17

Higher Education

A Trend Report

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India is now experiencing a situation of unprecedented rate of expansion of educational opportunities at the tertiary level accompanied by a high level of government financial support, public awareness and general concern for accountability. Higher education is now obliged to assume an important role and responsibility in the nation's effort for economic and social development and social justice. The universities can no more enjoy an isolated and protected position in the community. The Universities and other institutions of higher learning have accumulated over a period of time a number of functions of which economic development is one. Carnegie Commission have identified four major trends in the accumulation of functions by the institutions of higher education which are also relevant to the Indian situation. They are :

(1) The personal development of young people first through acculturation to the classics and to moral principles and then to science and social sciences and to the precepts of democracy and society as it evolved.

(2) Economic development — progressing from practical pursuits through professional education, science and technology, agriculture and industry to research and economic growth and the production of trained manpower.

(3) Political education — related to democratic participation, leadership, equality of opportunity.

(4) Service to society — beginning with service to agriculture and moving on to industry, the professions and government, and now to the cities and environmental protection.

The value objectives of higher learning are increasingly oriented to universal values such as secularism, socialism and democracy, useful skills and the future society.

LOOKING BACK

When we examine the history of higher education in India, it will be known that the colleges came first and the universities later. When the universities were founded in 1857 the main job entrusted to them was to look after the colleges and conduct examinations for them. In other words this is what is called granting affiliation to colleges. This is a unique feature of the Indian system, for the reasons that it is the main master principle of university organisation in India. Over a period of time, especially in the beginning of the twentieth century, efforts have been made to modify this concept. In this direction the major innovation was the establishment of Post-Graduate Departments by the University of Calcutta. Until then post-graduate education was given by the colleges. The new model that came into existence since then was that post-graduate teaching be discontinued in the colleges and, instead, university departments be established. Based on the feeling that affiliating system is not congenial to maintaining good standards, a number of new universities were established, in the first quarter of this century with the accent on unitary character. Banaras, Aligarh, Lucknow, Patna, Annamalai etc., were founded during this period. After a lapse of several decades, now the accent is again on the unitary system of universities.

The university system is becoming far more complex than it was earlier because of its fast rate of growth. To day the enrolment rate in higher education is galloping six times faster than the population growth rate. When the population growth rate is in the order of 2.2 percent the enrolment growth rate in higher education is of the order of twelve percent.

EXPANSION

Especially during the last twentyeight years, i.e., since 1947 the expansion of higher education was very fast. The number of students in 1947 was approximately two and half lakhs. The number of universities taking care of them was twenty. Today we have about four million students studying at the tertiary level, and the number of universities has risen to more

than 100. There are about 3,500 colleges spread all over the country. This phenomena of fast rate of expansion will create large number of problems which include managerial as well as curricular, besides of course financing. An average university managed fifteen to sixteen thousand students twentyfive years ago. Today it is required to manage fifty to sixty thousand students. The University of Calcutta is the most pertinent example in this regard. In 1947 it had approximately fifty thousand students. Today the number is almost 2.5 lakhs. It is said that there is no other university in the world which has as high an enrolment as the University of Calcutta. All this would indicate that there is a tremendous improvement in the accessibility of higher education. This has happened because of the policy of democratisation or equalisation of educational opportunities. Higher education which was a preserve of privileged class of people before independence has now thrown open its gates to all those who seek higher education irrespective of their caste and class background. Though even now the facilities for higher education are still concentrated in the urban areas there is growing tendency of higher education travelling to the door steps of even the rural households. This trend becomes evident if we know that between 1964 and 1972 roughly 200 colleges per year or four colleges per week were added. Most of these colleges were brought into being without due preparation often due to reasons which are hardly academic. The one problem such a growth presents is of viability. The other problem is related to the suitability of the curriculum to our national conditions. The attendant problem is one of a high rate of unemployment among the graduates and the other problem is of brain drain.

On the whole, three problems are evident so far as the higher education is concerned in this country. These are : (i) access to education (ii) its quality and (iii) its management. These three problems are inter connected and cannot be solved in isolation.

Accessibility

Improvement in the accessibility to higher education by itself is not undesirable. Especially in a country like India with its vast inequalities, increasing educational opportunities is in fact desirable. But what is undesirable is the lowering of the standards. Quantitative expansion should not lead to qualitative deterioration beyond a particular point. The one issue which has become controversial in the area of higher education relates to the admission policy. The norms of admission are increasingly liberalised. People seek admission into higher education not always because of their competency for it. For a variety of reasons-both academic and nonacademic people seek admission into colleges and universities. The two main reasons identified for the demand for higher education are : (i) the unemployment and the link between degree and employment, and (ii) the social prestige attached to the degree.

The enrolment is not amenable to regulation or control because of again several reasons. The one common reason shown is the social demand for higher education, which manifests itself into a political demand which is very often conceded in a democratic set up. Secondly, college education is politicised because these institutions are used as the instruments by the politicians to mobilise the support for their political status. Of late the institutions are increasingly oriented to caste affiliations.

Another constraint for the regulation of enrolment is constitutional. The central government does not have a direct control over higher education since it is a state subject. It has a very weak and indirect responsibility for higher education. Constitutionally the central government has an obligation to maintain and promote the standards of higher education. The U.G.C. at the national level, on behalf of the Ministry of Education, is entrusted with the function of promoting and maintaining the standards of higher education. This function, the U.G.C. is discharging through the leverage of development grants. But this is a very weak instrument for the reason that the total assistance received from the U.G.C. forms a very negligible proportion of the total investment made on the colleges and universities by the state government. So long as higher education remains as the state subject, the regulation of higher education becomes not possible.

Quality

If the regulation of the expansion of higher education is not possible, efforts must be in the direction of quality improvement. The main prerequisite for the quality improvement is adequate finance. Though higher education compares favourably with the other levels of education in terms of financial outlays still it is far from the required level of investment. It is also true that the unit cost at the higher education level is higher than in the other levels of education. This is only natural because the higher education is costlier than the other levels. The student-teacher ratio also compares favourably with the other levels of education. But this kind of favourable comparisons is inappropriate because higher education is supposed

to be discharging the function of not only teaching but also research.

Apart from the problem of financing, the problem of coping with heterogeneous composition of student population with low motivation for higher education and the inadequate preparation for higher education becomes very real. No sooner we realised the problem we are engulfed by the phenomenon. It requires a great deal of imagination and organisational innovations to cope up with this problem, which remains not just an academic problem but has the potential to manifest into social and political problems.

Management

The management problems of higher education are varied and complex. Over a period of time many innovations have been made with regard to the structure of higher education. A pendulum pattern is visible in this aspect. To start with, higher education included in it all post-secondary education. In the post-secondary, 2+2+2 system was followed, that is, two years of intermediate, two years of degree and two years of master's degree after ten or eleven years of schooling. In some cases, after two years of intermediate three years of honours course equivalent to master's degree was adopted. Later on, in many cases they switched on to 2+2+2 system. With a view to bringing about uniformity all over the country. Education Commission (1964-66) recommended 10+2+3 system. This includes ten years of schooling, two years of post secondary and three years of bachelor's degree course. So, in effect, post secondary education consists of two years of intermediate, three years of bachelor's degree and two years of master's degree. It is not yet very clear whether the two years course of post secondary level should be treated as a part of higher education or not in the present system of 10+2+3. So the various changes that have been attempted in the structure of higher education indicate a pendulum pattern. If there is any major reform that is attempted in the area of higher education it is mainly in the direction of restructuring higher education in terms of its duration. There are already attempts here and there to go back to two years of undergraduate course. So far, no worthwhile academic reason is advanced either in favour or against any of these alternatives that have been tried. The only reason shown by the Education Commission (1964-66) is that it brings in uniformity. But the real problem is one of safeguarding the standards and coping with the increased enrolments. Today almost as a rule, most of the state universities have gone in for the affiliation system. This presents a number of management problems of both academic and administrative nature. If the university assumes the power of affiliation, it automatically implies the responsibility for maintaining and promoting standards. But the way in which the colleges and universities are functioning indicates that the universities have very little control over the standards functioning as if they are two different parallel organisations. Excepting the functions of conducting examinations and certification, the universities have no major responsibility for the undergraduate institutions. It is very interesting to note how, to begin with, the universities gave away the responsibility of postgraduate education to the colleges affiliated to them, later appropriating the same from the colleges making affiliated colleges synonymous with institutions of undergraduate courses, have now started sharing the function of offering postgraduate education with affiliated colleges. The trend seems to be more in the direction of allowing the affiliated colleges to go in for postgraduate education. This may be to facilitate accessibility to postgraduate education to more and more aspirants in the rural areas. There is a tendency for the postgraduate centres to be organised in different places of the university area. There is also a tendency for such postgraduate centres to demand for the status of full-fledged universities. There is another tendency developing, which is in fact accepted as a policy by University Grants Commission, to confer autonomous status to well managed colleges. Here again, there is no convincing academic or administrative reason advanced so far either in favour or against the concept of autonomous colleges. This is a reaction to the fast deteriorating standards of the colleges and also it is a reaction to the growing burden on the universities. As pointed out earlier, an average university in this country has to cope with anywhere between 50,000 to 60,000 students enrolled in the several hundreds of colleges. Now the University Grants Commission is recommending (insisting) on the unitary type of universities with the hope that they maintain excellence in teaching and research. The implications of this system from the point of view of social, political, and economic dimensions are not yet examined.

CURRICULUM

Another crucial area of examination is the curricular aspects of higher education. The curriculum is prescribed by the statutory boards called Boards of Studies. These boards prescribe curriculum both for undergraduate and postgraduate courses. The subject matter specialists are supposed to work out the curriculum. This is the primary academic link between the colleges and the universities. A periodical review and revision of the curriculum is expected. One main

charge against the curriculum of the higher education is that it is not relevant either to the individual or to the nation. Though this is a sweeping generalisation, yet it indicates the problems faced in the area of curriculum development. This aspect is of immense importance because ultimately the output is judged from the point of view of curriculum inputs. More than anything else, we do not know the rationale based on which different levels of higher education are designed and the objectives of different levels of higher education. The level which stands out as an odd level is the undergraduate course. This is a level higher than that of post-secondary, that is, two years of intermediate course and a level lower than that of postgraduate course. The undergraduate course in this country is a terminus to the majority of the entrants. Only a minority of them pursue their studies further. If we can examine in comparative terms the developed and the developing economies we find that it is within the nature and organisation of developed economy to provide functional productive places for the people who obtain undergraduate level of education which in nature is neither too general nor too specialised. The absorption of these people into the economy is possible under the conditions of well-knit and widespread industrialisation. On the other hand in the under developed economies the scope for absorption is for those who have obtained a reasonable level of general education (H. S. C. or at best intermediate) and for those who have attained full fledged specialisation. The under developed economies have no place for under graduates except in terms of preparation for future education. This situation is obviously resulting in huge wastage from the point of view of economy. In other words, the curriculum planning and development in the area of higher education is devoid of the relevance to the economy. Even the curriculum that is offered is not designed in a rational way especially at the undergraduate level. The usual pattern is that the students are required to offer one main subject and a few ancilliaries. For example, in the social sciences a student who offers economics as the main has to choose the other social sciences as ancilliaries. Here the subjects are taught as disciplines. There is nothing wrong with this system but the way in which the courses are designed is not rational. For example, a student with economics (major) offers subjects like politics and sociology as the ancilliaries. The whole problem arises out of not teaching the aspects of the ancillary curriculum which are relevant for the main. On the other hand the usual practice is to teach the whole subject. The student who offers economics as the main has to be taught political aspects of the economy in politics and sociology of economics of life in sociology to be meaningful. This is happening because the curriculum for different subjects is designed independent of each other. This is clearly an area which requires an investigation to rationalize the curriculum. The other aspect of curriculum relates to the relevance of the curriculum to the needs of the economy. There is a mechanical overemphasis on certain conventional subjects. There is no differentiation in the curriculum. This results in a great deal of duplication of training in certain subjects. The modern and unconventional subjects receive very little attention. In fact it will be a good exercise to list the subjects and the combinations offered in all the universities. One will surely come up with the same subjects offered in the same combination all over the country. Again from the point of view of the requirements of the society we do not need so many trained in the same conventional subjects. It is very interesting to note that the subjects oriented to the rural economy and society are rarely offered as subjects of study in the colleges and the universities. It is strange that it is only recently that the U. G. C. is encouraging the colleges to go in for such subjects. The response however is poor because there are no definite guidelines about the curriculum development in this direction and it is not also spelled out how they will be absorbed in the employment market. This is again another area which is fruitful to pursue to make higher education relevant for the economy and society.

TEACHING

The teaching and evaluational aspects of higher education are also relevant from the point of view of standards of higher education. It is only recently that there is a growing awareness that teaching technology is essential even at the higher education level. Hitherto it was considered as not required because the teachers were supposed to be adopting the methods appropriate for the given discipline. In usual practice lecture was the method used in classrooms extensively. The emphasis was on the transmission of the content to be absorbed by the students. There is enough consensus that the students do not internalise the subject but remember it as long as it is required. After the examinations the subject matter is forgotten. If this is true the training that is given is very weak and wasteful. Ideally speaking at the higher educational level the emphasis should not be so much on the memory but should be more on aquisition of skills of analysis from the point of view of a given discipline. Creative thinking is expected to be developed. There is again consensus that this is not happening.

If it is not happening obviously the very purpose of higher education is lost. That is why the emphasis should be on such methods of teaching and learning which promote understanding, applicational abilities, creative thinking among the students. So far, there is no systematic attempt made to devise the methods of teaching at the higher educational level which have to achieve the above objectives. This is an area which deserves attention from the researchers. The other aspect of teaching relates to the utilisation of technology. Today we see the phenomena of large sized classrooms especially at the undergraduate level. The size of the classroom is growing because of the increased enrolments. In view of the limited resources it is not possible to improve the teacher-student ratios. So necessarily we have to depend upon some kind of technical media to obviate this problem. What media is to be used with what effectiveness is a matter for an examination.

EVALUATION

The evaluation aspects are equally important and somehow a lot of concern is shown for this. Rightly or wrongly the people concerned have gathered an impression from various commissions' reports that examination reform is the key to manipulate the whole system of education towards achieving higher standards. A number of reforms are suggested. The reforms are attempted in such aspects of examination as setting up of the question papers, evaluation technique, and grading system. Though this is a desirable reform it cannot be relied upon completely for improving the standards. It should be viewed in the total context of the system. It is very interesting to note that so far as the setting of the question papers are concerned the emphasis is more on the objective type of questions. But here we have failed to recognise the fact that in higher education the objective type of questions cannot meet the objects of higher learning namely analytical abilities and creative thinking. At best one can be sure of the content mastery. The idea of question bank is an outcome of the efforts in this direction. However so far as the social sciences and humanities are concerned the objective type of questions have very little relevance. At the school level they may be alright as at the school level the emphasis is more on the knowledge of the content. Continuous evaluation is another sort of evaluation that is favoured in recent times. This is a good practice but the internal evaluation some how is failing to be functional. There is a suspicion in the minds of many that the internal evaluation is leading to the inflation of marks and grades. If this happens we are actually lowering the standards. In total what it suggests is that the necessary pre-requisities which include both material and human are not satisfied. This is again an area which deserves attention. The marking system has become an issue of controversy. Whether the performance is to be assessed on a hundred and one point scale which is conventionally followed or whether the marking should be based on any other scale. This has received greater attention from the concerned because this is the quantiaive aspect of the problem and so amendable for exercises much as determining the levels of errors statistically. It is felt that there is a significant subjective bias and error of assessing performance. If two different examiners value the same script they mark differently and it is also known that even if the same examiner values the same script at two different time points it results in discrepancy. Because of all these reasons and with a view to reducing the error, grading system is favoured. Even in grading there is controversy about whether one should prefer the criteria grading or the relative grading. All this is relevant for examinations but the difference between one method and the other method is not very substantial. However, this is an area which can also be experimented.

SEMESTER SYSTEM

One of the latest in the field of higher education in India is the adoption of semester system. At present a few universities are experimenting in this. The semester system is different from the non-semester system or annual system where the courses are taught for a period of one academic year and the pupils are examined in those subjects at the end of the year. The scope for diversification in the courses offered is limited in such a system. Secondly all the courses are given more or less the equal weightage. The non-semester system does not give much scope to the curriculum development in terms of flexibility with combination of specialisations in different subjects. On the other hand in the semester system the student can offer a wide variety of courses and can choose the specialisations within a given discipline and between disciplines. And what is more is that the students are supposed to put in an extra load of work as they have to complete a given course in a shorter period of time and get assessed. Generally internal evaluation goes with the semester system. Though many universities are enthusiastic about the adoption of the semester system as an innovation they have not adequately prepared for a transition to the semester system. Very often the semester system is abused in terms of equating it with cutting the year into two terms and cutting the syllabus into two parts. The required curri-

culum development and design is never seriously attempted. Besides this the necessary facilities that are to be placed at the disposal of students and teachers are largely absent. With the result semester system has come to stay only as a symbol but not in its pure substance and spirit. This is another area which requires priority in research.

With this background it would be worthwhile to examine the researches in higher education.

REVIEW OF RESEARCH

A review of research studies on various aspects of higher education indicates a spurt of interest in higher education during the seventies. Until 1960, there was hardly any study on higher education. After 1960, the interest in research in higher education developed to a significant extent. About twenty percent of the total studies were conducted between 1960 and '65 and about the same percentage between 1966 and '69. It is only from 1970 a sudden rise in the studies on higher education is witnessed. Over half of the total studies on higher education are completed during this period. Another trend clearly evident is that during the seventies the institutional research has increased. Before the seventies much of the research was of the nature of Ph.D. work. On the whole, about half of the studies on higher education is of the nature of Ph.D. work. Another significant trend evident from the review is the growth of inter-disciplinary work. Until 1960 whatever work was done in the area of higher education was mainly contributed by the faculties of education and psychology. Very often they were of combined faculties. It is very interesting to note that the other related faculties, namely sociology and economics, specially economics, did not contribute for the studies on higher education to any significant extent before sixties. However, in the sixties the social science disciplines have started taking interest in research in higher education. During the period 1960-65 about eight percent of the total studies made were by the faculty of economics. They continued the trend more or less at the same rate until the seventies. After 1970, the rate of their contribution to studies on higher education was doubled. Similarly the faculty of sociology, though contributed only about four percent of the studies made during 1960-65 against eight percent by the faculty of economics, thirty-seven percent by the faculty of psychology and fifty percent by the faculty of education, has contributed thirtythree percent of the total studies made during the period 1966-69. This is a phenomenal rise in comparison with nine percent contribution made by economics, thirtythree percent psychology and twenty-three percent by education. During the seventies, it is very interesting to note that the relative contribution made by the four faculties, namely education, psychology, sociology and economics tended to be equal. This indicates the growing trend in inter-disciplinary interest on higher education. It is also evident from the review that the faculty of education has started taking greater interest on higher education since the seventies and thus trying to keep up the pace with the other social sciences who have started taking significantly greater interest on higher education. Hitherto the faculty of education was mainly concentrating its attention on the primary and secondary levels of education.

The institutional funding of research has helped a greater deal in undertaking the research projects on higher education. Credit must certainly go to I.C.S.S.R. for encouraging research on higher education. In fact I.C.S.S.R. is mainly responsible for encouraging the other related faculties to work on problems of higher education. The other agencies which funded research on higher education are mainly the N.C.E.R.T. and the U.G.C. It is strange to note that the U.G.C.'s contribution for research on higher education seems to be the least when compared to that of the N.C.E.R.T., and the I.C.S.S.R. Since U.G.C. is primarily responsible for maintaining and improving the standards of higher education, it should take greater interest in research on higher education. The N.C.E.R.T. should get the credit for its commitment and responsibility because though as an organisation it is primarily responsible for school education, it has funded quite a number of studies which have bearings on higher education. This is a good policy because there is an area of research in higher education which would help the school education. The Central Institute of English and Foreign Languages is another agency which has funded a few studies that have bearing on language. The I.C.M.R. has funded a few studies which are relevant for medical education. It is also encouraging that a significant number of studies have been financed by the educational institutions themselves. The broad trend that can be seen is the availability of research funds from various agencies. What is needed is a systematic and purposeful programme of research. The following review of the trend of research studies will highlight the areas covered and the gaps in research.

AREAS OF RESEARCH

When the areas of research were examined, it became evident that the majority of the studies were on various aspects of students. They roughly account for fifty percent of the total studies on higher educa-

tion. The other major areas are evaluation and assessment, financing and curriculum. There is very little work on the organizational aspects. The content analysis of the above areas of research is discussed below. Some aspects of student population have received major attention from the researchers. They are, value and attitudes, personality, unrest, socio-economic background, achievement and performance. Again of these aspects, studies relating to achievement and performance, and values and attitudes have received major attention. There are about six studies with their exclusive focus on the students of scheduled castes and tribes. All these six studies are sponsored by the I.C.S.S.R. There are a few studies which are exclusively on the women students. Though there are about seven studies with their major objective of identifying the socio-economic background of the students, most of the other studies on students have one of their objectives devoted for identifying the socio-economic background. It is very discouraging to note that none of the studies on students has its focus on the major problem of first generation college educated and the consequences thereof. There are hardly any in depth studies. The results, given below, are not comparable and hence are not useful for generalisations.

Studies on values bestowed their attention on social, religious and political domains. The major result that comes out of these studies is that the change is more in the peripheral values but not in the core or central values. Most of the studies have also tried to measure the differential rate of impact based on socio-economic background and personality traits of the respondents. Very often a contradiction is found in the value orientations of the respondents. This indicates that the change is uneven over the different domains. Belief system and behavioural system are often found to be in contradiction. The students tend to believe both in human effort and fate as poinetd out in the study made by Agrawal (1959). Beg (1962) studied the value orientations of the students of cross cultures and came out with a conclusion that the values are culture bound. According to this study the Indians are oriented towards inner life, development of self and preservation of tradition, whereas the Americans are oriented to more materialistic values.

So far as the attitudes of the students are concerned, most of the studies have concerned themselves with the attitude towards marriage, joint family and parental authority. Here again socio-economic background of the respondents is treated as an independent variable. The main problem with these studies is that they fail to indicate the impact of higher education on values and attitudes of the respondents. The methodologies used are so loose that they do not provide proper controls to isolate the influence of any one of the independent variables.

Studies with focus on personality have tried to identify the structure and types of personality of different categories of students. The dimensions are anxiety, tolerance, intelligence, extravert-introvert, creative potential, need achievement, autonomy, etc. Here again there is no study which tried to measure the impact of the level of education.

Student unrest is another major area of studies undertaken during late 60s and 70s. Most of the studies have their focus on the causes of unrest. Rarely there is any study which tried to study the processes involved in the student unrest. The causes that are identified may be classified under personality, environment, academic and political.

There are a few studies which have their major focus on identifying the socio-economic background of the students of higher education. Some of the studies have their exclusive focus on women students and married women. Some studies such as those conducted by the I.C.M.R. have bearing on medical students. But what is striking is that there is no study which brings out the differences between the first generation and the second and third generations of students of higher education. The most important area for research in this context is the various problems of growing heterogeneity of the student composition in the institution of higher education.

There are six studies with their exclusive focus on the students of scheduled castes and tribes. The major focus of these studies is on the educational and adjustment problems, besides identifying the socio-economic background. The studies have been, by and large, superficial and they have touched only the peripheral problems. More intensive studies in this area are required. For example, the impact of higher education on the personality of the scheduled caste students, their identity problems, etc. have to receive greater attention.

Studies on the problems of achievement are numerous. Most of these studies have tried to identify the factors that are responsible for high and low achievement and characteristics of high and low achievers. They have identified such factors as intelligence, study habits, personality adjustment, environment and certain other nonacademic factors. A peculiar characteristic of these studies is that they are divided so far as the influence of the general mental ability is concerned on the achievement. Similarly there is a divided opinion about the impact of rural background

on academic performance. Another interesting feature brought out by the studies is that the association between the level of aspiration and the level of academic achievement is negative. It is also brought out by some studies that the students who go through the English as medium of instruction are better than the others in terms of their performance.

On the whole, academic adjustment seems to be the factor responsible for the level of achievement. A few studies, not many in number, have their focus on the occupational aspirations and motivations of the students. Some studies have highlighted the importance of guidance and counselling programme in the institutions of higher education.

Teachers :

Studies on college and university teachers are rare. Singh (1970) has studied academic role structure and modernisation among the teachers of science and arts faculties. His major findings is that there is a transition in role-structure towards modernisation. Chhabra (1975) has studied morale among the teachers. The study identified the positive relationship between morale and study habits and adjustment. The study finds no relationship between morale and academic achievement. The study further identified various academic and non-academic factors responsible for low morale among the teachers. Pundlik (1970) has studied religion in the life of college teachers and came out with the conclusion that religion is still a force in the life of teachers. The most urgently required study is the professionalism, commitment and innovativeness of teachers in the institution of higher education.

Curriculum :

Research on the curriculum of higher education is also a neglected area and of whatever studies that are made half of them are concerned with the subject of English language and most of them are conducted in the Central Institute of English and Foreign Languages. Deulkar (1967) studied home science curriculum; but the study merely relates to the students' preference of subjects and the employment situation of the home science graduates. Singh and others (1974) have studied adoption of social sciences in higher agricultural education. But this study is conducted more on the style of adoption of agricultural innovations. The I.C.M.R. (1972) has made a study on the internship programme and came out with a list of deficiencies and irregularities in the system of internship. There is no work done on the academic course structure and design of the varied levels of courses offered in higher education.

Examination :

Studies on examinations are also numerous but most of the studies confined their scope to such aspects of examination as analysis of answer books, comparison between objectives and essay type, chance factor, the correlation between the internal and external evaluation, relative merits of scaled and un-scaled marks, nature of question papers, etc. What is more is that most of them are oriented to statistical analysis of the marks. There is hardly any study which has studied the examination system as a whole and in depth. This is so in spite of the fact that in certain universities Examination Reform and Research Centres are established. The work done in those centres are of the nature of statistical compilation and analysis of marks.

Financing :

A number of studies are conducted in the area of financing of higher education. Most of these studies are funded by I.C.S.S.R. Azad (1972) analysed pattern of financing of higher education in India. Dutta (1970) studied the relationship between the student input, student output and college environment. Singh (1971), Shahnaz Mushtar (1975) estimated the amount of financial assistance received from the U.S. Government and other U.S. agencies. Most of the other studies delineated as their scope the sources of income, adequacy of income and stresses and strains. On the whole most of these studies are stereotyped and conventional. There is absolutely no work in the area of educational planning relevant for higher education.

RESEARCH PRIORITIES

The review of research work done so far in the area of higher education suggests the following areas of research which should get priority in future :

1. Patterns of the growth of the colleges and the universities.
2. Conditions and factors responsible for the growth of the colleges.
3. The viability problems of the institutions of higher education.
4. College-University relationships.
5. The changing structure and functions of higher educational institutions.
6. The structure and functioning of the academic departments in the universities and colleges.
7. The academic administration at the higher educational level.
8. The community and college relationships, especially in the rural set-up.

9. Criteria for starting new colleges and universities and the structure of the new colleges and universities.
10. The structure and function of autonomous colleges.
11. Various alternative policies and methods of admission and their implications.
12. The changing nature of student composition and the problems and implications consequent to the heterogenous characteristic of student population.
13. Professionalism, commitment and innovativeness of college and university teachers.
14. Consequences of caste oriented colleges.
15. Course structure and design of undergraduate and postgraduate degrees.
16. Management and administration patterns and problems of various types of teaching and research institutions of higher learning.
17. Institutional Planning.
18. Evaluation of the working of semester system.
19. Evaluation of the working of internal assessment system.
20. Structure and functioning of the Boards of Studies.
21. Teaching methodology appropriate for higher education.
22. Methods and techniques of correspondence courses.
23. Methods and techniques of remedial education for backward students.
24. Resource mobilisation and utilisation for higher educational institutions.
25. Study of institutional budgets and the applications of modern systems of management like P.P.B.S.
26. Comparative systems of higher education.
27. The impact of higher education on the value system of students with special reference to the values of secularism, socialism and democracy.
28. The impact of higher education on identity formation and change among the weaker sections.
29. The structure, composition and functioning of discipline centered professional associations.
30. Evaluative criteria of faculty members and institutions.

CONCLUSION

To sum up, research in the area of Higher Education has picked up the momentum of late. It is found that various agencies have taken interest in providing the needed research funds. Though quite a number of studies have covered different areas of the field, many important ones like educational planning, academic course structure, etc., have been left untouched. At this juncture it is highly required to have a planned and systematic programme of research keeping in view the research gaps and the research priorities of the day in the field.

ABSTRACTS : 741–786

741. BADAMI, H. D., A Survey of Use of Leisure Time among the Preuniversity College Students, University School of Psychology, Education and Philosophy, Guj. U., 1969. (UGC financed)

The survey was undertaken with the following specific objectives : (i) to study various types of leisure time activities among the college students; (ii) to study sex differences in the use of leisure time among the students; and (iii) to enlighten the community and various educational agencies about the need for effective use of leisure time of college students and to provide them guidance for the worthy use of leisure.

The sample consisted of 327 male and 131 female students drawn from twelve colleges. Questionnaire was the main tool employed for data collection. The data were analysed with the help of t test and chi-square test.

The findings revealed the following : (i) A majority of the group spent their leisure time in extra-reading, tours/picnics, while very few spent in photography. Except extra reading, significantly more males spent their leisure time in tours/picnics, games/sports, and gossiping. (ii) A majority of the group was found to have interest in reading novels, short stories, and detective stories and very few were found to have interest in reading poems, essays, letters, diaries and criticism; practically no one was found to have interest in books on industrial and commercial arts, science and travels. Significantly more males than females had expressed interest in novels, detective stories, and biographies; comparatively more females were interested in reading poems. (iii) There was a significant difference between the level of interest expressed by both the groups — males and females. (iv) About seven students out of ten had expressed preference for social and detective movies; and few had shown interest for documentary, historical, and thrillers; significantly more males than females had shown interest in mythological, scientific, and documentary movies.

742. BOSE, P. K., Calcutta University : Some Problems and their Remedies, Cal. U., 1973. (UGC and MOE financed)

The objectives of the project were : (i) to assess broadly the needs for higher education and research and to examine, in particular, the developmental needs of the university departments; (ii) to examine the question of conferring the status of autonomous colleges on selected institutions; (iii) to suggest organisational and structural changes in the university; and (iv) to indicate the financial implications of the recommendations.

The study was done with regard to Calcutta University. The problems of the university were identified in terms of undergraduate education and post-graduate education as well as the academic administration of the university. Case studies were made on undergraduate students in Calcutta as to how they lived and worked, and on seven big colleges in Calcutta pertaining to their academic, administrative and financial affairs. The main sources of information were : (i) interviews with the senior administrative officers, and (ii) statements, reports and comments made by different individuals and institutions.

Some of the major findings were as follows : (i) The problems of the university as detected were the increase in number of the institutions, students and examinees irrespective of the constant remaining resources at the disposal of the university, shortcomings in the administrative arrangements, overconsciousness among students and employees about their rights and privileges, paucity of funds, paucity of space, recurring deficits, problems related to opening of new departments and starting new courses, developing university press, maintenance and repair of buildings, starting hostels, providing students with satisfactory welfare services, holding examinations, maintainnig adequate and able staff (teachers and administrative officers), financial position of some affiliated colleges, the demand for more teachers, and improvements in the library and laboratory facilities. (ii) As regards the undergaduate education, the percentages of passes were less than forty in the university examinations in a large number of private colleges, the main causes being inadequate number of working days, poor college libraries, ill-equipped laboratories, disproportionate teacher-student ratio and lack of motivation on the part of teachers and students. The per capita expenditure of the affiliated colleges was less than the government sponsored colleges. Some of the important remedial suggestions with regard to the affiliated colleges, were to provide more inputs in the nature of grants, equipments and books, formation of undergraduate college boards responsible for introducing new types of examinations, teaching methods and admission policies. (iii) Almost all the colleges had financial difficulties except two or three. Every college had common problems of library, laboratory, building and furniture. However, the emoluments of teachers did not differ remarkably. The enrolment in commerce stream was found to be higher. Conclusively, student explosion

and the extreme paucity of funds were the two main factors which hindered the functioning of the university efficiently.

743. BOSE, P. K., BANERJEE, P. K., and MUKHERJEE, S. P., Working Conditions of Colleges affiliated to the University of Calcutta during 1962-63, Dept. of Stat., Cal. U., 1966.

The study aimed at determining the extent of facilities currently available in the constituent and affiliated colleges of the University of Calcutta during 1962-63.

The sample consisted of ninetyeight affiliated colleges and two constituent ones as existing in the year 1964. The questionnaire technique was used for the collection of data. Attempts were also made to obtain the desired information by interviewing the principal/vice-principal or some other responsible members of the teaching staff and by consulting college records.

The study revealed the following : (i) Fiftytwo of the 100 colleges investigated were situated in Calcutta, thirtyeight of them being managed by private bodies. Of the remaining fourteen, six were managed and eight were sponsored by the State Government. (ii) During the session 1962-63 only twenty (out of 100) colleges imparted instructions in all the three branches, viz., arts, science and commerce. Teaching in science subjects was provided by sixtyfive colleges, of which twentynine were located within Calcutta. (iii) The overall percentage of colleges where the annual total number of working days went below 150 was as high as 41.4. The average number of working days was 163 in government colleges, 157 in sponsored and 154 in private colleges. (iv) It was found that students in about fortyfive percent of the respondent colleges had to pay tuition fees of Rs. 10/- or Rs. 11/- for study in arts classes. Government colleges charged less fees from their pupils than privately managed colleges. (v) It was felt that the financial position of some colleges was not bright. The largest percentage of total income received in the form of fees was shown by private colleges and the smallest figures applied to government colleges. In fortytwo percent of the colleges more than half of the total income was derived in the form of fees. (vi) In 31.5 percent of colleges the expenditure involved per student did not exceed Rs. 200/-, while in 23.7 percent of colleges the amount was higher than Rs. 500/-. (vii) Results were somewhat less satisfactory in government sponsored colleges, where the percentage of passes was less than fifty in twenty percent of the institutions. Performance of students from privately managed colleges was worse. More than sixty percent of examinees appearing from 13.5 percent of such institutions failed in the university examinations.

744. BUCH, M. B., PASSI, B. K., and PADMA, M. S., Review of Research in the M. S. University of Baroda (1949-1972), Centre of Advanced Study in Education, MSU, 1973. (MSU financed)

The objectives of the study were : (i) to take a stock of the existing position of research in the university; and (ii) to make suggestions for the improvement of the same.

The investigation had the characteristics of both historical and descriptive study. The data were collected from office records and also through interview schedules, from the Ph.D. students and members of staff of the different departments.

The results of the study were reported under three categories, namely, (i) research work done at the Ph.D. level; (ii) researches financed by the M. S. University; and (iii) researches financed by outside agencies. Under the first category the findings were : (i) during the period under review 976 research scholars were registered, of which 369 completed their work, 339 discontinued and the remaining were continuing; (ii) in facultywise analysis, the Faculty of Science (fifty percent), Faculty of Arts (twentyseven percent) and Faculty of Education and Psychology (seventeen percent) claimed approximately ninetyfive percent of the Ph.D.s produced by the university as a whole; (iii) there was high incidence of wastage which came to nearly thirtyfive percent; (iv) the percentage of girl scholars was twentyfour, nine, and seven in the Faculties of Education and Psychology, Arts, and Science respectively and there was one girl scholar in the Faculty of Home Science; (v) on an average a scholar took 4.2 years to complete his Ph.D. degree; (vi) about twentyseven percent of the scholars (N = 263) received fellowships/scholarships for their research work; (vii) enrolment of Ph.D. scholars under professors, readers and lecturers was 593, 267 and 33 respectively. Under the second category it was revealed that (i) during this period the university spent Rs. 1.48 million on research projects; (ii) seventyfive percent of the amount was utilized by Faculty of Science, Faculty of Arts and Faculty of Technology and Engineering; (iii) the university provided about 2.70 percent for research in its budget estimates in 1956-57 and this percentage came down to 0.63 in 1972-73. Under the third category it was found that (i) there were thirtyfive different agencies which financed researches in the

university; (ii) eight international, eighteen national, five state level and four private agencies from outside supported the researches in the university; (iii) the university started taking support from outside agencies since 1952-53; (iv) amongst the various agencies the national level agencies financed 165 projects, while international level, state level and private agencies financed fiftyfour, thirtysix and twelve projects respectively; (v) the percentage of financial contribution from international, national, state and private agencies was 69, 17.5, 12.7 and 0.8 respectively; and (vi) during the period under review, 267 projects were financed by the external agencies, and the Faculties of Arts, Science and Home Science claimed seventyone percent of these projects.

745. CHIRACKAL, G. S. J., A Study of Student Services in selected Colleges in Madras, Dept. of Social Work, Loyola College, Madras, 1970. (NCERT financed)

The objectives of the study were : (i) to find out the state of student personnel services in the arts and science colleges of Madras city; (ii) to study the effect of student personnel services on the academic performance, interpersonnal relations, discipline and personality development of students; (iii) to examine how far the recommendation of the Education Commission (1964-66) on student welfare services had been implemented in the colleges; (iv) to explore better ways of eliciting student participation in student services; and (v) to suggest, if necessary, better ways of organising student personnel services in colleges.

Fourteen colleges out of sixteen were selected for the study. Interview, observation and study of documents were used as tools for collection of information from students and members of staff of the colleges.

The findings were : (i) out of fourteen colleges only six colleges conducted orientation programme and the programmes were better organised in women's colleges than in the men's colleges; (iii) the orientation programme had a positive effect on the academic performance, interpersonal relations, discipline and personality development of students; (iii) nine colleges had dispensaries attached to the hostels and only one college had a full time doctor, (iv) out of the 29,615 college students 4977 were residing in college hostels, (v) in the case of majority of male students who stayed in the hostels, residing in hostels had no positive effect on their studies but in the case of female students the residence in the hostel had positive effect on their academic performance; (vi) four colleges had 'day-scholars centres'; (vii) five colleges had guidance and student counsellors except in the case of one college where a full time counsellor was appointed; (viii) in all colleges students' unions were functioning; (ix) in all colleges, except two, the relationships between the principals and the unions were harmonious; (x) financial aid helped a number of deserving students to complete their higher education and secure university degrees, (xi) many Harijan students, who had no desire for counselling centres which were served by part time higher education, enrolled themselves in the college and the hostels just to get residential scholarships; and (xii) in some cases rich students received scholarships which were meant for poor Harijan students.

746. CHITNIS, S., The Teacher-Role in the College System, Ph.D. Soc., TISS, 1973.

The objectives of the study were : (i) to identify the influences that the university or the college as a system, within which the teacher functions, had upon the teacher's-role; (ii) to develop a profile of college teachers in terms of their attributes, attitudes, performances and outlook on education; and (iii) to develop a college profile in terms of its sponsorship, aims, programmes, management, administration and the composition of student population.

The major assumption of the study was that the difference in the college profile would differentiate the teacher's role. The data regarding the attributes and attitudes of the teachers were collected through intensive interviews, based on interview schedule and an information schedule. The sample of the study was 171 teachers out of 195 full time teachers, belonging to three non-professional colleges, namely, Elphinstone, St. Xavier's and Ruia, affiliated to the Bombay University. Relevant records and documents of the university and the colleges were screened to find out other aspects of the data. Chi-square test was used to find out the significance of inter college differences of teacher attributes, attitudes and activities.

Some of the findings were : (i) Majority of college teachers were male and majority of them were below forty years. (ii) Hindu community formed the biggest group and fiftyseven to fiftynine percent were Brahmins. In St. Xavier's College, Christians (thirtyfive percent) were also in good number. (iii) Marathi speaking people formed the largest group of teachers while the Gujarati speaking people followed next. (iv) The teachers in St. Xavier's had an edge over others in the matter of academic qualifications. (v) The interaction between the teachers and students was extremely limited. In the classroom, lecture method was followed and the interaction in the form of questions and answers or discussion was negligible. (vi) Teach-

ing was mostly examination centred at Ruia, while it was not so in Elphinstone. (vii) Most of the teachers had a workload of twelve to twentyone hours a week. (viii) Variation due to programmes differentiated the college teachers with respect to their qualifications, academic activities and general outlook on education. (ix) The aims and objectives of the college influenced the patterns of teaching. (x) Management influenced the recruitment policies; hence the age, sex, qualifications were determined accordingly. (xi) Student population influenced the self-image of the teachers, interaction between teachers and students, and style or character of teaching. (xiii) College culture influenced the choice of medium of instruction, academic climate and teacher morale.

747. *CHITNIS, S., Traditional stereotypes and roles of women — A report on a study on "Co-education" and "Professional Education" as factors influencing the attitudes and outlook of college girls in Bombay City, TISS, Bombay, 1975.*

The objectives of this study were : (i) to examine the extent to which college women accepted traditional stereotypes and customary roles and to understand the extent of independence available to them; and (ii) to examine the impact of coeducation and professional education on these features.

The study was confined to the city of Bombay and it covered 1,005 students residing in the hostels of nine colleges and the university. As many as 250 students were interviewed and approximately twenty-five percent students of each hostel were interviewed.

The findings were : (i) a large majority of the respondents (more than eighty percent) agreed fully or at least partially with the notion that women were naturally passive, submissive, patient, tradition-bound and a fairly large number (fiftysix percent) also believed that women were more disciplined than men; (ii) women were better than men in cooking, household work and child care; (iii) personal freedom was available to some women but it was limited even in the case of college women living on their own in hostels in a metropolitan city; (iv) the majority of the respondents did not favour free mixing between the sexes because the boys expected physical intimacy in course of social interaction; (v) the 'non-coeds', rather than 'co-eds' favoured free mixing between boys and girls; (vi) comparisons between the students of professional degrees and students of general degrees indicated that the former were more liberal than the latter about mixing with the opposite sex; (vii) the findings supported the expectations that the students of professional courses were more independent and were oriented to change than the non-professionals; (viii) lower middle class and upper class homes were more favourably inclined towards education of girls than the middle class homes; (ix) a low level of education of the parents might not function as a constraint to the higher education of girls from lower middle class and upper class homes but it seemed to function as a constraint to higher education of girls of middle class families; (x) orthodoxy of the parents did not seem to be an obstacle to the higher education of girls, but orthodoxy combined with poor education and a middle class economic status appeared to function as a constraint; (xi) girls from the lower class homes did not enjoy approval for mixing with the other sex, girls from middle class families enjoyed the freedom only if their parents were educated and liberal, but the upper class girls seemed to be in a position to mix freely with boys.

748. *DASGUPTA, S. and Others, The Great Gherao of 1969, a Case Study of Campus Violence and Protest Methods, Gandhian Institute of Studies, Varanasi, 1972. (ICSSR financed)*

The important aims of the study were : (i) to find out the modus operandi of the gheraos at Calcutta University in 1969, their genesis, objectives and functions; and (ii) to find out the roles of student leaders, university authorities, state government, central government, political parties, students fronts and the non-involved students in the unrest.

The data were collected from the documents, newspapers, social case records of actual events and case studies of (a) six student leaders, (b) teachers' politics in the university and (c) the students' fronts. Student leaders, teachers, administrators, political party leaders and uncommitted students were interviewed.

The significant findings were : (i) the movement was not a cross generation conflict and it was not a generation gap problem; (ii) it was a conflict of programmes and ideologies between different political and factional groups; (iii) it was not a creation of separate youth culture; (iv) the aim of students' fronts was not to create student power, but to aid their respective political parties; (v) the student movement was not an attempt to gain an identification; (vi) there was no intra-group unity; (vii) the movement was not an expression of dissatisfaction in the infra-structure of education system; (viii) the movement was a battle for power between rival groups of students to put up their own political party at the seat of the government; (ix) the battle was more of a psychological warfare rather than the physical one; and (x) no group intended to

initiate violence but tried to make the other group to initiate violence.

749. *DESAI, N., Socio-Economic Background of Married Women Students of the University and Their Educational Problems, 1969. (NCERT and SNDT financed)*

The study aimed at inquiring into the problems of married women performing their student role. The specific objectives of the investigation were to study : (i) the socio-economic background of the married women students; (ii) the way in which the married women students were performing their two roles; (iii) the issues emerging out of the performance of the two roles; (iv) the nature of adjustment made by the three parties, e.g., the educand, the family and the educational institution; and (v) the awareness of the role tensions of the married women students. It was hypothesised that the role conflict is inherent.

The sample consisted of 372 married women students of SNDT and Bombay Universities. The questionnaire was the main tool to collect data. Opinions from their husbands, mothers-in-law, fathers-in-law and administrators of educational institutions were gathered through interviewing a sample of thirtyseven members.

The findings of the study revealed that (i) sixty-one percent respondents had started their higher education after marriage; (ii) the restrictive impact of the marriage was found in the case of sixtyeight percent students who had to become external students after marriage; (iii) some respondents reported inadequacy of time to pursue studies; (iv) the students predominantly belonged to upper castes and there was total absence of scheduled caste students; (v) the respondents belonged to either middle or upper income groups; (vi) forty percent of the students belonged to teachers training colleges; (vii) the academic performance of the married women students was good as 56.37 percent never failed and 29.27 percent secured more than fifty percent marks; (viii) economic need was found to be the motivational factor where husbands were educated percent marks; (viii) economic need was found to be the predominant factor in the case of the respondents whose husbands belonged to managerial or professional positions; (ix) a good number of the students were found to be well adjusted to their two roles while many of them exhibited a feeling ranging from acute strain to acceptance of challenge; (x) majority of husbands had the consent for their wives' educational pursuits and a few of them were willing to share the family tasks; (xi) the administrators expressed that the married students were irregular in their studies but they were sympathetic towards their problems; (xii) certain basic changes were occurring in Indian social structure with regard to husband-wife relationships; and (xiii) a new image of married woman, who wished to develop her personality, was emerging and there was the growing indifference to the criticisms against married women's role as a student.

750. *DESAI, S. D., The Teaching of English as a 'Library Language' in the Commerce and Science Faculties of Universities in Gujarat, Ph.D. Edu., Guj. U., 1975.*

The objectives of this investigation were : (i) to evaluate the prescribed syllabii in the context of the objectives of teaching English as a 'library language'; (ii) to study the usefulness of the vocabulary prescribed for study for the purpose of using English as a 'library language'; and (iii) to evolve a minimum useful vocabulary on an experimental basis for one of the levels upto graduation in commerce and science.

For data collection questionnaire and interview were employed as tools. The respondents were educationists, teachers of English and the elite group of the society. Two studies were conducted with a view to finding out the impact of teaching a set of vocabulary to increase the power of comprehension among pre-university students of commerce and science. Tests were also administered to a group of S.S.C.E. students. Statistical techniques were applied to find out the difference between the means of achievement scores.

The significant findings were : (i) in the faculties of commerce in the universities of Gujarat, the useful vocabulary items introduced ranged between thirtyone and thirtyseven percent of the total vocabulary; (ii) in the faculties of science in the universities of Gujarat the useful vocabulary items ranged between forty and fiftyone percent of the total vocabulary; (iii) in the syllabus of English and in the question papers thereof, there seemed to be a trend towards language orientation; (iv) a large number of comparatively young teachers of English in commerce and science colleges belonging to the universities of Gujarat did not possess an adequate language skill and the desirable clarity to the problems of English teaching; and (v) it would be possible to introduce library language oriented syllabi at different levels of degree courses for commerce and science students and it would also be possible to prepare readable textbooks on the basis of useful vocabulary.

751. *FAROOK FARZANA, A Study of the Complexes and Maladjustments of University Youths by Means of Word-Association and Cardiopneumopolygraph methods, Ph.D. Psy., AMU, 1974.*

The main objective of the investigation was to

study the complexes and maladjustment among university youths by using the techniques of word association and cardiopneumopolygraph.

The sample consisted of sixty highly adjusted and sixty highly maladjusted students selected from 1500 students of Aligarh Muslim University. The Personality Adjustment Inventory was administered to the above sample. The word association test was administered individually to the two matched groups. Of these students fortyseven were from the Faculty of Arts, fortynine from the Faculty of Science and twentyfour from the professional courses. The word association test consisted of 100 stimulus words related to the following areas : (i) home and family; (ii) health and physical appearance; (iii) social; (iv) emotional; (v) financial; (vi) moral and religions; (vii) sex; and (viii) educational and vocational. Besides these, the Keller's Cardiopneumopolygraph was used. Statistical measures of central tendency and variability were used for analysing the data.

The investigation revealed that (i) no significant differences in maladjustments were found between the male and the female groups for, home and family, emotional, financial, moral and religious, and educational and vocational areas; but, in case of health and physical appearance, social, and sex areas, the two groups differed significantly; (ii) the differences between the average reaction time scores of the adjusted and the maladjusted groups, both for critical and innocent words, were significant; (iii) in home and family area, the most frequent pattern of maladjustment was resentment and aggression against parents (more specifically against father) generally caused by the harsh, unsympathetic and strict disciplinarian attitude of fathers; (iv) in health and physical appearance area, maladjustment usually took the form of complex; (v) maladjustment in moral and religious area expressed itself in either of the two ways : (a) in the form of dissatisfaction and resentment against religion and morality, or (b) extreme religiosity and morality; and (vi) maladjustment related to educational and vocational area was usually expressed in the form of constant failures, dissatisfaction with studies, resentment against some teachers and these often led to strikes and other acts of indiscipline.

752. *GAUR, J. S., Factors affecting the Occupational Aspirations of Higher Secondary School Students of Delhi, Ph.D. Edu., I.I.T., New Delhi, 1973.*

The purpose of the investigation was to study the factors affecting the occupational aspiration of higher secondary students of Delhi. Hypotheses were formulated relating the levels of occupational aspirations with other variables of the study.

As many as ninetyeight girls and 202 boys of class X were selected as the sample on the basis of quota sampling technique from eleven Delhi Schools. The following five tests were administered : (i) the Cattell's Culture Fair Intelligence Tests; (ii) the Socio-Economic Status Scale (SES) by Jalota, Pandey, Kapoor and Singh (1969); (iii) the Occupational Aspiration Scale (OAS) adapted in the Indian context from the scale by Haller and Miller (1964); (iv) the High School Personality Questionnaire (HSPQ) published by the Institute for Personality and Ability Testing; and (v) the Organisational Climate Description Questionnaire (OCDQ). Data were analysed by using the methods of correlation, multiple regression and analysis of variance.

The findings revealed that (i) there existed a significant difference between the levels of occupational aspiration of the superior and the backward; (ii) the superior and the average did not differ significantly in relation to their occupational aspiration levels; (iii) there existed a significant difference between occupational aspirations of pupils belonging to the three types of schools — the public, the private-aided and the government; (iv) there was a significant relationship between age and the level of occupational aspiration; (v) though there was a significant relationship between the SES and the level of occupational aspiration, the relationship became not significant by keeping intelligence constant; (vi) significant relationship was found between school marks and the level of occupation; (vii) the relationship between the organisational climate of an institution and the level of occupational aspiration was not significant; (viii) boys with higher level of occupational aspiration were found to be more confident, emotionally stable and controlled; and (ix) the factor analysis of data obtained for boys and girls recognised two factors — one running positively through the tests of intelligence, OAS, SES, school marks and certain personality characteristics like social boldness, controlled and over activity, and the other factor running through the variables of age, over activity, dependence, tenseness and worriedness.

753. *ICMR, Evaluation of Intership Programme at Dept. of Medicine, Medical College, Rohtak, New Delhi, 1972.*

The investigation aimed at studying, how far the internship programme for medical students was successful, after evaluating different aspects of the programme.

The sample of the study consisted of 263 interns from the medical colleges at Agra, Amritsar, Chandi-

garh, Ludhiana, New Delhi, Patiala and Rohtak. Interview was the main tool used for collecting data. A proforma had been prepared for four categories of respondents, viz., (a) those interns who had started with this training programme in their respective medical colleges, (b) those who had just finished their internship, (c) senior professional teachers of various medical colleges where such a training was being imparted, and (d) doctors working in primary health centres, and medical practitioners. In each case, the respondents had been asked to reflect their reaction to the existing pattern of internship.

The main findings of the study were as follows : (i) Data indicated that those who had undergone this type of training evinced different and varied reactions towards it. (ii) It was found that there were certain types of deficiencies and irregularities in the training programme, which were responsible for failing to make it functionally significant from the point of view of the interns. This trend further revealed that the interns lacked clarity on their functional role in the system of this type of training.

754. ICMR, Socio-Economic Survey of Indian Medical Students, New Delhi, 1972.

The objective of the study was to survey certain demographic and socio-economic aspects of the medical students in the country.

The survey was conducted at various centres in the country. The students in these colleges formed the sample of the study.

The highlights of the information obtained from this study were as follows : (i) Most students were from urban areas and were unmarried. (ii) Approximately two-thirds of the students came from families of the low income group. (iii) Guardians of most students belonged to technical professions or administrative services, very few being agriculturists. (iv) Thirteen percent of the guardians were reported to have incurred debts for supporting their wards. (v) Most students had chosen this career out of their own liking. (vi) A little less than half of the students had expressed dissatisfaction with regard to the present curriculum. (vii) Regarding the methods of assessment, majority of the preclinical students appeared to be satisfied with the methods but more than half of the clinical students were dissatisfied. (viii) Majority of the students had expressed a need for more opportunities for practical work during the internship training.

755. ICMR, Follow-up of Students admitted to St. John's Medical College, Bangalore, New Delhi, 1974.

The present study aimed at a follow-up of students at different stages of M.B.B.S. course.

The follow-up study of medical students admitted to St. John's Medical College, Bangalore, was carried out on the basis of the students' performance in the pre-university course (PUC) and the entrance examination as well as their performance on some psychological tests.

The findings of the study indicated that the predictive validity of psychological tests was significantly high in forecasting academic success and training wastage. As compared to psychological tests the validity of PUC was significantly low in predicting academic success. The validity of entrance examination came in between that of psychological tests and PUC. The coefficients of multiple correlation and regression analysis revealed that the combination of psychological tests and entrance examination had significant precision of prediction at each and every stage of M.B.B.S. course.

**756. JINDAL, C. R., A Comparative Study of Some Personality Variables and Affective Reactions toward Examinations of Superior and Failing College Students, Ph.D. Edu., Kur. U., 1976.*

The study had an objective to compare the superior and failing students on five personality variables, viz., (i) test anxiety (ii) achievement orientation, (iii) intellectual achievement, (iv) socio-economic status, and (v) intelligence, along with affective reactions toward their final examination.

The sample of the study constituted 400 college students from the State of Haryana who either received fiftyfive percent and more marks, or failed in their previous examinations. The tools used were : (i) the Mandler and Sarason Test Anxiety Scale, (ii) the Mehrabian Achievement Orientation Scale, (iii) the Grandall Intellectual Achievement Responsibility Scale, (iv) the Jalota General Mental Ability Test, and (v) the Jalota Socio-Economic Scale. The statistical techniques used were t test and product-moment correlation.

The findings of the study were : (i) successful students were higher in achievement orientation and lower in test anxiety than failing students; (ii) successful students were more likely to attribute their success to their own, than failing students; (iii) successful males were lower in test anxiety and higher in achievement orientation than failing males; (iv) successful females were higher in test anxiety and lower in achievement orientation than successful males; and (v) socio-economic status had a positive correlation with intelligence except in successful males and failing females.

*757. *JINDAL, S. K., Student Perceptions of the College Environment as Related to Their Satisfaction in the Colleges of Haryana, Ph.D. Edu., Kur. U., 1977.*

The study was conducted with the main objective to find the relationship between perceived discrepancies between the self and various aspects of college environment and the sources of conflicts or strain within the college environment.

A sample of 1850 students was selected from the different colleges of Haryana. They were administered TAPE (Transitional Analysis of Personality and Environment) test which was based on the semantic differential technique and asked the students to rate a number of concepts on bipolar adjective scales. The data was analysed on the two bases — (i) intra and inter institutional comparisons; and (ii) student versus college interactions.

It was found that there were large discrepancies between the way the students saw themselves and the various aspects of college environment. The sources of strain were in the functioning of the college. The student versus college interaction suggested that the students were dissatisfied with the other students in the college, faculty and the administration of the college. The largest variability was however found on student and administration concept.

*758. *KALE, S. S., Budgeting in the Financial Administration of Private Aided Colleges and the Institutions of Higher Education in Maharashtra State, Gokhale Institute of Politics and Economics, Poona, 1972. (Maharashtra Government financed)*

The investigation aimed at studying (i) the significance of budget in the educational institutional management, (ii) approaches and philosophies governing budget, (iii) various stages and phases in the preparation and administration of budget, (iv) responsibilities of the business and finance officer of the college or the institution of higher education in the budget preparation and administration, and (v) observations regarding budgetary practices in the institutions of higher education in Maharashtra.

The study was restricted to all the private aided colleges or institutions of higher learning of the State of Maharashtra. Stratified random sample technique was employed for drawing out the sample. Two hundred and fifty institutions were selected for the purposes of collection of data relating to financial accounting. The sources of data were the records available from the colleges, universities and state government. Discussions and deliberations with the business and administrative officers, senior members in the colleges, and college auditors were carried out. The data were analysed by employing simple statistical techniques like mean and percentage.

The following were the main findings. Budget was a significant tool of planning, controlling and coordinating in the institutions of higher learning. The main reasons for failure of budgetary system were — misunderstanding and mistakes expressed in (a) expecting too much, (b) inadequate supervision and administration, (c) inadequate accounting and costing systems, (d) expecting results too immediately, (e) failure to obtain cooperation, (f) absence of well defined routined procedures, (g) absence of flexibility and failure to revise estimates, and so on. A number of controversies over the approach and philosophy of budgeting emerged. It was found that the system of budgeting was mostly mechanical, yearly, management dominated and centralised. The essentials for effective budgeting were related to active and whole-hearted support of management, application of principles, delegation of authority at all levels, effective relationship between budgeting and accounting, and clear statement of budget objective. Budget procedure of a college was influenced by factors like philosophies and policies, approach and the size of the college, as well as the type of the budget. It appeared that in addition to the normal routine type of budget, there were systems of multiple yearly budgeting. The considerations for the formulations of the budget procedures were budget period, budget centre, draft proposal, final draft proposal, and so on.

759. *KALE, S. S., A Diagnostic Study of Incoming Crisis in Higher Educational System in Maharashtra — A System Analysis of Higher Educational System in the State 1960-1970, B. M. College of Commerce, Poona, 1972. (Government of Maharashtra financed)*

The major objectives of the investigation were : (i) to study the growth of higher education in Maharashtra during 1960-1970; and (ii) to study the various aspects of the existing system of higher education in the state in order to provide a sound basis of educational planning for the state in future.

The study was conducted on all the then existing six universities in Maharashtra. The data were collected mainly through interview and discussion, and record analysis. Interviews and discussions were held with the Education Minister, the Under Secretary, the Director of Higher Education, the Director of the State Institute of Education, Vice Chancellors and Registrars

of the universities in Maharashtra, and a few eminent educationists. The records were available mainly from the Directorate of Education, and the universities of Maharashtra. The data were quantified and analysed.

The study provided a broader framework of higher education as the human capital forming industry imbibing input, processes and output aspects in it. This issue was further evaluated in terms of the significance of higher education in the process of socio-economic revolution in the country. The study revealed that during the period under study the higher education grew phenomenally in the state in terms of enrolment, number of institutions, and expenditure. The need for higher education was well recognised and a clearly defined policy on higher education was formulated. Some progress was made in terms of equalisation of educational opportunity. Nevertheless, serious discrepancies were also existing between the quantitative and qualitative growth in higher education, and scarcity and abundance of educated manpower between the sectors. The existing higher education system failed to adapt to the changing needs of the community. The present situation revealed the unsatisfactory output both social — family membership, citizenship and productive labour, and individual — intellectual, attitudinal and motivational. The factors responsible for the present situation were absence of objectives and planned growth of higher education, deficiency of the competent staff, absence of adequate understanding of the social expectations before the system, dearth of effective leadership, absence of integrative planning of social, economic and (higher) educational sectors, organisational deficiencies, scarcity of resources, and underdeveloped information system. The future trends in terms of rising social demand for education, explosion of knowledge, resource scarcity, rising cost, further discrepancy between higher education and life needs and social aspirations, growing graduate unemployment and youth discontent indicated the probable deepening of the crisis in higher education. State level planned action strategies seemed imminent in order to overcome this crisis.

*760. *KALE, S. S., Financial Accounting in the Financial Administration of Private Aided Colleges and the Institutions of Higher Education in Maharashtra State, Gokhale Institute of Politics and Economics, Poona, 1972. (Maharashtra Government Financed)*

The investigation proposed to study broadly : (i) the objectives of keeping accounts; (ii) factors that influence and determine a particular pattern of the system of financial accounts and records keeping; (iii) broad outline and analysis of the existing system of financial account keeping; (iv) determinants of a satisfactory system of financial account keeping; (v) basis of accounting procedure; (vi) system of fund accounting and analysis of its suitability to the educational institution; (vii) operational development of the fund accounting system (the identification of distinct transactions and their segregation and grouping into functions); (viii) accounting records; and (ix) operating of funds accounts.

The study was restricted to all the private aided colleges or institutions of higher learning of the state of Maharashtra. Stratified random sample technique was employed for drawing out the sample. Two hundred and fifty institutions were selected for the purposes of collection of data relating to financial accounting. The sources of data were the records available from the colleges, universities and state government. The data were analysed by employing simple statistical measures indicating central tendency and dispersion. The study, thus, is a normative one.

The following were the findings of the study. The existing system had developed manifold confused and even conflicting objectives due to number of pressures. Moreover the existing system failed to operate as administrative and management tool as well as a planning technique. The educational system of financial accountancy differed from commercial system in its (a) nature and aims, (b) financial aims of education, (c) accumulation of assets and their structure in institutions of higher education, (d) attitude towards accumulation of capital and its treatment in the balance sheet, (e) treatment of inventories, (f) acquiring of capital and the nature of the liabilities emerging out of it and its reflection in financial accountancy, and (g) exemption from taxation. The system of financial accountancy in the institutions of higher education (a) based itself on the appreciation of institutional (educational) objectives, (b) operated as a safeguard to the funds, and (c) provided adequate information needed for institutional planning and programming, and administration and financial control.

761. *KARANDIKAR, S. P., Problems and Conditions of Students in the Poona University Area, Ph.D. Edu., Poona U., 1975.*

The major objective of the study was to identify the problems of degree course students in the Poona University area and suggest probable solutions.

The study was conducted on a stratified random sample of 2276 (about ten percent of the population) arts, science and commerce students of forty colleges

in the area of Poona University. The distribution of students was 894 in arts, 688 in science and 694 in commerce. The data were collected through a questionnaire administered to the sample; only 1545 were available for use. Fiftysix teachers were also interviewed to supplement the data. The various aspects covered in the study were students' socio-economic background, living conditions, facilities for studies, study habits, participation in cocurricular activities, leisure time activities, health habits, friendship, relationship with parents, relationship with teachers, expectations, aspirations, special problems of women students and insight of teachers into the problems of students.

The study revealed that (i) students came from varied socio-economic background and a large proportion from rural areas; (ii) while rural and urban students did not differ in overall life aspiration, the former group showed clear preference for teaching profession and the latter for other occupations; (iii) rural and urban students were comparable in achievement, but the rural students were somewhat better in sports and games and other nonacademic activities than the urban students; (iv) the popular notions that the students cram guides, do not respect teachers, are indifferent to studies, are interested in agitation and are not ready to move out for job, were proved unfounded; (v) students expected efficiency and affection from college teachers; (vi) the generation gap between parents and students were not prominent as most of the students had no feeling of rejection for their illiterate and poor parents; (vii) deficient economic conditions was responsible for many of the problems; (viii) the women students represented highly selective families and they preferred to manage both home and job after graduation; and (ix) the teachers educated in the pre-independence era were not aware of the problems of students and seemed to be complacent of the present conditions of the colleges.

762. *MAJUMDAR, T., Academic Leadership and Student Unrest — A Pilot Study, Zakir Husain Centre for Educational Studies, JNU, 1974. (ICSSR financed)*

The main purpose of the study was to evolve an explanation of the student unrest in the colleges and departments of the University of Delhi in 1972-73.

The sample of the study included (i) academic leaders (N=116) — formal (N=67) and informal (N=49), of which 47 were students and 69 were teachers; (ii) a group of 73 college and university teachers selected at random; and (iii) a group of 274 students selected randomly. Tools employed were : (a) the Teacher-Student Study Questionnaire; (b) the Interpersonal Communication Form; (c) the Allport-Lindzey-Vernon Value Scale; (d) the Sentence Completion Test; (e) interviews; (f) records available from the offices of the Proctor, teachers' associations and students' union; (g) newspapers records; and (h) anecdotes.

The main results of the study were : (i) The events of the year 1972-73 in the University of Delhi did not indicate a generalised pattern of unrest either in terms of campus/off campus or pure arts and arts and science colleges. (ii) About 55.56 percent teachers did not spend adequate time on preparation for teaching. Their attitude towards students was of indifference and negative in case they supported the authorities. (iii) The existing academic programmes failed to gratify students' psychological needs at three levels, namely, cognitive, affective and conative and helped in fomenting student unrest. (iv) Although the relationship between intellectual climate and student unrest was significant, the overall organisational climate also affected student unrest. (v) Students indulged in violence and vandalism prematurely and under conditions of perceived psychological threats. (vi) The police and governmental interference affected the organisational climate, attitudes of teachers and students negatively, and encouraged the neglect of codes of conduct. (vii) Nearly 56.93 percent of students listed economic insecurity as one of the important sources of students' frustrations. (viii) Political interest in Indian colleges and university campus was natural and real one. (ix) Student agitations represented complex, multidimensional and dynamic social behaviour of student groups. (x) Formal leadership was perceived more favourable in times of unrest. (xi) A substantial percentage of students and teachers perceived informal leadership as playing double roles or redundant.

763. *MAKHIJA, V. K., Evaluating Training Adequacy of Agricultural Undergraduates against Critical Requirements of Practical Agricultural Graduates, Ph.D. Extn. Edu., HAU, 1976.*

The main objectives of the study were to determine the critical requirements of practical agricultural graduates and on the basis of these requirements develop an adequacy scale to evaluate the training adequacy of outgoing students of Haryana Agricultural University.

The study was conducted in Haryana State. As a prerequisite, the existing training programmes in the country were surveyed from a sample of thirtynine institutions to provide details of the special training programmes being followed in the institutions in addition to the routine practicals in the respective courses.

Flanagan's critical incident technique was used to determine the critical requirements of a practical agricultural graduate. A total of 568 nonpractical and 551 practical incidents were studied. On the basis of critical requirements, an adequacy scale consisting of sixtyone items developed to estimate the confidence level of students completing their graduation in the year 1974-75 in Haryana Agricultural University by their expressed confidence on each item given in the scale. The data through the scale was obtained from 125 students.

It was found that (1) the confidence level of the class as a whole was in the middle of the adequacy scale, i.e. 'somewhat confident'; and (ii) the background variables of the students had no effect on their level of confidence.

*764. *MEHR, K. H., Higher Education in Iran and a Socio-Economic Study of Tehran University Students, Ph.D. Soc., Poona U., 1976.*

The aims of the study were (i) to study the role of higher education in providing skilled manpower; (ii) to set down and present the quantitative and qualitative aspects of higher education in Iran; and (iii) to know about the socio-economic status of the students of Tehran University.

The data were collected from 900 randomly selected Tehran University students through questionnaires, interviews and observations. Relevant documents were also used.

Modern education had made rapid progress in Iran during the last decades. The technical education was rapid in the early years of industrialisation in Iran. Teaching was done mainly by lecture system where there was no active participation and discussion from the student side. There was a handicap due to the lack of latest books on the subject taught in the universities of Iran. On account of the lack of the latest knowledge on the subject, the teachers were unable to guide the students on latest ideas and views at the international level. The number of students was very high and individual attention and contact between the teacher and the student was not possible. Tehran University had a high percentage of women students. The basis of admission to any university or institution of higher education in Iran was a general entrance examination. A large number of students at the university belonged to the families connected with government staff, private sector employees, and small scale businessmen. The percentage of students belonging to the agricultural community and labour class was relatively low. About one-fifth of the students had a savings account, whereas about one-third had debts. There was no good team work among the professors of the university. The sports and recreational facilities provided for students at the Tehran University were not adequate. Though the university had improved the facilities of loans, scholarships, training with salary and dwellings for students, they were not sufficient.

765. *MEHTA, P., Attitude and Choices of College Girls in Rajasthan, Dept. of Psy., Uai. U., 1974. (ICSSR financed)*

The major aim of the study was to measure the attitudes and choice of college girls of Rajasthan.

The sample of 375 girls was selected from the local government college and the Home Science Department of Udaipur University. The data were collected through questionnaires.

The outcomes of the study were : (i) almost all the girls came from middle or lower middle class families; (ii) majority of students had selected the subjects of their own choice and the arts students were independent in this decision making process; (iii) the girls of highly educated mothers showed better perception regarding the relationship with opposite sex; (iv) majority of respondents believed that women in India had been traditionally submissive and passive and there was a need to change with time; (v) a great number of girls of educated mothers showed dissatisfaction with the present status of women; (vi) majority of girls thought that it was difficult for women to break the traditional customs and conventions; (vii) home science students showed highest degree of confidence with regard to chalking out a career and science students had more confidence than the arts students in this respect; (viii) the science and arts girls tended to show greater career orientation than the home science girls and this was influenced by two significant factors, namely, mother's education and coeducation; (ix) girls of more educated mothers were more inclined towards a career than the girls of less educated mothers; (x) a majority of girls of educated mothers, in comparison to the girls of less educated mothers, perceived no difference in decision making on account of sex difference and they felt that girls could take a decision in a similar way as boys could; (xi) eight out of ten students felt that discipline came naturally to the girls and they could handle responsible jobs with competence.

*766. *OSMANIA UNIVERSITY, The Report of the Syndicate Sub-Committee on Academic Reforms — Undergraduate Studies, Hyderabad, 1975.*

Out of the need for a fresh look at the system of

instruction and evaluation both at the undergraduate and postgraduate levels, the present study was undertaken. The main objectives were as follows : (i) to examine the revival or otherwise of the yearwise examination scheme for B.A., B.Sc., and B.Com. degree courses; (ii) to revise the existing syllabus of the undergraduate and postgraduate courses in all the faculties; (iii) to look into total academic improvement, standards, evaluation, teaching techniques and methods in the principles of modern educational concepts; and (iv) to study the content, direction and pace within the existing pattern and evolve a concensus among the principal constituents of the educational system, namely, the teachers and the students.

The present investigation is an opinion survey. Data were collected by a questionnaire containing all the aspects of the existing system of education with an option to make suggestions and additional comments. Respondents were all the university students, teachers, the members of the Senate, Academic Council and Syndicate and a few administrators. As many as 1790 students and 1244 teachers responded. Suggestions were made by sixtyseven students, fiftytwo teachers and seven others. To supplement and cross-validate the questionnaire data, discussions were held with a representative cross-section of the academic community and leaders of the known teacher organisations of the university. Data were analysed and percentage of agreement or disagreement indicated the trend of opinion. The suggestions made by different respondents served as a backdrop to the questionnaire responses and revealed the complex causes that contributed to the erossive trends in the existing system of university education.

The following were some of the significant findings of the study: (i) For admission to B.A., B.Com., and B.Sc. courses, an entrance test was a necessity. (ii) Student orientation programme was not organised well and in proper time. (iii) Lecture schedules were not scientifically planned. There was little scope for the revision of the courses, seminar classes and for the tests to be conducted. Students had hardly any idea about the content and structure of the lecture they came to attend. (iv) Library and reading room facilities were utterly inadequate. (v) Textbook lending library was badly needed. (vi) Programme for remedial instruction to below average students was needed. (vii) Home assignment as a learning device was not regularly practised by the majority of teachers. (viii) There was scope for organising extension lectures to supplement the classroom teaching, and using all the available audio-visual aids to make teaching more effective. (ix) In selection of university lecturers more rigorous ways of judging their abilities in teaching were needed. (x) Functions of a university teacher in terms of teaching techniques adopted, seminars held, project work or field work undertaken by the teacher, were not regularly and consistently carried out. (xi) A large majority of the respondents held that student evaluation of the teacher might form an essential part of an academic improvement programme as a feedback mechanism for the teacher to improve his teaching. (xii) All the departments of the university needed well planned and well coordinated action for their development. (xiii) Teaching schedules and workloads remained to be recasted on a more scientific and efficient basis. (xiv) Yearwise examination could be introduced at the undergraduate level with twenty percent of marks in each paper for internal assessment through periodical tests. (xv) Organising workshops for training the teachers in the preparation of better questions was an urgent necessity. (xvi) There was a general consensus for making the present syllabi up-to-date and relevant to life and also for job oriented and/or application oriented courses as a part of the undergraduate programme. (xvii) Greater administrative flexibility, more sympathetic approach to problems of the students, and more coordinated and all out efforts of all the university departments to follow through their programmes, were some of the keynotes, as opined by many of the respondents, for implementing academic reforms in the university.

*767. *PANCHAMUKHI, P. R., Education and Research in Economics : A Profile of the Postgraduate Students in Economics of the Bombay University — 1930-1970, Dept. of Eco., Bom. U., 1973.*

The major objectives of the study were : (i) to design the trends in the facilities for postgraduate study and research in economics in the Bombay University; (ii) to study the socio-economic status of the students; and (iii) to study the effectiveness of the programme in terms of student achievement.

The main sources of data were the application forms of the students for admission to the department, budgets of the university, handbook of information of the department and other records of the university. Since all the records were not available for years before 1930 the study was restricted to the period 1930-31 to 1969-70.

The study revealed that (i) there had been a significant growth in the facilities for postgraduate

study in economics during 1930-70; (ii) there had been a shift in students' preference from M.A. by thesis to M.A. by papers in recent years; (iii) though male students had greater representation, the number of female students were also fast increasing; (iv) while majority of students who offered papers were unmarried and were in the nineteen to twentyfour age group, majority of students who offered thesis were married and belonged to higher age group; (v) a fairly high percentage of Ph.D. students was married and was in the age group of twentyfive years and above; (vi) students were largely from urban area; but in case of Ph.D. students, the percentage of rural area students was found to be increasing; (vii) in respect of demographic character, female students were more homogeneous than male; (viii) the course dropout rate for male was higher and increasing while that for female was slightly low and declining; (x) the dropout rates among M.A. by thesis and Ph.D. students were thirty-three and twentyfive percent respectively; (xi) the Ph.D. productivity rate was very high, but it took five years on an average to complete; (xii) the overall pass percentage at M.A. examination was found to be fairly high but was found to show a declining tendency in the recent years; (xiii) the department's training enabled the students to improve their performance in graduate examination; and (xiv) the scholarship holders in general performed well but they dropped out also at a very significant level.

*768. *PHUTELA, R. L., A Study of Some Selected Motivational Factors in Relation to Academic Achievement and Socio-Economic Status among the College Students in the States of Haryana and Punjab, Ph.D. Edu., MSU, 1976.*

The major aim of the investigation was to study relationships among the selected motivational factors, keeping in view the factors causing variations in these relationships, i.e., sex, stream of course, socio-economic status and academic performance.

The sample consisted of students of fourteen colleges in all, from the States of Haryana and Punjab. Three colleges had semi-urban or rural background, six colleges had urban background and five colleges came from cities at district headquarters. The data were collected with the help of following tools : (i) the TAT test by Mehta (1969); (ii) the TAT test by Birney (1970); (iii) Questionnaires to assess Educational and Occupational Aspiration by Mathur (1969); (iv) Achievement Test by Patel (1971), and (v) the Kuppuswamy's Socio-Economic Status Scale, Form A, for urban students (1962). The data were analysed by employing the techniques of correlation, analysis of variance and t test.

The findings concluded that need achievement and educational and vocational aspirations formed one group of the motivational variables, and fear of failure and achievement press formed another group of the variables affecting academic achievement in their unique way. The former group was a significant predictor of academic achievement, while the latter group was not a significant determinant of it. The study of differences showed that the arts students had different motivational levels than the science students, more so, for the first group of motivational variables than with respect to second group of variables. These motivational levels were by and large independent of the differences in sex and academic achievement.

*769. *PIMPALKHARE, M. H., A Study of Arts, Science and Commerce Colleges in Maharashtra (1971-72), Ph.D. Edu., Poona U., 1976.*

The purpose of the investigation was to conduct a status study of the nongovernment arts, science and commerce colleges in Maharashtra in the year 1971-72, with a view to finding out the growth of these types of colleges during the period 1966 to 1972, studying the pattern of enrolment in the year 1971-72, the teaching and the nonteaching staff, the physical facilities and the financial position of the colleges, and teaching subjects under the faculties of arts, science and commerce.

Out of the 329 colleges teaching arts, science and commerce in Maharashtra in 1971-72, as many as 303 colleges responded to the study. The data were collected through a mailed questionnaire. Visits to some of these colleges were also made. Reports of various commissions and committees, both Indian and foreign, dealing with higher education were also used.

There were 95 arts, science and commerce colleges in 1960 when the Maharashtra State came into being. The number of such colleges increased to 189 in 1965-66 and further to 329 in 1971-72. The figures of enrolment for 1966-67 and 1971-72 were 1,38,765 and 2,71,584 respectively. During the period 1966-70 the maximum enrolment was in the arts faculty followed by science and commerce. In 1966-67 the average enrolment per college was 806 and it increased to 896 in 1971-72. Nearly 7.27 percent of the total seats available were lying vacant in 1971-72. In the same year, out of the total enrolment, girls formed 23.24 percent. The percentage of girls varied from university to university, the maximum being 36.67 in Bombay and 7.23 in the colleges affiliated to the Marathawada University. About 4.23 percent of

the teachers had to their credit the Ph.D. degree. The pay scales of the nonteaching staff varied from the jurisdiction of each university and even among colleges affiliated to the same university. Compared to the norms of physical facilities laid down by the Committee on Improvement of Standards of University Education appointed by the UGC, a number of colleges fell below the expected norms. The state government incurred an expenditure of rupees 22.10 lakhs in 1960-61 for payment of grant-in-aid to nongovernment colleges. It increased to rupees 74.21 lakhs in 1966-67 and to rupees 257.47 lakhs in 1971-72. Nearly 44.30 percent of the students availed themselves of the facility of concession available to the economically backward classes.

770. *RATH, R., Attitudes of University Students towards Some Politico-Economic Issues, Dept. of Psy., Utkal U., 1955.*

The present study aimed at measuring the attitudes of the university students of Orissa towards some politico-economic issues. Besides this, an attempt was also made to see if the distribution and intensity of attitudes scores had anything to do with the family occupation and the economic status of the subjects. The hypotheses tested in the present investigation were : (i) the student population have favourable attitudes regarding some political and economic issues; (ii) attitudes have definite relationship with the family occupation of the subjects; and (iii) attitudes have statistically significant relationship with the family economic status of the subjects belonging to different strata.

The sample consisted of 800 college students irrespective of their class and subjects from Orissa. For constructing an attitude test a set of five statements graded from most favourable to most unfavourable attitudes towards a particular issue was formulated. The test finally contained thirty important issues concerning social, political, economic and cultural problems. Besides this, the students were asked to give the details regarding their family occupation, annual income, land in acres and its approximate value, immovable property and other assets of their families. Data were analysed by computing percentages and using statistical technique of chi-square test.

The study revealed that (i) the distribution of attitude scores of all the subjects showed clear trends for three groups of politico-economic issues; (ii) the chi-square values obtained for Russian influence, Russia's responsibility for another war and communism were highly significant, yet compared to other chi-square values these were quite low; (iii) chi-square value for nationalisation of industries, etc., was the highest; (iv) none of the chi-square values for three occupational and three economic groups was significant at one percent level; there were only two trends in economic group which were significant at five percent level in regard to the present day administration and nationalisation of the industries; and (v) the present sample represented the true population in regard to six out of eight attitudes studied; the chi-square values for the socialists and Marxism were significant at one percent level.

771. *SHAH, R. P., A Survey of the Problems and Guidance Expectations of the Students of Gujarat Vidyapith, Gujarat Vidyapith, 1973.*

The purpose of the study was to find out the guidance needs of the students and to plan out suitable guidance programme.

A questionnaire was prepared after making a preliminary tryout with forty pupils of standards X and XI studying in one of the secondary schools in Ahmedabad. The questionnaire for the preliminary tryout was prepared by an all India committee on educational and vocational guidance. The preliminary tryout was conducted with high school pupils in order to obtain reactions regarding their guidance expectations and thus to modify the questionnaire accordingly. The final form of the questionnaire was administered to a sample of 450 college students.

The major findings were : (i) provision for measuring special abilities of the students was felt necessary; (ii) a system of loan library could be established; (iii) it was necessary to have the guidance and counselling programme for the first and the third year students; (iv) an information centre was needed for disseminating the information about vocational training; (v) self study materials were required to be made available for the students in Gujarati for providing self guidance; and (vi) students expressed concern regarding changes in examination system.

772. *SHAH, R. S., College Campus Life in Perspective, Ph.D. Edu., MSU, 1975.*

The major objectives of the investigation were : (i) to develop a profile of colleges in Central Gujarat, including sociology of student and teacher community, physical facilities and qualitative status; (ii) to study some major trends and issues of higher education, namely, perception of academic life, and student unrest; and (iii) to identify desirable reforms in areas like curriculum, teaching, textbooks, and examination.

The study was confined to twentyeight out of thirtyfour colleges in Kheda and Panchmahal districts.

A total of twentysix principals, 100 teachers (12.3 percent of the total population) and 1,112 students (5.34 percent of the population) were selected for the study on stratified randomisation basis. For the evaluation of the colleges, fifteen research tools were used. Out of these, fourteen were in the form of questionnaires, opinionnaires, rating scales, data sheets and these were developed separately for principals, teachers and the students. The other tool included was the Organisational Climate Description Questionnaire developed by Halpin and Croft. The data were analysed using chi-square test and the contigency coefficient.

The important findings were : (i) students who secured first class marks in the qualifying examination joined the science courses; (ii) wards of highly educated parents tended to join the science courses, while the wards of less educated parents mostly joined arts courses; (iii) students who belonged to low socio-economic status selected arts courses, while students belonging to middle and high socio-economic status selected science courses; (iv) the students showed their maximum dissatisfaction towards students' welfare services, curriculum, examination, discipline, and interpersonal relationships; (v) strict admissions, compulsory attendance, small size of classes were supported by postgraduate students; (vi) sixty percent teachers fully endorsed the selective admissions, small size classes consisting of fifty students and co-education classes; (vii) principals (sixty percent) felt that there should be at least one college in each district located in rural and open air setting, admissions should be selective, and junior teachers should be given short term inservice courses; (viii) teachers and principals observed that one final university examination should have less weightage and internal assessment should be adopted; (ix) students, teachers, and principals were divided on the issue of causes of student unrest; (x) students' satisfaction was higher when the management was committed to serve the cause of higher education, constructed best possible college buildings, etc.; and (xi) organisational climate of the college was significantly related to the principals', teachers' and students' perception of the causes and remedial measures of students' unrest.

773. SHAHNAZ MUSHTAR, A critical study of American Influences on Post-Independence Higher Education in India, Ph.D. Edu., AMU, 1975.

The study aimed at exploring American interest in Indian education and critically assessing American influence on the development of higher education in India, mainly its theory and practice, during the post-independence period. The study also tried to take into account the attitudes and opinions of those Indian scholars who had studied in the U.S.A. and other European countries and were now associated with various Indian institutions of higher learning.

A critical and evaluative study was made of the available relevant literature pertaining to the assistance in the shape of money and materials provided by the American government and private agencies for the development of education in India since independence. The efforts made by American personnel or American trained Indian personnel associated with higher education in India were also studied. A questionnaire was prepared and was sent to about 600 teachers engaged in teaching and research in various universities of India. The total number of questionnaires received back duly completed was 286. Statistical measures of critical ratio and chi-square test were used for analysing the data.

The findings of the study were : (i) American assistance to India came at a time when the nation possessed insufficient schools, too few textbooks, and an outmoded system of education. (ii) The U.S. aid was provided in such programmes as Marshal Plan, Point Four programmes. PL-480 programme, Mutuai Security Act, TCM, USAID and Fulbright, etc. (iii) The total financial assistance for the development of higher education in India through U.S. governmental agencies came to about Rs. 719.85 crores. During the same period, the assistance from Rockfeller and Ford Foundations came to about Rs. 261.7 crores. Apart from this, the equipments, apparatus and thousands of books were given as gifts and donations from the American government and various private publishers, organizations, etc. (iv) From 1951 to 1970, under the Fulbright programme 1151 and under USAID programme 3000 American specialists served as teachers and consultants in India. (v) The total number of Indian specialists who visited U.S.A. was 2449 under Fulbright scheme and 5778 under USAID scheme. Moreover, till 1969, about 68000 Indians studied in U.S.A. In the year 1969 alone, 8000 Indian students, 3000 Indian medical doctors, 4000 Indian university faculty members were in the U.S.A. studying for various degrees or engaged in research work.

774. SHARAN, M. B., A Study of Role Conflict and its influence on Role Performance, Ph.D. Psy. Pat. U., 1974.

The study was designed to understand role conception, role demands, personality and role performance of the college students. Some of the hypotheses tested were : (i) students' role conception would differ significantly from their parents' expectation; (ii) stu-

dents' role conception would be similar to their friends' expectation, (iii) there would be positive correlation between parents' and teachers' expectations on students' role; (iv) students' role performance would be significantly lower than their role conception; (v) there would be one to one correspondence between self concept and self satisfaction; (vi) the role performance of high role conflict group would be lower than that of low role conflict group; and (vii) the self concept of high role conflict group would be lower than that of low role conflict group.

The study was designed on the line of role theory. Nine independent inventories, forms and schedules, namely, SRC Inventory, PESR Inventory, TESR, FESR, SRP Inventory, PIS, ISC Inventory, SC and SS Inventory were developed in order to measure different aspects of role performance in order to measure different a sample of 500 students (385 males and 115 females) of Bhagalpur University.

The important findings were : (i) male and female students differed significantly on five variables out of nine studied; (ii) the difference between students' role conception and parents' and teachers' expectations on students' role was not significant; (iii) there was a wide gap ween students' role conception and their friends' expectations on students' role; (iv) there was positive correlation between teachers' and parents' expectations; (v) there was a wide gap between role conception and role performance of college students; (vi) there was a significant gap between ideal self concept and self concept of the college students; (vii) the relationship for one to one correspondence between self concept and self satisfaction was very high in both the samples of males and females; (viii) although the influence of role conflict depended upon the nature of role conflict, the conflicting expectations had definite influence upon their role performance, and (ix) the influence of perception of irregularities in society (as an index of role conflict) was not clear either upon personality or role performance of the students.

*775. *SINGH, B., A Study of Personality Traits of Student Leaders and Non-leaders of Selected Indian Universities and their Expressed Opinion towards Leadership Traits, Ph.D. Edu., BHU, 1974.*

The study was undertaken with the following objectives : (i) to find out the difference between personality traits of leaders and nonleaders and to prepare personality profiles; (ii) to find out the difference between the intelligence of these two groups; (iii) to find out the difference between the expressed opinion towards leadership traits of leaders and nonleaders; (iv) to make a comparative study of their academic achievement; (v) to determine the extent of relationship between the socio-economic status and student leadership; (vi) to find out the relation between ordinal position and student leadership, and (vii) to find out the relation between the political consciousness and student leadership.

The present empirical study consisted of 200 student leaders and 500 nonleaders. The sample was drawn from six selected universities of U.P., viz, BHU, Kashi Vidyapith, Varanaseya Sanskrit University and the universities of Allahabad, Lucknow and Gorakhpur. The incidental-cum-purposive sampling technique based on normative survey was adopted in case of both the groups — leaders and nonleaders. The tools used were : (i) the Indian Adaptation of the 16 PF Test by Jalota and Kapoor, (ii) the 16 PF Test (Factor B — intelligence) and the Joshi Group Test of General Mental Ability, (iii) Leadership Trait Inventory developed by the investigator, and (iv) General Information Sheet developed by the investigator. The statistical techniques used were : critical ratio, chi-square, t values, product moment correlation, and cluster analysis.

The main findings of the study were as follows : (i) The student leaders in comparison with the nonleaders were more warm and sociable, emotionally mature and stable, dominant, having stronger character or superego strength, tended to be more adventurous, tough and realistic, practical, sophisticated and polished, confident, secure, cheerful and self-composed. (ii) Both the leaders and nonleaders were more or less similar in their general mental ability. (iii) The leaders appeared to have higher self-image towards leadership while the nonleaders appeared to disagree with the leader's self rating. (iv) The nonleaders were found to be better achievers than the leaders. They were more regular in the class and also secured higher percentage of marks at the examinations than the leaders. (v) The leaders in comparison with the non-leaders belonged to higher income groups and better educated families. (vi) The ordinal position had no significant relationship with student leadership. (vii) The leaders were found to be politically more conscious, participating in various occasional student movements, going to jail for students' causes, having a desire to become a leader in future and so on.

776. *SINGH, D. B., A Pilot Study of Scholarships awarded at University Stage, Madurai U., 1971. (ICSSR financed)*

The aims of the study were : (i) to assess the economic and social costs of scholarships; (ii) to exa-

mine the extent to which the award of scholarships has secured its purpose; and (iii) to ascertain the real cost of scholarships.

For this pilot study the Thiagarajan Arts College, Madurai was selected. Out of 1,115 scholarship holders (of 1969-70), 103 were randomly selected and fifty scholarship holders, who had completed their studies, were also selected. For the collection of data three schedules were adopted : (i) to interview the scholarship holders; (ii) to interview the principal and the lecturers concerned; and (iii) to study the family budgets of a few selected scholarship holders and to elicit information from their academic records in the college.

The main findings were : (i) eleven types of scholarships were available, but the majority of students received their scholarships (80 out of 103) from the Harijan Welfare Department; (ii) the scholarships were given, on the whole, to deserving candidates; (iii) there were some cases of overlapping specially between scholarships and fee concessions; (iv) the amount received on the average as scholarship by a college student was adequate, or perhaps more than adequate, to meet his educational expenditure; (v) academic performance of scholarship holders was satisfactory as it was found that out of the fifty ex-students who were scholarship holders fortyfive came out successful; (vi) it was reported that the payment of scholarships was prompt and regular; and (vii) excepting in a few cases, the amount paid as scholarship was utilised properly.

777. SINGH, H. K. M. and SINGH, B. P., Unit Cost of Higher Education, Dept. of Eco., Punjabi U., 1972. (A Project sponsored by Planning Commission, Govt. of India)

The study aimed at estimating the unit cost of higher education separately for science and nonscience students as well as combined, in one university, namely, Punjabi University.

The data on cost of education were collected from twentythree science and nonscience teaching departments offering master's degrees, undergraduate and postgraduate diplomas, and certificates. For the purpose of this study, cost of fortythree affiliated colleges and research departments were excluded. Costs were calculated in terms of current costs including salaries, dearness allowance, house rent, provident fund, contingencies, etc., and capital cost. Both the current as well as the capital costs were calculated under direct and indirect cost. Indirect costs were further calculated under two heads — proportion of total joint cost for university departments and affiliated colleges, and costs involving solely the students of the university departments. Capital costs were worked out in the manner of depreciation allowed for under incometax regulations as given in Income Tax Manual, Vol. II, App. I. The division on science and nonscience categories was on the basis of the respective strength of each category to the total. The science students formed 29.2 percent, 26.4 percent, and 27.7 percent of the total student population of the teaching departments of the university in the years 1969-70, 1970-71, and 1971-72 respectively for which the unit costs were calculated.

It was found that (i) students of teaching departments formed 4.45 percent, 4.34 percent, and 4.24 percent of the total student population of the university for the years 1969-70, 1970-71, and 1971-72 respectively; (ii) the total current costs per science student were Rs. 3,162=58, Rs. 3,330=54, and Rs. 4,144=55 for the years 1969-70, 1970-71, and 1971-72 respectively; (iii) capital costs per science student came to Rs. 813=23 (1969-70), Rs. 1,124=14 (1970-71), and Rs. 1,201=14 (1971-72); (iv) the current costs per nonscience student were estimated at Rs. 1,165=65 (1969-70), Rs. 1,357=36 (1970-71), and Rs. 1,745=73 (1971-72); (v) the capital costs per nonscience student were Rs. 188=40 (1969-70), Rs. 204=18 (1970-71), and Rs. 224=61 (1971-72); (vi) the unit costs per science student were worked out to be Rs. 3,975=81 (1969-70), Rs. 4,454=68 (1970-71), and Rs. 5,345=70 (1971-72); (vii) the unit costs per nonscience student came to Rs. 1354=05 (1969-70), Rs. 1,561=54 (1970-71), and Rs. 1,970=35 (1971-72); and (viii) unit costs per student (science and nonscience combined) were worked out to be Rs. 2,119=36, Rs. 2,325=66, and Rs. 2,904=60 for the years 1969-70, 1970-71, and 1971-72 respectively.

778. SINGH, G., A Study of the College Environment and Student's Personality in Medical Education, Ph.D. Psy., Del. U., 1975.

The objectives of the study were : (i) to find out the difference in the nature of perceived environment for learning in the medical colleges of all-India and regional characters; (ii) to find out the socio-economic background of the medical students and the patterns of change that might have taken place during the last few years; (iii) to study the changes in attitudes, values and achievement motivation of the medical students during the college years; (iv) to study the nature and change in anxiety and problems faced by the medical students during their academic life; and (v) to find out the nature of interaction between personality variables and college characteristics and to identify the predictive personality variables related to existing environments in medical colleges.

The study included five medical colleges in three states of northern India. A random 'cross section' sample of 505 medical students and internee doctors was selected. The tools employed for the study were: (i) the CCQ scale; (ii) the Socio-Economic Status scale; (iii) the Allport – Vernon-Lindzey Study of Values; (iv) the McClelland's n-Achievement Test; (v) the Cattell's IPAT Anxiety Scale; and (vi) the Mooney Problem Checklist.

The significant findings of the investigation were : (i) the medical colleges of all-India character provided comparatively better learning environment than the colleges of regional character; (ii) the students of colleges of all-India character, in general, belonged to higher socio-economic background compared to their counterparts in regional colleges; (iii) medical students suffered from moderate degree of anxiety particularly of suspiciousness generated type; (iv) theoretical and social values were found to be the most dominant and religious values the least dominant in the prevailing value system; (v) a higher level of achievement motivation was found among the students of colleges of all-India character compared to students of regional colleges; (vi) high degrees of anxiety and worries about academic and nonacademic activities was a common characteristic of the medical students; and (vii) low proprietory characteristic of college environment tended to give rise to problems among medical students regarding social and psychological relations, personal and psychological relations, courtship, sex and marriage, home and famiy, adjustment to college work, and vocational and educational prospects in future.

779. *SINGH, Y., Academic Role Structure and Modernization (A Study of Structural and Cultural Aspects of Modernization among the University Teachers), Dept. of Soc., Raj. U., 1970. (ICSSR financed)*

The purpose of the study was to analyse the various ramifications of tensions and equilibriums which emerged in a universty structure as a result of different types of integrations in the role structures of teachers in the context of modernisation which implied growth and development of roles on a progressive scale in societies.

The study was conducted on 248 male teachers of the teaching departments of Rajasthan University. The sample included professors, readers, senior lecturers and lecturers. The data were collected through a structured questionnaire in terms of a series of scales, which was developed for this study. It comprised items on modernisation, aspiration, morale, and commitment, and an open end question to elicit teachers' cognitive association with modernisation. The reliability of the questionnaire was established. The data were analysed both qualitatively and quantitatively. Factor analysis was also utilised in analysing data.

The study revealed that (i) most of the teachers came from families having a tradition of professionalism; (ii) the mobility in respect of education seemed to be high between the generation of the self and fathers which was indicative of diversification of aspirations in the sphere of educational achievement; (iii) most of the teachers moved from lower middle class family status to middle class category; (iv) about 57.7 percent of the families had high modernisation, which was again, more among the science teachers than among teachers of humanities and social sciences; (v) degree of modernisation was found to vary directly as commitment and inversely as aspiration; (vi) nearly 36.9 percent teachers had role structures which were modern transitional, and fourteen percent were purely modern which indicated a stage of transition in role structure towards modernisation; (vii) with the growth in the homogeneity in the structural context and modernisation process, the democratic values would also grow and authoritarianism would decline; and (viii) factor analysis of the modernisation scale revealed two factors, namely, 'Affective Neutrality' and 'Universalism-Particularism'.

780. *SINGH, Y. P., PAREEK, U., and ARORA, D. R., Adoption of Social Sciences in Higher Agricultural Education, HAU, 1974. (ICSSR and UGC financed)*

The objectives of the study were : (i) to deal with the entry and development of social sciences in agricultural education system; (ii) to identify the various routes of entry of the programme into agricultural education system and its post entry progress through the years; (iii) to give the information on yearwise growth of Master and Ph.D. theses; and (iv) to find out the contribution of different institutions, the geographical locale of studies, nature of respondents, subject area covered and research tools and techniques used in these studies.

To collect information for this study, depth interviews of selected personnel in the institutions concerned were held.

The important findings were : (i) The entry of social sciences into higher agricultural education was facilitated through different routes of combinations of any of these, namely, the enthusiastic insiders, external change agents, student pressures, suggestions of visiting teams, special Government of India schemes, and highly motivated power figures. (ii) In the initial

stage some problems related to the availability of staff, finance, clear cut job opportunities and clear cut teaching methods were encountered. (iii) The number of theses submitted in 1957 was eleven which rose to 197 in 1968. (iv) U.P. Institute of Agricultural Sciences, Kanpur and I.A.R.I. accepted 119 theses, the number being followed by R.B.S. College, Agra and Bihar Agricultural College, Bhagalpur. (v) In terms of subject area, ninetyfive percent of the theses pertained to rural people. Three studies covered agricultural labour while studies on rural women and tribal population were very few. As many as 970 studies were of survey, 105 of descriptive, 94 of evaluatory, 104 of experimental, 30 of case study and 4 of action research types. (vi) Ninetyfour percent studies used interview schedule as the tool for investigation. (vii) Questionnaires, attitude scales, projective tools, teacher made tests and score cards were also made use of. (viii) Percentage was the most frequently used technique of analysis, followed by coefficient of correlation technique.

*781. *SINHA, N., University Administration in Bihar, Ph.D. Soc., Pat. U., 1975.*

The main purpose of the study was to analyse the present administrative structure of universities in Bihar and suggest some sort of planning in university admitured manner.

This survey type study was confined to the universities in Bihar. The sources of information utilised were — books, journals, periodicals, reports of various committees and commissions on university education and administration, both at the national and state levels. Besides, some eminent administrators and teachers of Patna University were interviewd in a structured manner.

The major findings of the study were as follows : (i) The evils, such as, casteism, petty politics, low level of morality resulting from mass illiteracy, were reflected in the universities. (ii) The authoritarian traits of the society too were reflected in the universities, e.g., rigid hierarchy, emphasis on compliance, and resistance towards innovation and experimentation. The power of decision-making concentrated in the hands of a few. (iii) Principles of democracy, election for example, whenever or wherever introduced, failed mainly due to social factors, lack of training and half-hearted efforts. Democracy was prevalent in the form of 'casteocracy'. (iv) Channels of communication between the different components of the universities were restricted, and the junior teachers and students were prevented from taking active part in the affairs of the universities. This frustrated the sense of belongingness to the universities and resulted in problems of discipline and lower level of academic output. (v) The universities, on the whole, were not performing their role as the main producer of knowledge and intellect or trained personnel. They were, thus, unable to become agents of social change.

782. *SINHA, S. N., An Investigation of Some Correlates of Job Orientation of University Students, Dept. of Psy., Raj. U., 1971. (NCERT financed)*

The major objectives of the study were : (i) to determine the extent to which the contemporary job orientation patterns prevailing among university students were based on students' awareness of job spectrum; (ii) to determine the degree to which students' job orientation was influenced by job availability and to estimate the discrepancy between idealised and actual requirements of jobs; (iii) to determine the extent to which students' job orientation was influenced by parental decisions or other superordinate decisions made by guardians, elderly family persons or teachers; and (iv) to ascertain whether job orientation and choices tended to be determined by such motivational categories of job stratification, such as esteem, fame, power, leadership, prestige, social service, money, security, etc.

A random sample of 1,320 male and female students of first and third years of the three year degree course was taken. For data collection a questionnaire was developed.

The findings of the study were as follows : (i) The job orientation of students was considerably influenced by parental decisions and in some cases by friends and teachers also. (ii) The most preferred occupational category, among all the subjects of the sample, was the professional and technical, while the administrative and sales job ranked second and third in order of preference. (iii) A considerable disparity was found between the values of the students and the jobs they sought. (iv) Most of the students were found to be vocationally immature in the sense that their job awareness was very low. (v) No correlation was found between awareness of job units and awareness of functions of the same units. (vi) A significant difference was found in the job preference and job awareness of the students. (vii) Marked discrepancies were found between the job availability and job preferences of students. (viii) No significant difference was found between the job awareness of science and arts students, but the job awareness of the commerce students was lower in comparison to that of science and arts students. (ix) The knowledge about jobs and their func-

tions was possessed more by female students in comparison to male students.

783. SRI CHANDRA, A Psycho-Social Study of Tension in College-Going Youth, Luc. U., 1971. (ICSSR financed)

The study attempted to understand the psychosocial factors that accounted for the growing unrest, tension and frustration in the youth of the country. The hypotheses tested were : (i) tension would be due to unfavourable attitudes towards university authorities, police authorities, student-union leaders, political parties and government; (ii) discrepancy between achievement and aspiration levels would be higher among the group with high tension than among the group with low tension; (iii) tension would be due to lack of communication between students and teachers; (iv) tension would be higher among students with urban background than those coming from rural background; (v) tension would be higher among students from low and middle income groups than those from higher income groups; and (vi) tension would be higher among students from non-agricultural families than those from agricultural ones.

A specified number of colleges in the Lucknow district were randomly selected from urban and rural areas. A random sample of 803 students, in the age group of seventeen to twentyfour, was taken. A questionnaire, which was pre-tested on a sample of 200 students, was the main tool for investigation.

The findings indicated that the total sample of 803 students reflected almost an average amount of tension on its three indices, namely, level of adjustment, anxiety and insecurity. The medians in each of the three types of cases were found to be closely approaching the respective means. The two criterion groups, the low scorers (LS) and the high scores (HS) numbering 164 and 161 respectively, were compared on the different hypotheses which showed : (i) tension was higher among students from low and middle income groups than those from higher income groups; (ii) tension was higher among students with urban background than those coming from rural background; (iii) lack of clearcut ideas as to the choice of vocation was greater among the high than among the low tension group; (iv) tension in youth was due to lack of communication between teachers and students; (v) a significantly larger percentage of the students of the HS group, as compared to the LS group, felt that political parties took undue advantage of students and the government frequently exercised undue interference in the affairs of the students; (vi) lack of crystallization of either the traditional or modern values was greater among the high tension than among the low tension group; and (vii) discrepancy between achievement and aspiration level was higher among the group with high tension than among the group with low tension. The study concluded that a radical reconstruction of the educational system to meet the needs and aspirations of the students was urgently required.

**784. TRIVEDI, M. D., An Inquiry into the Motivation for and Cost of Postgraduate Education at Saurashtra University, Ph.D. Edu., Sau. U., 1977.*

Major objectives of the study were : (i) to evolve a hierarchical pattern of motivational factors — intrinsic and extrinsic — that prompted graduates to pursue postgraduate studies, (ii) to study private costs and recurrent institutional costs, (iii) to compare unit costs per student, by faculty, for the year 1972-73, and (iv) to present students' responses regarding fees, facilities and duration of postgraduate instruction at Saurashtra University.

As many as 1277 postgraduate students belonging to the faculties of arts, science, commerce, education and medicine of the Saurashtra University in the year 1972-73 formed the sample. A questionnaire and a data sheet were designed for collecting data on motivation and cost respectively. Multiple regression analysis of unit costs were carried out. Students' reactions were analysed.

The main findings of the study were as follows : (i) Majority of the students came from families with income of parents or guardians over Rs. 500 per month and the parents were mostly merchants, executives, doctors, engineers, teachers, or the like. (ii) About fiftytwo percent of the students came from more-than-three children families and the rest came from smaller families. (iii) Regardless of faculty and sex, the intrinsic motivations were operative through an interest for advanced study and a desire to acquire deep knowledge of the subject of study. (iv) The extrinsic motivations were to enhance employability, to achieve greater success in a job, to obtain more economic gains, and to qualify for lecturership in a college. (v) In terms of mean private cost per annum, the faculties ranked in the order as medicine, science, education, arts and commerce. (vi) Total recurrent institutional costs per annum showed a gradual rise and became four-fold in 1972-73 in respect of the faculty of arts. They exhibited a galloping trend in the faculty of science, assuming in 1972-73 fifteen times the initial value. In faculties of commerce, education, and medicine, they assumed in 1972-73 respectively, over twice, thrice and around twice their values in 1968-69.

785. TRIVEDI, R. S. and PATEL, B. V., Comparative Study of the Performance and Study Habits of Students Reading in B.A. (English) and B.A. (Non-English) Course of S.P. University, SPU, 1973. (SPU financed)

The objectives of the present study were : (i) to compare the achievement in common subjcts of the students of B.A. (with English) and B.A. (without English); (ii) to find out the study habits of these students; and (iii) to compare the study habits of the students of B.A. (with English) and B.A. (without English).

The following tools were employed : (i) the B. V. Patel's Nonverbal Test of Intelligence; (ii) the Kuppuswamy's Socio-Economic Status Scale; and (iii) an attitude scale. These tools were administered to students of third year B.A. The sample included, 102 students who belonged to English and 138 who belonged to non-English groups.

The findings were : (i) the average performance of students of English stream was better and significant in comparison with the average performance of students of non-English stream; (ii) the standard of knowledge of students of non-English group was lower than the average standard of students of English group; (iii) the study habits of students of English stream were relatively better organised than the study habits of students of non-English stream; and (iv) students belonging to English stream had favourable attitude towards English than the students belonging to non-English stream.

786. UPADHYAYA, R., Student Unrest — A Study of the Dgree Colleges of Eastern Uttar Pradesh, Ph.D. Edu., BHU, 1975.

The objectives of the study were : (i) to examine the intensity of the various causes of student unrest; and (ii) to suggest remedies to check student unrest as given by the four groups, viz., the students, teachers, parents, and administrators.

The sample of the study consisted of degree colleges from seven districts and affiliated to the universities of Allahabad and Gorakhpur. As many as 400 students, 100 teachers, guardians and fifty administrators were the respondents. The main tool for the investigation was the questionnaire, which was standardised for the purpose.

The study revealed that the following were the most important causes for student unrest : (i) inadequate teacher-taught contacts; (ii) defective method of teaching; (iii) education system being divorced from Indian conditions and needs; (iv) authorities indifferent to problems of students; (vi) future of students being uncertain even after completing the education upto degree course; (vi) inadequate parent-teacher contacts; (vii) recognition being given to indisciplined rather than serious and studious students; (viii) direct or indirect support of political parties for candidates at the time of union elections; (ix) abuse of student unions; and (x) secret association of teachers with students for the sake of personal gains and selfish motives. The respondents also suggested many remedial measures. Some of them were : (i) to motivate students and teachers to confine their activities to college affairs only; (ii) to set up finance committees to control the college union budget; (iii) to examine and check the teacher's role in helping the students by unfair means; (iv) to appoint and promote teachers on the basis of qualifications and efficiency; (v) to develop proper skills among students to make them self sufficient; (vi) to organise parent-teacher conferences; (vii) to send progress reports of students to their parents regularly; (viii) to debar the indisciplined students from the membership of various college committees; (ix) to encourage teachers to visit students' homes and to contact their parents; (x) to set up a welfare committee consisting of the representatives of students, teachers, principal and the managing committee to look into the problems of students; (xi) to lay emphasis on extra-curricular activities in the college; (xii) to improve the management of the hostels; (xiii) to introduce mother tongue as the medium of instruction; (xiv) to change the teaching methods, to emphasise discussion method and to assign more home work; and (xv) to develop the feelings of nationalism and social service through the curriculum.