum utility from a particular action. Thus, the utility and the

probable consequences associated with the action become the two important dimensions of the decision-making process. 39

Again, in group or family pressure decision, if an individual finds that he or she is being induced to take an action that conflicts with his or her own initial belief, this produces a dissonance or tension which is uncomfortable. If an individual is actually induced to act on a social situation for which he or she has no positive attitude, he or she will tend to reduce the dissonance caused by changing his or her initial belief so that it could conform to the behaviour expected of him or her. The group pressure, in that way, may bring about a change in attitudes through extrinsic motivations to act in a certain way. 40

Innovations in different fields like health, family planning education, etc. have been explained within the framework of model of diffusion of innovations as suggested by Rogers (1962) and Rogers with Sverring (1969). The main outline of the original model as proposed by Rogers is


as follows: \(^{41}\)

Awareness\(\rightarrow\) Interest\(\rightarrow\) Knowledge\(\rightarrow\) Evaluation\(\rightarrow\) Adoption.

Further he has classified decision-makers according to the time of adoption such as innovators, early majority, late majority and laggards. Later, with regard to Family Planning Practices, Rogers has modified his model and suggested the following stages for adoption:

Knowledge- Persuasion- Decision- Confirmation.

Similar to this, Donald Bogue also suggests the following stages through which an individual may pass with regard to the adoption of Family Planning Practices. \(^{42}\)

(a) Information (knowledge)
(b) Motivation
(c) Credibility
(d) Social legitimation and positive attitude
(e) Persuasion and referral.

Rogers and Shoemaker (1962) have emphasized that an innovation is an idea, practice, or object perceived as new by the individual. It matters little as far as human behaviour is concerned, whether or not an idea is


\(^{42}\) Ibid.
"objectively" new as measured by the lapse of time since its first use of discovery ... if the idea seems new and different to the individual, it is an innovation.\textsuperscript{43}

Zaltman and Lin (1973) have further suggested that adoption of an innovation by an individual or other relevant unit of adoption represents one half of the dynamic core of social change. It is the fruition of a decision-making process often influenced by deliberate plans or strategies made by others (change agents), affected by personality and creative ability, basic wants, and so on.

On the other hand diffusion is the other half of the dynamic core of social change. It is a phenomenon which emerges from the adoption of an innovation by potential adopter units and is usually a partial result of interaction among these units.\textsuperscript{44}

When an innovation is diffused to and adopted by sufficiently large number of relevant units in a social system, so as to register an impact, it is said that the change has occurred in that particular social system.\textsuperscript{45} The adoption of an innovation at the individual level may be indicative of a change at the attitudinal level. And a

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\item \textsuperscript{45} Ibid.
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change in the attitude has been considered as a pre-requisite for any other change in the social structure of a group, community or a society.  

It is rightly believed that education is an important factor which affects the cognitive elements in an individual’s personality. The process of education helps in the inculcation of some new thought patterns and also in the reshaping of the old ones. It can, therefore, be said that an educated person tends to have less traditional attitudes as compared to an uneducated person. When the traditional attitudes of educated persons start changing in order to give place to the modern attitudes, the individual is faced with the problem of maintaining a balance in his changing attitudes. In accordance with the dissonance and consonance theories of cognitive elements, an individual attempts to bring about harmony and consistency in his attitudes regarding various social elements. In order to achieve this consistency, the individual adds some new attitudes and also changes some of the existing ones. This process of attitudinal change is likely to affect the role performance and behaviour patterns of the individuals.


47. Bhatnagar G. S. *op. cit.*
In the above background, population education is an innovation to a large number of people especially the young students, who would need inputs of knowledge for building desirable attitudes and behaviour change with regard to population problems.

A great deal of work also serves to accentuate the importance of teaching in affecting behavioural change. The teacher must have an understanding of the essential conditions that influence learning and bring about behavioural change in an individual student. Hively (1959) supported that education is concerned with changing the behaviour of students. Boodish (1955) also stressed the importance of each learning situation in the formation of future behaviour: "Free will" is a myth. Perhaps two per cent of our decisions can be attributed to free will whereas the other 95 per cent are inevitable consequences of the chain reactions of the past events. Further Tyler (1955) emphasized the importance of perception: since one's behaviour is strongly influenced by what one "sees" in the memory of an earlier perception, reactions to situations are often unrealistic. The re-education of perception thus becomes important in achieving effective behavioural change. 48

Within the functional perspective, Pareek and Rao have suggested a conceptual framework for understanding human behaviour which has been stated as follows: Behaviour (B) is the result of Motivation (M) and Values (V), which in turn are determined by the Social System (SS) in which the individual lives. According to this framework, the individual behaviour is caused by factors at two different levels. At the individual (intrinsic) level, the individual's motivation and values including his attitudes influence his behaviour. At the societal (extrinsic) level, his behaviour is influenced by the expectancy of reward and punishment from the socially significant persons within the society and by the social system. The social system produces relevant motivational patterns in the members of the society. These patterns help maintain the social system, and are thus functional. The motivational patterns produced by a specific social system determine the behaviour of the member of the society. In this way, behaviour is the product of the social system in which the individual lives, but this is produced through the intervening variables of motivation. This framework is diagramatically shown as below:
The figure shows that a social system produces two different variables at two different levels. At the level of the individual, it produces relevant motivational patterns and at the societal level it produces reinforcing mechanisms. Each social system has its own reinforcing mechanism through which it is maintained and reinforced. These mechanisms influence and produce processes of institutionalization and routinization of those processes which produce reward and punishment systems in the society. Some important mechanisms from this point of view are child rearing practices, the school system, and the other institutions of socialization. Such institutions and mechanisms greatly influence human behaviour by producing expectations of behaviour being rewarded or punished by the society. The expectancy framework and motivation both
influence behaviour equally. However, motivation and expectancy are not unidirectionally related to the social system and its reinforcing mechanisms. In the course of time, motivation and expectancy framework, acquire great influence, they not only maintain the social system, but also begin to determine it to some extent. This is presented in the figure by the dotted arrows from motivation and expectancy towards social system and reinforcing mechanisms. This concept is similar to that of second-order conditioning in learning research. Motivation and expectancy framework acquiring the determining influence, thus become quite important. This functional perspective may be useful in operationalizing concepts such as motivation, expectancy and so on for the generation of some hypotheses in our setting.

4. Review of Some Related Studies

Most of the studies reported here are of recent origin. It is assumed that these studies would have taken into consideration some of the earlier studies. Twenty-one

studies conducted in the field of population education were analysed by Rao (1981). In most of these studies, it has been found that the students, teachers and the parents were aware of the population problem. Both the parents and the teachers favoured the introduction of population education in schools but were against the introduction of sex education. It is interesting to note that some illiterate parents wanted their children to learn not only about population problems but about sex education as well. Many of the teachers were not aware of the concept of population education. When the concepts were made clear to them, they favoured the introduction of population education in the school curricula. 50

Six studies related to sex education were also reviewed by Rao (1981) and it was seen that the students in general favoured the introduction of sex education in the curriculum. A majority of the teachers favoured the introduction of sex education but wanted that it should be introduced either in the lower classes or at the university stage. Some teachers opined that sex education should be taught in schools as a part of the population education programme. The teachers also felt that it cannot be effectively taught by them, and that it should be taught

by an expert or a doctor.  

A study was conducted by Gangrade on population education for University Youths --- (A Research-cum-action study, 1975). The objectives were to develop a model syllabus in population education at the University level and to develop an appropriate methodology for introducing population education for the college students. Based upon the experience gained in this programme, the following curriculum has been suggested:

(a) Demographic trends - their determinants and consequences.

(b) Social and economic development and their improvements and methods.

(c) Sociological factors and population growth.

(d) Social, community and family organization.

(e) Human reproduction, family life and interpersonal relationship.

(f) Family size norms.

(g) Basic values and the quality of life for human progress.

It was suggested that the content of population education thus developed should be taught not directly but in the form of an action programme including seminars, exhibitions, film shows, lectures and debates.  

51. Ibid.

A study conducted by Veena Gupta and associates (1979) aimed at making an assessment of the awareness of adolescents towards population dynamics, human reproduction and the family planning programme. The knowledge of students regarding population dynamics was found to be poor. Girls seemed to be better informed than boys with respect to information on human reproduction. An assessment of the students' knowledge about Family Planning methods revealed that girls knew more about female methods while boys knew more about male methods.  

A study conducted in Chandigarh in 1981 to evaluate the perception and attitude of the college going female students towards population education reveals that whereas all respondents agreed on considering population as a serious problem, they did not have any specific awareness and knowledge on the nature, the extent of population as a problem. Again very few of them had their own ideas about controlling the population, and their knowledge on the reproductive process was also not adequate.  

An FPAI survey on Adolescent Reproduction Health Education and Service Aspects, undertaken sometime back for


the WHO, reveals that adults directly responsible for the upbringing of children have little understanding of the many-sided aspects of growth and development at the different stages of the life cycle. The study provides some insights into the way the adults perceive the needs of youth and the views of the young people themselves. Questionnaires and personal interviews with a cross-section of teen-agers from schools and colleges, as well as slums, remand and rescue homes and orphanges reveal that young people require education and guidance not only in understanding body changes and the reproductive system but also about other dimensions of growing up.\(^55\)

Raj Kumari (1985) conducted a study on girls and found out that most of the girls expressed favourable attitudes towards the small family norm and the acceptance of birth control methods, although they needed some more education on these aspects. The study also indicated that the higher educational attainment and the employment status were closely related to favourable attitude towards higher age of marriage for girls.\(^56\)

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A study of population awareness among school students in Goa (Standard VII to XI) as well as among teachers and parents and their reactions to the inclusion of population education in the school curriculum, by Salkar (1974) reveals that school teachers in Goa were sufficiently aware of the population problem of the country on the whole. However, they were in favour of introducing population education in the school curriculum. The parents also felt that population education should be included in school curricula.\(^{57}\)

Another study was conducted by Rashmi Malhotra and associates in 1984 on high school students in both urban and rural sectors. The study showed that the rural boys obtained the highest score on knowledge regarding Family Planning while the rural girls got the lowest score. Boys, whether rural or urban, are more knowledgeable than girls, the reason being that girls in our tradition-oriented society, get fewer opportunities to read and discuss this issue freely. With regard to their attitudes to family planning, girls seemed to possess more favourable attitudes than the boys though the attitudes of the latter too were highly favourable. Thus, it

can be said that the high school students in general had highly favourable attitudes but poorer levels of knowledge about family planning. 58

From a study conducted in Hyderabad and Secunderabad by Moses and Praveena (1973), it may be concluded that the sources from which adolescents received information regarding sex were largely impersonal, such as books and films followed by personal sources like friends and parents. The knowledge level and attitude towards sex were higher among the respondents in the exposed group as against their unexposed counterparts though in the former group, more boys than girls had correct knowledge but less favourable attitude towards sex education. In general, both the groups largely stated the need for the usefulness of sex education. 59

In a study on attitudes of teachers towards introduction of sex education in schools, Reddy and Babaiah (1979) found out that teachers in general had a favourable attitude towards the introduction of sex education. Further, there was a difference in the attitudes of male and female teachers. 60


A study was conducted with the purpose of finding out the role of Indian magazines in imparting knowledge on population, human sexuality and family living to educate urban youth and young adults by Kapoor and Jha (1982), in which it was observed that,

(a) Magazines can be a very acceptable communication channel especially in the field of population, family welfare and human sexuality; and

(b) Scientific knowledge about human sexuality, population and family living deals with the vital aspects of life and is required by youth and young adults as basic to their education.  

In a study on sex knowledge of school going teen-agers of Jhansi, Uttar Pradesh in 1980, Awasthi and associates emphasize that knowledge of sex should be imparted to all students right from twelve years of age. Parents are perhaps the most suitable persons to begin the first education on sex. Teachers especially trained in sex education could be later involved in imparting formal education on sex and family life, which could form a part of the general education to children. As problems differ for boys and girls, it would perhaps be more beneficial to hold separate sessions for each group. On the basis of survey findings, school health education programme related to sex education should be drawn

up and introduced in urban and rural schools with the help of school teachers. 62

A comparative study of professional and non-professional college students with regard to their perception, knowledge of and attitudes towards population education, conducted in Solan in 1983, reveals that there was not much difference in the perception and knowledge of students in both the colleges with regard to the population problem in India. However it was observed that there were sex differences in regard to awareness and knowledge. In general, the boys had more awareness and knowledge about various issues as compared to girls in almost all spheres. It was also noted that both the boys and the girls had more knowledge about the reproductive physiology of their own sex as compared to that of the opposite sex. But on the whole the students were not having adequate knowledge of different aspects of population education and they had various misconceptions regarding reproductive behaviour. 63

A study conducted by Aparna Sharma (1985) shows that the knowledge and understanding of the students in school


regarding population problem was adequate. But in terms of their knowledge pertaining to sex education, some aspects of human physiology and reproductive behaviour they exhibited inadequacy and ignorance to some extent. Teachers consider themselves to be incompetent in imparting population education. As such teachers especially trained should be involved in imparting formal education on population phenomena, sex education and family life.

Most of the studies reviewed above suggest that the rapid growth of the population is seen as a problem in India. However, it is revealed that the younger generations have poor knowledge; in fact they carry various misconceptions regarding human sexuality and reproductive behaviour and are interested in receiving population education and sex education. Therefore, it seems there is an urgent need to properly educate the younger generations so that they have a better understanding of the population situation in the country, this would in turn help them to take right decisions for themselves.

64. Sharma, Aparna, Population Education - A Study in knowledge, Attitude and Perception of School Students and Teachers, M. Phil. dissertation, Department of Sociology, Panjab University, Chandigarh, 1985 (unpublished).
5. Hypotheses of the Study

Earlier, in the traditional Indian social structure, the youth had a dormant role to play. The kind of values and beliefs which were prevalent in the society ensured that the elder members in the family should play a pivotal role in the family system. The elders constituted the core of the authority structure and the youth had a subservient position. In the traditional joint family structure, most of the decisions were made either by the head or any other elder member of the family. All the important decisions of life such as education, marriage and so on, in respect of a younger person were made by the elders and he or she had hardly any say in these matters. Respect for elders had become so sacrosanct that it was considered sinful to go against the wishes of the elders. Therefore, it is quite evident that in the traditional social setup, the youth had hardly any significant role to play.

But today, the situation has changed and is further changing very fast. Social change has characterised all societies. The last few decades have witnessed a series of profound changes in Indian society, as a result of increased industrialization, urbanization and other facets of modernization.
These changes which have occurred at technological, cultural and social levels, have provided new opportunities and have established new conditions of life, for example, joint-families are disintegrating and there is a lessened importance of primary ties. People are migrating to urban areas in search of better job opportunities and better standard of life. There is a wide diversity in occupations and an increased geographical and social mobility in society. With a change in the family structure, the roles of individual members in the family have also changed. More and more individualistic attitudes are being cultivated and now the youth has started assuming a more important role in the society. Thus the entire social system is undergoing a tremendous change and in this new setup, education is playing an important role.

A more specialized kind of knowledge is required to suit to the demands made upon the individuals by this new evolving system. It is important to observe that a conflicting situation may arise within an individual due to lack of adequate knowledge about an issue or a problem. This may result in cognitive dissonance and subsequently may bring structural inconsistency in the role of an individual due to gap in the expected and performed role. Therefore, one of the major functions of education is to
enable an individual to acquire correct knowledge and understanding of the problems and develop appropriate attitudes so that he or she can take right decisions for himself or herself.

An attempt to operationalize the functional perspective on behaviour change as outlined earlier may show, that the acceptance of the population education programme by the people is influenced by factors operating at the levels of the individual, the family and the society. An appreciable understanding of population education intervention can be made by considering the factors at the individual level, that is the personal variables related to the individual. These would include the level of his or her motivation, his or her social outlook, values, educational background, socio-economic status, caste, religion, sex, age and so on. All these variables are important because they influence the individual’s values and shape his or her attitudes.

In addition to above, various factors at the family level are also important. The type of family structure and the orientation of the family towards modernization and other social values may constitute important dimensions of population education programme. One important aspect of the family is the manner in which the children are brought up including child rearing practices as these are indicative
of the values that may get internalized in the socialization process and consequently affect the adult externalized behaviour. The socio-economic status of the family is also an important factor as this builds up class-consciousness. Another important factor is the sense of security that an individual may have in the family. For example, it has been observed that the desire for a male offspring in the family is often influenced by a strong urge for security that the son will provide for the family when the father gets old.

Besides the individual and the family, there is a number of factors at community or societal (more often called environmental factors) level influencing the attitudes of the individuals. These include the general beliefs prevalent within the community, the community social structure, educational economic influences, sources of communication including mass media exposure and so on. So it can be said that the adoption of the new idea and behavioural pattern does not occur suddenly and all the above mentioned factors play a significant role in socialization and internalization of values affecting the perception and attitudes of the younger persons as potential actors in the societal system.

The different set of roles makes demand on them to contribute towards the integrative functioning of the system of which they constitute an important part. As individuals, they have to be adequately trained to perform different set of roles expected of them in response to differential societal needs. One of the important needs of the society, at the present juncture, is to have an optimum size of population so as to match with the available or potentially generated resources. This function of training individuals regarding the population problem or need of the society, perhaps, is provided through formal or non-formal schooling system in the context of developing nations. Besides, the reinforcing mechanisms in the societal system such as the role of parents or family members, or that of educational institutions to bring in conformity in the behaviour expectancy of the individuals have to supplement and complement their motivational patterns, for the fulfilment of societal needs.

As a consequence of the changes in the society, there is a need for the preparation of the students adequately to meet the challenge of population growth. In this context, population education and sex education become important functional prerequisites of the societal system. Therefore, it is necessary to prepare the youth, who are potential parents of tomorrow, adequately with the population problems.
Notwithstanding the problems of conceptualizing population education and sex education and determining the methods and media, to bring about a desirable behavioural change in individuals, families and groups, one has to recognize the fact that youth population (15 to 24 years) in our country, which has relatively a higher proportion than the other age groups, is the most potential target group for educational purposes.

The youth in family while in school or college or university would tend to show sex differential behaviour. For instance boys generally take more liberties as compared to girls. They would have wider social circle and more interaction with friends. The parents usually don't mind their sons coming home late in the evenings, whereas girls are expected home as soon as their classes are over. Even if a girl goes out occasionally with friends she is advised to come back early whereas boys are given more freedom. In our society girls are more or less confined to the home whereas boys have an access to various kinds of experiences while interacting with the outside world. This sex differential behaviour may lead to different perceptions, levels of knowledge, and attitudes of boys and girls toward population education and sex education.

In view of the fact that our society still is largely
influenced by traditional values and norms, sex is considered a taboo, and any discussion on this subject is not given proper sanctity. People still are hesitant to open up and have lots of inhibitions and fears. These may restrict them to know the various aspects of human physiology and sex, and as such they may have doubts, fears, misapprehensions regarding certain aspects of population and sex education.

On the basis of the above discussion, we may formulate some of the following general hypothesis related to this study:

1. Some of the demographic and socio-cultural characteristics such as sex, age, type of schooling, residence—day scholar or hosteler, enrollment in the faculty of study, family socio-economic background including education and occupation of parents and so on of the University youth may be related to their perception and attitudes towards population problem.

2. Boys as compared to girls may have better awareness and knowledge of population education and sex education.

3. Knowledge of human reproductive system may be sex specific (girls may have more knowledge of female
reproductive system and boys that of male reproductive system).

4. Both, the girls and the boys may tend to show or express apprehensions, doubts, fears and misconceptions regarding sex and contraceptions.

5. Parents may tend to show differential treatment to boys and girls in the family in regard to their mixing and interactional patterns with persons of the opposite sex.

6. Communication between teachers and students, parents and children on matters related to sex issues and problems may be limited due to social and cultural norms.

6. Methodology

(a) Research Site

This study was conducted in two Universities - the Himachal Pradesh University, Shimla and the Panjab University, Chandigarh. These Universities have been selected for a specific reason. The Himachal Pradesh University is relatively a younger and a smaller University as compared to the Panjab University in terms of its inception and size.
Moreover, the Panjab University has a metropolitan and secular character and students from all over the country and abroad also seek admission here, whereas the Himachal Pradesh University is more likely to have students from Himachal itself or from the nearby states. These differential characteristics of the two Universities may have some bearing upon the behavioural patterns of the students - for example students in the Panjab University may have a broader outlook due to wider interaction among people coming from different communities. Again, these students have better chances of getting exposed to different communication media like films, magazines, literature, and so on. Further, the two areas chosen represent different cultural settings and socio-economic development levels. These environmental and socio-cultural factors may influence the psyche or personality development of youth, especially the University students, who have an age structure where most of the attitudes start stabilizing.

The present study has been carried out in two different socio-cultural regions having different levels of development. As stated earlier, the Himachal Pradesh University, located at Shimla is, relatively a new academic institution as compared to Panjab University, Chandigarh. Further, Himachal Pradesh, comparatively speaking is less
developed and more traditional in its social structure, organisation and value system than the regions represented by the Panjab University. Consequently, it is assumed that the students belonging to these different regions in the two universities will have differential perception, knowledge and attitudes towards population problems, population education and sex education and more so in relevance with their socio-cultural milieu and development levels. Again, one would expect that within each region, because of socio-cultural differences, the social psychological make-ups of the students, differential socialisation patterns within the family and outside, differential treatment of parents towards boys and girls within the family and openness shown by teachers towards the students in discussing the population and sex problems will influence their attitudes towards population problems, population education and sex education.

(b) Sample design

Only those teaching departments were selected for the study which were common in both the Universities. A sizeable sample of students of both the sexes was drawn from the post-graduate classes (final year) in these departments. This is mainly because after an M. A. or an M. Sc. degree, most of the students are likely to settle down in jobs and subsequently
get married. Further, the final year students have already had an exposure to the University life and tend to have stabilization of attitudes to a large extent, though attitudes are dynamic in nature. So with them it would perhaps be easier to see whether this exposure has registered an impact upon the values and attitudinal framework of the students or not.

The total number of students who were enrolled in various regular post graduate degree courses in both the Universities was found out from the administrative offices. According to the official sources, at the time of this study, there were 4612 students (2805 boys and 1807 girls) in the Panjab University, Chandigarh and 2307 students (1571 boys and 736 girls) in the Himachal Pradesh University, Shimla. It was also found out that the Panjab University had 607 Faculty Members (teachers) and there were 135 in the Himachal Pradesh University. The Himachal Pradesh University was comparatively smaller and had only 19 departments, whereas the Panjab University had 35 departments. It was observed that there were more female students in the Panjab University (approximate ratio of boys to girls was 12:8) as compared to those in Himachal Pradesh University (ratio of boys to girls was 11:5). Thus we can say that the Panjab University is a larger
complex with almost double the strength of students than those in the Himachal Pradesh University.

Eleven major departments in both the Universities were selected for the study namely History, Political Science, Psychology, English, Hindi, Economics, Botany, Zoology, Chemistry, Mathematics and Physics. Broadly speaking, only two Faculties of Arts and Science were selected keeping in view the constraints of time and manpower resources.

To keep the sample size manageable, it was also decided in the beginning to include 125 students from the Himachal Pradesh University and an equal number from the Panjab University (the final year students in the post graduate - M. A./ M. Sc. courses ) in all the selected departments for the interview purposes.

It was found out that there were 266 students in the Himachal Pradesh University in the final year of the post graduation courses of the selected departments. In the Panjab University, the number of students in M. A./ M. Sc. final was 440 in the two Faculties of Arts and Science of the selected departments. One hundred and twenty five students in each University, were selected randomly using
It was also decided to interview five teachers in each of the eleven departments of the two Universities. The total list of teachers in all these departments was obtained in both the universities. It was found out that in the Himachal Pradesh University there were 34 teachers and in the Panjab University, their number was 298. One hundred and ten teachers (55 in each University) were randomly selected for the purpose of study. But some of the teachers could not be interviewed in both the Universities due to their non-availability at the time of this study. Some of them also expressed their inability to spare time for this study due to their other commitments. Therefore, in all 44 teachers in the Himachal Pradesh University and 46 in the Panjab University could only be interviewed.

Though, it was decided in the beginning that parents of all the students who were day scholars would be interviewed, but at the time of the study parents of only 46 students in the total sample (16 in Himachal Pradesh University and 30 in Panjab University out of a total number of 98 day scholars —

31 in Himachal Pradesh University and 67 in the Panjab University) could be contacted and interviewed.

(c) Tools and Techniques

After a careful review of available literature, three interview schedules were constructed separately for the students, teachers and parents of the students.

In order to ensure a proper understanding of all the questions and to gain a proper insight into the perception, knowledge and attitudes of the respondents, it was considered wise to administer interview schedules instead of questionnaires. Further in order to keep the uniformity of the informations, this investigator herself did all the interviews. The first part of all the schedules consisted of questions pertaining to the socio-economic background of the respondents.

The schedule for students had questions relating to their perception of the population problem in India and world in general, their knowledge of and attitudes towards population education and sex education, marriage and family formation, and certain other related issues like reproductive physiology and so on.

The interview schedule for teachers had questions pertaining to the population situation, population education
to them. The teachers and in some cases the laboratory assistants in various science departments helped in identifying the students both in the theory and the practical classes. Thus the respondents were personally contacted. Similarly the teachers in the sample were also contacted personally. All the day scholar students who were living with their parents were asked to give their addresses and some of their parents were also contacted personally. All the respondents were told the purpose of the study and were requested to give specific time according to their convenience for personal interviews. They were given assurance that the information sought will be kept strictly confidential and used only for the purpose of this study.

All the sampled cases were thus, personally contacted and appointment was fixed for the interview purposes. The teachers and the students were interviewed in the Campuses only, whereas parents of all those students who were willing to give their interviews were interviewed in their homes only. It took nearly 40 to 45 minutes to fill a single schedule, sometimes even more in case of parents and teachers when they would start discussing various issues.

Most of the time, the students and the teachers were busy with their classes and could make themselves available only in their free hours. The parents of the students could
be contacted in the evenings only when both the father and the mother were at home. Although the parents were interviewed jointly, yet most of the responses were given by the father only and the mother answered rarely. It took nearly 20 weeks to complete all the interview schedules. The data collection was done in two periods of time, first in October and November 1984 and it was followed through February to May, 1985, in the second phase.

On the whole, the students were keen in answering some questions more eagerly than the others. However, a few of the students were not able to give exact information on the socio-economic background of their parents. Whatever responses they could provide, these were recorded. In certain cases it was not considered desirable to probe them further beyond certain limits because of socio-psychic make up. However, there is nothing to suggest that the information given by the respondents was not to the best of their knowledge.

7. **Limitations of the Study**

Some of the main limitations of the study are as follows:

1. This study is confined to youth of two Universities located in two different regions having different levels of
development. As such, on the basis of the findings of this study, it may not be possible to draw up any generalizations. The findings of this study therefore would warrant further validation in other geographical and cultural regions of the country.

2. The data were obtained through a subjective reporting method. All the intrinsic limitations of this method, therefore would be valid for this study as well (Seltize, 1962, pp. 237-238; Festinger, 1953, pp. 330-331).

3. The study is correlational in nature. The results, therefore, cannot be taken as evidence of causal relationship between independent variable such as demographic and family background factors and dependent variables such as perceptions, knowledge and attitudes of the students.

4. Although it would have been desirable to include in the study design all the students and teachers, yet keeping in view the time constraint only a sample of them was selected, this itself is a main limitation of the study.

5. It would have been desirable to hold interviews with the parents of all the selected students for this study in both the Universities, but owing to a large number of students residing in the hostels and further due to location of
students' residences at far off places, it was not possible to do so. However, to get an insight into the perceptional and attitudinal framework of parents, all those parents who could be conveniently contacted were interviewed. This is another limitation of this study.

6. The selection of the Panjab University and the Himachal Pradesh University as a locale for research work was mainly motivated by the researcher herself being a student of the Panjab University and a resident of Himachal Pradesh. This was done so because of the possibility of easy establishment of rapport in these Universities.

7. Though the analysis is mostly based on methods of classification and cross-tabulation, statistical treatment was given to the data wherever it was possible. In order to apply the test of significance to the demographic and socio-cultural factors, the data in respect of students for the two Universities were combined. The values for this test have been given only in respect of those correlations wherever it was found significant.