CHAPTER I

INTRODUCTION

Most of the Asian and African countries got freedom or aspired for freedom from the bonds of slavery in the second half of the twentieth century. The achievement of independence was not an end in itself; rather, it was a means for the rational transformation of their social, economic and political infrastructure of society to raise their national status on the world map.

For this modernization\(^1\) or development\(^2\), the antiquated and traditional psycho-social dispositions or value orientations proved to be the biggest barriers; so it was pertinent to find out those agencies which could inculcate attitudinal modernity.

Hopes lay on education. Thus the end of the 1950s seems to be the beginning for the social scientists to devote their attention to the theme of the role of education in modernization in the developing countries. Since then, a

\(^1\)Modernization, here, is defined as a rational transformation of social, economic and political orders of a society.

\(^2\)Whereas we are aware of the diversity of views about the conceptual differences between modernization and development, the two have, however, been used in an interchangeable sense for the present study.
vast body of literature, both speculative and empirical, on this theme has appeared on the world scene. This literature is being reviewed in two parts, i.e., the review of foreign studies, and the review of Indian studies in the following paragraphs:

I Review of foreign studies

For the proper understanding and appraisal of foreign studies, this literature is being dealt with under two phases - first, pertaining up to the end of the 1960s; and second, dealing with the literature produced up to the beginning of the 1980s.

The criterion for classifying the literature into two phases is based upon the type of the sample studied in the empirical work in the respective phases. Most of the studies during the first phase have been concentrated on adults, whereas the second phase has witnessed the concentration of most of the researchers on the school children and adolescents. These two phases have been subdivided into two parts - speculative and empirical.

1 Studies pertaining to the first phase

(a) Speculative studies: Many scholars (Parsons, 1959; Clark, 1962; Moore, 1963; Coleman, 1965; Dreeben, 1968) have recognized the value of the school as an engine of psychological change in the developing countries. Becker (1962) has commended the role of schools in developing world-views and self-images. Liebenstein (1965: 61) writes that
education creates not only specific skills but also attitudes which may be more important in fostering economic development than the specific skills created directly by the educational process. The key concept 'explosive proliferation of knowledge' in the analysis of modernization by Black (1966) further highlights the role of education. Weiner (1966) has referred to education as one of the instruments for modernizing man's values and attitudes. Such writers as have supported the school-effect thesis are usually referred to as functionalists.

During the same decade the sociological functional perspective sketched above has been seriously questioned. Hoselitz (1961) has claimed that education must have little or no effect on changing an individual's perspectives in traditionalistic societies which seek to preserve their cultural heritage. The works of Jules Henry (1963), Holt (1967), Kohl (1967,1969), Herndon (1968), Dennison (1969), Friedenberg (1969) also indicate that the schools seem to stifle the growth of the reflective self rather than provide for a successful transition for most of their students. Similarly, the books with titles, such as 'Raspberry'\(^3\) and 'Big Rock Candy Mountain'\(^3\), by the individuals best to be described simply as hippies, also aim at

\(^3\)Quoted from Hurn, Christopher, J., 1976, Theory and Ideology in Two Traditions of Thought about Schools. Social Forces (June), Vol.54 (4)
criticizing the schools. The exponents of the school-crisis thesis may be labelled as radicals.

(b) **Empirical studies**: The only way to resolve the dispute between these two mutually antithetical viewpoints is to substantiate the respective claims through empirical data. Lerner (1958) seems to have taken the lead in this direction. On the basis of his study dealing with the adult sample of six developing countries (Turkey, Lebanon, Egypt, Syria, Jordan and Iran) in the Middle East, he has suggested that literacy is the basic personal skill underlying the whole modernization process. Almond and Verba (1963) have shown with data on five countries that education is closely associated with political information, attitudes and participation. All the studies (McClelland's, 1966; Briones and Waisanen's, 1967; Kahl's, 1968; in Brazil and Mexico; Inkeles', 1969, in Argentina, Nigeria, Chile, India, Israel and East Pakistan (now Bangladesh); Kohn's, 1969; Rogers', 1969), except those by Herzog (1967) in Brazil; Gouvelia (1967) in Brazil; and Saunders (1969) in Brazil, have consistently shown a positive correlation between education and attitudinal modernity.

2 **Studies pertaining to the second phase**

(a) **Speculative studies**: Though the onset of the seventies has lent support to the school-effect thesis through the works of Ashley (1970) and Óróny (1972), yet this phase has opened with a vehement opposition from the radicals. Many commentators (Campbell, 1970; Etzioni, 1970; Loubser, 1970;
(b) Empirical studies: There has been a significant change in the trend of social researchers in regard to the sample with the advent of the 1970s. With the exception of a few studies by Waisanen (1971), Waisanen and Kumata (1972) in five countries (USA, Finland, Japan, Mexico and Costa Rica), Sack (1973) in Tunisia, Suzman (1973), and Kumar & Waisanen (1979), conducted on the adult sample, all other researchers have concentrated on the school-going children/adolescents. Armer and Youtz (1971) have taken a significant turn in this direction. They drew their data from 591 seventeen-year-old males in Kano City, Nigeria, covering both students and non-educated youth. These males were classified into three categories - those with no education, those with some primary education, and those with some secondary education; and on the basis of comparing the modernity scores of these three categories, they have concluded that Western education...
definitely affects the value orientations of youth largely independent of the test factors (p.621).

They have also studied two types of schools - Muslim Koranic and the Western - and have found that tendency for individual modernity is negatively associated with more years of Koranic education, and it has been found to be positively associated with more years of education in the Western schools independent of alternative modernizing forces, such as the exposure to mass media, voluntary membership, parental modernity and personal background. DuBey (1972), in his study of adolescents in Nigeria, has concluded that in most circumstances, every year spent in school brings to the youngers an added increment of personal development in the form of more modern attitudes, values and behaviour patterns. Holsinger (1973) interviewed 2,553 students from third, fourth and fifth grades from 90 classrooms in 67 different schools in Brasilia, the new federal district of Brazil. From the methodological viewpoint, it is a perfect research design as it has employed longitudinal, cross-sectional and non-school baseline techniques in the collection and analysis of data. He has suggested a positive association between the exposure to school and the modernity score. This correlation has also been found to be independent of the competing variables including the mother's modernity. Cunningham (1973) conducted a study on the entire student body of the Ponce de Leon High School in San Juan, Puerto Rico, during the academic year of 1967-68. The number of the total students interviewed was 1,339.
Both the mothers and fathers of those students in the top and bottom quartiles were also interviewed. The students in a class were ranked by the grade-point average and each student was asked to list his three closest friends from among the students' body in order to determine the peer modernity. She has found substantial correlation between the student modernity and the grade-point average. This association is stronger than that between the student modernity and the parental modernity. The modernity scores of students are also significantly correlated with the scores of school peers. Klineberg (1973) focused his research on Tunis, known as Babe Souika in Tunisia. His sample consisted of 526 respondents - 272 adolescents (144 boys and 128 girls) and 254 adults (122 fathers and 132 mothers). He has found the schooling to be more effective in modernizing the adolescents than the parents' attitude. DeRebello (1979) conducted a study on a random sample of 447 students drawn from three junior high schools and one high school in San Mateo County, California (USA) in 1975. Two hundred and eighteen of these students took the questionnaire again in 1976. This study has a special significance, being the first to be conducted on the school adolescents in a developed country. She has noted through both the cross-sectional and the longitudinal approaches that there is a positive and significant relationship between the years of schooling and the personal efficacy (an important dimension of individual modernity) independent of the alternative explanatory variables.
It may be interesting to note that all the empirical studies, conducted on the school sample in the second phase, have consistently brought out that education has a positive correlation with the modernity score. But at the same time, it is equally important to point out that a mixed trend of arguments for and against the studies on the attitudinal modernity came to limelight by the end of the 1960s. First, various writers (Wicker, 1969; Deutscher, 1973; Liska, 1974; Schuman and Johnson, 1976) have attacked the attitudinal studies on the ground that there is no consistency between one's attitude and behaviour. Armer and Isaac (1976) have demonstrated that modern attitudes tend to have little or no influence on behaviours identified by modernity theorists as relevant to development.

In support of the attitudinal studies, Inkeles' (1969) findings are worth quoting. He finds a strict correspondence between the modernity of attitude and the modernity of behaviour. He has concluded that not only that modern is as modern does, but also that modern does as modern speaks. The others (Acock and DeFleur, 1972; Clayton, 1972) have assigned a crucial role to the situational variables in evaluating the observed relationships between attitudes and behaviour. Heredia (1980) also writes that the intersecting structures, like other personalities and social structures, play an important role in establishing a relationship between attitude and behaviour. The positive effects of attitudes on behaviour are increased in situations that are themselves
favourable to the behaviour. Kenneth and Kandel (1979) have demonstrated that there is a consistency between attitudes and behaviour, and the attitudes affect behaviour more than behaviour affects attitudes. Kumar and Waisanen (1979) have found an association, though weak, between innovative behaviour and modernity from their Indian sample. Raghuvanshi (1980) has noted a strong congruence between attitude and behaviour in his Indian study.

Second, Armer and Schnaiberg (1972) have reported that the scales designed by Smith and Inkeles (1966), Kahl (1968), Schnaiberg (1968), and Armer (1970) for measuring individual modernity are only moderate in their degree of equivalence and inadequate in their discriminant validity, i.e. the results vary for the same sample with the application of the above-mentioned different scales, and the scales do not discriminate between modernity and other concepts, such as anomia (a general orientation of despair) developed by Srole (1956), alienation (involving powerlessness, normlessness, isolation and meaninglessness) by Middleton (1963), and socio-economic status. They have, thus, called psychological modernity as a myth, and have advocated the abandonment of this concept, as they doubt the theoretical as well as the practical significance of modernity in addition to measurement or conceptual problems or both.

To the problem of lack of equivalence, Cohen and Till (1977) have commented that this anomaly has arisen from
Armer's and Schnaiberg's (1972) fallacy in substituting Schnaiberg's (1968, 1970) full 46-item scale, used originally for Turkish women, for the 24-item emancipation scale (a sub-portion of the original 46-item scale) in their study of the male sample in Chicago. This emancipation scale encompassed only two components, i.e., the women's equality and the mass media. So one cannot consider this two-component scale to be sufficiently broad to enfold a many-faceted concept, such as modernity. Otherwise, the rest of the three scales (Smith and Inkeles', Kahl's, and Armer's) show a much higher degree of equivalence or convergence.

To the proposition of inadequacy in discriminant validity, Cohen and Till (1977), after eliminating Schnaiberg's scale, have found that Armer's scale discriminated adequately between modernity and all three variables (anomia, alienation and socio-economic status). Actually, according to them, the failure of the remaining two scales (Kahl's, and Smith's and Inkeles') to distinguish modernity from related phenomena is attributable to their questionnaire designs and not to the concept of modernity.

In continuation of the above, Rau (1980), on the basis of field interviews administered to groups of farmers and industrial workers in Ghana, India, Brazil, Japan, and the United States, has suggested that the root cause of the above difficulties lies in the unidimensional approach (overall modernity) to the concept of modernity, and this problem can be solved if this concept is analysed as a
To the proposition of calling the psychological modernity as a myth, Inkeles (1973) has argued that modernity is a syndrome which coheres empirically at a level of reliability high enough to satisfy most standards of psychological testing. Thus the modern man is clearly not just a construct in the minds of sociological theorists. He exists and can be identified, with fair reliability, within any population which can complete the OM Questionnaire (p.166).

Third, it is very likely that the educated people from the underdeveloped countries may leave for the more developed countries. Thus this brain drain may adversely affect the process of social change or modernization in their home societies.

As a defence against this objection, Sassen-Kooib's article (1978) is worth referring to. He has concluded that the internationally mobile segment of the labour force constitutes a minor fraction of the total labour force. The largest share of this mobile force is made up of manual workers who are generally viewed as a resource of little value for both the emigration and the immigration countries. The brain drain constitutes a very small proportion of the total internationally circulating labour force. Thus the brain drain does not seem to retard the development process in their home countries. Rather, the emigration countries
are generally seen to be benefiting from labour migration (p.511).

Critique of the foreign empirical studies

The studies dealing with the adult samples have shown a strong positive relationship between education and modernity. But such a research design is bound to vitiate their conclusions, as the researchers have failed to separate the initial effects of schooling from the consequent effects of post-school openings made available by schooling to control the vitiating influence of a host of other forces to which the respondent might have been exposed since he left school. Such studies also suffer from irrefutable charges of recall inaccuracy. As rightly acknowledged by Inkeles (1973:159), no amount of statistical controls can serve to give a definitive answer to the independent role of education in view of this constraining limitation.

Most of the studies in the second phase of the 1970s are focussed on the school-going children or on adolescents. These studies have employed a sophisticated research design and have used statistical controls to delineate the relation between the level of schooling and modernity, independent of other intervening variables. In spite of this improvement over the previous research, the existing studies have failed to relate variations in attitudinal modernity to the specific aspects of the educational process. Most of the studies are concerned just with the demonstrating of the effect of the
amount of schooling on modernity. But to the fundamental question, i.e., what it is about schooling that promotes attitudinal modernity, the characteristic answer from the available studies is: "formal schooling experiences". It is obviously an ambiguous and undifferentiated category which conceals within it several types of diverse effects: structural, curricular, contextual and so on. These studies seem to move around the periphery of education rather than penetrating into it. This is not a trivial omission, for unless the links between the constituents of education and the indicators of modernity are specified, the cognitive mapping of the relationship between education and modernity will remain incomplete. Further, these studies seem to be biased in favour of Western education, and they might have formulated such a design as to impress upon the Third World their supremacy in the sphere of education and modernization. deRebello's study, the only study conducted on the school-going children in a developed country, suffers from methodological limitations. The questionnaires were filled up by the students in the classroom. Such a design might have amounted to copying and conversation, and, thus, the findings

5 Of the available studies, only two (Amer's & Youtz's, 1971; Sack's, 1973) have dealt with curriculum effects. Only Sack (1973) has dealt with 'boarding effects', and only deRebello (1979) has dealt with the schooling environment, as perceived by the students. But the treatment given to these effects in the studies is very casual and sketchy, and it leaves behind much to be desired.
are likely to be vitiated. Moreover, it denied to the respondents the secrecy of information which is the primary condition for collecting the data.

II Review of Indian studies

Up to the middle of the 1970s, all the educationists, politicians, administrators and planners in India laid great stress on education and considered it a necessary condition for social development and also a panacea for all the social diseases. To quote Singh (1973:106), "... education has been one of the most influential instruments of modernization in India. It has led to the mobilisation of people's aspirations for nationalism, liberalism and freedom. It alone has been responsible for the growth of an enlightened intelligentsia who carried forward not only a movement for independence, but also a relentless struggle for social and cultural reforms."

Shukla (1975) seems to be the first person to give a word of caution against the indiscriminate use of education as an instrument of social change. He suggests that education by itself cannot start a revolution. It depends upon the socio-economic policy and persons at the helm of affairs. So he cautions us against using education as an instrument of social change. Shashadri (1978) advises that we should break down the school system and free the child to experience reality rather than myths about society and values which the schools perpetuate. Ahmed (1979) also warns us against the
indiscriminate use of education as an agency of social change. It cannot contribute to social change independently of the social structure. It can induce changes in society only indirectly, i.e., it can help our society to move away from the old towards the new; it can inspire us to believe in change, adaptability, achievement and rationality by changing the ideas and attitudes of the people.

Again, the appropriate way to test the validity of such hypothetical and controversial statements is to resort to empirical evidence. So for the proper appraisal of empirical studies, in the Indian context, they also have been classified into two phases. The studies conducted during the 1960s comprise the first phase, and those of the 1970s constitute the second phase. Again the basis for this classification is the type of the sample. The studies of the first phase have been concentrated on the college sample, whereas the onset of the 1970s has shown a mixed trend of concentration on college as well as on other types of samples.

1 Studies of the first phase: The research focus during this decade has remained on the college students. Cormack (1961) seems to be the first to produce a full-length study of Indian students and social change. Her sample consisted of 404 students drawn from over a dozen colleges located in various parts of India. She has found that college education is ineffective in changing the values and attitudes
of students. Shah (1964) conducted a study on the college students of Gujarat. He classified his respondents into three categories, namely traditional, partially deviated and non-traditional. He has found that the college students are traditional in the areas of caste endogamy, joint family and gainful employment of married women; partially deviated in such areas as boy-girl relations, caste commensality, the selection of bride, place, livelihood and occupation. He has further concluded that the fully deviated non-traditional students are a rare commodity (p.192). Damle (1966), on the basis of a study of a special sample of 26 academically and intellectually gifted college youths in Poona, finds some positive evidence of 'individuation' (modernization). But this generalization has a limited reliability, as the study is confined to a special group and not to the college student community, in general. Another study to mention during the 1960s is that of Sullivan (1968). He, by comparing four secondary-teacher-training colleges in India, has concluded that the colleges served primarily to reinforce rather than to change the beliefs of the trainees and that "factors other than experience at a particular training college appeared to be operative in changing the students' outlook towards traditional social practices" (p.76).

2 Studies of the second phase: This decade is characterized by a mixed trend of concentration on college
effects, school effects, post-school effects and university-
education effects. It is worth noting that, at the theoretical
level, this decade is marked by the ineffectiveness of
education or the cautious use of education as an instrument
of social change, whereas at the practical plane, the education
has been found to be effective in inculcating modernity in
the minds of the students, or in accelerating the process of
modernization or both. The appearance of Gore et al.'s work
(1970) marks the beginning of this second phase of research in
education and modernization. They drew samples from four
levels of education - primary, secondary, liberal arts and
science colleges, and professional colleges of medicine and
engineering, and have put forward some evidence of the
positive effects of education on student modernity. Bhatnagar
(1972), by basing his findings on the study of adult males in
three villages, has concluded that the educated persons have
more modern attitudes than the uneducated ones. Malik and
Marquette (1974) focussed their research on the college
students in the Punjab, and have concluded that education
is an agent of attitudinal change. To quote them "... an
overwhelming majority of Punjab youth favours the abolition
of such traditional institutions as caste and untouchability
and strongly approves of a general revolution in India" (p. 805).
Pandey (1977) conducted research on a national sample of 900
families in India. The data were collected from parents as well
as from their children (both pre-adolescents and adolescents).
He suggests that formal schooling shapes a child's experiences during pre-adolescence and adolescence (p.163). Daykin and Hartel (1978), studied a sample of 1,053 married men of 30 to 44 years of age in the Balia District of eastern Uttar Pradesh and have indicated that education appears to have a significant impact on individual modernity independent of the place of residence. Sharma (1979) has analysed the role of university-education in student modernity. He, after interviewing 770 students on the Panjab University Campus, Chandigarh, has come to the conclusion that there is a trend of negative association between the level of education and modernity. Raghuvanshi (1980), by basing his findings on 326 male Rajput youths (18-20 years old) from three villages in western Uttar Pradesh, has suggested that formal education is the most powerful determinant in making the rural youth modern independently of other alternative modernizing forces.

**Critique of the Indian studies**

The overall conclusion of the studies of the first phase, excluding that by Damle (1966), is that the college students are, by and large, still under the influence of traditional values, whereas the studies of the second phase, except that carried out by Sharma (1979), have emphasized the modernizing role of education.

Turning to the general critical appreciation of all the Indian studies, it may be remarked that these studies lack
conceptual clarity, methodological rigour and proper operationalization. On the conceptual front, they exhibit a tendency of loose thinking and make extravagant use of such concepts as social change and modernity; hardly, if ever, they care to determine their conceptual content, let alone their precise measures or indices. Though the study by Gore et al. (1970) seeks to identify some broad indicators of modernity, such as secularism, activist orientation, optimism, achievement orientation and civic sense, yet at the stage of operationalization, the study leaves much to be desired. Only the study by Sharma (1979) may be considered to be the first theoretically systematic and methodologically sophisticated attempt to define the role of university-education in bringing about student modernity. He has tried to isolate the concept of modernity from the muddle of confounding concepts and has identified some broad indicators of modernity. He has also operationalized education in terms of five components - class, faculty, teacher, extra-curricular activities, and residence in hostel.

Methodologically, these studies can best be called descriptive surveys of the college students' attitudes towards traditional social institutions, such as caste, untouchability, joint family and marriage. Neither do they follow a longitudinal approach, nor the control-group strategy, nor even a standard cross-sectional procedure permitting comparison of fresh men in the college with the final-year men.
The studies by Gore et al. (1970), and Sharma (1979) may be quoted as marginal exceptions. Gore et al.'s study (1970) included samples from four levels of education - primary, secondary, liberal arts and science colleges, professional colleges of medicine and engineering, etc. But it has dubious value, as it confounds the level of education with the type of education, since it treats liberal colleges and professional colleges as representing two levels of education. Sharma (1979) has followed cross-sectional approach. As regard tools, most of the studies have characteristically used either a questionnaire or an interview schedule. No body, except Sharma (1979), has used any authentic scale of individual modernity, and yet the investigators have rushed to the conclusion that education and modernity are linked together. Statistically, these studies, except that of Sharma (1979), have made little attempt to control the influence of selective recruitment, demographic factors and alternative modernizing forces to decipher the independent correlation between education and modernity. Rarely, if ever, statistical treatment has gone beyond the calculation of percentages. The studies dealing with the adult samples (Bhatnagar, 1972; Daykin and Hartel, 1978) seem to suffer also from the problems of recall inaccuracy, failure to disentangle the initial effects of schooling from the consequent effects of post-school openings made available by schooling, and the lack of control over the vitiating influence of a host of other forces to which the respondent
might have been exposed since he left school along with the other flaws, as mentioned above. Though Sharma (1979) has examined the relationship between education and the dimensions of modernity, yet he has usually dealt with the overall modernity level/score and has not explained the impact of various components of education on the different dimensions of modernity as it is very likely that an individual may be modern in one dimension and non-modern in another. Schuman et al. (1967), and Armer & Youtz (1971) have already found that the impact of education and literacy is confined to only a limited number of psychological orientations. The need for the dimension-wise analysis has also been felt by Kumar and Waisanen (1979), Rau (1980), Heredia (1980), and Ahmed (1980). Moreover, the overall modernity is an average modernity which may be significant only at the theoretical level and of little import at the practical level.

Gaps in the existing literature

Turning to the overall analysis of all the empirical studies, in brief, it may be concluded that the foreign studies have been preoccupied with the demonstrating of the school effects on individual modernity, whereas in India, the researchers seem to be busy with the analysis of college effects on modernization. The role of different types of schools towards modernity seems to have escaped the attention of researchers in the foreign countries as well as in India in spite of

No doubt Armer & Youtz (1971) have studied two types of schools, but their study suffers from the tautological problem as they have a tacit assumption that Western schools definitely make the students more modern through Western education.
their differential potential, as emphasized by Wallace (1966), Himmelweit and Swift (1969), Benitez (1973), Kerckhoff (1975), Meyer (1977), and Sharma (1979). Almost all the studies on modernity have considered the overall modernity level or score, and none of these has explored the various value-orientations as the distinct dimensions of modernity in order to know whether or not all the dimensions of modernity are equally promoted by education. The studies dealing with the school effect have also failed to operationalize the school education into definite components.

Purpose of the study

The present study is intended to investigate some of the unexplored dimensions of the relationship between school education and student modernity. Accordingly, it seeks to examine the effects of school education as well as those of its components on a student's overall modernity as well as on its dimensions in India through a standardized measure of modernity by employing the 'comparison-group' and 'cross-sectional' approaches. India is particularly an appropriate setting for such a study. This is so because of several reasons, three of which seem to be of greater importance. First, India is a developing country marching ahead on the road of modernization. Second, no systematic study has evaluated the effect of school education on psycho-social dispositions of the country's future youth. Third, the
failure of higher education in modernizing the individual perspectives has further highlighted the significance of such study in the Indian context.

The present study: objectives and hypotheses

This study seeks primarily to achieve the following objectives:

1. To examine the modernizing effects of school education on the rural setting
2. To determine the contribution of education towards the promotion of the dimensions of modernity
3. To explore the modernizing effects of an urban school in comparison with a rural school
4. To examine the role of urban schooling in the promotion of the dimensions of modernity
5. To analyse the modernizing effects of a high-ranking school in contrast with a low-ranking school
6. To determine the contribution of select components of a high-ranking school, such as dues at the time of admission, monthly tuition fees, the teacher-pupil ratio, the medium of instruction, and the annual examination results and of other components of education, such as extra-curricular activities and school organizational climate towards student modernity
7. To evaluate the independent impact of the level of education in the high-ranking school on student modernity after parcelling out the role of family socio-economic status, parental modernity, mass media and other intervening variables
Stated in terms of research questions, the study aims to answer the following questions:

1. Whether or not the school-going adolescents are more modern than the non-school adolescents in the rural setting.
2. Whether or not the level of schooling is positively related to the modernity score.
3. Whether or not all the dimensions of modernity are equally promoted by school education.
4. Whether or not the students of an urban school are more modern than those of a rural school.
5. Whether or not all the dimensions of modernity are equally promoted by urban schooling.
6. Whether or not the students of a high-ranking school are more modern than those of a low-ranking school in the urban setting.
7. If yes, what is it about the high-ranking school which makes its students more modern.
8. Whether or not the higher modernity score of the students in a high-ranking school is independent of other equally potential modernizing factors like socio-economic status, parental modernity, mass media, etc.

Pursuant to the above ends, the following hypotheses are tested in this study:

1. The school-going adolescents are more modern than the non-school adolescents in the rural setting.
2. The level of education is positively related to the student modernity.
The students of an urban school are more modern than those of a rural school.

The students of a high-ranking school are more modern than those of a low-ranking school, and this correlation is independent of the intervening variables.

The key assumption underlying the above hypotheses is that school education does not impart cognitive skills only, but also modernizes the psycho-social dispositions of the students. Turning to the rationale of each hypothesis separately, the first two hypotheses are an extension of the overall assumption of the study. If school education is conducive to the modernization of attitudes, it is natural that the school-going children should be more modern than the non-school-going respondents, and the greater exposure to education should be rewarded with an increase in the modernity score of the respondent. With respect to the third hypothesis, urbanization has been considered an alternative modernizing force, so it follows that the students in an urban school will be more modern than their counterparts in a rural school. The different types of schools show marked differences in outcome; so one can expect that the students of a high-ranking school will be more modern than those of a low-ranking school; hence the justification for the fourth hypothesis.
other two schools. Thus the final study group comprised 465 units.

To see whether this was representative of the universe, the sample size for the total population was calculated with the formula, \( N = \left( \frac{1.96}{\sigma} \right)^2 \) at 95 per cent level of confidence. The mean was estimated within an accuracy of plus/minus one modernity score. This norm yielded a sample size of 380 units for the total student population. Thus it was verified that the sample size of 465 cases fully represented the universe.

Social characteristics of the study sample

The knowledge of the social characteristics of the sample is important in view of two considerations: first, it will help us to penetrate into the composition of the school adolescents; second, it will put the findings in proper perspective. For the sake of a proper understanding of the social characteristics, these have been organized into two sets: (i) demographic features, such as age, sex and rural-urban composition; and (ii) family-background characteristics, such as the socio-economic status.

(i) Demographic features

Age-wise, the majority of the students (130/465 = 27.96 per cent) comprised the 14-year age-category, and the highest percentage (56.15) in this category was concentrated in the Senior Model School, Hissar. The 16-year age-category

\[3\] For more details, see Tables in Appendix 'A'.

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constituted the minority group \( \frac{75}{465} = 16.13 \) per cent. It had the highest strength (52.00 per cent) in the Jat High School, Hissar, and the lowest (6.67 per cent) in the Senior Model School, Hissar (Table I, Appendix 'A').

The sex-wise analysis showed that the sample was over represented by male respondents \( \frac{364}{465} = 78.28 \) per cent. The highest percentage of females (81.19) was enrolled in the Senior Model School, Hissar, and the lowest (7.92) in the Government High School, Sarso-Bichpari (Table II, Appendix 'A').

Domicile-wise, the Senior Model School had the highest percentage (63.93) of urban residents, whereas there were 48 out of 53 rural students in the Jat High School (Table III, Appendix 'A').

Religion-wise, Hinduism dominated the scene, as a larger majority of the families of respondents \( \frac{434}{465} = 93.33 \) per cent were its followers (Table IV, Appendix 'A').

The caste-wise analysis showed that the majority of the respondents \( \frac{264}{465} = 56.77 \) per cent belonged to the middle-castes group, followed by the high-castes group \( \frac{160}{465} = 34.41 \) per cent. The Senior Model School had the highest percentage (60.62) of the respondents belonging to high-castes, whereas their percentage (4.38) was lowest in the Government High School (Table V, Appendix 'A').

It will be in order to give the details of the Jat and the non-Jat composition of the student sample in the
Jat' High School as it has a denominational character. The data showed that a larger percentage (48.73) of the students represented the Jat community here, whereas their representation in the rural school and in the second urban school was 62.42 per cent and 20.5 per cent respectively.

(ii) Family background characteristics
The distribution of respondents, according to the socio-economic status, indicated that the majority of the students (258/465 = 55.48 per cent) came from families of high socio-economic status. The highest percentage of respondents (73.64) in this category was found to have joined the Senior Model School, whereas the highest percentage (47.83) of the students belonging to the category of low socio-economic status were studying in the Government High School, Sarsod-Bichpari (Table VI, Appendix 'A').

Other categories of respondents
The study included the following categories of respondents, in addition to the study group:

(a) The comparison group: A list of male respondents between the ages of 12 and 16, who had never been to school, was prepared in the villages of Sarsod and Bichpari. This age-group corresponded with that of the male school adolescents at the village level. This list contained 72 names, and this number of non-school male respondents comprised the comparison-group.
(b) **The teacher group**: This group included the teachers as well as the headmasters of the two urban schools. Their total strength was 35. It was intended to cover the whole lot, but 3 teachers could not be interviewed. Thus this category consisted of 32 respondents, including the two headmasters.

(c) **The parent group**: Only the fathers of the students, studying in the Senior Model School, Hisar (a high-ranking institution) were included in this group. A list of the students selected for interview in this school was prepared. Thus 40 students were randomly chosen starting with the number of 1, 6, 11 and so on. The addresses of the fathers were noted down for personal contact with them. This category comprised 40 respondents.

**Scale and tools**

The following scale and tools were used for the collection of data for this study:

1. **The modernity scale** (Appendix 'B'): For this study we have used the scale designed by Sharma (1979) for evaluating the effects of university education on the value orientations of students. It was modified in order to make it comprehensive at the school and the non-school level. A view of the original as well as of the replaced items can be had from Table VII (Appendix 'A'). The items to be replaced were selected from
the items put into competition with the selected items, and while replacing the items the conventional standard of .30 loading had also been duly adhered to.

This scale has six dimensions, and every dimension has five items. Sharma (1979) has defined 'modernity' and dimensions (orientations) as such:

**Modernity:** Modernity has been defined in terms of a set of attitudes, reflecting secular, scientific, universalistic, achievement, independence and civic orientations.

(a) **Secular orientation:** Secular orientation is an attitude of withdrawal of authority of religion from various institutional spheres, such as matrimonial, educational, economic, etc., with the result that religion ceases to exert any influence on interpersonal relations and corporate action.

(b) **Scientific orientation:** Scientific orientation is a tendency to understand the world on the basis of the rule of evidence and verification rather than in terms of the wisdom of the past.

(c) **Universalistic orientation:** Universalistic orientation is an attitude of preference to universal impersonal norms in playing one's public role over tempting particularistic loyalties of kin, caste, friendship and the like.

(d) **Achievement orientation:** Achievement orientation is a positive attitude of mastery over one's fate, a desire to get
ahead and a belief in the utility of planning.

(e) Independence orientation: Independence orientation is an attitude of emancipation from the structural constraints of traditional authority resulting in non-conformity to such norms as may have suspect rationality.

(f) Civic orientation: A willingness to keep up with the national and international news, an awareness of the problems facing the nation and the international community, and an attempt to form and hold opinion on the crucial issues of one's time.

This scale was administered to the school respondents, non-school respondents, teachers and fathers alike. Each modern statement (item) was assigned the weightage of 3, 2 & l in that order to the expressions, 'agree, undecided, disagree'. The direction of weightage was reversed in the case of non-modern statements. In order to avoid the risk of wrong weightage, the modern statements were asterisked. The total modernity score and dimension-wise modernity scores were calculated by summing up the scores of all the items, and by adding up the scores of items in the respective dimensions.

II The schedule for school adolescents (Appendix 'C'):
It was designed to evoke information on five major points: identification, family characteristics, with a particular stress on socio-economic status, schooling, urban exposure and media exposure. The identification included particulars
about the name, sex, age, religion, caste and domicile.

III. The schedule for non-school male adolescents (Appendix 'D'):
The term 'non-school adolescents' was used for those respondents who had never attended any school formally and were between the ages of 12 and 16 years. It was designed to elicit information only from the male respondents on identification, family socio-economic status, media exposure and urban exposure.

IV The schedule for the parents (Appendix 'E'):
This schedule was aimed at eliciting information only from the fathers of the students in the high-ranking school on identification and personal characteristics, such as education, occupation and income.

V The schedule for headmasters/teachers (Appendix 'F'):
This schedule was also constructed to get particulars on identification and personal characteristics.

VI Schedule for the superintendent of the school-office (Appendix 'G'):
This schedule was designed to secure information with respect to the strength of the teachers as well as of the students, dues at the time of admission, monthly tuition fees, medium of instruction, annual examination results, etc.

VII The school organizational climate description questionnaire (Appendix 'H'):
This schedule was developed by Sharma (1973) and is an Indian adaptation of 'Organizational Climate Description
Questionnaire' (OCDQ) framed by Halpin and Croft (1963). They defined the organizational climate as "the personality of the school, as seen by teachers and principals in individual schools." Sharma (1969) defined organizational climates "as patterns of social interaction that characterize an organization. The main units of interaction in this concept of climates are individuals, the group as a group, and the leader". Though many types of organizational climates were identified, yet they had their roots in two major types — open and closed.

So for our purpose, these two types of organizational climates were retained. Sharma (1973) has defined them as follows:

1. **Open climate**: Open climate refers to an environment in which teachers obtain social-needs satisfaction as well as job satisfaction and enjoy a sense of accomplishment in their job. They perceive their principal (leader) as highly considerate and democratic in behaviour and, hence, the group members as well as the principal feel 'all of a piece'. So the group enjoys a high degree of integration and authenticity of behaviour (Sharma, 1973: 252).

2. **Closed climate**: Closed climate is characterized by a high degree of apathy on the part of all members of the organization. The organization is not moving. This climate lacks authenticity of behaviour. The principal constrains the emergence of leadership acts from the group. The members
of the group secure neither social needs-satisfaction nor job satisfaction stemming from task accomplishment (p.266).

This questionnaire has eight dimensions, and Sharma (1973) has defined them as follows under two sub-heads:

I. Group behaviour characteristics

1. Disengagement: Disengagement refers to the teacher's tendency to be "not with it". This dimension describes a group which is "going through the motions", a group that is "not in gear" with respect to task in hand. Teachers gripe about among themselves. In short, this sub-test is focussed upon the teachers' behaviour in a task-oriented situation.

2. Esprit: Esprit refers to 'morale'. The teachers feel that their social needs are being satisfied and that they are, at the same time, enjoying a sense of accomplishment in their jobs.

3. Intimacy: Intimacy refers to the teachers' enjoyment of friendly social relations with one another. This element describes a social-needs satisfaction which is not necessarily associated with task accomplishment.

4. Alienation: Alienation refers to the behaviour patterns among the group (faculty), including the leader (the principal), which are characterized by being highly formal and impersonal. It reveals the degree to which the principal "goes by the book" and adheres to policies rather than dealing with the teachers
in an informal, face-to-face situation. It also indicates the emotional distance between the group and the leader, and at the same time, among the group members (Sharma, 1973: 199).

II Leader-behaviour characteristics

5 Psycho-physical hindrance: Psycho-physical hindrance refers to the feeling among the group members that the principal burdens them with routine duties, management demands and other administrative requirements which they consider to be unnecessary. At the same time, they perceive the principal as a person who is highly dictatorial. He has not adjusted himself to the feedback from the staff; his style of communication tends to be unidimensional (Sharma, 1973: 204).

6 Controls: Controls refer to the degree to which the principal's behaviour can be characterized by being bureaucratic and impersonal. Although task-oriented in respect of behaviour, he tries to raise the degree of effectiveness and efficiency by helping the group work towards the common goal by providing them with adequate operational guidance and secretarial services (Sharma, 1973: 205).

7 Humanized thrust: Humanized thrust refers to the behaviour of the principal, which is marked by his attempts to motivate the teachers through personal example. He does not ask the teachers to give themselves any more than what they can give themselves willingly. The behaviour of the
principal, though unmistakably task-oriented, is at the same time characterized by an inclination to treat the teachers humanely and tender-heartedly. He attempts to do something extra for them in humanistic terms, and consequently his behaviour is viewed favourably by the teachers (Sharma, 1973: 209).

8 Production emphasis: Production emphasis refers to behaviour by the principal, which is characterized by a close supervision of the staff. He is highly directive and plays the role of a 'straw boss'. His communication tends to go in only one direction, and he is not sensitive to feedback from the staff.

This questionnaire was administered only to the teachers and headmasters of the urban schools under study, with the purpose to know whether they viewed the climates in their respective schools as 'open' or 'closed'.

To this 'School Organisational Climate Description Questionnaire' (SOCDQ), the weightage of 1, 2, 3, and 4 was assigned in that order to the expressions, 'rarely occurs', 'sometimes occurs', 'often occurs', and 'very frequently occurs'. The total score on the organizational climate description questionnaire was obtained by summing up the scores of all individual statements along with the dimension-wise totals for each school. Then the individual scores of all the teachers in the two urban schools were summed up and the mean was calculated for these two schools. The mean value for the
total sample came to 145.12. Thus the school(s) having the mean values higher than 145.12 was/were regarded as having 'open climate', and the school(s) having the mean values lower than this was/were regarded as having 'closed climate'.

**Variables and indexes**

The independent variable for the present study was the school education, whereas the dependent variable was the student modernity. The school education was identified in terms of the level of education, school rank, extra-curricular programmes and the school organizational climate. The level of education or exposure to schooling was determined by taking into consideration the three classes, i.e. VIII, IX & X. The schools were ranked on the basis of five indicators, viz. due at the time of admission, monthly tuition, fee, the teacher-pupil ratio, the medium of instruction and the results of the annual examination. The information about the participation in extra-curricular programme was obtained by using an index of extra-curricular participation.

This index covered three broad categories of extra-curricular activities - academic (declaration contests and debates), cultural (music and dramatics), and athletics (games and sports). The students were dichotomized into two categories - participants and non-participants (including passive participants). The participants were given the

4Passive participants were those who acted as audience or witnesses.
weightage of 2 for each activity, whereas the non-participants were awarded the weightage of 1. Those participating seldom or occasionally, no additional weightage was given, whereas for those participating often or regularly, an additional weightage of 1 for each activity, was given. To those who participated at the inter-school level, they were further given the weightage of one for each activity, whereas to the participants at the intra-school level, no additional credit was given. Thus the individual score varied between 3 and 12. Taking into consideration the mid-point, the students scoring up to 7 were kept under the 'low-participation category', whereas those who obtained a score higher than 7 were placed under the 'high-participation category'.

The school organizational climate was measured through a tool, 'School Organizational Climate Description Questionnaire' (Refer to the scale and the tools section for details).

Three sets of intervening variables were taken into consideration in this study: demographic, familial and developmental. The demographic variables included sex, age and domicile, whereas the familial variables comprised one's father's socio-economic status, one's mother's education, English-medium schooling by parents and father's modernity. The socio-economic status was determined through the index of socio-economic status, which provided information on the education, occupation and income of the head of the family. Each of the indicators of S.E.S. was subdivided into
three parts: education - up to matriculation, graduation and postgraduation; occupation - low, medium, and high; income (per month) up to Rs 500, Rs 501 to Rs 1000, and Rs 1000 and above. The subdivisions of each indicator were given the weightage of 1, 2 & 3 respectively. Thus the total score of an individual varied between 3 and 9. Six was the median between these two figures. Thus a person, getting the score less than six, was treated in the category of 'low socio-economic status', whereas a person having a score of 6 and more was placed in the category of 'high socio-economic status'. The parental modernity was determined through the

Postgraduation also includes such degrees as Bachelor of Law (LL.B), Doctor of Philosophy (Ph.D.), Bachelor of Medicine and Bachelor of Surgery (M.B., B.S.), Bachelor of Engineering (B.E.), Master of Engineering (M.E.), etc.

For the categorization of occupations, D'Souza's (1968) prestige-occupation categories have been adopted. His first two occupational categories have been treated as high, the third category as middle, and the last four categories as low. The low occupational category includes carpenters, tenant-cultivators, peons, tailors, electricians, drivers, policemen, labourers, mechanics, laboratory assistants, etc. The middle occupational category comprises land-owners, shopkeepers, registered medical practitioners, teachers, medium businessmen, military jans, sectional officers, inspectors, auditors, travelling ticket-examiners, clerks, office superintendents, coachers, cashiers, draftsmen, revenue officials, foremen, assistant station masters, etc. The high occupational category includes absentee landlords, bank managers, architects, university professors, engineers, advocates, big businessmen, judges, tahsildars, scientists, doctors, project officers, 'A'-class contractors, police officers, principals, military officers, deputy collectors, other 'A' - grade officers, etc.
administration of 'modernity scale' to the father. The developmental variables enfolded urban exposure and media exposure, and these both were measured with the aid of indexes. The urban exposure index provided information about the frequency of visits to the cities and the period of stay in the city or cities by the respondents of the rural area. The respondents were initially divided into two groups, viz. 'city-goers and non-city-goers'. They were given the weightage of 2 and 1 respectively. The frequency of visits was categorized into four: less than once a month/once a month/two times or three times a month/more than three times a month. These categories were assigned the additional weightage of 0, 1, 2, 3 respectively. The stay in the cities was also divided into four categories: no stay/stay up to 10 days/stay between 11 and 30 days/stay for more than one month. These categories were further given the additional weightage of 0, 1, 2, 3 respectively. Thus the individual score varied between 1 and 8. So a person who scored up to 4 was considered to be belonging to the 'low-urban-exposure' category, whereas the respondent scoring 5 or more was placed under the 'high-urban-exposure' category.

The media-exposure index provided information on the questions related to newspapers, magazines, radio and movies. The students were divided into two categories on the basis of their exposure to these four channels: (i) non-reader/non-listener/non-movie-goer, (ii) reader/listener/movie-goer. These categories were assigned the weightage of 1 and 2 respectively for each component. The movie-goers were given
the additional weightage of 0, 1, 2, and 3 to their four categories respectively, based on the frequency of visits: less than once a month/once a month/two times or three times a month/more than three times a month.

The administration of modernity scale and the interview schedules

The modernity scale was administered in the beginning to all the categories of respondents (students, non-school respondents, parents, and teachers/headmasters), and each item was read out slowly and clearly to obtain responses on the three-point continuum. To facilitate a correct interpretation of each item, it was also translated and got cyclostyled into Hindi.

After eliciting the required information on the modernity scale, the interview schedules were administered to the respective categories of respondents. All our respondents were interviewed either on the school campus or in their houses, each with a prior appointment. Before interviewing a respondent, the purpose of the study was explained to him/her, so that correct and reliable information could be obtained without any suspicion. They were fully assured of anonymity and confidentiality of the information. An air of privacy was maintained between the respondent and the interviewer (i.e., myself) in order to attain the desired rapport during the interview. The interview schedules were constructed in such a way as to avoid abrupt shift to the next variable. Some
cross-questions were also included in the schedule to check up the validity of responses. Each interview took about one hour, and all my respondents, barring a few, showed a keen interest in the interviews and were very co-operative.

The 'School Organizational Climate Description Questionnaire' (SOCDQ) was administered only to the headmasters and teachers of the two urban schools, and the responses were obtained on the four-point continuum.

Information on the schedule for collecting information from the school office was obtained from the respective office superintendent of the two urban schools.

**Coding and tabulation**

After the collection of the data, the next exercise was to prepare a comprehensive code design. All the information was first compressed into meaningful and manageable categories and these categories were then assigned codes systematically.

For each respondent, a separate code card was prepared. All the relevant information from the interview schedule was coded and transferred to a code card. After coding, the next job was to arrange data into rows and columns, i.e. tabulation, to make the scattered data intelligible. Thus the necessary Tables were prepared, keeping the following points in view:
(1) Control was to be exercised on the variables, such as age, sex, domicile, socio-economic status and parental modernity, in order to evaluate the independent impact of schooling on the student modernity.

(2) The role of media exposure and urban experience, other potential modernizing variables, were also to be parcelled out to analyse the independent correlation between the components of school education and the indicators of modernity.

**Statistical treatment**

Considering the fact that most of the data were of nominal and ordinal nature, we had mostly resorted to non-parametric tests. The arithmetic mean, the median, the standard deviation, and the variance were calculated. For noting down the significance of difference between the groups, 't', Chi square and 'Z' tests were applied. The significance of correlation between the variables was measured through Pearson 'r' and the Guttman's Coefficient of Predictability 'Lambda'. The confidence limit for testing the hypotheses and the level of significance of the error of estimate were set at 95 per cent and 5 per cent respectively. The figures in the brackets, along with the means indicate the number of respondents, unless mentioned otherwise.