



सत्यमेव जयते

EMPLOYMENT SURVEY OF THE ALUMNI OF DELHI UNIVERSITY

REPORT OF THE COMMITTEE OF DIRECTION



**Directorate General of Employment & Training,
Ministry of Labour and Employment,
Government of India, New Delhi**

1962

EMPLOYMENT SURVEY OF
THE ALUMNI OF DELHI UNIVERSITY

R E P O R T
OF
'The Committee of Direction

The Survey Report

Price : Rs. 6-50 or 10s.

**Directorate General of Employment and Training, Ministry of
Labour and Employment, Government of India, New Delhi.
1962**

PRINTED IN INDIA BY THE MANAGER GOVERNMENT OF INDIA PRESS
NASIK ROAD AND PUBLISHED BY THE MANAGER OF PUBLICATIONS DELHI-8
1982

FOREWORD

This book presents the results of the employment survey of the Alumni of Delhi University undertaken jointly by the University, the Ministry of Labour and Employment and the Planning Commission. It attempts to examine the relationship between the University education and the employment opportunities open for those who have come out of the portals of the University. In the context of a developing economy, it is often said that higher education should be tuned to the needs of development. One cannot, however, get an idea of the direction in which to move, unless one knows to what extent the current system of university education answers or does not answer the needs of the situation. The present study, which is the first of its kind in India, tries to answer some of the questions which arise in relating education to employment in a developing economy. Encouraged by the response which the Alumni of Delhi University gave to this investigation, a more comprehensive sample survey, covering major universities in India is at present in progress.

These studies, I think, are of great value to educators, planners and administrators, particularly those dealing with manpower problems. Factual data on the inter-action between educational institutions and employment market will give a clearer understanding as to how the educational patterns should be reoriented to suit the country's development. While we should not judge the value of our educational programme solely by the material benefits which will flow from them, the capacity of the educational system to meet the requirements of employment and accelerate the rate of growth are in the present circumstances of the country, the most important criteria of efficacy of the educational system. These considerations lend importance to the Survey which is being made available for wide use in the form of this publication.

Gulzari Lal Nanda

(G. L. NANDA)

CONTENTS

	PAGES
CHAPTER I—INTRODUCTION	1—5
1. Objectives of Education	1
2. Stimulation for and Objectives of the Survey	3
3. Method of Conducting the Survey	4
CHAPTER II—OPERATION OF THE SURVEY	6—8
1. Preparation of Lists of the Alumni and Schedules of Interview	6
2. Pilot Inquiry	6
3. Main Survey—Collection of Data	7
CHAPTER III—COVERAGE OF THE SURVEY	9—13
1. Coverage of Men and Women Graduates	9
2. Coverage of Different types of Graduates	9
3. Coverage of Women in different Examination Categories	11
4. Comparison of Year-groups included and covered in the Survey	12
CHAPTER IV—GENERAL CHARACTERISTICS OF THE ALUMNI	14—23
1. Background of the Alumni	14
2. Sex	17
3. Age	19
4. Marriage	21
5. Economic Status	23
CHAPTER V—EDUCATION	24—60
1. School Education	24
2. Stage of Joining Delhi University	29
3. Academic Performance at Delhi University	31
4. Further Education	35
5. Termination of Education	40
6. Financing of Education	42
7. Breaks in Educational Career	50
8. Training besides University Education	56
9. Extra-curricular Activities	58
CHAPTER VI—EMPLOYMENT	61—127
1. Sex and Employment	61
2. Employment Status	62
3. Occupational Patterns	65
4. Employing Agencies	81
5. Means of Securing Employment	88
6. Employment within the Field of Specialisation	98
7. Employment Mobility	100
8. Shifts in Employment	105
9. Unemployment	114
10. Alumni not seeking Employment	124

CHAPTER VII—EARNINGS	128—136
1. Earnings in Present Employment	128
2. Earnings and Education.	129
3. Earnings and Occupation	131
4. Earnings and Class or Division	133
CHAPTER VIII—OCCUPATIONAL CHOICE AND ADJUSTMENT	137—165
1. Vocational Aim during the College Years	137
2. Influences underlying Choice of Subjects and Occupation	144
3. Occupational Model	150
4. Vocational Satisfaction	152
5. Opinion on Vocational Guidance	163
CHAPTER IX—EMPLOYMENT OF WOMEN	166—172
1. Women in Employment	166
2. Employment status of Women	167
3. Utilization of Education in Employment	167
4. Occupations entered by Women	169
5. Career versus Non-career Types of Women	171
6. Interference from Marriage in Occupational Life	171
CHAPTER X—SUMMARY OF FINDINGS	173—181

APPENDICES

APPENDIX A. Interview Schedules	182
APPENDIX B. Total and covered population of the alumni in 1950 and 1954 according to the examination passed.	196

CHAPTER I

INTRODUCTION

1. Objectives of education :

1.1. It is generally agreed that the aim of education is the all-round preparation of citizens for life. The concept of preparation for life is as comprehensive as are the phases and tasks of life, and includes preparation for citizenship, preparation for work, development of personality, etc. The task of education, however, may be considered under two broad objectives, the cultural objective and the vocational objective. Controversies have raged round the question as to the supremacy of the cultural or the vocational objective. This is, however, a somewhat futile controversy. Any assumption that only the vocational and employment needs should be served by education is entirely fallacious ; conversely, the argument that education should mainly concentrate on cultural aims is also quite untenable. The problem for education, particularly at the high school and university stage, is how to harmonise and integrate the two aims.

1.2. The vocational aim of university education has been given its rightful place in the report of the University Education Commission, 1948-49, popularly known as the Radhakrishnan Commission Report*. Commenting on the new shape of university education since independence, the report states : "We have now a wider conception of the duties and responsibilities of universities. They have to provide leadership in politics and administration the professions, industry and commerce. They have to meet the increase in demand for every type of higher education, literary and scientific, technical and professional. They must enable the country to attain, in as short a time as possible, freedom from want, disease and ignorance, by the application and development of scientific and technical knowledge. India is rich in natural resources and her people have intelligence and energy and are throbbing with renewed life and vigour. It is for the universities to create knowledge and train minds who would bring together the two, material resources and human energies. If our living standards are to be raised, a radical change of spirit is essential".

1.3. For many years past, the cry has been heard that our education is entirely unrelated to the employment needs of the country. It is accepted by all concerned that the time has now come to re-examine our education from the employment angle. It might be said that education has been marked by a good deal of conservatism, perhaps more than other institutions of life. Hence it has perhaps failed to keep pace with the changing occupational structure and the economic needs of the country. Even in the U.S.A. this complaint against education has been voiced by the authors of Education for an Industrial Age †

"However phenomenal its development and however great its contribution, the traditional system has failed to meet the needs of a vastly

**The Report of the University Education Commission, Dec. 1948—Aug. 1949, Volumes 1, Govt. of India, (Delhi 1949), p. 33.*

†Alfred Kahlen and Ernest Hamburger, *Education for an Industrial Age*, Cornell University Press, (New York, 1948), pp. 1-2.

augmented school population and-of a period in which new social and occupational groups have come forward to claim a significant place in a highly industrialised nation. Academic education as it has evolved in this country is so closely oriented around the occupational needs of the professions and the commercial and clerical groups that it falls far short of providing occupational preparation for the population as a whole”.

In India the unrelatedness of education to the employment needs and the changing occupational structure is obvious as can be seen from such spectacle as M.A., LL.B's working as clerks on the one hand and the industry crying for engineering and technical personnel on the other. Educators as well as employers are keenly aware of this disjointedness in our present-day structure of education.

Concern over this problem was also manifested by the Study Group on the Unemployed which was set up in 1955 by the Planning Commission for the purpose of assessing the extent of the problem of unemployment among educated persons in the country and for working out schemes which would tackle the problem. All those who are matriculates and above are presently included in the category of the educated. While examining the causes of unemployment among this part of the working population the authors of the report* say :

“The problem is a continuing one and in looking at the problem as it developed particularly during the last two decades, we have felt that the present malaise is the cumulative effect of education having been directed along a single channel, largely unrelated to the economic development of the country.”

Referring even to those who had education directed to specific employment (as in the case of some university courses), the authors state that although unemployment amongst them is comparatively small, the non-utilisation of specialised skill forms a great national waste. The problem of mis-employment among this class of persons is greater than that of unemployment.

1.4. With such awareness of the need for reforming education in the light of employment requirements and economic development, the need to study the content and policy of education from the employment angle comes to the forefront. Some circles in the University and the Government have felt the need for factual data on which long-term planning and action with regard to the reformation of education can be undertaken. The need for research and survey of the products of universities has been keenly felt. Authorities concerned with university education raised such questions as “What happens to our graduates when they leave the portals of the university?”, “Have they been employed in the occupation for which they were educated?” “How far was the education imparted in the university useful and effective in their job performance?” Are changes needed in the curricula of instruction so that job performance can be improved?” “Does university education supply the background for development of occupational skills?”

**Outline Report of the Study Group on Educated Unemployed*, Govt. of India, Planning Commission, New Delhi, (January, 1956), pp. 3, 51.

Authorities in the Government of India and the State Governments concerned with the manpower requirements of the country, (particularly in view of the needs of the Five Year Plans) have been exercised over the question of the adequacy of the supply of trained manpower from the universities. They are deeply concerned with such questions as : "Are the universities supplying the type of manpower needed ?" "Can university education be reformed so as to be more in line with employment ?" "Which type of university education leads to a strain on the employment market and to the frustration of employment seekers ?"

2. Stimulation for and Objectives of the Survey :

2.1. Questions such as those mentioned above characterised the thinking of the authorities of the Delhi University, officers of the Planning Commission and the Ministry of Labour and Employment when a scheme to survey the employment pattern of the alumni of Delhi University was devised. The then Vice-Chancellor of the University, Dr. V. K. R. V. Rao was particularly keen on evaluating the relation between university education and employment. The Ministry of Labour and Employment felt the need for information on the actual employment pattern of university graduates with different degrees and diplomas. This interest was a natural extension of their concern with unemployment among university graduates. A research publication brought out by the Directorate General of Employment and Training known as *Pattern of Graduate Unemployment** had highlighted the examination groups in which unemployment was of a considerable magnitude. Mention may also be made here of a sample survey of men graduates of Great Britain conducted by the Political and Economic Planning in 1953† with a view to collecting reliable and comprehensive information to study the manifold problems bearing on the employment of graduates in industry. The example of this survey provided encouragement to the line of thinking which at that time was the concern of the university and government authorities.

Another stimulation for the Survey was drawn from the concern of the National Employment Service with the problems underlying vocational guidance of university youths. For a proper understanding of these problems it was felt that information on occupational thinking of the youths during their university career and their experience in the employment market in the earlier stages would provide valuable data for counselling purposes. A study of the vocational development of youths during their college career and the career patterns of graduates in the early period of their employment history was thus considered important. Such data, it was also thought, would contribute to the theory and practice of vocational guidance in the country in the formative stages of its development.

2.2. To summarize the different objectives, it may be stated that the Survey was launched with a view :

**The Pattern of Graduate Unemployment*, Employment and Unemployment Studies No. 1 N. E. S., Ministry of Labour and Employment, D. G. E. & T., New Delhi, (December, 1957).

†The results of the survey conducted by P.E.P., London, have been published in two volumes namely *Graduate Employment—A Sample Survey* and *Graduates in Industry*, George Allen etc., (London, Sept. 1956, 1957).

- (a) to investigate the relationship between the type of education at the university and the occupations which the graduates subsequently take ;
- (b) to consider how far the instruction imparted in different departments and faculties is useful in the job performance of graduates ;
- (c) to study the occupational thinking, the factors determining the choice of subjects and career patterns of university graduates.

The Survey was also undertaken with a hope that its results will be helpful to the university in examining its admission policy to various departments and faculties and in considering the possible modifications necessary to suit the current demands for manpower, thereby increasing the employment potential and suitability of the future products of the university. It would, it was felt, stimulate and guide the university in reformulating educational and examination policies in the interests of its students. The results of the Survey might also be useful to the Planning Commission and the Government of India in the formulation of their educational and employment policies. The data would also be helpful in programmes of vocational guidance and employment counselling at Employment Exchanges and in educational institutions, as well as to the Employment Bureaux which are being opened in the universities.

3. Method of Conducting the Survey :

3.1. Although a full account of the methods and procedures of the Survey is given in the following chapter, it would be of interest to give here a brief statement on the method of the investigation.

The Survey was conducted under the direction and supervision of a committee consisting of representatives of the University of Delhi, the Ministry of Labour and Employment and the Planning Commission. The following members constituted the Committee of Direction :

1. Dr. V. K. R. V. Rao,* *Chairman*,
Vice-Chancellor, University of Delhi.
2. Shri S. A. Qadir,
Director General of Employment & Training,
Ministry of Labour and Employment.
3. Shri B. N. Datar,
Chief, Labour and Employment Division,
Planning Commission.
4. Shri H. Davenport,
Director of Employment Exchanges,
D. G. E. & T., Ministry of Labour & Employment.
5. Dr. D. S. Kothari,†
Head of the Department of Physics,
University of Delhi.

*Dr. V.K.R.V. Rao subsequently resigned his post as Vice-Chancellor to return to academic work and took over the Directorship of the Institute of Economic Growth, an institution specialising in research work on problems of social and economic development. But he continued to be responsible for the survey and its report.

†At the time of the publication of this Report Dr. Kothari has ceased to be Professor of Physics in the University of Delhi and has taken over the Chairmanship of the University Grants Commission.

6. Dr. H. P. Mehta (*Member-Secretary*),
Assistant Director (Vocational Guidance),
D. G. E. & T., Ministry of Labour & Employment.

In the beginning it was decided to obtain the relevant data from the alumni of the University of one particular year group and the year 1954 was chosen for the purpose. The choice of this year was motivated by the consideration that the alumni belonging to this group would not be too far removed in time from their university education and yet they would have had some employment history. Any one having passed a degree or a diploma examination in that year was considered to be a member of the group. Later it was decided to include in the Survey the alumni of the 1950 year group as well, as it was felt that the members of this group would have had a longer employment history and the data obtained from them would yield a better picture of the developing career patterns. It was further decided to obtain, if possible, data from all the alumni of the two year groups and not just proceed on a sample.

3.2. As the Survey office was located in Delhi, it was decided to interview by specially appointed investigators all those alumni who were resident in Delhi. Those residing outside Delhi were interviewed by Employment Officers of the National Employment Service of the localities in which they were residing. The data from those few who could not be interviewed by the investigators or the Employment Officers was collected by mail.

Data from each alumnus was obtained according to a specially prepared schedule seeking information on a wide variety of subjects, such as employment, education, family, socio-economic status, and other relevant topics of personal history. The schedules included additional questions on the various courses of study at the university. A few selected employers in Delhi were also interviewed with a view to obtain their views on the job performance of university graduates.

3.3. Before commencing the Survey proper, it was decided to conduct a small pilot enquiry with a view to obtain some familiarity with the kinds of problems faced in an enquiry of this type. A few selected alumni of an intermediate year group, namely 1953, were chosen for the purpose of conducting the pilot investigation. The results of this pilot survey proved very useful in planning and conducting the main Survey.

Acknowledgments :

The Committee is very grateful to its Member-Secretary, Dr. H. P. Mehta who was in charge of the investigation and helped in preparing the first draft of the Report. He was ably assisted by Shri K. B. Suri, Research Officer, and by the small body of investigators and office staff who worked under him. Among those who assisted the Committee at some stage of their work and deserve the Committee's thanks should be mentioned: Shri M. S. Gore, P. N. Dhar, N. K. Pant, and S. Sivasubramonian. While the main findings were discussed with the members and the summary version of the Report was approved by them, the major responsibility for planning the Survey, scrutinising its results, and editing the final version of the Report rests on the Chairman.

CHAPTER II

OPERATION OF THE SURVEY

1. Preparation of lists of the alumni and schedules of interview :

1.1. Soon after the Survey Unit was set up in February 1958, the heads of all institutions, faculties and departments of the University were contacted with a view to securing lists of the alumni in the two selected year groups and also the questions or points of enquiry pertaining to their respective courses of study which they would like to have included in the investigation. The deans of faculties and heads of departments were addressed by the Vice-Chancellor in a meeting in which the aims and methods of the Survey were discussed.

The lists of the alumni contained particulars about the examinations passed and the subjects offered by the graduates and also their latest addresses together with the institutions they last attended. These lists were scrutinised, consolidated and arranged according to the examination passed.

1.2. The preparation of schedules for interviewing the alumni and for recording the data was undertaken simultaneously. It was decided to interview the alumni on the basis of two schedules, a general one and a special one. The items of the tentative general schedule, which were approved by the Committee of Direction, were arranged in tabular form to facilitate the recording of information. This schedule sought information on general characteristics such as age, sex, marital status etc. of the alumni, educational career (from the time of passing the school leaving examination to the final examination in the University), employment history (including a detailed study of those not in employment at the time of the investigation), occupational choices, and the socio-economic and educational status of the family. The general schedule was to be used for all alumni.

The special schedule was prepared on the basis of questions framed by various departments and faculties of the University. It was divided into three parts. The first part sought information on the usefulness of the curricula in employment and also the opinion of the alumni on educational and examination methods. The second part had questions about the subjects taught in different courses of study. The third part contained a few questions about the employment of women graduates. The first two parts were intended for those alumni who had specialised in a subject by having graduated with honours or passed higher examinations in the subject, and for those who had passed examinations in technical and professional courses. The third part applied to women graduates only. The three schedules have been reproduced at Appendix A.

2. Pilot Inquiry :

2.1. At this stage, the pilot enquiry was launched with a view to obtain some initial experience. Such experience, it was thought, would enable the staff to judge the suitability of the items framed for the interview schedules and to modify or reject the items found unsuitable. The experience would also be utilised for training the field investigators in conducting the main survey. The pilot survey would also provide an indication of the degree and nature of the response from the alumni.

2.2. As has been stated earlier it had been decided to obtain, if possible, information for the main Survey from all those who had passed their graduate and post graduate examinations from Delhi University in 1950 and 1954. As it was necessary to select graduates of a different year for its pilot survey, it was decided to take up the year 1953 and draw a sample from the graduates of that year. Attempt was made to include alumni who had passed different examinations so as to make the sample fairly representative of the year's group. After giving due weightage to the size of the examination groups, a sample of 142 alumni, including 34 women, from the total population of 2,099 graduates of 1953 group, was decided upon. It was further decided to confine the inquiry to the alumni with local addresses. Reply paid post-cards were sent to these 142 alumni to obtain their current residential and office addresses. Replies were received from 65 alumni including 10 women (46 per cent of the selected sample). The response from men and women was 51 per cent and 29 per cent, respectively. Taking men and women alumni together, 42 or 65 per cent of those who communicated their current addresses were residing in Delhi. These 42 alumni in Delhi were interviewed for detailed enquiry. The interviews of the 42 alumni in Delhi lasted for about a fortnight.

2.3. None of the alumni contacted for the pilot survey refused the desired information. They were, without exception, cooperative and courteous and spared enough time for the lengthy interview. They showed high regard for their *Alma Mater*, evinced keen interest in the enquiry and highly appreciated its objectives.

2.4. The pilot study served its purpose well. The experience obtained proved of great help in the revision of the questionnaire and in the preparation of the coding and tabulation schemes for the main Survey.

3. Main Survey—Collection of Data :

3.1. Mailing of reply paid post-cards to obtain the current addresses of the alumni (no small task) began soon after the completion of the pilot enquiry and lasted for about a month. Concerted efforts were directed towards securing the largest possible number of addresses. The alumni were appealed to through the radio and the press to communicate their current addresses. Employment Exchanges all over the country were requested to notify to the Survey Office particulars of unemployed alumni of Delhi University of the relevant year groups on their Live Registers. As a result of these measures, by the middle of April 1958 the current addresses in respect of about 1,000 out of 3,580 alumni of the two year groups were secured. Reminders were sent to those who had not replied. In about a month additional replies from over 700 alumni were received and over 300 of these were in response to the reminders. Encouraged by the results of the reminders another reminder was mailed to the remaining alumni. At the same time lists were prepared according to the examination passed and the institution last attended. Field investigators who were to interview the alumni were provided with these lists which they checked with the informants in an attempt to obtain from them additional addresses of their class or course fellows. This fourth device of locating the alumni proved very effective with the result that the investigators found the addresses of 221 more alumni.

In all, contact addresses of 2,320 or a little under 65 per cent of the alumni could then be included in the inquiry. Of these, a little under 88

per cent were obtained in response to the appeal made to them through the business reply cards and about 9.5 per cent were located by the field investigators through their contact with the interviewees. 1.4 per cent were contacted by the Employment Exchanges and in the case of the remaining 1.2 per cent, the alumni themselves contacted the Survey Office as a result of the appeals made to them through the press or the radio.

3.2. Seven field investigators were appointed on a piece rate basis and trained for interviewing the alumni in Delhi. Of these, five had already acquired experience of investigation work in the Greater Delhi Survey Scheme that was being conducted by Dr. V. K. R. V. Rao for the Research Programmes Committee of the Planning Commission. The training lasted for about a fortnight and included role-playing sessions in interviewing, actual filling up of schedules and discussions thereon.

3.3. Interviewing of alumni started after the investigators had acquired sufficient experience of conducting the work and had returned correctly filled schedules to the Survey Office. The field work in Delhi was completed in about five months. Of 1,588 alumni who were found staying in Delhi, 1,436 or a little over 90 per cent were contacted and interviewed and their schedules returned by the field investigators. Of the remaining 152 alumni only five were reluctant to give the desired information and the remaining 147 could not be contacted. They had left Delhi or had shifted from their place of contact and no indication of their whereabouts could be obtained.

3.4. Townwise lists of alumni staying at other places in India were prepared and sent with copies of the schedules and the directions for interviewing and recording to the Officers-in-charge of the Employment Exchanges, who were requested either to contact the alumni at their residence or place of work, whichever was convenient to both the parties, or invite them to the offices of the Employment Exchange and obtain the desired information. A few of the alumni who were residing at places far away from an Exchange could not be contacted by the Employment Officers. A copy of the blank schedule and a set of complete directions for filling it were sent to each of these. Of 636 alumni staying outside Delhi, information was obtained in respect of 417 or 65.6 per cent. 340 were interviewed by the Employment Officers and the remaining 77 alumni filled the schedules themselves and returned these to the Survey Office.

Copies of the schedules with directions for filling them were also mailed to the alumni staying in foreign countries. Of 96 such alumni only 10 returned the completed schedules.

To conclude, in all 1,863, that is 80.3 per cent of the 2,320 alumni whose current addresses had been secured earlier, were interviewed. This number forms 52.0 per cent of the alumni included in the Survey. The coverage in Delhi, other places in India, and foreign countries came to 90.4, 65.6 and 10.4 per cent, respectively, of the alumni whose addresses we were to locate.

It was found that the data supplied by the Employment Officers came up to the required standard and hence was comparable with that obtained by field investigators in Delhi. Similarly the data recorded by the alumni themselves on the basis of exhaustive directions was also found to be comparable with the data obtained by the other two methods.

CHAPTER III

COVERAGE OF THE SURVEY

1. Coverage of men and women graduates :

1.1. As already indicated, the Survey Office secured contact addresses of 2,320 or a little under 65 per cent of the 3,580 alumni of the two groups and gathered through various agencies the desired information in respect of 1,863 or 52.0 per cent of the total number. Details are given in table below :

TABLE 1

Distribution of alumni who were located and interviewed by year group and sex

	1954			1950			Total		
	Men	Women	Total	Men	Wo- men	Total	Men	Wo- men	Total
1. Total population .	1963	493	2456	917	207	1124	2880	700	3580
2. Located (No.) .	1380	339	1719	508	93	601	1888	432	2320
%	70.3	68.8	70.0	55.4	44.9	53.5	65.6	61.7	64.8
3. Interviewed (No.)	1113	268	1381	407	75	482	1520	343	1863
%	56.7	54.4	56.2	44.4	36.2	42.9	52.8	49.0	52.0

As was expected, the coverage for the 1954 group was larger than that for the 1950 group. 70 per cent of the alumni belonging to the former were located as compared with 53.5 per cent of those belonging to the latter group and a large proportion of the former (56.2 per cent) could be contacted and interviewed. The coverage for men was more than that for women in the case of both the groups. For the 1954 group, 56.5 per cent of the men as compared with 54.7 per cent of the women could be interviewed, whereas for the 1950 group the corresponding figures were 44.4 per cent and 36.2 per cent. The disparity between the two sexes was wider for the 1950 group because a larger proportion of the women graduates of this group as compared with that of 1954 got married after the completion of University education and left the parental abode. It was, therefore difficult to obtain their new contact addresses.

2. Coverage of different types of graduates :

2.1. Let us now study the coverage of the enquiry for different types of graduates. The types of examinations which the alumni passed in the relevant years are very extensive and for some of these the number of the alumni was too small to permit analytical treatment of the information. The examinations were, therefore, grouped into 18 homogenous categories

(Appendix B), which form the basis for the analytical pattern of this Report. The coverage according to examinations is given in the following table:

TABLE 2

Distribution of total number of alumni of 1950 and 1954 groups and of those who were interviewed by examination categories

Examination categories	No. of alumni in year groups					
	1954			1950		
	Total	Covered No.	%	Total	Covered No.	%
1. B.A. Pass	428	251	58.6	238	94	39.4
2. B.Sc. Pass	175	105	60.0	74	29	39.1
3. B.Com.	174	133	76.4	74	43	58.1
4. B.A. Hons.	327	172	52.6	132	52	39.4
5. B.Sc. Hons.	157	86	54.7	99	49	49.5
6. M.A. Languages	71	43	60.6	50	21	42.0
7. M.A. His.-Pol.Sc.-Phil.	72	36	50.0	18*	3	16.7
8. M.A. Eco.-Math.-Com.	112	57	50.9	60	18	30.0
9. M.A. Social Work	33	16	48.4	20	7	35.0*
10. M.Sc.	68	39	57.4	41	16	39.0
11. Library Science	14	9	64.3	9*	8	88.9
12. Law	284	171	60.2	132	61	46.2
13. Proficiency in Law	213	110	51.6	25	18	72.0
14. Education	88	51	57.9	81	41	50.6
15. Nursing	14*	6	42.9	4*	3	75.0
16. Medicine	58	29	50.0	23	9	39.1
17. Technology	95	42	44.2	16*	2	12.5
18. Foreign Languages	73	25	34.2	28	8	28.6
TOTAL	2,456	1,381	56.2	1,124	482	42.9

The coverage for different examination categories has been influenced by a complexity of factors, such as the sex composition of the category, the time the graduates had for settling down in their occupational fields, the proportion of the alumni in the categories staying at places other than Delhi, the individual attitudes of the graduates towards the Survey, etc. It is not possible to disentangle these factors from one another and study their influence separately.

*The percentages in the above table for the examination categories of M.A. His.-Pol.Sc.-Phil., Library Science, Nursing and Technology of 1950 group and the categories of Library Science and Nursing of 1954 group have to be viewed with caution as they are based on very small frequencies.

It will be noticed that variation in the coverage for the examination categories is more for the 1950 group than for the 1954 group. For the 1950 group the coverage for alumni included in the categories of Library Science (88.9%), Nursing (75.0%), Proficiency in Law (72.0%), B.Com. (58.1%), and Education (50.6%) is appreciably above the figure (42.9%) for the group as a whole, whereas it is much below this figure in respect of the categories of Technology (12.5%), M.A. His.-Pol.Sd.-Philosophy (16.7%). Foreign Languages (28.6%), M.A. Eco.-Math.-Commerce (30.0%) and M.A. social work (35.0%). In the case of the 1954 group the coverage is well above the figure for the group (56.2%) for B.Com. (74.4%) and Library Science (64.3%) categories whereas it is well below this figure in the case of Foreign Languages (34.2%), Nursing (42.9%), Technology (44.2%), M.A. Social Work (48.4%) and M.A. His.-Pol.Sc.-Phil. (50.0%). It is thus found that the B.Com. and Libraray Science categories were well represented whereas Foreign Languages, Technology, M.A. His.-Pol. Sc.-Phil, and M.A. Social Work were inadequately represented in the covered section of the alumni.

3. Coverage of Women in different examination categories :

3.1. The sex composition of the alumni in various examination categories is given below showing the ratio of the women to the men for the examination categories.

TABLE 3

Number of women per 100 men for the examination categories of 1950 and 1954 groups

Examination categories	Ratio of women			
	1954		1950	
	Original	Covered	Original	Covered
1. B.A. Pass	39.4	41.8	50.6	27.0
2. B. Sc. Pass	24.1	15.3	2.8	3.6
3. B.Com. . . . .	..	..	..	..
4. B.A. Hons.	46.6	44.5	38.9	40.5
5. B.Sc. Hons.	12.1	14.6	3.1	..
6. M.A. Languages	108.8	153.0	42.9	61.5
7. M.A. His.-Pol. Sc.-Phil.	56.5	80.0	28.6	50.0
8. M.A. Eco.-Math.-Com.	14.3	9.6	3.4	..
9. M.A. Social Work	57.1	23.0	81.8	40.0
10. M.Sc.	11.5	14.7	..	..
11. Library Science	27.3	28.6	12.5	..
12. Law	3.0	3.0	1.5	..
13. Prof. in Law	3.4	3.8	..	..
14. Education	83.3	82.1	72.2	95.2
15. Nursing . . . . .	..	..	..	..
16. Medicine	241.2	314.3	91.7	80.0
17. Technology . . . . .	..	..	..	..
18. Foreign Languages	12.3	4.2	12.0	..
TOTAL	25.1	24.3	22.6	18.7

It will be seen that though the ratio of the women for the covered group as a whole is less than that for the original group in the case of both the groups, the difference is not considerable. On an examination of the position of the examination categories in this regard, it is found that for the 1954 group the ratio of the women has gone up considerably in the case of M.A. Languages, M.A. His-Pol. Sc.-Phil, and Medicine, whereas it has fallen in the case of B.Sc. Pass, M. A. Social Work, and Foreign Languages. For the 1950 group it has increased for M.A. Languages, M.A. His.-Pol.Sc.-Phil. and Education, diminished for B.A. Pass and M.A. Social Work, and reduced to cypher for B.Sc. Hons. M.A. Eco.-Maths.-Com., Library Science, Law and Foreign Languages.

4. Comparison of year-groups included and covered in the survey :

4.1. It may be of interest to study how the total number of alumni as originally included in the Survey and those interviewed were distributed according to the examination categories. The following table presents a comparative view of the groups :

TABLE 4

Percentage distribution of alumni included and covered in the enquiry for 1950 and 1954 groups by examination categories

Examination categories	Percentage to total number of alumni of the group			
	1954		1950	
	Total	Covered	Total	Covered
1. B.A. Pass	17.4	18.2	21.2	19.6
2. B.Sc. Pass	7.1	7.6	6.6	6.0
3. B.Com.	7.1	9.6	6.6	8.9
4. B.A. Hons.	13.3	12.4	11.7	10.8
5. B.Sc. Hons.	6.4	6.2	8.8	10.2
6. M.A. Languages	2.9	3.1	4.5	4.4
7. M.A. His.-Pol.Sc.-Phil.	2.9	2.6	1.6	0.6
8. M.A. Eco.-Maths.-Com.	4.5	4.1	5.3	3.7
9. M.A. Social Work	1.3	1.2	1.8	1.5
10. M.Sc.	2.8	2.8	3.6	3.1
11. Library Science	0.6	0.7	0.8	1.7
12. Law	11.5	12.4	11.8	12.7
13. Prof. in Law	8.7	8.0	2.2	3.7
14. Education	3.6	3.7	7.2	8.5
15. Nursing	0.6	0.4	0.4	0.6
16. Medicine	2.4	2.1	2.0	1.9
17. Tochnology	3.9	3.0	1.4	0.4
18. Foreign Languages	3.0	1.8	2.5	1.7
TOTAL	100.0	100.0	100.0	100.0
No.	3456	1381	1124	482

In the case of the 1950 group, B.Com., Proficiency in Law, Nursing and Library Science have enhanced their relative strength whereas, M.A. His -Pol.-Sc.-Phil., M.A. Eco.-Maths.-Commerce, Technology and Foreign Languages have diminished in their comparative importance in the group. For the remaining categories of the 1950 group the relative position in the group remains more or less the same. In the case of the 1954 group most of the categories have undergone fluctuations but only three of them have changed significantly, B.Com. gaining and Nursing and Foreign Languages losing their relative importance in the group.

Summing up, the groups as covered in the investigation conform to a very large measure in their examination category composition to the original groups included in the enquiry though the 1954 group as compared with the 1950 group is better represented.

CHAPTER IV

GENERAL CHARACTERISTICS OF THE ALUMNI

This chapter is based on the information collected in Block I 'Identification' of the General Schedule (see Appendix A) and describes some of the general characteristics of the alumni, including their place of origin, family income, sex, age, marital condition, time of marriage, and economic status.

1. Background of the alumni :

1.1. An analysis of the data pertaining to the place of origin of the alumni reveals that a big majority belonged to Delhi and a very large proportion of the remainder came from the adjoining States of the Punjab and Uttar Pradesh, as is shown in the following table:

TABLE 5

Distribution of the alumni according to the native State

State of origin	No. of alumni			
	1954		1950	
	No.	%	No.	%
Delhi	960	69.5	303	63.0
Punjab	221	16.0	85	17.6
Himachal Pradesh	4	0.3	5	1.0
Jammu and Kashmir	3	0.2	2	0.4
Uttar Pradesh	66	4.8	46	9.6
Rajasthan	19	1.4	5	1.0
Bombay	15	1.0	7	1.5
Madhya Pradesh	14	1.0	5	1.0
Bihar	1	0.1	..	..
Orissa	4	0.3	..	..
West Bengal	19	1.4	12	2.5
Assam . . . . .	..	..	..	..
Andhra Pradesh	9	0.7	1	0.2
Mysore	12	0.8	2	0.4
Madras	21	1.5	3	0.6
Kerala	11	0.8	6	1.2
Other States	2	0.2	..	..
TOTAL	1,381	100.0	482	100.0

A comparison of the groups indicates that the percentage of the local persons was slightly higher among the alumni of the 1954 group than among those of the 1950 group; the proportion belonging to the Punjab was more or less the same for the two groups; and the proportion of those belonging to Uttar Pradesh among the alumni of the former group was just half of the corresponding figure for the latter.

1.2. Information regarding the family income at the time the alumni joined college was obtained from a large number of interviewees. Of the 1381 alumni of the 1954 group, 1278 or 92.5 per cent and of the 482 alumni of the 1950 group, 441 or 91.7 per cent gave the information which is presented in the following table:

TABLE 6

Distribution of the alumni according to their family income at the time they joined college

Family income per mensum (Rs.)	Alumni			
	1950		1954	
	No.	%	No.	%
Below 50	11	2.5	31	2.4
50—149	46	10.4	101	7.9
150—299	106	24.1	301	23.6
300—499	83	18.8	335	26.2
500—999	103	23.3	263	20.6
1000 and above	92	20.9	247	19.3
TOTAL	441	100.0	1278	100.0

It will be seen that the alumni were concentrated in higher family income brackets. In respect of only a third of the alumni was the family income per mensum below Rs. 300; the remainder had a family income of Rs. 300 or more. It is important to observe that over a fifth of the alumni belonged to the family income bracket of Rs. 500-999 and about the same proportion had family income of Rs. 1000 or more.

1.3. An analysis of the family income separately for the men and the women revealed that the women had come from higher family income groups than the men. This is shown in the following table:

TABLE 7

Percentage distribution of men and women according to their monthly family income

Family income (Rs.)	1954		1950	
	Men	Women	Men	Women
	(Percentage)			
Below 150	12.0	2.6	14.3	4.7
150—299	26.4	10.8	25.3	17.2
300—499	27.7	19.5	19.1	17.2
500—999	18.4	30.3	22.5	28.1
1000 & over	15.5	36.8	18.8	32.8
TOTAL	100.0	100.0	100.0	100.0
Number	1047	231	377	64

This wide disparity between the men and the women in respect of the financial status of their families strengthens the commonly held view that in the matter of higher education the families with a low income give precedence to the education of their sons over that of their daughters because it is beyond their means to send their sons as well as their daughters to the University and also because they may not consider the higher education of women with as much favour as the families in a better financial position.

1.4. A study of the relationship between the family income of the alumni and the type of their education was at variance with the wide spread belief that it is mainly the sons and daughters of the rich who join technical and professional courses such as in Medicine, Engineering and Technology. The analysis of the relevant data showed that the students who came of well-to-do families tended to join general courses in arts, commerce and science rather than technical and professional courses. This is indicated in the following table:

TABLE 8.

Percentage distribution of the alumni according to type of education examination passed in 1954/1950 and family income

Type of education	Family income (in rupees)					Total
	Total No.	Below 150	150-299	300-499	500 & above	
A. 1954						
1. Arts & Commerce	675	9.5	24.6	24.6	41.5	100.0
2. Science	219	6.9	20.5	29.7	42.9	100.0
3. Law	257	15.2	22.2	25.3	37.3	100.0
4. Education & Library Science	56	21.4	21.4	25.0	32.2	100.0
5. Nursing, Medicine, Engineering	71	2.8	29.6	36.6	31.0	100.0
B. 1950						
1. Arts & Commerce	231	9.1	23.4	17.7	49.8	100.0
2. Science	87	11.5	28.7	19.5	40.3	100.0
3. Law	63	17.6	17.6	17.6	47.2	100.0
4. Education & Library Science	45	31.1	28.9	17.8	22.2	100.0
5. Nursing, Medicine, Engineering	10	..	20.0	50.0	30.0	100.0

It seems that the the proportion of the alumni with a family income of over Rs. 500 was higher among those who joined Arts and Commerce, Science and Law than among those who took up technical and professional courses. It may, however, be observed that among the later courses, Nursing, Medicine and Engineering entailing considerable time and expenses draw a

large number of students from families with a monthly income varying from Rs. 300 to 499, whereas Education and Library Science, which are less expensive and are of shorter duration, attracted students mainly from families of poorer means.

Summing up, the analysis of the family income of the alumni leads to the inescapable conclusion that the higher education, particularly in respect of women is open mainly to the high income strata of the population. The situation calls for efforts on the part of the State and other agencies interested in the cause of education to find ways and means of encouraging higher education among the poorer sections of the community.

2. Sex :

2.1. The number of students who passed various graduate and post-graduate examinations more than doubled itself from 1124 in 1950 to 2456 in 1954. Of the 1124 alumni of the 1950 group, 917 or 81.6 per cent were men and the remainder 207 or 18.4 per cent were women. The figures for the 1954 group were 1963 or 69.9 per cent men and 493 or 20.1 per cent women. The proportion of women in the 1954 group was, thus, slightly higher than in the 1950 group. It is interesting to find that the proportion of women underwent a steady rise after 1953. This is shown in the following table:

TABLE 9

Proportion of women to the total number of students who passed different examinations during 1950-58

Year	Total No.	No. of women	Percentage
1950	1,124	207	18.4
1951	1,409	325	23.3
1952	1,782	353	19.8
1953	2,044	399	19.5
1954	2,456	493	20.1
1955	2,455	541	22.1
1956	2,395	588	24.6
1957	2,835	798	28.1
1958	2,840	840	29.6

It is seen that the increase in the number of women has been much faster than that of men. In the course of eight years, *i.e.*, from 1950 to 1958 the number of the former increased by 306 per cent whereas that of the latter rose only by 113 per cent. As a result the representation of women in the group rose from 18.4 per cent in 1950 to 29.6 per cent in 1958.

2.2. A study of changes in the sex composition of the examination categories over the period 1950-58 revealed that women joined courses in Science,

Languages, Economics, Mathematics, Library Science, Education and Foreign Languages in increasing proportions. This is shown in the table, below:

TABLE 10

Percentage of women in different examination categories of students who passed various examinations in 1950 and 1954 to 1958

Examination category	Percentage of women in					
	1950	1954	1955	1956	1957	1958
1. B.A. Pass	33.6	28.3	28.0	29.3	41.0	38.6
2. B.Sc. Pass	2.7	19.4	28.1	43.9	50.6	46.4
3. B.Com. . . . .	..	..	0.5	0.5	..	..
4. B.A. Hons.	28.0	31.8	37.6	40.4	36.6	45.6
5. B.Sc. Hons.	3.0	10.8	12.4	11.9	7.7	6.5
6. M.A. Languages	36.0	52.3	43.5	46.5	46.0	48.9
7. M.A. His.-Pol.Sc.-Phil.	22.0	36.1	41.8	35.9	45.8	40.0
8. M.A. Eco.-Maths.-Com.	3.3	12.5	16.9	9.3	14.8	18.4
9. M.A. Social work	45.0	36.4	30.0	26.7	30.8	25.6
10. M.Sc. . . . .	..	10.3	21.9	15.1	13.0	23.5
11. Library Science	11.1	21.4	20.0	15.8	38.1	45.8
12. Law	1.5	2.8	2.4	6.9	2.8	4.1
13. Prof. in Law. . . . .	..	3.3	0.6	..	4.2	3.5
14. Education	42.0	45.4	55.7	54.2	55.1	60.3
15. Nursing	100.0	100.0	100.0	100.0	100.0	100.0
16. Medicine	47.8	70.6	56.7	45.0	N.A.	N.A.
17. Engineering . . . . .	..	..	..	..	..	..
18. Foreign Languages	10.7	11.0	21.6	18.8	15.6	24.7
TOTAL	18.4	20.1	22.1	24.6	28.1	29.6

It will be observed that women showed no inclination towards courses in Commerce and Engineering and constituted a very small fraction of the alumni included in the categories of B.Sc. Hons., M.A. Eco.-Math.-Commerce, M.Sc., Law, Prof. in Law and Foreign Languages. The women included in these categories preferred biological sciences to physical sciences and agriculture*, and Economics to Mathematics and Commerce*. They were well represented in the categories of B.A. Pass, B.A. Hons., M.A. in Languages, M.A. His.-Pol.Sc.-Philosophy, Education and Medicine. It may be said in regard to M.B.,B.S. and B.Sc. Hons. Nursing that both these courses were open to women only. It is thus clear that women preferred the study of Arts, Humanities and Education to that of Law, Science, Engineering and Foreign Languages.

*All of those who passed B.Sc. Hons. in Agriculture and M.Com. Examinations were men.

The above table also shows that the sex composition of the examination categories underwent a change as the time passed. In the period 1950-58 the proportion of women in the categories of B.Sc. Pass, M.A. Eco.-Math. and Commerce, M.Sc. and Library Science showed an appreciable increase. It rose also, though not to the same extent, in the categories of B.A. Hons., B.Sc. Hons., M.A. Languages, M.A. History-Pol.Sc.-Philosophy, Law, Education and Foreign Languages. The proportion in B.Sc. Pass category registered a spectacular rise from 2.7 per cent in 1950 to 19.4 per cent in 1954 and 50.6 per cent in 1957 because of the inclusion in this category of the B.Sc. Home Science courses which was started after 1950 and was open only to women students. The categories of B.A. Pass, B.Com., Nursing and Engineering maintained more or less the same sex composition. M.A. Social Work was the only category which registered a fall in the percentage of women.

To conclude, the trend during the period 1950-58 shows that the women exercised their choice over a gradually widening variety of courses.

3. Age :

3.1. The age structure of the alumni covered in the Survey may be studied with the aid of the following table which gives their distribution according to the degree obtained and the age at the time of passing the examination in 1950 or 1954. The examination categories comparing the alumni with similar age composition have been combined to form a single group. In this way the 18 examination categories have been rearranged so as to form 9 groups.

TABLE 11

Percentage distribution of alumni of 1950 and 1954 groups according to degree obtained and age in 1950/1954

	1950				1954			
	Below 21	21-24	25 and above	Total	Below 21	21-24	25 and above	Total
1. B.A. Pass, B.Sc. Pass, B.Com. B.A. Hons., B.Sc. Hons.	67.8	31.8	0.4	100.0	68.1	30.7	1.2	100.0
2. M.A. & M.Sc.	10.8	58.4	30.8	100.0	22.0	70.2	7.8	100.0
3. Library Science	..	37.5	62.5	100.0	..	22.2	77.8	100.0
4. Law & Prof. in Law	3.8	57.0	39.2	100.0	1.8	47.3	50.9	100.0
5. Education	7.3	29.3	63.4	100.0	7.9	49.0	43.1	100.0
6. Nursing	33.3	66.7	..	100.0	..	66.7	33.3	100.0
7. Medicine	..	..	..	100.0	..	69.0	31.0	100.0
8. Technology	..	100.0	..	100.0	14.3	64.3	21.4	100.0
9. Foreign Languages	12.5	37.5	50.0	100.0	20.0	32.0	48.0	100.0
TOTAL	40.7	40.2	19.1	100.0	41.4	42.1	16.5	100.0

It may be observed that the vast majority of the alumni who passed the first degree examinations had not completed the age of 21 years. A significant portion of those who passed M.A., M.Sc., Nursing, Medicine and Engineering examinations were of the ages ranging from 21 to 24 years and a large proportion of the alumni who passed examinations in courses like Library Science, Law, Education and Foreign Languages were above the age of 25 years. The courses mentioned last attracted relatively older persons. Some of them, as will be seen in the latter part of the Report, were engaged in employment and had joined these courses after long breaks in their educational career in order to better their qualifications.

3.2. An attempt has been made to examine probable differences in the ages of men and women at the time they completed their school education and entered a university. The following table gives the distribution of men and women at the time of passing the Higher Secondary examination.

TABLE 12

Distribution of men and women according to age at the time of passing the Higher Secondary Examination

Age in years	1954		1950	
	Men	Women (Percentage)	Men	Women
Below 15	2.7	8.9	4.4	18.7
15	14.2	26.9	17.2	24.0
16	35.6	33.2	30.3	34.6
17	27.4	22.7	26.0	14.7
18	13.0	6.0	11.0	4.0
19	5.3	1.9	7.2	2.7
20 & above	1.8	0.4	3.9	1.3
TOTAL	100.0	100.0	100.0	100.0
NUMBER	1113	268	407	75

It is seen that large concentrations of men are found in ages of 16 and 17 years whereas those of women are in the ages of 15 and 16 years. The average ages for men and women work out as follows:

	Average age	
	1954	1950
Men	16.57	16.60
Women	15.95	15.65

4. Marriage :

4.1. There being a gap of 4 years between the selected groups, the alumni covered in them differed in the pattern of their marital status, as is shown in the following table:

TABLE 13

Alumni of 1950 and 1954 groups by marital status

Marital Status	Alumni in the year											
	1954						1950					
	Men		Women		Total		Men		Women		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1. Unmarried	653	58.7	145	54.1	798	57.8	103	25.3	30	40.0	133	27.6
2. Married	458	41.1	122	45.5	580	42.0	300	73.7	44	58.7	344	71.4
3. Widowed	..	..	..	..	..	..	3	0.7	..	..	3	0.6
4. Divorced/ Separated	2	0.2	1	0.4	3	0.2	1	0.3	1	1.3	2	0.4
TOTAL.	1113	100.0	268	100.0	1381	100.0	407	100.0	75	100.0	482	100.0

Of the alumni covered in the 1950 group, 71.4 per cent were found leading married life at the time of the enquiry as compared with 42.0 per cent of the 1954 group, and only 27.6 per cent of the former group as compared with 57.8 per cent of the latter were unmarried. Those who had either lost their spouses or had separated from them formed imperceptible proportion of both the groups.

A comparative study of men and women shows that whereas the proportion of women who were found married (45.5 per cent) was slightly higher than that of men (41.1 per cent) for the 1954 group, it (57.5 per cent) was much below the proportion of men (73.3 per cent) for the 1950 group. The proportion of women seems to be depressed in the case of the 1950 group because of very low coverage of women, many of whom had got married and could not be located.

4.2. An attempt was made to gather from the alumni information about the time of marriage. Of the alumni covered in the 1950 group, all the 249 married alumni gave the information. In respect of the alumni of the 1954 group, 583 had been married, of whom the information could not be obtained from 13 or 2.2 per cent.

A majority of the alumni, about 61 per cent of 1950 and 59 per cent of the 1954, got married after the completion of the university education. 30 per cent of the 1950 alumni and about 32 per cent of the 1954 were

married during their university career, and only a small proportion, about 9.0 per cent of 1950 and 6.7 per cent of 1954 did so before entering the university. More than half of the alumni, 57.0 per cent of 1950 and 51.8 per cent of 1954 got married while in employment. Details regarding the time of marriage of men and women are given in the table below:

TABLE 14

Percentage distribution of the alumni of 1950 and 1954 group by sex and time of marriage

Time of Marriage	1954			1950		
	Men	Women	Total	Men	Women	Total
1. Before entering the university	8.3	0.8	6.7	9.5	4.4	8.9
2. During university career and without employment	12.5	20.2	18.9	20.1	24.5	20.6
3. During university career and while in employment	15.9	4.0	13.4	10.5	2.2	9.4
4. After completing university education and before getting employment	12.2	50.8	20.4	9.9	37.8	13.5
5. After completing university education and after getting employment	42.9	21.8	38.4	50.0	31.1	47.6
6. Not available	2.2	2.4	2.2	..	..	..
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
NUMBER	460	123	583	304	45	349

A larger proportion of men as compared with that of women of both the groups got married before entering the university. This shows that a larger proportion of married men as compared with that of married women pursue higher education at university. The proportion of men who married during their university career and while in employment was much higher than that of such women. On the other hand the proportion of men who married during the university career and without employment was slightly lower than that of similarly placed women. Among the alumni who married after getting employment, the proportion of women was four times as high as that of men, indicating that a very large percentage of women either did not seek employment after the university career or did not consider it necessary to postpone their marriage till they had found employment. A very high proportion of men as compared with that of women

had, on the other hand, married only after getting employment. To conclude, whereas finding of employment proved to be a decisive factor in determining the time of marriage for men, it was not so important for women.

5. Economic Status :

5.1. Of the 1381 alumni of the 1954 group, 1086 or 77.9 per cent were reported at the time of the Survey to be self-supporting in the sense that their income was sufficient atleast for their own maintenance ; 73 or 5.3 per cent were earning dependents as they were not having an income sufficient to meet their own needs and were, therefore, partially dependent for their livelihood on the family ; and the remaining 232 or 16.8 per cent were non-earning dependents, that is, they had no income and were completely dependent for their livelihood on others.

Of the 482 alumni of the 1950 group, who after the completion of their university career had a longer period to settle down in the world of work, as many as 423 or 87.8 per cent were self-supporting, only 17 or 3.5 per cent were earning dependents, and the remaining 42 or 8.7 per cent were non-earning dependents. Details for men and women are given in the following table :

TABLE 15

Distribution of the alumni of the 1950 and the 1954 groups by sex and economic status

	1954						1950					
	Men		Women		Total		Men		Women		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1. Self Supporting	945	85.0	131	48.9	1076	77.9	375	92.2	48	64.0	423	87.8
2. Earning dependents	62	5.5	11	4.1	73	5.3	14	3.4	3	4.0	17	3.5
3. Non-earning dependents	106	9.5	126	47.0	232	16.8	18	4.4	24	32.0	42	8.7
TOTAL	1113	100.0	268	100.0	1381	100.0	407	100.0	75	100.0	482	100.0

A larger proportion of men as compared with that of women was self-supporting. The proportion of men earning dependents was more or less the same as that of women. A very high proportion of women as compared with that of men was found to be that of non-earning dependents. This indicates that a high percentage of women belonging to both the year groups consisted of those who either were completely engrossed in domestic life and did not find time to engage themselves in economic activity or they were so well off as not to find it necessary to work.

CHAPTER V

EDUCATION

It appeared desirable at a very early stage of the Survey to gather information about the educational background of the alumni so that the details of their employment might be understood in a realistic setting. Moreover, data on education, it was expected, would be helpful to those concerned with manpower planning in studying the impact of university education on the problem of employment. A part of the information, presented in this chapter, is, however, of interest in itself, without any bearing on employment problems.

The data presented in this chapter were obtained mostly in response to items included in Block II—Education of the General Schedule (Appendix A) and are organised into nine sections devoted to the study of a variety of aspects of university education before and after the relevant years, namely, 1950 and 1954, education in school, and training besides university education.

1. School Education :

1.1. A glance at the pattern of pre-university education of the alumni will be helpful to assess the extent to which the school education determined the pattern of their university education. We will study in this context the place where the alumni had their schooling, the subjects offered by them for the school leaving examination, and their performance in the school in terms of the division obtained by them in the final examination.

1.2. About half the alumni of both the groups had their school education in Delhi and a very high proportion of the remainder matriculated from the Punjab University.* Only a few alumni, 13 per cent of the 1954 group and 17 per cent of the 1950 group, passed the school leaving examination conducted by other agencies, important among these being the U.P. and Rajasthan Boards of High School and Intermediate Education, and the Universities of Cambridge, Bombay and Madras. Details about the examination passed by the alumni from Delhi University in 1950 and 1954 and the place of receiving school education are given in the table below :

TABLE 16

Percentage distribution of the alumni of the selected year groups by examinations passed in 1950 and 1954 and the board/university from where they passed the school leaving examination

Examination group	Total No.	Percentage of alumni at				
		Delhi	Punjab	U.P. Board	Rajasthan Board	Other universities
A. 1954						
1. B.A., B.Sc. Pass, Hons. Courses and B.Com.	747	67.1	23.8	2.9	0.5	5.7
2. M.A. & M.Sc.	191	46.1	41.4	1.6	0.5	10.4
3. Foreign Languages	25	68.0	12.0	..	..	20.0

*Some of them might have been residing in Delhi and passed the School Leaving Examination of the Punjab University as private candidates.

TABLE 16—*contd.*

Examination group	Total No.	Percentage of alumni at				
		Delhi	Punjab	U.P. Board	Rajas- than Board	Other univer- sities
<i>A. 1954—contd.</i>						
4. Library Science	9	..	22.2	11.1	22.2	44.5
5. Law	281	24.9	66.5	3.9	1.4	3.3
6. Education	51	17.6	51.0	5.9	11.7	13.8
7. Medicine & Nursing	35	14.3	42.8	2.9	..	39.0
8. Technology	42	26.2	54.8	4.7	2.4	11.9
TOTAL	1381	50.8	37.1	3.1	1.3	7.7
<i>B. 1950</i>						
1. B.A., B.Sc. Pass, Hons. Courses & B.Com.	267	63.7	27.0	2.2	1.1	6.0
2. M.A. & M.Sc.	65	30.8	33.8	15.4	1.6	18.4
3. Foreign. Languages.	8	25.0	37.5	..	25.0	12.5
4. Library Science	8	50.0	12.5	..	..	37.5
5. Law	79	27.8	62.0	5.1	2.5	2.6
6. Education	41	26.8	51.3	12.2	..	9.7
7. Medicine & Nursing	12	..	16.7	41.6	16.7	25.0
8. Technology	2	50.0	50.0	..	..	..
TOTAL	482	47.7	35.5	6.2	2.1	8.5

Of the alumni of the 1954 group, over two-thirds of those who took bachelor's degree in Arts, Science, or Commerce had their school education in Delhi, about one-fourth had matriculated from the Punjab University and the remainder (about 9 per cent) passed out from other boards/universities. Of those, who passed M.A. and M.Sc. examinations, a comparatively smaller proportion (46.1 per cent) had passed the School Leaving Examination from Delhi and a higher proportion (41.4 per cent) had matriculated from the Punjab University. In the case of graduates in Library Science, none of the alumni had passed from Delhi and in case of alumni belonging to the remaining groups of technical and professional education, a very small proportion passed from Delhi and a very high percentage from Punjab and other universities. Similar observations may be made about the alumni of the 1950 group.

It is thus clear that a significant proportion of the alumni who obtained their first degree from Delhi University had their schooling in Delhi, whereas a high percentage of those who passed post-graduate or technical and professional examination had their school education at other universities.

1.3. The elective subjects offered by the alumni for the School Leaving Examination have been classified into three groups, *viz.*, Arts, Commerce and Science. Arts group includes languages—both modern and classical, mathematics, drawing and social studies. Commerce group has commerce in addition to the subjects of the Arts group, and Science group has one or more science subjects like Physics, Chemistry, Hygiene, Physiology, Biology, etc.

About half the alumni of both the groups had offered science subjects for the School Leaving Examination, over a third had offered arts subjects, and about an eighth had offered commerce. The table below gives details about the subjects offered by the alumni for the School Leaving Examination and the type of education received at Delhi University. The eighteen examination categories have been rearranged to form eleven broad groups.

TABLE 17,

Distribution of alumni by examination passed in 1950 and 1954 and subjects studied for the school Leaving examination

Examination categories	Total No.	Percentage of alumni offered			
		Arts	Com- merce	Science	N.A.*
A. 1954					
1. B.A. Pass & Hons.	423	55.1	8.7	34.3	1.9
2. B.Com.	133	27.8	66.2	6.0	..
3. M.A.	152	36.1	10.5	50.1	3.3
4. B.Sc. Pass & Hons.	191	6.8	..	92.1	1.1
5. M.Sc.	39	20.5	..	79.5	..
6. Foreign Languages	25	32.0	..	68.0	..
7. Library Science	9	55.6	..	44.4	..
8. Law	281	36.6	6.4	55.2	1.8
9. Education	51	31.4	1.9	66.7	..
10. Nursing & Medicine	35	28.6	..	68.6	2.8
1. Technology	42	4.8	..	92.8	2.4
TOTAL	1381	35.5	11.6	51.3	1.6
B. 1950					
1. B.A. Pass & Hons.	146	51.4	7.5	40.4	0.7
2. B.Com.	43	23.2	69.9	6.9	..
3. M.A.	49	55.1	12.2	24.5	8.2
4. B.Sc. Pass & Hons.	78	7.7	..	92.3	..
5. M.Sc.	16	12.5	..	87.5	..
6. Foreign Languages	8	37.5	..	62.5	..
7. Library Science	8	37.5	..	50.0	12.5
8. Law	79	30.4	17.7	50.6	1.3
9. Education	41	58.6	2.4	36.6	2.4
10. Nursing & Medicine	12	16.7	..	75.0	8.3
11. Technology	2	..	..	100.0	..
TOTAL	48.2	36.5	12.9	48.7	1.9

*Information not available.

It will be observed that a majority of B.A. Pass and Honours course graduates had studied arts whereas a high percentage among those included in the categories of B.Sc. Pass and Hons., M.Sc., Technology, Nursing and Medicine, Law and Foreign Languages had studied science. The preponderance of those who had offered science for the school leaving examination among the holders of certificates in Foreign Languages is explained by the fact that quite a few of them had graduated in science prior to their joining the courses in Foreign Languages. Among the graduates in Commerce, those who had studied Commerce for their school leaving examination accounted for over two-thirds of the total number. As regards the M.As. a majority among the alumni of the 1954 group had studied science whereas those of the 1950 group had studied arts. This dissimilarity between the two groups is found also in respect of the categories of Library Science and Education.

The above analysis reveals that a large majority of graduates in Science, Nursing, Medicine, Technology and Foreign Languages consisted of those who had studied science at the pre-university stage and that graduates in professional courses like Law, Education and Library Science and even those in Arts had amongst them a significant proportion of those who had studied science for the school leaving examination. It shows that whereas a large proportion of the alumni had studied science in their school days only a few of them could have scientific or technical education at the university. A large number had diverted to the study of arts or had education in professional courses like Law, Education and Library Science. The preliminary training in Science imparted at school was thus not fully utilised. This calls for a substantial expansion in the facilities for higher education in the field of Science, Engineering and Medicine.

1.4. The analysis of the data pertaining to the divisions secured by the alumni in their school final examination shows that most of them had got either a First or a Second and that only a few had obtained a Third, as is indicated in the following table:

TABLE 18

Percentage distribution of alumni by examination passed in 1950 and 1954 and the division obtained in the School Leaving Examination

Examination passed	Total	Division in School Leaving Examination				
		First	Second	Third	No.	N.A.
A. 1954						
1. B.A. Pass & Hons.	423	17.0	56.0	24.8	1.7	0.5
2. B.Com.	133	23.3	69.2	7.5	..	..
3. M.A.	152	34.2	52.0	5.3	2.6	5.9
4. B.Sc. Pass & Hons.	191	27.2	62.3	7.3	1.6	1.6
5. M.Sc.	39	58.9	23.1	2.6	7.7	7.7
6. Foreign Languages	25	48.0	44.0	4.0	4.0	..
7. Library Science	9	22.2	44.5	22.2	11.1	..
8. Law	281	35.2	48.5	10.3	2.8	3.2

TABLE 18—*contd.*

Examination passed	Total	Division in School leaving examination				
		First	Second	Third	No.	N.A.
9. Education	51	39.2	37.3	15.7	5.9	1.9
10. Nursing & Medicine	35	57.1	25.7	5.7	8.6	2.9
11. Technology	42	76.3	14.3	4.7	4.7	..
TOTAL	1381	30.1	52.2	13.2	2.5	2.0
B. 1950						
1. B.A. Pass & Hons.	146	21.2	54.1	23.3	0.7	0.7
2. B.Com.	43	23.2	72.1	4.7	..	..
3. M.A.	49	26.5	61.2	4.1	8.2	..
4. B.Sc. Pass & Hons.	78	47.4	48.7	2.6	..	1.3
5. M.Sc.	16	31.3	56.3	6.2	6.2	..
6. Foreign Languages	8	12.5	75.0	..	12.5	..
7. Library Science	8	50.0	37.5	..	12.5	..
8. Law	79	36.7	51.9	7.6	1.3	2.5
9. Education	41	51.2	41.5	7.3	..	..
10. Nursing & Medicine	12	33.3	58.4	..	8.3	..
11. Technology	2	50.0	50.0	..	..	..
TOTAL	482	32.4	54.4	10.4	2.0	0.8

Over half of the alumni had got a Second; nearly a third, a First, only 13.2 per cent of the 1954 group and 10.4 per cent of the 1950 group, a Third; and the remainder a Pass*. In the case of the 1954 group, the proportion of the alumni who had got a First in the school final was appreciably higher among those who had obtained a Master's Degree in Science or had specialised in Nursing, Medicine and Technology than among those who had passed other examinations. The proportion of the alumni who had got a Third was the highest among the Bachelors of Arts, Pass and Honours courses. The figures for the 1950 group do not show a clear pattern. It will, however, be noticed, as in the case of 1954 group, that the proportion of the alumni with a Third was the highest among B.A. (Pass and Honours) graduates.

*The alumni who had got a pass had either matriculated from Bombay University which awards the certificate without division or from the East Punjab University in 1947 in lieu of social service.

The above analysis lends support to the general impression that only persons with sound academic background join courses in Science, Engineering and Technology, and Nursing and Medicine, and that most of those who do not fare well in their school final either do not pursue further education or tend to join courses in Arts where the admission requirements are not high.

2. Stage of joining Delhi University :

2.1. A very large proportion of the alumni, 73 per cent of the 1954 group and 67 per cent of the 1950 group, had joined Delhi University straight from school ; about 7 per cent of the 1954 group and 8 per cent of the 1950 group had done so after having passed the intermediate examination from other universities ; and the remaining 20 per cent of the 1950 group joined the university for post graduate education in arts and science or for professional and technical courses only after having obtained their first degree from other universities. On comparing the groups it is found that a large proportion of the 1954 group than the 1950 group began their university career at Delhi University. This shows that with the passage of time Delhi University could draw a large number of students for the first degree courses, from Delhi itself. Details linking the examination passed by the alumni in 1950 and 1954 and the time of their joining Delhi University are given below :

TABLE 19

Percentage distribution of the alumni of 1950 and 1954 groups according to the examination passed in the relevant years and the time of joining Delhi University

Examination group	Percentage of alumni joined Delhi University								
	1954				1950				
	Total No. from School	Strai-ght	After inter- mediate exam.	After first degree	Total No. from School	Strai-ght	After inter- mediate exam.	After first degree	
1	2	3	4	5	6	7	8	9	
1. B.A. Pass & Hons.	556	97.7	2.3	..	189	94.7	5.3	..	
2. B.Sc. Pass & Hons.	191	93.2	6.8	..	78	87.2	12.8	..	
3. M.A. Lang., M.A. His.- Pol. Sc.-Phil.	136	67.6	5.9	26.5	42	47.6	11.9	40.5	
4. M.A. Social work	16	31.3	6.2	62.5	7	..	..	100.0	
5. M.Sc.	39	71.8	20.5	7.7	16	31.3	6.2	62.5	
6. Foreign Languages	25	68.0	8.0	24.0	8	75.0	..	25.0	

TABLE 19—*contd.*

Examination group	Percentage of alumni joined Delhi University								
	1954				1950				
	Total No.	Strait-ght from School exam.	After inter-mediate degree exam.	After first degree	Total No.	Strait-ght from School exam.	After inter-mediate degree exam.	After first degree	
1	2	3	4	5	6	7	8	9	
7. Library Science	9	11.1	..	88.9	8	50.0	..	50.0	
8. Law & Prof. in Law	281	34.2	7.1	58.7	79	32.9	5.1	62.0	
9. Education	51	31.4	1.9	66.7	41	24.3	7.3	63.4	
10. Nursing	6	33.3	66.7	..	3	33.3	66.7		
11. Medicine	29	34.5	58.6	6.9	9	22.2	33.3	44.5	
12. Technology	42	50.0	26.2	23.8	2	..	100.0		
TOTAL	1381	73.1	7.1	19.8	482	67.0	8.3	24.7	

It will be observed that a very high percentage of the holders of a Bachelor's Degree in Arts and Science joined the University immediately after the completion of school education. The percentage of such alumni was comparatively low in the case of examination groups which included categories of M.A. Languages, M.A. Hist.-Pol. Sc.-Philosophy, M.A. Economics-Commerce-Mathematics, M.A. Social Work, M.Sc. and Foreign Languages, and was even lower in the case of the remaining categories of Library Science, Law, Proficiency in Law, Education, Nursing, Medicine and Technology. In the case of the alumni who belonged to the categories of Nursing of both the groups, Medicine of the 1954 group and Technology of the 1950 group, which all comprise of first degree examinations, those who joined the University at the pre-degree stage after having passed intermediate examination from other universities formed a very high proportion; and in the case of the alumni included in the categories of Social Work, Library Science, Law, Proficiency in Law and Education of both the groups, which comprised post-graduate examinations, those who had obtained a first degree from other universities before migrating to Delhi University constituted a very prominent proportion.

Besides these broad trends there are visible significant variations in the pattern of different examination groups. In case of those who took a Bachelor's degree in Arts, Commerce or Science, the proportion of the alumni who joined Delhi University after passing Intermediate examination from other Universities was higher for Bachelor's degree holders in Science than that for similar degree holders in Arts and Commerce. It can as well be noticed in the case of the Masters

of Arts that the proportion of the alumni who migrated to this University at the post-graduate stage was significantly higher among M.As. in Social Work than among M.As. in other subjects. The possible explanation is that the facilities for teaching higher courses in science are relatively limited and that those for teaching the course in social work are almost non-existent in the adjoining States.

To conclude, the proportion of the alumni who joined Delhi University straight from school was higher among those who passed a first degree examination at Delhi University than among those who took a Master's degree in Arts, Commerce or Science. The latter proportion was, in turn, higher than the proportion of similar persons who passed examinations in technical and professional education.

3. Academic performance at Delhi University :

3.1. A comparative picture of the alumni classified according to the divisions obtained by them in their examinations may be attempted with a view to evaluating their academic achievements. The results were classified into four groups: First division or distinction, Second division, Third division, and Pass Degree*.

*In Delhi University the percentage of marks required for the classification of successful candidates is as follows :

Examination	First Divn.	Second Divn.	Third Divn.
1. B.A. Pass and B.Sc. Pass and B.Ed.	60% or more (Distinction)		
2. B.Sc. Hons., Science, B.A. Hons., B.Com., B.Sc. Hons., B.Sc. Agr. (Hons) M.A., M.Com., M.Sc., M.Lib.Sc., Dipl. in Library Science.	60% or more	50% or more	Below 50%
3. B.Sc. Hons. (Nursing)	75% or more	60% or more	Below 60%
4. M.Ed.	65% or more (Dist.)		
5. LL.B. (Final), LL.M. & B.C.L.	65% or more	50% or more	
6. Certificate of Proficiency in Russian, Dip. in Russian	75% (Dist)		
7. M.B.B.S. & D.T.D.	80% or more in a subject (Distinction)		

The following table presents the pattern of the results of different types of graduates:

TABLE 20

Percentage distribution of the alumni of selected year groups by the examination passed in 1954 and 1950 and division obtained in the examination

Examination category	Total No.	Percentage of alumni in				
		First Divn. (Distinction)	Second Divn.	Third Divn.	Pass	N.A.
A. 1954						
1. B.A. Pass	251				100.0	
2. B.Sc. Pass	105	4.8			95.2	
3. B.Com.	133	6.8	29.3	60.1	3.8	
4. B.A. Hons.	172	13.4	35.5	43.0	7.5	0.6
5. B.Sc. Hons.	86	19.8	58.1	17.4	2.4	2.3
6. M.A.	152	13.8	46.7	36.8		0.7
7. M.Sc.	39	43.6	43.6	12.8		
8. Library Science	9	11.1	66.7	22.2		
9. Law	171	8.8	91.2			
10. Prof. in Law	110				100.0	
11. Education	51	7.8			92.2	
12. Nursing	6		83.3	16.7		
13. Medicine	29	13.8			86.2	
14. Technology	42				100.0	
15. Foreign Languages	25	44.0			56.0	
TOTAL	1381	9.2	29.3	16.9	44.3	0.3
B. 1950						
1. B.A. Pass	94				100.0	
2. B.Sc. Pass	29				100.0	
3. B.Com.	43		27.9	60.5	11.6	
4. B.A. Hons.	52	15.4	25.0	52.0	7.6	
5. B.Sc. Hons.	49	29.4	46.9	30.6	2.1	
6. M.A.	49	18.4	36.7	44.9		
7. M.Sc.	16	43.8	43.7	12.5		
8. Library Science	8	37.5	37.5	25.0		
9. Law	61	6.6	43.4			
10. Prof. in Law	18				100.0	
11. Education	41	9.8			90.2	
12. Nursing	3		100.0			
13. Medicine	9				100.0	
14. Technology	2				100.0	
15. Foreign Languages	8	50.0			50.0	
TOTAL	482	10.2	27.6	19.5	42.7	

The overall distribution of the alumni according to the division obtained in their examinations is almost the same for both the groups. The largest proportion of the alumni, about 44 per cent of the 1954 group and 43 per cent of the 1950 group got a Pass, about 29 per cent of the alumni of the 1954 and 28 per cent of the 1950 group got a Second, about 17 per cent of the 1954 group and 20 per cent of the 1950 group got a Third, and only about 9 per cent of the alumni of the 1954 group and 10 per cent of the 1950 group obtained a First or Distinction.

All of the B.A. Pass course graduates of both the year groups got a Pass. In the case of B.Sc. Pass course graduates only a small fraction of the alumni of the 1954 group (5.0 per cent) could get a Distinction; the remaining 95.0 per cent alumni of the 1954 group and all the alumni of 1950 group got a Pass.

In the case of B. Com., B.A. Hons. and B.Sc. Hons. categories of both the groups, the proportion of the alumni who got a First or a Second was larger for the graduates in Arts (49% for the 1954 and 40% for the 1950) than for those in Commerce (36% for the 1954 and 28% for the 1950) and it was the largest for the graduates in Science (78% for the 1954 and 67% for the 1950); consequently, the proportion of the alumni who got a Third was the highest for graduates in the Commerce (60% for the 1954 and 61% for the 1950) and the lowest for those in Science (17% for 1954 and 31% for the 1950).

It may also be noticed that in respect of both the groups the alumni included in the M.A. Group showed better result than those who passed B.A. Hons., and B.Com. examinations, though they did not fare as well as the Master's degree holders in science who had secured a First and a Second in very high proportions.

As to the remaining categories, there is no uniformity in the classification of results, which are unclassified in the case of 'Proficiency in Law' and Technology, classified into two groups of 'Distinction' and 'Pass' in the case of Law, Education, Medicine and Foreign Languages, and distributed over the customary three divisions, 'First', 'Second' and 'Third', in respect of Library Science and Nursing. This lack of uniformity renders the inter-category comparison impossible.

3.2. It will be of interest to compare the results of the examinations passed by the alumni in 1950 and 1954 with those of the school leaving examination to find out how well the graduates had fared at the University. The comparison has a serious limitation in that the Pass degree awarded by Delhi University for examinations included in the categories of B.A. and B.Sc. Pass courses, Education, Medicine and Foreign Languages cannot be compared with the Second and Third Divisions, though it is distinguishable from the First Division. Further, the results of the examinations for Proficiency in Law and Technology are declared without division and are, therefore, incomparable with those of the school leaving examination.

The following table which presents the findings of the comparison does not include in its scope the categories of B.A. and B.Sc. Pass courses, Proficiency in Law, Education, Medicine, Technology and Foreign Languages, on account of the aforesaid difficulties.

TABLE 21

Percentage distribution of 768 alumni of 1954 group and 281 alumni of 1950 group by examination passed in 1954 and 1950 and whether got a higher, same or lower division in the examination than that obtained in the school leaving examination

Examination	Total No.	Percentage of alumni getting			
		Higher Divn.	Same Divn.	Lower Divn.	Not available
1	2	3	4	5	6
A. 1954					
1. B.Com.	133	1.5	32.3	66.2	..
2. B.A. Hons.	172	7.6	39.0	51.7	1.7
3. B.Sc. Hons.	86	2.3	59.3	32.6	5.8
4. M.A.	152	9.9	36.8	48.7	4.6
5. M.Sc.	39	7.7	51.3	30.8	10.2
6. Library Science	9	11.1	55.6	22.2	11.1
7. Law	171	11.1	52.6	28.1	8.2
8. Nursing	6	16.7	33.3	50.0	..
TOTAL	768	7.3	43.5	44.8	4.4
B. 1950					
1. B.Com.	43	..	23.3	76.7	..
2. B.A. Hons.	52	1.9	46.2	51.9	..
3. B.Sc. Hons.	49	4.1	42.8	53.1	..
4. M.A.	49	12.2	26.5	53.1	8.2
5. M.Sc.	16	25.0	56.2	18.8	..
6. Library Science	8	25.0	25.0	50.0	..
7. Law	61	11.5	35.7	27.9	4.9
8. Nursing	3	100.0	..	..	..
TOTAL	281	8.9	40.2	48.4	2.5

The table reveals that only a small fraction of the alumni for whom the comparison could be made, about 7 per cent of the 1954 group and about 9 per cent of the 1950 group, could secure a higher division in the university examination; about 44 per cent of the alumni of the 1954 group and 40 per cent of the 1950 group got the same division; a slightly higher proportion of the alumni, 45 per cent of the 1954 group and 48 per cent of the 1950 group got a lower division and the remaining alumni, forming about 4 per cent of the 1954 group and 3 per cent of the 1950 group, could not be included in any of these three groups as the information about the division obtained by them in either or both of the examinations could not be obtained.

The proportion of the alumni who got a lower division in the university examination was the highest for B.Com. graduates of both the groups. A negligible proportion of these graduates could get a higher division and only a small proportion could manage to maintain the same position. B.A. Hons. and B.Sc. Hons. graduates were in a comparatively better position and between themselves the latter had fared better in 1954 and both had done almost equally well in 1950. The position of the Master's degree holders in Science was much better than those in Arts. In 1954 a very large proportion of the former as compared with that of the latter could maintain the same position and a smaller proportion had suffered deterioration. The gap between the achievements of the two categories was wider in 1950; the proportion of the post-graduates in Science who could secure a higher or the same division was more than twice as large as that of those in Arts. Law graduates had done as well as the post-graduates in Science, in 1954, and the latter had done a little better than the former in 1950. It will not be appropriate to comment on the position of the categories of Library Science and Nursing on account of the small number of the alumni included in them.

The above analysis highlights the deterioration in academic performance undergone by a high percentage of the alumni during their university career which means that the intellectual development attained by them at the University was not adequate enough to enable them to comprehend the vast and complex field of higher studies. This fall in the standards of their scholastic achievement may be attributed to a variety of causes, such as, the emotional and other factors which distract the attention of the students from studies, change in the methods of teaching as they pass from school to university, lack of guidance at home and college, the absence of a definite vocational goal before them, etc.

4. Further Education :

4.1. The two groups selected for the Survey included all those who graduated and post-graduated in various subjects in the relevant years, and obviously all of them did not terminate their education in these years. Of the alumni covered in the enquiry those who pursued and successfully completed further education formed about 38 per cent of the 1954 group and 49 per cent of the 1950 group. The remaining alumni of the two groups either terminated their education in 1950 and 1954 or were continuing their

studies at the time of the enquiry.* The position according to the examination categories is indicated in the table below:

TABLE 22

Distribution of the alumni who furthered their education after 1950 and 1954 according to the examination passed in the relevant years

Examination category	1954			1950		
	Total No.	Had further education		Total No.	Had further education	
		No.	%		No.	%
1	2	3	4	5	6	7
A. 1954						
1. B.A. Pass	251	89	35	94	48	53
2. B.Sc. Pass	105	46	44	29	15	52
3. B.Com.	133	43	32	43	17	37
4. B.A. Hons.	172	111	65	52	35	67
5. B.Sc. Hons.	86	57	64	49	30	61
6. M.A. Languages	43	12	28	21	3	14
7. M.A. Hist.-Pol.Sc.-Philosophy	36	10	28	3	1	33
8. M.A. Eco.-Com.-Mathematics	57	12	21	18	5	28
9. M.A. Social work	16	1	6	7	1	17
10. M.Sc.	39	7	18	16	5	31
11. Library Science	9	1	11	8	6	75
12. Law	171	87	51	61	38	62
13. Prof. in Law	110	11	2	18	6	33
14. Education	51	9	18	41	14	34
15. Nursing	6	..	..	3	2	67
16. Medicine	29	4	14	9	3	33
17. Technology	42	20	48	2	1	50
18. Foreign Languages	25	8	32	8	4	50
TOTAL	1381	528	38	482	234	49

It will be seen that in the case of most of the categories a larger proportion of the alumni of the 1950 group as compared with that of the 1954 group had enhanced their academic qualifications due to the longer period they had had.

*An account of persons who were continuing their education at the time of the survey is given in para 6.2 on page 40.

In respect of the first degree examination categories of both the year groups, the proportion of the alumni who obtained further education was the largest for the Honours course graduates in Arts and Science. The proportion of the Master's degree holders, was lower than that of the Bachelors degree holders. As to the remaining categories of technical and professional education and Foreign Languages, the proportion of the alumni who had further education was significantly high for Law, Technology and Foreign Languages in both the groups.

Of the alumni who got further education, as many as 38 per cent of the 1954 group and 36 per cent of the 1950 group ended up with a Master's degree in Arts ; about 27 per cent of the alumni of both the groups graduated in Law ; about 12 per cent got a degree in Education about 12 per cent of the alumni of the 1954 group and 5 per cent of those of the 1950 group got a Master's degree in Science ; and the rest passed other examinations, important amongst these being in Technology and Foreign Languages. Details about the last examination passed by the alumni in different categories are given in the following table :

TABLE 23

Percentage distribution of the alumni of 1950 and 1954 groups who had furthered education by examination passed in 1950/1954 and the last examination passed

Examination passed 1950/1954	Total No.	Last examination passed (percentage to total)										
		B.A. & B.Sc. P & H	M.A.	M.Sc.	Library Science	Law	Educa- tion	Medi- cine	Techno- logy	Foreign Languages	Ph. D.	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
A. 1954												
1. B.A. Pass	89	..	51.7	..	..	18.0	29.2	..	..	1.1	..	..
2. B.Sc. Pass	46	..	15.2	23.9	..	21.7	28.3	..	8.7	2.2	..	..
3. B.A. Hons. & B.Com.	154	..	70.8	..	1.3	14.9	7.8	..	0.6	3.9	0.7	..
4. B.Sc. Hons. . . .	57	..	12.3	73.6	..	1.8	1.8	..	3.5	7.0	..	..
5. M.A.	35	..	20.0	5.7	..	22.9	34.3	..	..	8.6	8.5	..
6. M.Sc.	7	..	42.9	..	..	..	..	..	..	57.1	..	..
7. Library Science . . .	1	..	..	..	100.0	..	..	..	..	..	..	..
8. Law	87	..	3.5	..	..	94.3	1.1	..	..	1.1	..	..
9. Prof. in Law	11	..	72.7	..	..	18.2	..	..	..	9.1	..	..
10. Education	9	..	77.8	..	..	11.1	11.1	..	..	..	..	..
11. Nursing . . . . .	..	..	..	..	..	..	..	..	..	..	..	..
12. Medicine	4	..	..	..	..	..	..	100.0	..	..	..	..
13. Technology	20	..	5.0	25.0	..	..	..	..	70.0	..	..	..
14. Foreign Languages . .	8	12.5	12.5	12.5	..	12.5	..	..	..	25.0	..	..
TOTAL	528	0.2	37.6	11.6	0.6	27.3	12.5	0.8	4.0	4.3	1.1	..

TABLE 23—*contd.*

Examination passed 1950/1954	Total No.	Last examination passed (percentage to total)										
		B.A. & B.Sc. P & H	M.A.	M.Sc.	Library Science	Law	Educa- tion	Medi- cine	Techno- logy	Foreign Languages	Ph. D.	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
B. 1950												
1. B.A. Pass	48	..	41·6	..	4·2	27·1	22·9	..	..	2·1	..	2·1
2. B.Sc. Pass	15	..	33·3	6·7	..	6·7	26·6	..	20·0	6·7	..	..
3. B.A. Hons. & B.Com. . .	52	..	59·6	..	1·9	23·1	9·6	..	..	3·9	..	1·9
4. B.Sc. Hons.	30	..	6·7	36·6	..	6·7	6·7	10·0	20·0	3·3	3·3	6·7
5. M.A.	10	..	30·0	..	..	20·0	30·0	10·0	..	..	10·0	..
6. M.Sc.	5	..	..	..	..	20·0	..	..	80·0	..	..	..
7. Library Science	6	..	..	..	50·0	16·7	..	..	..	30·3	..	..
8. Law	38	..	13·2	..	..	81·6	2·6	..	..	..	2·6	..
9. Prof. in Law	6	..	83·3	..	..	16·7	..	..	..	..	..	..
10. Education	14	..	64·3	..	..	..	14·3	..	..	..	14·3	7·1
11. Nursing	2	..	50·0	..	..	..	..	50·0	..	..	..	..
12. Medicine	3	..	..	..	..	..	..	66·7	..	33·3	..	..
13. Technology	1	..	..	..	..	..	..	..	100·0	..	..	..
14. Foreign Languages . . .	4	..	50·0	..	..	..	..	..	..	50·0	..	..
TOTAL	234	..	35·5	5·1	2·6	27·3	12·0	3·0	6·0	4·3	2·1	2·1

It will be seen that among the B.A. Pass course graduates of both the groups the largest proportion obtained a Master's degree in Arts, followed by those graduating in Law and Education. Large proportions of the B.Sc. pass course graduates got professional training in Education or post-graduated in Science or Arts. Of the Honours course graduates in Arts and Commerce about 71 per cent of the 1954 group and 60 per cent of the 1950 group obtained a Master's degree in Arts or Commerce and a large proportion of the rest specialised in Law and Education. The Honours course graduates in Science showed different patterns in the two years; in 1954 over two thirds had got a Master's degree in Science and a large proportion of the rest diverted to post-graduation in Arts, whereas in 1950 only a little over a third had passed the M.Sc. examination and significant proportions of the remainder had specialised in Engineering and Medicine. The post graduates in Arts of both the groups had obtained a Master's Degree in another Arts subject in large proportions or studied for a degree in Education, Law or Foreign Languages. The post graduates in Science diverted to Arts and Foreign Languages in 1954 and specialised in Engineering and Law in 1950.

The Diploma holders in Library Science had either improved their qualifications in that very subject or specialised in Law or Foreign Languages. Almost all of the alumni included in the category of Law had further specialised in the subject by qualifying for the Certificate of Proficiency in Law, whereas about three-fourths of those included in the category of proficiency in Law post-graduated in Arts, and quite a few had further specialisation in Law. About two-thirds of the graduates in Education in case of the 1954 group and over four-fifths in case of the 1950 group post-graduated in Arts and the remaining specialised in Education or Law. Most of the graduates in Nursing and Medicine specialised in their subject. An overwhelming majority of the holders of Diploma in Engineering and Technology in the case of both the groups consisted of those who improved their qualifications by obtaining a degree in the subject. A significant proportion of the holders of Certificates in Foreign Languages specialised in another Foreign Language and the rest got a post graduate degree in Arts or Science, or specialised in Law.

5. Termination of Education :

5.1. A large number of the alumni of the selected groups, as has been shown in the preceding para, pursued further education and passed subsequently higher examinations. Most of them had, however, terminated their education by the time of the enquiry. The object of the present section is to investigate into causes of the termination of education.

5.2. 1,213 or about 88 per cent of the alumni of the 1954 group and 457 or about 95 per cent of the 1950 group had terminated their education. The remaining 168 alumni of former group and 25 alumni of the latter, were studying at the time of the Investigation. It will not be out of place to enquire about the type of education being received by them.

Of the 168 alumni of the 1954 group who were pursuing higher education at the time of the enquiry, as many as 55 or 22.7 per cent were specialising in Law; 48 or 28.6 per cent were preparing for a Master's degree

in Arts; 33 or 19.6 per cent were engaged in research leading to Ph.D. degree; 10 or 6.0 per cent were studying for a degree in Education (Teaching); 9 or 5.4 per cent were preparing for a diploma in Economic Administration or Business Management; and the remaining 13 or 7.7 per cent alumni were studying various technical and professional courses. Of the 25 alumni of 1950 group, 10 were studying for a Master's degree in Arts; 9, for Ph.D; 4, for degree in Law; and one each, for Diploma in Business Management and Degree in Education.

A very high percentage of these alumni, 75 per cent of 1954 group and over 80 per cent of the 1950 group had been in employment for a long time and had either joined the part-time courses in Law or were preparing for various degrees as private students. Most of the remainder, who were not found employed at the time of the Survey, had qualified for their first degree in 1954 or 1950 and passed a number of examinations subsequently. A few among them also had spells of employment in the intervening period.

5.3. As to the reasons for the termination of education, a very large proportion of the alumni, 59 per cent of the 1954 group and 62 per cent of the 1950 group, replied that they had reached the level at which they could follow the occupation of their choice, and 7 per cent of the alumni of the 1954 group and 6 per cent of the 1950 group felt that the available employment was more likely to be helpful in the achievement of their occupational goal. Taking these two reasons together, it will be noticed that over two-thirds of the alumni of the two groups were able to reach the desired level of their educational career and terminated their studies of their own accord. About 16 per cent of the alumni of the 1954 group and 14 per cent of the 1950 group had to discontinue their studies on account of financial difficulties, and 10 per cent of the alumni of the former group and 9 per cent of those of the latter had to assume family responsibilities. Only a small proportion, 4 per cent of the 1954 group and 3 per cent of the 1950 group failed to get admission to higher classes. About 3 per cent gave 'miscellaneous' reasons, such as ill health, scarcity of time, lack of guidance, lack of proper transport arrangement, absence of facilities for higher education in India, etc. Details about the various categories of the alumni are given in the table below:

TABLE 24

Percentage distribution of the alumni by last examination passed and reasons for the termination of education

Last examination passed	Total No.	Reached desired level	Avail-able job better	Finan- cial difficul- ties	Family respon- sibili- ties	Admis- sion denied	Misc- ellan- eous	N.A
A. 1954								
1. B.A. & B.Sc. Pass and Hons.	351	23.4	8.8	33.0	18.8	8.0	3.7	4.3
2. M.A. & M.Sc.	346	72.2	8.1	9.0	5.5	2.3	2.9	..
3. M.A. & Library Science	11	81.8	9.1	9.1	..	..	..	..
4. Law	105	62.8	4.8	15.2	7.6	1.0	7.6	..

TABLE 24—*contd.*

Last examination passed	Total No.	Reached desired level	Available job better	Financial difficulties	Family responsibilities	Admission denied	Miscellaneous	N.A.
5. Prof. in Law . . .	185	82.7	1.1	5.9	9.7	0.6	..	..
6. Education . . .	99	72.7	5.1	10.1	8.1	2.0	2.0	..
7. Nursing . . .	6	33.4	..	..	..	33.3	33.3	..
8. Medicine . . .	27	74.1	7.4	11.1	7.4	..	..	..
9. Technology . . .	48	77.1	6.2	14.6	2.1	..	..	..
10. Foreign Languages . . .	35	71.4	5.7	11.4	2.9	12.9	5.7	..
TOTAL . . .	1213	59.1	6.5	16.4	10.1	3.6	3.1	1.2

B. 1950

1. B.A. & B.Sc. Pass and Hons.	125	34.4	3.8	21.6	20.0	8.0	4.0	3.2
2. M.A. & M.Sc.	140	70.7	5.7	10.7	5.7	2.9	4.3	..
3. Library Science	7	85.7	..	14.3	..	..	..	..
4. Law	35	65.7	11.4	8.6	14.3	..	..	..
5. Prof. in Law	62	85.5	1.6	6.5	4.8	1.6	..	..
6. Education	53	56.7	1.9	18.9	16.8	5.7	..	..
7. Nursing	2	50.0	50.0	..	..	..	..	..
8. Medicine	10	100.0	..	..	..	..	..	..
9. Technology	12	83.4	8.3	8.3	..	..	..	..
10. Foreign Languages	11	81.8	..	18.2	..	..	..	..
TOTAL	457	62.1	5.9	13.8	10.9	3.7	3.3	0.3

The proportion of the alumni who had terminated their studies only after reaching the desired level of their educational career (first reason) was the smallest (23.4 per cent for the 1954 and 34.4 per cent for the 1950 group) in respect of those who had discontinued their studies after passing a first degree examination; a significantly large proportion of these alumni had to give up their studies against their wishes due to financial stringencies, family responsibilities, and denial of admission to higher courses. Among the alumni who had taken their post-graduate degrees or passed examinations in technical and professional courses, those who felt they had reached the desired level or thought the available job was more attractive than the pursuit of higher education formed very prominent proportions; comparatively fewer of these alumni ascribed the termination of the educational career to other reasons.

6. Financing of Education :

6.1. This section reviews the replies of the alumni to questions concerning the manner in which their education was financed. The term 'finance' was defined to comprise all expenses involved in education, including fees, books, stationery, transport, and also the expenses on board and lodging, in

case of the student staying away from the family. The interviewers were instructed to record all the different sources of finance including the subsidiary sources. The information gathered relates to all of the various stages of the student life of the alumni. The analysis of the data has, however, been limited to the course of study completed by the alumni in the relevant years, that is, 1950 and 1954, and the term 'education' has been employed in this section in this narrow context.

6.2. An examination of the principle sources of financing the education shows that the dependence on the family was very heavy: over three-fourths of the alumni, 79 per cent of the 1954 group and 78 per cent of the 1950 group, were financed by their families. Most of these alumni were financed by their parents or guardians and only a very small fraction, by their brothers and other members of the extended family. About 17 per cent of the alumni of the 1954 group and 18 per cent of the 1950 group depended on themselves; about 16 per cent of the former group and 15 per cent of the latter worked to meet the expenses, and the remainder drew on past saving. Only a few alumni got merit scholarship or aid from the college or university and about the same percentage had miscellaneous sources, e.g., loan from Government, deputed by the employer and in receipt of salary, income from inherited property, etc.

The analysis clearly shows that as compared with college students of foreign countries, a very small proportion worked their way through college and an even smaller proportion financed their education with merit scholarship or aid from college. The data lend support to the general experience that higher education in this country is a burden on the family.

Details about the source of finance for different types of the alumni are given in the following table:

TABLE 25

Percentage distribution of the alumni by the examination passed in 1950 or 1954 and the principal source of financing the education

Examination passed	Total No.	Parents	Brothers	Other relatives	Merit scholarship	Aid from college	Through work	Past savings	Others	N.A.
1	2	3	4	5	6	7	8	9	10	11
A. 1954										
1. B.A. P & H	556	83.6	5.8	1.6	1.3	0.5	6.8	..	0.4	..
2. B.Sc. P & H	191	90.6	5.2	..	1.6	1.0	1.6	..	..	..
3. M.A.	152	89.9	2.0	0.7	0.7	0.7	3.3	..	2.0	0.7
4. M.Sc.	39	84.6	5.1	..	5.1	2.6	2.6	..	..	..
5. Library Science	9	55.6	..	..	..	..	22.2	11.1	11.1	..
6. Law	281	42.0	1.4	0.7	..	1.6	52.2	0.7	0.7	0.7
7. Education	51	56.7	5.9	2.0	5.9	..	15.7	11.8	2.0	..
8. Nursing	6	16.7	..	..	49.9	16.7	..	..	16.7	..

TABLE 25—*contd.*

Examination passed	Total No.	Parents	Brother	Other relative	Merit scholarship	Aid from college	Through work	Past savings	Others	N. A.
1	2	3	4	5	6	7	8	9	10	11
9. Medicine	29	69.0	..	..	6.9	3.4	3.4	3.4	13.9	..
10. Technology	42	76.2	4.8	..	2.4	4.8	9.5	..	..	2.4
11. Foreign Languages	25	44.0	4.0	..	..	4.0	44.0	..	..	4.0
TOTAL	1381	74.1	4.1	1.0	1.6	1.0	16.1	0.7	1.0	0.4

B. 1950

1. B.A. P & H	189	87.0	5.1	0.5	..	0.5	5.3	..	..	1.6
2. B.Sc. P & H	78	88.4	5.1	..	..	1.3	2.6	1.3	1.3	..
3. M.A.	49	57.3	6.1	6.1	2.0	..	24.5	2.0	2.0	..
4. M.Sc.	16	87.4	..	6.3	..	6.3	..	..	..	..
5. Library Science	8	50.0	..	..	37.5	..	12.5	..	..	..
6. Law	79	48.1	2.5	..	..	..	45.6	2.5	1.3	..
7. Education	41	36.5	12.2	4.9	..	..	17.1	24.4	..	4.9
8. Nursing	3	66.7	..	33.3	..	..	..	..	..	..
9. Medicine	9	33.4	..	..	22.2	..	22.2	..	22.2	..
10. Technology	2	50.0	..	..	..	50.0	..	..	..	..
11. Foreign Languages	8	50.0	..	..	..	..	50.0	..	..	..
TOTAL	482	71.4	4.6	1.7	1.2	0.8	15.4	2.9	1.0	1.0

A very high proportion of the alumni who had specialised in Law and Foreign-Languages (part-time courses), a comparatively smaller proportion of those who had studied Library Science and Education, (full day courses), and an even smaller proportion of those who had specialised in Nursing, Medicine and Technology (full day courses demanding very hard work from the students) consisted of those who worked during the course of their studies. It will also be noticed that a significant proportion of the alumni who had studied for a degree education, had worked as teachers before joining the course and drew on past savings, and that a large proportion of those who had specialised in Medicine depended on miscellaneous sources as most of those who studied for the diploma in Tuberculous Diseases had been deputed by their employers and were in receipt of their salary.

6.3. We will now relate at this stage the source of finance to the family income at the time the alumni left the college. The family income recorded on the schedule was the approximate monthly income that accrued to the family as constituted during the student life of the alumni and included also income from property and other family assets.

Of the 1381 alumni of the 1954 group, 151 or about 11 per cent and of the 482 alumni of the 1950 group, 63 or about 13 per cent did not disclose their family income. The information about the rest is given in the table below :

TABLE 26

Percentage distribution of the alumni according to the family income at the time the alumni left the college and the source of finance

Family income at the time of leaving college	Total	Par-ents	Bro-thers	Other relatives	Merit scho-lar-ship	Aid from col-lege	Self- thr-ough work	Self through past savings	Oth-ers	N.A.
<i>A. 1954</i>										
Below 150	92	58.8	6.5	1.1	..	4.3	23.9	..	5.4	..
150—299	249	64.7	5.6	2.4	2.8	2.0	21.3	0.8	..	0.4
300—499	320	75.3	2.8	0.3	0.9	1.2	17.8	..	..	0.7
500—749	235	75.3	4.7	0.4	1.7	..	16.2	0.4	1.3	..
750—999	76	84.2	5.3	..	1.3	..	9.2	..	..	..
1000 & above	258	90.7	1.9	..	1.6	..	5.0	0.4	..	0.4
N.A.	151	61.5	5.3	2.6	2.0	..	21.9	4.0	2.0	0.7
TOTAL	1,381	74.1	4.1	1.0	1.6	1.0	16.1	0.7	1.0	0.4
<i>B. 1950</i>										
Below 150	26	46.3	..	3.8	3.8	..	42.3	..	..	3.8
150—299	95	57.8	2.1	2.1	1.1	2.1	27.4	6.3	1.1	..
300—499	91	69.2	5.5	2.2	1.1	2.2	15.4	2.2	..	2.2
500—749	82	79.3	7.3	..	1.2	..	12.2	..	..	..
750—999	24	83.3	..	4.2	..	..	12.5	..	..	..
1000 & above	101	91.0	4.0	..	1.0	..	1.0	1.0	2.0	..
N.A.	63	58.7	7.9	3.2	1.6	..	14.3	7.9	3.2	3.2
TOTAL	482	71.3	4.7	1.7	1.2	0.8	15.4	2.9	1.0	1.0

The figures in the above table lend support to the common observation that the higher the family income the greater the dependence on the family and the less the family income, the greater the need to finance the education through work.

6.4. We may make a further enquiry regarding the alumni who financed their education through work. Of the 1381 alumni of the 1954 group, 264 or 19.1 per cent and of the 482 alumni of the 1950 group 98 or 20.3 per cent worked in order to meet, in part or full, the expenses of higher education.* A very large proportion of these alumni, 69 per cent of 1954 and 55 per cent of the 1950 group, was engaged in part time employment; the remaining alumni, 31 per cent of the 1954 group and 45 per cent of 1950 group worked whole time. The largest proportion of the alumni, about 44 per cent of the 1954 and 54 per cent of the 1950 group was engaged in professional, technical and related occupations, notable among these being teaching, accountancy, legal practice and journalism; a smaller proportion, 42 per cent of 1954 and 34 per cent. of 1950 group, in clerical and related occupations; about 6 per cent of the alumni of 1954 group and 5 per cent of the 1950 group, in sales and related occupations; about 5 per cent of each of the groups, in administrative, executive and managerial occupations and only an imperceptible proportion in production processes. Details about different types of graduates are given in the following table:

*This number is in excess of the figures mentioned in the preceding para as it includes, in addition to the alumni whose chief source of finance was through work, the alumni whose principal source of finance was not through work but who, nonetheless, worked to supplement their resources.

TABLE 27

Percentage distribution of the alumni who worked during the course of their study by examination passed in 1950 or 1954 and type of work in which they were engaged

Exam. passed	Total	Div. O: Professional, tech. & Related								Div. I	Div. 2	Div. 3	Div. 6	Div. 7-8	Div. 9	Div. 7	
		Engi- neering	Resea- rch in Social Science	Ac- coun- tancy	Med- ical & Hea- lth	Arts & Ae- sthe- tics	Tea- ching	Legal pur- suit	Jour- nalism								
A. 1954																	
1. B.A. P & H & B.Com.	46	..	..	..	..	..	65.2	..	..	6.5	2.2	15.2	6.5	2.2	2.2	..	..
2. B.Sc. P & H	11	..	..	..	..	..	90.9	..	..	9.1	..	..	..	..	..	..	..
3. M.A.	16	..	..	..	..	6.2	75.1	..	..	6.2	..	..	..	12.5	..	..	..
4. M.Sc.	3	..	..	..	..	..	66.7	..	..	..	..	..	..	33.3	..	..	..
5. Library Science	3	..	33.4	..	..	..	..	..	33.3	..	..	33.3	..	..	..	..	..
6. Law	157	..	..	3.2	..	..	7.6	3.8	4.4	..	7.6	64.9	7.6	..	..	0.9	..
7. Education	9	..	11.1	..	..	..	88.9	..	..	..	..	..	..	..	..	..	..
8. Nursing Medicine	3	..	..	..	100.0	..	..	..	..	..	..	..	..	..	..	..	..
9. Tech.	5	40.0	..	..	..	..	20.0	..	..	20.0	..	..	..	20.0	..	..	..
10. Foreign Languages	11	..	..	9.1	9.1	..	9.1	..	9.1	27.2	9.1	18.2	9.1	..	..	..	..
TOTAL	264	0.8	0.8	2.3	1.5	0.4	28.9	2.3	3.5	3.5	5.3	42.6	6.1	1.2	0.4	0.4	..

TABLE 27—contd.

Exam. passed	Total	Div. O: Professional tech. & Related						Div. I	Div.2	Div.3	Div.6	Div.7-8	Div.9	Div.7
		Engi- neering	Resea- rch in Social Science	Ac- coun- tancy	Med- ical & Hea- lth	Arts & Ae- sthe- tics	Tea- ching pur- suit								Legal Jour- nalism
B. 1950														
1. B.A. P & H & B.Com.	22					72.9		4.5	13.6	4.5		4.5		
2. B.Sc. P & H	4					100.0								
3. M.A.	15					6.6	93.4							
4. M.Sc.	1													
5. Library Science	1								100.0					
6. Law	37			5.4			5.4	10.8	62.6	10.8				
7. Education	11					100.0								
8. Nursing Medicine	3				66.7								33.3	
9. Tech.	1							100.0						
10. Foreign Languages	4								100.0					
TOTAL	98			2.1	2.1	1.1	45.2	2.1	11.1	5.1	33.8	5.1	1.1	1.1

The table shows that a very large proportion of the alumni, who were preparing for a Bachelor's or a Master's degree in Arts, Commerce, Science, and Education, had undertaken teaching and tuition work; only a few were engaged in clerical, sales, and administrative, executive and managerial occupations. A very high proportion of those who were specialising in Law was engaged in clerical and related occupations, and a small proportion in administrative, executive and managerial, sales and teaching occupations. Nursing and Medical students were working in their own field and those who were preparing for a Diploma in Engineering were engaged in technical occupation or teaching work. The alumni who were specialising in Library Science and Foreign Languages were not concentrated in any particular occupation.

6.5. An attempt was made to gather from the alumni who worked during their student life information about their approximate monthly earnings. It could not be obtained from 13 or 4.9 per cent of the 264 alumni of the 1954 group and 6 or 6.5 per cent of the 98 alumni of the 1950 group. The information collected from the remainder is given in the table below :

TABLE 28
Distribution of the alumni who worked, during the course of their study by monthly earnings.

Earnings (Rs.)	Number of alumni			
	1954		1950	
	Number	%	Number	%
Below 15	..	..	..	..
15—29	6	2.3	2	2.2
30—44	12	4.8	6	6.5
45—59	16	6.3	8	8.7
60—74	11	4.3	4	4.3
75—99	12	4.8	3	3.3
100—149	60	23.9	23	25.0
150—199	55	21.9	14	15.1
200 & above	79	31.7	32	34.9
TOTAL	251	100.0	92	100.00

It is seen that large concentrations of the alumni are found in higher income brackets. About a fourth earned less than Rs. 100; another fourth earned from Rs. 100 to Rs. 150; and the rest more than Rs. 150.

7. Breaks in educational career :

7.1. This section is devoted to an examination of the nature of interruptions in the educational life of the alumni with a view to having an idea of the resulting educational waste. An attempt will be made to relate the duration, causes, and effects of the interruptions to such variables as sex of the graduates and the types of higher education they had.

7.2. About half the alumni of the selected groups had uninterrupted educational career in the sense that they had passed the series of examinations in the prescribed course of time. The other half had suffered breaks in their student life.

Of the 699 alumni of the 1954 group, who had breaks, the educational career of a vast majority of 485 or over 69 per cent was interrupted once; of 175 or 25 per cent, twice; of 34 or about 5 per cent, four times or more. Of the 282 alumni of the 1950 group, a smaller proportion (58%) had one interruption, and larger proportions had two (30%), three (10%), or 2 (2%) interruptions. This was perhaps so because the university career of a larger number among the 1950 group was interrupted by the Partition. The following table gives details about the men and the women graduates :

TABLE 29

Distribution of the alumni who had breaks in their educational career by sex and number of breaks

No. of breaks	1954						1950					
	Men		Women		Total		Men		Women		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
One	389	68	96	75	485	69	135	58	30	61	165	58
Two	146	26	29	23	175	25	72	31	13	27	85	30
Three	31	5	3	2	34	5	21	9	6	12	27	10
Four & above	5	1	..	..	5	1	5	2	..	..	5	2
TOTAL	571	100	128	100	699	100	233	100	49	100	282	100

It will be seen that the proportion of the alumni who had one break was higher among women than among men. This shows that men had a relatively larger number of breaks.

17.3. It will be desirable at this stage to relate the number of breaks with the type of higher education the alumni had. The following table presents the information.

TABLE 30

Distribution of alumni by last examination passed and the number of breaks in the educational career

Last exam. passed	Number of alumni					
	Had no break			Had break		
	No.	%	Total	Percentage of alumni who had		
				One break	Two breaks	Three or more breaks
A. 1954						
1. B.A. P. & H. and B.Com.	202	64	114	85	15	..
2. B.Sc. P. & Hons.	52	59	36	74	24	2
3. M.A.	199	64	114			
4. M.Sc.	63	73	23			
5. Library Science	4	36	7	57	43	..
6. Law	76	23	250	59	31	10
7. Education	34	31	77	66	26	8
8. Nursing & Medicine	17	49	18	67	28	5
9. Technology (Engg.)	20	41	29	83	17	..
10. Foreign Languages	15	33	31	58	32	10
TOTAL	682	49	699	69	25	6
B. 1950						
1. B.A. P. & H. and B.Com.	65	69	29	78	22	..
2. B.Sc. P. & Hons.	23	66	12	50	28	13
3. M.A.	38	32	81			
4. M.Sc.	20	69	9			
5. Library Science	1	12	7	57	43	..
6. Law	32	32	68	53	41	6
7. Education	7	11	54	48	28	24
8. Nursing & Medicine	4	33	8	75	25	..
9. Technology (Engg.)	7	58	5	80	20	..
10. Foreign Languages	3	25	9	45	22	33
TOTAL	200	41	282	59	30	

The table shows that the proportion of the alumni who had breaks in their educational career was higher among those who had technical and professional education than among those who had general education. Of the former, the proportion of the alumni who had breaks was very high among those who had specialised in Law, Education, Foreign Languages and Library Science. It was not as high among those who had specialised in Nursing and Medicine and Engineering. The possible explanation is that the former courses of study, that is Law, Education, Library Science and Foreign Languages do not require continuity with earlier education and, in fact, had drawn quite a few persons after long break in their educational career. It is interesting to note in regard to the alumni who had general education that the proportion of those who had breaks was slightly higher among the Bachelors of Science than among the Bachelors of Arts and Commerce whereas it was considerably lower among the Masters of Science than among the Masters of Arts. This may be so because those of the Arts students who fail to qualify for the Bachelor's degree in the first attempt find it comparatively easier to pursue higher education than similarly placed science students.

As to the number of breaks, it will be seen that the proportion of the alumni whose educational career was interrupted only once was higher among the holders of a Bachelor's degree than among the holders of a Master's degree, and consequently a higher proportion of the latter suffered two or more breaks. In respect of the alumni who had technical and professional education, a higher proportion of those who had specialised in Engineering, Medicine and Nursing as compared with the proportion of those who had specialised in Library Science, Law, Education and Foreign Languages had one break. On the whole those who had professional education had a larger number of breaks in their educational career than those who had general and technical education.

7.4. The analysis of the data pertaining to the time of occurrence, duration and causes of the breaks has been limited to the first break in the educational life of the graduates. We will take the time of occurrence first.

For 27 per cent of the alumni of the 1954 group and 23 per cent of the 1950 group the first break occurred at the pre-graduation stage and affected the passing of school leaving, qualifying or intermediate examinations; for 36 per cent of the alumni of 1954 group and 33 per cent of the 1950 group, it delayed the passing of first degree examination; for 10 per cent of the 1954 group and 15 per cent of the 1950 group, it occurred at post-graduation stage; for 25 per cent of the 1954 group and 21 per cent of the 1950 group, it occurred just before or during the course of technical and professional education; and for the remainder 2 per cent of the alumni of both the groups it occurred before the passing of examinations in Indian and Foreign Languages. Thus the largest proportion of the alumni of both the year groups had the first break at the first graduation stage and relatively smaller proportions had it at pre-graduation and technical and professional education stages. Only a few had it at the post-graduation stage.

7.5. Consideration of the duration of the first break revealed that a few alumni were obliged to break their educational career for over five years. This is shown in the following table :

TABLE 31

Percentage distribution of the alumni who had breaks according to the last examination passed and duration of first break

Last Exam.	Total	Duration in years				
		One	Two	Three	Four	Five or more
A. 1954						
1. B.A. & B.Sc. P. & H.	150	72.7	17.3	6.0	2.0	2.0
2. M.A. & M.Sc.	137	75.8	14.6	4.4	1.5	3.7
3. Library Science	7	57.1	14.3	..	..	28.6
4. Law	250	57.2	18.0	8.0	4.8	12.0
5. Education	77	62.3	23.4	5.2	..	9.1
6. Nursing & Medicine	18	77.7	16.7	5.6	..	..
7. Technology	29	65.5	27.6	..	..	6.9
8. Foreign Languages	31	64.7	19.6	2.8	..	12.9
TOTAL	699	65.9	18.2	5.9	2.4	7.6
B. 1950						
1. B.A. & B.Sc. P. & H.	41	80.5	12.2	7.3	..	..
2. M.A. & M.Sc.	90	60.1	15.5	8.9	5.5	10.0
3. Library Science	7	14.3	28.6	28.6	..	28.5
4. Law	68	63.3	17.6	6.9	2.9	10.3
5. Education	54	55.6	11.1	7.4	3.7	22.2
6. Nursing & Medicine	8	62.5	25.0	12.5	..	..
7. Technology	5	100.0	..	..	..	..
8. Foreign Languages	9	44.5	33.3	..	..	22.2
TOTAL	282	62.0	15.6	7.4	3.3	11.7

It will be observed that for nearly two-thirds of the alumni, the first break lasted for one year. A comparative view of the groups indicates that the alumni of the 1954 group had slightly shorter breaks.

The figures in the above table also highlight the courses wherein breaks in educational career tend to be of a longer duration. Figures for both the groups suggest that the longest duration of break is found among alumni who qualified in Library Science. On the other hand alumni who had general courses such as B.A. & B.Sc., M.A. and M.Sc. and certain professional courses, such as Medicine and Nursing and Engineering tend to have breaks of shorter duration.

7.6. Analysis of the causes of breaks reveals two important causes, namely, failure in examination and being in employment. The largest proportion of the alumni of the 1954 group who had breaks (33%) attributed it to failure in the examination, and of those of the 1950 group (27%), to being in employment. It suggests that the proportion of the alumni, who had joined professional courses after long spells of employment, was larger among the alumni of the 1950 group. Other important reasons given by the alumni were 'illness', 'partition' and the 'communal turmoil', 'domestic circumstances and marriage' and 'financial difficulties'. Only a few had ascribed the break to causes like, 'late results', 'no interest' and 'underage', and a large proportion (13% of the 1954 and 11% of the 1950 group) either could not give a definite reason for the break or gave miscellaneous reasons. Details follow in the table, on page 55.

TABLE 32

Percentage distribution of the alumni according to last examination passed and reasons for the first break

Last exam.	Total	Failed/ dropped	Late result	Change of sub- jects/ courses	Illness	Domes- tic cir- cum- stances	Fi- nancial difficul- ties	Not inte- rested	In em- ploy- ment	Parti- tion	Under- age	Others
A. 1954												
1. B.A. & B.Sc. P. H. & B.Com.	150	54.6	2.0	0.7	14.7	3.3	2.7	0.7	4.0	1.3	5.3	10.7
2. M.A. & M.Sc.	137	28.6	5.1	2.9	16.1	5.8	5.1	3.6	5.8	10.2	6.6	10.2
3. Library Science	7	..	..	14.3	..	14.3	..	..	28.6	14.3	..	28.5
4. Law	250	30.4	2.8	4.8	6.4	4.8	2.0	1.6	23.6	10.4	1.2	12.0
5. Education	77	16.9	3.9	5.2	10.4	5.2	3.9	10.4	23.3	2.6	1.3	16.9
6. Nursing & Medicine	18	33.3	..	..	5.6	..	..	..	22.2	27.8	..	11.1
7. Technology	29	24.3	..	3.4	3.4	..	13.8	..	13.8	13.8	3.4	24.1
8. Foreign Languages	31	25.8	3.2	3.2	..	..	6.5	..	35.5	..	3.2	22.6
TOTAL	699	33.1	3.0	3.4	10.0	4.3	3.6	2.6	16.0	7.7	3.3	13.0
B. 1950												
1. B.A. & B.Sc. P. H. & B.Com.	41	41.4	4.9	7.3	9.8	4.9	..	2.4	9.8	12.2	..	7.3
2. M.A. & M.Sc.	90	16.7	5.6	1.1	14.4	6.7	4.4	3.3	27.8	8.9	..	11.1
3. Library Science	7	..	..	28.6	..	..	..	..	57.1	..	14.3	..
4. Law	68	14.7	4.4	2.9	11.8	2.9	7.4	1.5	23.5	20.6	..	10.3
5. Education	54	24.1	..	3.7	14.8	3.7	3.7	3.7	35.2	1.9	..	9.2
6. Nursing & Medicine	8	12.5	..	12.5	..	..	..	..	35.5	..	..	37.5
7. Technology	5	20.0	20.0	..	20.0	..	20.0	..	20.0	..	..	..
8. Foreign Languages	9	..	..	22.2	..	..	..	..	44.5	11.1	..	22.2
TOTAL	282	20.2	3.9	4.6	12.1	4.2	4.2	2.5	27.0	10.3	0.4	10.6

It will be seen that a very large proportion of the Bachelors of Arts, Science and Commerce, 55 per cent of the 1954 group and 42 per cent of the 1950 group, had failed or dropped in the examination and only a small percentage, 4 per cent of the 1954 group and 10 per cent of the 1950 group, attributed the break to being in employment. In case of the Masters of Arts and Science, a considerably smaller proportion, 29 per cent of the 1954 group and 17 per cent of the 1950 group, had failed in the examination and a comparatively larger proportion was of those who were either in employment or were affected by the partition of the country. A very large proportion of those who had specialised in professional courses like Library Science, Law, Education, Nursing and Medicine and Foreign Languages was in employment during the course of the break. A marked proportion of Degree and Diploma holders in Engineering had their educational career interrupted on account of financial difficulties.

8. Training besides University Education :

8.1. The alumni were asked whether they had acquired during or after the completion of their educational career any practical training or experience which was not included in their normal academic courses. Of the 1381 alumni of the 1954 group, 389 or 28.2 per cent and of 482 alumni of the 1950 group, 149 or 30.9 per cent replied in the affirmative. The figures for the men and the women who had this experience were 308 or 27.7 per cent and 81 or 30.0 per cent for the 1954 group, and 119 or 29.2 per cent and 30 or 40 per cent for the 1950 group, respectively, indicating that in case of both the groups a larger proportion of women than men received some kind of training besides university education.

8.2. An analysis of the data pertaining to the types of training received by alumni revealed that the kinds of training popular among the men differed from those popular among the women, as is shown in the following table :

TABLE 33

Percentage distribution of the alumni who had training besides university education by sex and type of training

Type of training	Men		Women	
	1954	1950	1954	1950
1. Typing and shorthand	42.3	31.2	14.8	3.3
2. Accountancy	9.4	5.0	..	..
3. Legal Practice	2.6	2.5	..	..
4. Business Management, Administration, Local Self Government	3.6	4.2	..	3.3
5. Engineering and Technology	11.0	10.1	..	..

TABLE 33—*Contd.*

Type of training	Men		Women	
	1954	1950	1954	1950
6. Agricultural techniques, extension methods*	1.9	6.7	..	..
7. Medicine, pharmacy	0.3	2.5	2.5	..
8. Teaching†	..	8.4	2.5	13.3
9. Research investigation/statistics	2.6	3.4	..	..
10. Military.	6.2	3.4	..	..
11. Fine Arts/Crafts	10.1	10.9	30.8	43.5
12. First aid	3.2	1.6	45.7	30.0
13. Others	6.8	10.1	3.7	6.6
TOTAL	100.0	100.0	100.0	100.0

*Most of the alumni who had training in agricultural techniques and extension methods had passed B.Sc.(Hons.) in Agriculture.

†Practical training in teaching refers to Happy school and Montessory training arranged by private institutions.

It is seen that the largest proportion of men graduates of both the groups learnt typewriting and shorthand; a significant proportion had training in engineering and technology, fine arts and crafts, accountancy, agricultural techniques and extension methods, teaching, and military training; and a small proportion had training in personnel management, public administration and local self government, legal practice, resarch and investigation, and first aid.

The largest proportion of women graduates, about three-fourths in the case of both the groups, had training in first aid or fine arts and crafts; and the remainder had training mostly in typewriting and shorthand in the case of the 1954 group and in teaching in the case of the 1950 group. A few had training also in the field of medicine and pharmacy, and military operations, and none had training of other types.

8.3. The data did not reveal a clear relationship between the type of education received by the alumni and the type of training undergone by them. It may, however, be pointed out that in the case of the men a smaller proportion of those included in the categories of technical and professional education as compared with that of the alumni who graduated and post-graduated in arts and commerce, had training in typewriting and shorthand. A large proportion of the technologists and law and science graduates had training in their respective fields. Women, as has already been pointed out had training in fine arts or first aid in very large proportions, irrespective of the type of education they had at the University.

9. Extracurricular activities

9.1. Participation by the alumni in co-curricular activities during their student life as an indication of the extent to which they could take advantage of the multifarious facilities provided by the university education for an all-round development of their personality and avoid becoming mere specialists in their specific subjects of study.

9.2. It is interesting to find that about three-fourths of the alumni covered in the Survey said that they had taken part in one or more extracurricular activities during their educational career. The remainder had never done so at any stage of their student life. The figures depicting the proportion of those who had done so seem to have been inflated as the question of the participation of the alumni in the activities did not refer to any particular stage of their educational career. The figures, therefore, included all those alumni who took part in the activities at any time during their student life. Besides many alumni who either did not take part in the activities or did so in a casual way, might have treated it as a prestige issue and affirmed their participation in the activities.

Considering the men and the women graduates separately, it is found that the proportion of the alumni who had extracurricular activities during their student life was 77 per cent for the men and 73 per cent for the women in the 1954 group, and 74 per cent for the men and 79 per cent for the women in the 1950 group. Men and women graduates, therefore, participated in the extracurricular activities in more or less equal proportions.

9.3. It will be desirable to enquire into the probable relationship between participation in extracurricular activities and the type of university education. The following table shows the proportion of different types of graduates who participated in the activities :

TABLE 34

Distribution of the alumni who participated in the extra curricular activities by the last examination passed

Last Examination Passed	Total No.	1954		1950		
		Had extracurricular activities		Total No.	Had extracurricular activities	
		No.	%		No.	%
1. B.A. Pass & Hons. B.Com.	316	227	71.8	94	60	63.8
2. B.Sc. Pass & Hons.	88	65	73.9	35	26	74.3
3. M.A.	313	256	81.8	119	93	78.2
4. M.Sc.	86	61	70.9	29	22	75.9
5. Library Science	11	10	90.9	8	6	75.0
6. Law	326	237	72.7	100	68	68.0
7. Education	111	94	84.7	61	51	83.6
8. Nursing & Medicine	35	25	71.4	12	11	91.7
9. Technology	49	36	73.5	12	10	83.3
10. Foreign Languages	46	38	82.6	12	11	91.7
TOTAL	1,381	1,049	76.0	482	358	74.3

It is interesting to note that the alumni who passed examinations in technical and professional courses were as active as those who had general education in the 1954 group and the former were more active than the latter (excepting law graduates) in the 1950 group.

9.4. Of the alumni of the 1954 group who participated in extracurricular activities during their student life, 40 per cent had taken part in one type of activity, 33 per cent in two types; and the remainder 27 per cent, in three or more types. The corresponding figures for 1950 group were 38 per cent, 30 per cent and 32 per cent. The analysis of the data pertaining to the type of activities has been limited to the first or the principal activity. The following table presents the information separately for men and women.

TABLE 35

Percentage distribution of the alumni by sex, last examination passed and type of extracurricular activity

Exam. Categories	Total	N. C.	Scout & C. crew	Sports & Rov.	Drama, Music, Fine Arts	Debating, Music, Fine Arts	Literary & vocational	Social work	Others
A. Men 1954									
1. B.A. Pass & Hons. and B.Com.	189	32.8	6.9	45.0	4.2	4.8	4.2	0.5	1.6
2. B.Sc. P. & H.	61	11.5	6.8	68.1	1.6	8.8	1.6	..	1.6
3. M.A.	190	26.3	7.4	45.8	6.3	8.4	11.1	3.1	1.6
4. M.Sc.	55	5.5	16.4	50.9	1.8	1.8	21.8	..	1.8
5. Library Science	7	14.3	14.3	57.1	14.3	..	..	..	..
6. Law	230	18.7	12.2	43.0	4.3	7.8	9.6	2.2	2.2
7. Education	49	22.3	18.4	32.8	8.2	12.2	6.1	..	..
8. Nursing & Medicine	5	20.0	40.0	..	20.0	..	20.0	..	..
9. Technology	36	5.6	8.3	64.4	5.6	8.3	2.2	2.8	2.8
10. Foreign Languages	33	12.1	6.1	48.4	6.1	9.1	12.1	..	6.1
TOTAL	855	19.4	10.2	46.4	5.0	7.3	8.5	1.3	1.9
B. Men 1950									
1. B.A. Pass & Hons. and B.Com.	52	36.5	7.7	44.4	3.8	3.8	1.9	..	1.9
2. B.Sc. P. & H.	26	..	30.8	50.1	3.8	11.5	3.8	..	..
3. M.A.	68	16.2	13.2	48.5	7.4	4.4	8.8	..	1.5
4. M.Sc.	22	22.7	13.6	41.0	9.1	4.5	9.1	..	..
5. Library Science	5	..	..	60.0	20.0	20.0	..	..	..
6. Law	67	14.9	16.4	49.2	4.5	9.0	4.5	1.5	..
7. Education	33	21.2	27.3	33.4	3.0	9.1	3.0	3.0	..
8. Nursing & Medicine	6	16.7	16.7	49.9	..	..	..	..	16.7
9. Technology	10	20.0	10.0	60.0	..	..	10.0	..	..
10. Foreign Languages	10	20.0	10.0	50.0	10.0	10.0	..	..	..
TOTAL	299	19.1	15.7	46.5	5.3	6.7	5.0	0.7	1.0

TABLE 35—Contd.

Exam. Categories	Total	N. C. C.	Scout & Rovers crew	Sports	Drama, Music, Fine Arts	Debate, Singing	Literary & vocational	Social work	Others
A. Women 1954									
1. B.A. Pass & Hons. and B.Com.	38	7.9	..	57.9	23.7	7.9	2.6	..	..
2. B.Sc. Pass & Hons.	4	..	..	50.0	25.0	..	25.0	..	..
3. M.A.	66	3.0	1.5	54.6	19.1	6.1	12.1	3.0	..
4. M.Sc.	6	..	..	..	50.0	..	50.0	..	..
5. Library Science	3	..	..	33.4	33.3	33.3	..	..	..
6. Law	7	..	..	71.4	14.3	14.3	..	..	..
7. Education	45	6.7	8.9	57.8	22.2	2.2	2.2	..	..
8. Nursing & Medicine	20	..	10.0	70.0	10.0	..	5.0	..	5.0
9. Technology	..	..	..	..	..	..	..	..	..
10. Foreign Languages	5	..	..	..	20.0	0.0	40.0	..	..
TOTAL	194	4.1	3.6	54.7	21.1	6.2	8.8	1.0	0.5
B. Women 1950									
1. B.A. Pass & Hons. and B.Com.	8	..	..	25.0	50.0	12.5	12.5	..	..
2. B.Sc. Pass & Hons.	..	..	..	..	..	..	..	..	..
3. M.A.	25	40.0	48.0	60.0	24.0	..	4.0	..	..
4. M.Sc.	..	..	..	..	..	..	..	..	..
5. Library Science	1	..	..	..	100.0	..	..	..	..
6. Law	1	..	..	100.0	..	..	..	..	..
7. Education	18	5.6	5.6	55.4	22.2	5.6	5.6	..	..
8. Nursing & Medicine	5	..	..	20.0	60.0	..	20.0	..	..
9. Technology	..	..	..	..	..	..	..	..	..
10. Foreign Languages	1	..	..	100.0	..	..	..	..	..
TOTAL	59	3.4	5.1	50.8	30.5	3.4	6.8	..	..

It will be observed from the above table that about half the men were interested in sports and about a third had joined the N.C.C. or Scouting and Rovers Crew. Over half the women participated in sports and 20 to 30 per cent had joined cultural societies. It is thus, clear that sports, N.C.C., Rovers Crew etc., were popular among the men whereas sports and fine arts like dance, drama and music were popular among the women.

It is also seen that the extent of popularity of various activities varied with the type of education. Thus, in respect of men, a higher percentage of B.A. Pass and Hons. and B.Com. graduates than other types of alumni had joined the N.C.C. and significant proportion of the M.Sc., Engineering, Medicine, and Nursing students took part in the activities of literary and vocational societies. Similar observations cannot be made in respect of the women because of very low frequencies.

CHAPTER VI

EMPLOYMENT

This chapter aims at presenting material on several significant aspects of employment of the alumni under investigation, except earnings which have been considered in the following chapter. The employment of women which is marked by special features has been discussed separately in chapter IX.

The most important feature with which we are concerned in this chapter is the relationship between employment and education, the investigation of which is one of the main objectives of this Survey. This relationship which is intended to provide an assessment of the waste or utilization of education from employment point of view, has been delineated in two sections of the chapter, *viz.*, Occupational Patterns and Employment in the Field of Specialization.

Tracing the career patterns of the alumni which constitutes another objective of the Survey has been attempted in two other sections of the chapter *viz.*, Occupational Mobility and Shifts in Employment. It is realised that a case history approach would have been more appropriate for the purpose. Owing to large numbers, it has not been possible to use this approach and only the statistical method has been applied to the study of the problem. Occupational mobility has been judged on two criteria *viz.*, the number of employments held and the duration of the present employment. Employment shifts have been considered under three heads: shifts in employment status, shifts in occupation and shifts in employing agency.

The third important issue with which the chapter deals is unemployment among the alumni. The concept of unemployment has been broadened to include, besides current unemployment, the total period of unemployment suffered by the alumni and the time lapse before completion of education and first employment.

Besides these aspects the chapter presents data on sex and employment status of the alumni, means of securing employment and employing agencies. It also includes a brief account of the alumni not seeking employment.

1. Sex and Employment :

1.1 Although data was collected on all the previous employments held by the alumni, most of the characteristics studied refer to the employment at the time of investigation. The present section deals with some of the characteristics of the employment at the time of investigation, *viz.*, sex composition and employment status of the alumni. Other characteristics such as means of securing employment, employing agency, etc., have been discussed in other sections of the chapter.

1.2. As many as 80 to 90 per cent of the alumni from whom data was collected, were found to be employed at the time of investigation in 1958. Of the 1381 alumni of the 1954 group, 1149 or 83.2 per cent were in employment. Among the 482 alumni of the 1950 group, 442 or 91.7 per cent were found employed. The remaining, that is 232 or 16.8 per cent of the 1954 group and 40 or 8.3 per cent of the 1950 group were either unemployed or not seeking employment for several reasons, to be shown in a later section.

1.3. An analysis of the data separately for the men and the women revealed that relatively higher proportions of the men were employed and significantly larger proportions of the women were either unemployed in the sense that they were in search of employment or not seeking employment. This is shown in the following table :

TABLE 36

	1954						1950					
	Men		Women		Total		Men		Women		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Employed	1,007	90.5	142	53.0	1,149	83.2	392	96.3	50	66.7	442	91.7
Unemployed	61	5.5	38	14.2	99	7.2	9	2.2	7	9.3	16	3.3
Not seeking Employment	45	4.0	88	32.8	133	9.6	6	1.5	18	24.0	24	5.0
TOTAL	1,113	100.0	268	100.0	1,381	100.0	407	100.0	75	100.0	482	100.0

The disparity in the two groups in regard to the proportions of the alumni in employment, unemployed, and those not seeking work was perhaps due to the impact of time on the state of employment of the alumni. Higher proportions of the men as well as the women in the 1950 group were employed and smaller proportions were unemployed or were out of the labour force.

2. Employment Status :

2.1. The alumni under consideration were found employed either as "employed", "employer", "self-employed" or as "unpaid family worker". This method of classifying the employment status has been adopted from the one used by Census of India. For the purposes of the Survey the different types were defined as under :—

An *employee* is one who is employed by an individual or an organisation on the basis of remuneration.

An *employer* is an individual who runs his own independent business and employs others in his business.

A *self-employed* is an individual who runs his own business but does not employ any one for business purposes.

An *unpaid family worker* is one who works without remuneration for at least one-third of the full time day, week or month or year in an economic enterprise operated by any member of his family.

2.2. As may be expected, a very large majority of the alumni under consideration (over four-fifths) were found working as "employees". For the 1954 group, employees accounted for 84.1 per cent whereas in the 1950 group, they constituted 80.8 per cent. The difference is probably an expression of a change in the employment status of the alumni of the 1950 group from employees into employers or self-employed. If so, it shows the general tendency of some of those who enter the employment market as employees to start their own business in the course of years.

2.3. When employment status of the alumni is examined in relation to sex, it is observed that in both the groups a larger proportion of women than men work as employees. This is shown in the following table :

TABLE 37

Percentage distribution of alumni by sex and employment status

Employment status	1954			1950		
	Men	Women	Total	Men	Women	Total
Employee	82.0	98.6	84.1	78.9	95.8	80.8
Employer	4.1	0.7	3.6	4.8	2.1	4.5
Self-employed	11.6	..	10.2	14.7	2.1	13.3
Unpaid family worker	2.3	0.7	2.1	1.6	..	1.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
TOTAL	1007	142	1149	292	50	442

In the 1954 group, the percentage of employees among men is 82.0; in the case of women, it is 98.6. For the 1950 group, the respective percentages are 78.9 and 95.8. This sex difference may be due to the influence of the cultural prejudice in the Indian society against women starting their own business.

2.4. The next largest category of employment status is that of the "self-employed" in both the year groups. They constituted 13.3 per cent in the 1950 group and 10.2 per cent in the 1954 group. Those in the categories of employers and unpaid family workers formed very small minorities. It is noticed that a larger proportion of men than women work as unpaid family workers.

2.5. When employment status is studied in relation to education, it is found that those who graduated with B.A. Pass, B.Sc. Pass, B. Com., B.A. Hons., Law and Proficiency in Law tend to work in all the four capacities. Whereas those who obtained professional degrees, barring Law and Medicine, tend to work as employees only. It is further observed that a far greater proportion of those who graduate with Law or Proficiency in Law than those with any other degree take to self-employment or family work or become employers. One would expect a similar situation with regard to Medical graduates but the tendency is not so marked as in Law graduates. This is probably because more opportunities as "employees" exist for Medical graduates than for Law graduates. Distribution of alumni relating their employment status to their education is given below.

TABLE 38

Percentage distribution of the alumni according to last examination passed and employment status

Last examination	Total	Employment Status			
		Em- ployee	Em- ployer	Self- em- ployed	Family worker
1954					
1. B.A. Pass	123	82.6	8.3	6.6	2.5
2. B.Sc. Pass	50	90.0	..	4.0	6.0
3. B.Com.	86	85.6	4.8	8.4	1.2
4. B.A. Hons.	53	90.6	1.9	1.9	5.6
5. B.Sc. Hons.	25	100.0	..	..	..
6. M.A. Languages	49	91.8	4.1	4.1	..
7. M.A. His.-Pol. Sc.-Philosophy	50	90.0	4.0	6.0	..
8. M.A. Eco.-Com.-Maths.	113	95.5	1.8	0.9	1.8
9. M.A. Social Work	19	100.0	..	..	..
10. M.Sc.	74	100.0	..	..	..
11. Lib. Science	11	100.0	..	..	..
12. Law	114	73.1	4.6	16.7	5.6
13. Prof. in Law	183	53.2	5.4	38.7	2.7
14. Education	85	100.0	..	..	..
15. Nursing	6	100.0	..	..	..
16. Medicine	25	96.0	4.0	..	..
17. Technology	41	95.6	4.4	..	..
18. Foreign Languages	42	83.7	7.0	9.3	..
TOTAL	1,149	84.1	3.6	10.2	2.1

TABLE 38—*contd.*

Last examination	Employment Status				
	Total	Em- ployee	Em- ployer	Self- em- ployed	Family worker
1950					
1. B.A. Pass.	40	82.5	7.5	7.5	2.5
2. B.Sc. Pass.	12	66.7	8.3	16.7	8.3
3. B.Com.	25	72.0	16.0	12.0	..
4. B.A. Hons.	15	80.0	..	13.3	6.7
5. B.Sc. Hons.	21	90.4	4.8	4.8	..
6. M.A. Languages	35	94.3	5.7	..	..
7. M.A. His.-Pol. Sc.-Phil.	20	80.0	..	20.0	..
8. M.A. Eco.-Com.-Maths.	48	97.9	..	2.1	..
9. M.A. Social Work	7	100.0	..	..	..
10. M.Sc.	27	100.0	..	..	..
11. Library Science.	8	100.0	..	..	..
12. Law	37	59.2	5.7	35.1	..
13. Prof. in Law	61	37.7	8.2	49.2	4.9
14. Education	52	98.1	1.9	..	..
15. Nursing	1	100.0	..	..	..
16. Medicine	7	85.7	14.3	..	..
17. Technology	15	100.0	..	..	..
18. Foreign Languages	11	100.0	..	..	..
TOTAL	442	80.3	4.5	13.3	1.4

3. Occupational Patterns :

3.1. We shall now examine the occupations in which the alumni were employed at the time of investigation. The most meaningful method of presenting this data is to show how the alumni with different types of education are distributed in the world of occupations. The occupational distribution of alumni who graduated with a certain degree may be regarded as the occupational pattern for that group of alumni. In what follows are presented occupational patterns of the alumni as a whole and as divided into 18 examination categories mentioned in the chapter on Education.

3.2. The occupational patterns are described in terms of occupational divisions of the National Classification of Occupations. This classification of occupations (known as the NCO) has been devised by the Directorate General of Employment and Training, Ministry of Labour and Employment and has been modelled on the International Standard Classification of Occupations approved by the International Labour Organization. It has also been accepted for national uses by the Government of India. The NCO classifies all occupations in the country, which number over 3,000, into 11 occupational divisions, which are divided into 75 occupational groups, which in turn are sub-divided into 331 occupational families. Occupational families are further broken down to yield individual occupations.

3.3. Before examining the occupational patterns of the alumni with different degrees, it is desirable to view the occupational pattern of the alumni as a whole. We shall first confine our attention to the occupational pattern of employees only. The pattern for the alumni in other categories of employment status will be examined later. The following table shows the overall pattern for the employees :

TABLE 39
Percentage distribution of Occupations of the Employees

Occupational Divisions	1954 (N=966)	1950 (N=357)
Professional, Technical and Related Workers	50.3	59.7
Administrative, Executive and Managerial Workers	5.3	9.8
Clerical and Related Workers	40.8	25.1
Sales Workers	0.7	0.8
Farmers, Fishermen, Hunters, Loggers and Related Workers . . . . .	..	..
Miners, Quarrymen and Related Workers . . . . .	..	..
Craftsmen, Production Process Workers, and Labourers not elsewhere classified	0.3	0.6
Transport and Communication Workers	0.3	..
Service, Sport and Recreation Workers	0.8	2.3
†Armed Forces	0.5	1.1
‡Apprentices	1.0	0.6
TOTAL	100.0	100.0

3.4. It may be observed that the alumni are distributed in all occupational divisions except in 'Farmers, Fishermen, Hunters, Loggers and Related Workers' and 'Miners, Quarrymen and Related Workers'. They are concentrated in three divisions only viz., "Professional, Technical and Related Workers" "Administrative, Executive and Managerial Workers" and "Clerical and Related Workers". These three divisions account for the occupations of 96.4 per cent of the employees of the 1954 group and 94.6 per cent of the employees of the 1950 group. Among these over half of the 1954 group and over two-thirds of the 1950 group are engaged in the first two categories, for which university education is presumably intended. Assuming that nearly fifty per cent of the graduates of Delhi University are able to enter these occupations soon after completing their education, it may be said that the University fulfils the employment objective in respect of half of its products.

†"Armed Forces" does not form a separate division of the NCO. Members of the Armed Forces are considered in the NCO under 'workers reporting occupations unidentifiable or unclassifiable'. However in this report, they are considered as a category in themselves.

‡According to the NCO, apprentices are designated by the letter "A" prefixed to the occupation which the apprentice is learning. It is however appropriate for this report to consider them separately.

3.5. It may be rather disconcerting to find that as many as 40 per cent of the 1954 group and 25 per cent of the 1950 group were engaged as "Clerical and Related Workers". In considering these figures, it must be noted that the division includes all levels of clerical workers, including Section Officers or Office Superintendents. Their proportion in the 1950 group being considerably less than in the 1954 group and the proportion of the Administrative, Executive and Managerial Workers being more in the 1950 group than in the 1954 group suggests that some of them were able to raise their occupational level in course of time. It may be therefore assumed that among the alumni of a later year group say 1956 or 1957 the proportion of the clerical workers would be still higher. Hence it appears that nearly half the university graduates enter the employment market as clerical workers after completing their education.

3.6. The proportion of Professional, Technical and Related Workers is also higher in the 1950 group than in the 1954 group. This feature probably suggests that some of those engaged in clerical and related work, after passing certain vocational and technical examinations, were able to become professional and technical workers. It would be of some interest to break this occupational division into groups and observe the pattern for the two year groups :

TABLE 40
*Percentage distribution of Professional, Technical and Related Workers
According to Occupational Groups**

Occupational Groups	1954 (N=486)	1950 (N=212)
Engineers	3.9	3.8
Physical Scientists	0.6	1.9
Doctors and Nurses	5.1	4.7
Teachers	35.0	50.4
Legal Workers	6.2	5.2
Social Scientists	10.3	10.4
Artists and Writers	0.2	..
Technical Assistants	38.7	23.6
TOTAL	100.0	100.0

*The breakdown into occupational groups is also done according to the NCO. Titles of the groups have however been abbreviated in certain cases. Physical Scientists also include natural scientists, combining the NCO groups 01 "Physicists, Chemists, Geologists and other Physical Scientists", and 02 "Biologists, Veterinarians, Agronomists and Related Scientists". Doctors and Nurses combines the NCO groups 03 "Physicians, Surgeons and Dentists" and 04 "Nurses, Pharmacists and other Medical and Health Technicians". The NCO group 09 "Draughtsmen, Science and Engineering Technicians. n.e.c." has been renamed as "Technical Assistants". This group includes scientific assistants in physical and chemical laboratories, statistical assistants, economic investigators, who are engaged in professional and technical work at a junior level. It also includes library workers at all levels.

3.7. The table shows that the groups in the Division of Professional, Technical and Related Workers which absorbed the largest proportion of alumni were "Teachers" and "Technical Assistants". In case of the 1950 group "Teachers" formed the highest majority, constituting over half of the Professional and Technical Workers. In case of 1954 group "Technical Assistants" formed the highest majority. This difference in favour of "Technical Assistants" may be an impact of the opportunities created by the Second Five Year Plan in this occupational category. It may be noted that "Teachers" and "Technical Assistants" put together account for nearly 75 per cent of Professional and Technical Workers in both the year groups.

3.8. We may now study the relationship between the occupations followed by the alumni and their education. For this purpose, the occupations of the alumni at the time of investigation have been related to the last examination passed by them. For the sake of convenience in presenting the data, the eighteen examination categories have been considered under eight groups as below :—

1. B.A. Pass, B.Sc. Pass, B.Com.
2. B.A. Hons., B.Sc. Hons.
3. M.A. Languages, Diploma and Certificate in Foreign Languages.
4. M.A. History, Philosophy, Pol. Science ; M.A. Economics, Commerce, Maths.
5. M.Sc. Physics-Chemistry-Botany-Zoology; Diploma in Technology.
6. Nursing, Medicine.
7. Law, Proficiency in Law.
8. Education, Library Science, Social Work.

3.9. The occupational patterns for different examination categories are presented in terms of fifteen occupational categories, the first eight of which represent the groups of the first division of the NCO, viz., "Professional, Technical and Related Workers", and the remaining seven refer to the other divisions in which the alumni were found to be working. The full NCO title with their code numbers corresponding to the occupational categories are given below :—

Occupational Categories	NCO Code and Title
1. Engineers	00 Architects, Engineers and Surveyors.
2. Physical Scientists	{ 01 Physicists, Chemists, Geologists and other Physical Scientists. 02 Biologists, Veterinarians, Agronomists and Related Scientists.
4. Teachers	05 Teachers (includes teachers at all levels and in all institutions).
5. Legal Workers	06 Legal practitioners and advisers, law assistants, etc.

Occupational Categories	NCO Code and Title
6. Social Scientists	07 Social Scientists (includes economists, accountants and auditors, statisticians, psychologists, labour and social welfare workers, sociologists, anthropologists, archaeologists, etc.)
7. Artists and Writers	08 Artists, Writers and Related Workers (includes authors, editors, journalists, painters, sculptors, commercial artists, actors, etc.).
8. Technical Assistants	09 Draughtsmen, and Science and Engineering Technicians [include scientific assistants, economic - investigators, and statistical assistants which have been included in the NCO among physical and social scientists (01, 02, 07). For the purposes of this report, in which we are concerned with showing levels of occupational status, earnings etc., it is considered desirable not to group them with Physical and Social Scientists.]
9. Administrative Workers	1 Administrative, Executive and Managerial Workers (includes such workers in Government, wholesale and retail trade, financial institutions, etc.).
10. Clerical Workers	2 Clerical and Related Workers (includes book-keepers, cashiers, stenographers, typists, section officers, assistants, clerks, etc.).
11. Sales Workers	3 Sales and Clerical Workers (includes wholesale and retail dealers, salesmen, shop assistants, contractors, brokers, insurance agents, auctioneers, etc.).
12. Transport Workers	6 Workers in Transport and Communication Occupations (includes naval officers, aircraft pilots, telephone operators, etc.).
13. Craftsmen	7-8 Craftsmen; Production Process Workers and Labourers. Not elsewhere classified (includes workers in textiles, construction etc).
14. Service Workers	9 Service, Sport and Recreation Workers (includes police service, photographers, etc.).
15. Armed Forces	Not classified in NCO.
16. Apprentices	Not classified separately in NCO but indicated by prefixing the letter 'A' to the appropriate occupation. For the purposes of the Report, it is thought desirable to group them separately.

3.10. We may now examine the occupational pattern of the alumni who graduated with B.A. Pass, B.Sc. Pass and B.Com. in 1950 and in 1954.

TABLE 41

Percentage distribution of the alumni with B.A. B.Sc. Pass, and B.Com. degrees according to Occupation

Occupation	B.A. Pass		B.Sc. Pass		B.Com.	
	1954 (N=102)	1950 (N=33)	1954 (N=45)	1950 (N=28)	1954 (N=74)	1950 (N=18)
1	2	3	4	5	6	7
1. Engineers . . . . .	..	..	4.4	12.5	..	..
2. Physical Scientists . . . . .	..	..	..	..	..	..
3. Medical Workers . . . . .	..	..	6.7	..	..	..
4. Teachers	2.9	..	..	..	..	..
5. Legal Workers . . . . .	..	3.0	..	..	..	..
6. Social Scientists	1.0	12.1	2.2	..	27.0	22.2
7. Artists and Writers . . . . .	..	..	..	..	..	..
8. Technical Assistants	5.9	3.0	11.1	25.0	1.4	..
9. Administrative Workers	2.9	12.2	8.9	..	2.7	5.6
10. Clerical Workers	80.3	63.6	57.9	62.5	68.9	66.6
11. Sales Workers	2.0	..	2.2	..	..	..
12. Transport Workers	1.0	..	2.2	..	..	..
13. Craftsmen	1.0	..	2.2	..	..	..
14. Service Workers	2.0	6.1	..	..	..	..
15. Armed Forces . . . . .	..	..	..	..	..	..
16. Apprentices	1.0	..	2.2	..	..	5.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

The table presents occupational patterns for the alumni who may be considered as having received more or less general education. Hence we notice that the patterns cover a large number of occupational categories. We shall refer to this feature of the pattern as its occupational spread. As will be seen later, the occupational spread for general degrees is on the whole more than that for professional degrees. As B.Com. is less of a general degree than B.A. Pass and B.Sc. Pass, the occupational spread is less than in case of the latter two.

In case of all the three degrees, the proportion of the clerical workers is by far the largest. Roughly, it may be said that 2 out of every 3 graduating with one of these degrees tends to become a clerical worker. In case of B.A. Pass of the 1954 group, it may be said that 4 out of every 5 is a clerical worker. This difference between B.A. Pass of the 1950 group and 1954 group suggests that some of those who enter the employment market as clerical workers are able to raise in the course of time their occupational level and become administrative workers or social scientists. This feature however does not hold good in case of B.Sc. Pass and B.Com.

In case of B.Sc. Pass, the occupational spread is more for the 1954 group than for the 1950 group. This feature probably indicates that soon after entering the employment market these alumni have to accept jobs in diverse

occupational fields unrelated to their education but in course of time they are able to enter occupations more in keeping with their education. This however, does not hold good for those in the clerical field. As can be seen from the table, besides the clerical field, the alumni of the 1950 group are either working as engineers or technical assistants. The difference in the proportion of engineers and technical assistants in the two year groups supports the view expressed above. However, the higher percentage of clerical workers in both the year groups points to the amount of waste involved in B.Sc. education.

In case of alumni with B.Com., next to the proportion of clerical workers, the highest proportion is of social scientists. This is so on account of the inclusion of accountants in this group of occupations. A slight rise in occupational level is suggested by a larger proportion of administrative workers in the 1950 group.

3.11. In considering the occupational patterns of alumni with B.A. Hons. and B.Sc. Hons. it may be borne in mind that some degree of specialization is involved in these degrees, although it is not to the same extent as in M.A., M.Sc., and other professional degrees. In the former degrees, besides concentrating on the major subject, the alumni have to study two minor subjects. The patterns for the two degrees are given below :—

TABLE 42

Percentage distribution of alumni with B.A. Hons. and B.Sc. Hons. degrees according to occupations

Occupation	B.A. Hons.		B.Sc. Hons.	
	1954 (N=48)	1950 (N=12)	1954 (N=25)	1950 (N=19)
1	2	3	4	5
1. Engineers . . . . .	..	..	..	..
2. Physical Scientists . . . . .	..	..	..	5.3
3. Medical Workers . . . . .	..	..	..	5.3
4. Teachers	4.2	8.3	4.0	..
5. Legal Workers	4.2	8.3	..	10.5
6. Social Scientists	2.1	8.3	..	5.3
7. Artists and Writers . . . . .	..	..	..	..
8. Technical Assistants	6.2	16.8	60.0	41.9
9. Administrative Workers	8.3	33.3	4.0	5.3
10. Clerical Workers	72.9	25.0	32.0	5.3
11. Sales Workers . . . . .	..	..	..	5.3
12. Transport Workers	2.1	..	..	..
13. Craftsmen . . . . .	..	..	..	5.3
14. Service Workers . . . . .	..	..	..	..
15. Armed Forces . . . . .	..	..	..	10.5
16. Apprentices . . . . .	..	..	..	..
TOTAL	100.0	100.0	100.0	100.0

The pattern for B.A. Hons., almost parallels that for B.A. Pass, the percentage of clerical workers being as high as over 70 per cent. This probably suggests that the employment prospects were not very much better for B.A. Hons. than for B.A. Pass alumni of the 1954 group. The rise in the occupational level, however, is greater in case of B.A. Hons. than in case of B.A. Pass, as shown by a bigger drop in the proportion of clerical workers and a greater rise in the proportion of administrative workers.

A sheer drop in the clerical workers of the 1950 group is a feature also of the pattern of the alumni with B.Sc. Hons. The drop in case of technical assistants and the presence of physical scientists and medical workers in the pattern for the 1950 group shows that these alumni have been able to improve their occupational status. The fact that some of these alumni have become legal workers, social scientists, and sales workers indicates that their education has not been utilized in employment.

3.12. The occupational pattern for M.A. Languages and Foreign Languages alumni is given in the table below :—

TABLE 43

Percentage distribution of alumni with M.A. in Languages and Diploma and Certificate in Foreign Languages

Occupation	M.A. Languages		Foreign Languages	
	1954 (N=45)	1950 (N=33)	1954 (N=35)	1950 (N=11)
	2	3	4	5
1. Engineers	..	..	..	..
2. Physical Scientists	..	..	2.9	9.1
3. Medical Workers	..	..	..	..
4. Teachers	55.6	78.8	20.0	36.3
5. Legal Workers	4.4	..	2.9	..
6. Social Scientists	..	..	2.9	..
7. Artists & Writers	..	..	..	..
8. Tech. Assistants	8.9	9.1	39.9	18.2
9. Adm. Workers	6.7	..	2.9	9.1
10. Clerical Workers	22.2	12.1	28.5	18.2
11. Sales Workers	..	..	..	..
12. Transport Workers	..	..	..	..
13. Craftsmen	..	..	..	..
14. Service Workers	..	..	..	9.1
15. Armed Forces	..	..	..	..
16. Apprentices	2.2	..	..	..
TOTAL	100.0	100.0	100.0	100.0

The pattern for alumni with M.A. Languages shows that a very large majority of them, over three-fourths in case of the 1950 group and over half in case of the 1954 group, are employed as teachers. Among these, a much larger percentage is employed in schools than in colleges, as indicated by the data presented in the section on Employment Agencies. The next highest proportion in case of both the year groups is that of the clerical workers. In respect of these as well as the teachers in schools, considerable waste in education seems to be involved.

In examining the pattern for alumni with qualification in foreign languages, it may be recalled from Table 24 of the chapter on Education that these qualifications are sought for by alumni with diverse degrees such as B.A. Pass, B.A. Hons., B.Sc., B.Sc. Hons., M.A., M.Sc., Library Science and Law. Hence their occupational pattern is governed by all these previous qualifications. A majority of them are employed as teachers and technical assistants, who constitute nearly 58 per cent in both the year groups. In case of the 1950 group, the proportion of teachers is greater than that of technical assistants and in case of the 1954 group, the proportion of technical assistants is more than that of teachers. This shows the growing tendency for alumni with these qualifications to find employment in scientific and technical fields.

3.13. The following table gives occupational pattern for the alumni with M.A. History-Pol. Science-Phil. and M.A. Eco-Com-Maths degrees :—

TABLE 44

Percentage distribution of alumni with M.A. in History, Philosophy, Political Science and M.A. in Economics, Commerce, Mathematics

Occupation	M.A. His.-Phil.- Pol. Sc.		M.A. Eco.-Com.- Maths.	
	1954 (N=45)	1950 (N=16)	1954 (N=108)	1950 (N=47)
1	2	3	4	5
1. Engineers . . . . .	..	..	..	..
2. Physical Scientists . . . . .	..	..	..	..
3. Medical Workers . . . . .	..	..	..	..
4. Teachers	22.2	31.2	13.9	17.0
5. Legal Workers	11.1	..	4.6	2.1
6. Social Scientists . . . . .	..	6.3	3.7	6.4
7. Artists and Writers . . . . .	..	..	..	..
8. Tech. Assistants	20.0	18.7	38.9	23.4
9. Adm. Workers	4.4	12.5	4.6	10.6
10. Clerical Workers	35.7	31.3	30.6	32.0
11. Sales Workers	2.2	..	..	2.1
12. Transport Workers . . . . .	..	..	..	..
13. Craftsmen . . . . .	..	..	..	..
14. Service Workers	2.2	..	0.9	4.3
15. Armed Forces . . . . .	..	..	0.9	..
16. Apprentices	2.2	..	1.9	2.1
TOTAL	100.0	100.0	100.0	100.0

The pattern for alumni with M.A. in History, Philosophy, and Political Science is marked by high proportions of teachers and clerical workers. In the 1950 group the proportion of clerical workers is the same as that of teachers; in the 1954 group, the proportion of clerical workers is greater than that of teachers. The next highest proportion is that of technical assistants in both the year groups.

In the pattern for M.A. in Economics, Commerce and Mathematics, we find high proportions of technical assistants and clerical workers. The proportion of teachers is less than in case of M.A. in Languages and M.A. in History, Philosophy and Political Science. As compared with the alumni with M.A. in History, Philosophy, and Political Science, this group finds more employment as social scientists and as technical assistants. This may be accounted by a change in the employment market caused by the setting up of the Planning Commission and units in many of the Government Departments and educational and research institutions which acquired the services of a large number of persons in the field of socio-economic research. It may also be noted that the proportion of the clerical workers and teachers is less in these two groups than in the case of the alumni with M.A. in Languages.

Among the three M.A. groups, it may be noted that the proportion of teachers is highest in case of the alumni with M.A. in Languages and lowest in the case of alumni with M.A. Economics, Commerce and Mathematics. This also indicates that the alumni with M.A. in Economics, Commerce and Mathematics are more able to find more diversified employment than M.A.'s in Languages.

3.14. The occupational pattern of holders of masters degree in science and of those who specialised in Engineering and Technology is given below :

TABLE 45

Percentage distribution of alumni with M.Sc. Physics-Chemistry-Botany-Zoology and with Degree or Diploma in Technology

Occupation	M.Sc.		Technology	
	1954 (N=74)	1950 (N=27)	1954 (N=39)	1950 (N=15)
1	2	3	4	5
1. Engineers . . . . .	..	3.7	38.5	53.3
2. Physical Scientists	1.4	3.7	..	13.3
3. Medical Workers . . . . .	..	3.7	..	..
4. Teachers	23.3	25.9	7.8	..
5. Legal Workers . . . . .	..	..	5.1	..
6. Social Scientists	1.4	7.4	..	..
7. Artists and Writers . . . . .	..	..	..	..
8. Technical Assistants	73.9	29.7	17.9	..

TABLE 45—*contd.*

Occupation	M.Sc.		Technology	
	1954 (N=74)	1950 (N=27)	1954 (N=39)	1950 (N=15)
1	2	3	4	5
9. Administrative Workers	7.4	..	20.0
10. Clerical Workers	11.1	25.6	6.7
11. Sales Workers
12. Transport Workers
13. Craftsmen	6.7
14. Service Workers
15. Armed Forces	7.4	..	..
16. Apprentices	5.1	..
TOTAL	100.0	100.0	100.0	100.0

The occupational patterns now examined are those of the alumni with purely professional degrees. The pattern for the M.Sc. group shows that the largest majority of them are occupied as technical assistants who are professional workers at a junior level. The proportion of technical assistants in the 1954 group is nearly three-fourth which indicates that most of these alumni have to enter professional work at a junior level. The fact that even in the 1950 group 30 per cent of them work as technical assistants as against 7 per cent of Physical Scientists suggests that it takes a long time for the alumni to begin working at a senior level. It may be noted that a few of these alumni qualified further in order to become engineers and medical scientists.

The pattern for alumni with a diploma in Engineering and Technology, shows that a large majority of them were employed in their own field *viz.* in engineering and science. It may however be noted that 25.0 per cent of the 1954 group and 9 per cent of the 1950 group were found to be clerical workers. When an inquiry was made as to the precise nature of their clerical work, it was found that the most of these worked as section officers in the C.P.W.D. Majority of them find this work as not in keeping with their education. This probably explains the lesser percentage of the clerical workers in the 1950 group. On the whole it may be said that the education in the case of M.Sc. and Engineering is utilized properly in employment.

3.15. The following table gives occupational pattern for the alumni with degrees in Nursing and Medicine :

TABLE 46

Percentage distribution of alumni qualifying in Nursing and Medicine

Occupation	Nursing		Medicine	
	1954 (N=6)	1950 (N=1)	1954 (N=24)	1950 (N=6)
1	2	3	4	5
1. Engineers
2. Physical Scientists	4.2	..
3. Medical Workers	100.0	100.0	70.8	66.7
4. Teachers	12.5	33.3
5. Legal Workers
6. Social Scientists
7. Artists and Writers
8. Technical Assistants	4.2	..
9. Administrative Workers	8.3	..
10. Clerical Workers
11. Sales Workers
12. Transport Workers
13. Craftsmen
14. Service Workers
15. Armed Forces
16. Apprentices
TOTAL	100.0	100.0	100.0	100.0

The above table shows that all those who obtained the qualification in Nursing were employed in their field. This is the only degree in which all those who obtained it, work in the occupation in which they were trained. Among the alumni who qualified in Medicine, a large majority are working in the medical field. A sizeable proportion are engaged as teachers in the medical colleges and also as administrative workers probably in health departments of the Central and State Governments.

3.16. Occupational Patterns of Law graduates are given in the table below :

TABLE 47.

Percentage distribution of alumni qualifying in Proficiency in Law and Law

Occupations	Prof. in Law		Law	
	1954 (N=96)	1950 (N=23)	1954 (N=85)	1950 (N=22)
1	2	3	4	5
1. Engineers . . . . .	..	..	..	..
2. Physical Scientists . . . . .	..	..	..	..
3. Medical Workers . . . . .	..	..	..	..
4. Teachers	1.0	..	5.9	4.5
5. Legal Workers	10.4	8.7	4.7	13.6
6. Social Scientists	9.4	13.0	5.9	4.5
7. Artists & Writers . . . . .	..	..	1.2	..
8. Technical Assistants	3.1	..	8.2	9.1
9. Administrative Workers	12.4	21.7	10.5	22.8
10. Clerical Workers	56.3	47.8	56.5	41.0
11. Sales Workers	3.1	..	..	4.5
12. Transport Workers	1.0	..	..	..
13. Craftsmen . . . . .	..	..	..	..
14. Service Workers	2.1	8.8	2.4	..
15. Armed Forces . . . . .	..	..	3.5	..
16. Apprentices	1.0	..	1.2	..
TOTAL	100.0	100.0	100.0	100.0

In considering the occupational pattern for the alumni who qualified in Prof. in Law and Law, it would be helpful to understand the employment implications of these two qualifications. In the Law qualifications we have included, as mentioned in Education chapter, Bachelor of Laws (LL.B.) Bachelor of Civil Laws (B.C.L.) and Master of Laws (LL.M.). The qualification of the Proficiency in Law is obtained after one year's study following LL.B. or LL.M. It is understood that for practising in the courts of Delhi, and Punjab it is necessary to obtain the Certificate of Proficiency in Law. For practising in other States, certain other requirements such as apprenticeship etc. are laid down. It is therefore clear that those qualifying with just a Law degree cannot practise in Delhi or Punjab.

The occupational pattern for the alumni with qualifications in Law who are working as employees is characterised by a very high percentage of clerical workers. In magnitude, this proportion is next only to similar proportions in alumni with general degrees such as B.A. Pass, B.Sc. Pass and B.Com. Among the holders of professional degrees the proportion of clerical workers is by far the largest among Law graduates. The reason for this high percentage seems to be that the Law studies can be undertaken during

evening hours along with an employment. Hence a large number of alumni with B.A. Pass and other degrees obtained these qualifications while in employment to improve their occupational status. But as shown by the high percentage, a large majority of them were unable to raise their occupational level. The percentage for 1954 being higher than for 1950 suggests that the employment position of these alumni was worse in case of 1954 than in case of 1950.

It may be seen from the table that on the whole only about 10 per cent of these employees are engaged in the legal occupation*. A larger proportion is engaged in the field of administration and somewhat smaller proportion as social scientists. Assuming that their education is utilised in their occupation, it may be roughly said that legal education is utilised to the extent of about 20 to 40 per cent of the employees.

3.17. Occupational pattern of the alumni specialising in Social work, Education (Teaching) and Library Science are shown in the table below :

TABLE 48

Percentage distribution of alumni qualifying in Social Work, Education and Library Science

Occupation	Social Work		Education		Library Science	
	1954 (N=19)	1950 (N=7)	1954 (N=85)	1950 (N=51)	1954 (N=11)	1950 (N=8)
1. Engineers	..	..	..	..	..	..
2. Physical Scientists	..	..	..	..	..	..
3. Medical Workers	..	..	..	2.0	..	..
4. Teachers	..	14.3	85.9	90.1	9.1	..
5. Legal Workers	..	14.3	..	..	..	..
6. Social Scientists	31.6	42.8	2.3	..	..	..
7. Artists & Writers	..	..	..	..	..	..
8. Technical Assistants	42.1	..	5.9	..	81.8	87.5
9. Administrative Workers	15.8	28.6	..	5.8	..	..
10. Clerical Workers	10.5	..	5.9	2.0	9.1	12.5
11. Sales Workers	..	..	..	..	..	..
12. Transport Workers	..	..	..	..	..	..
13. Craftsmen	..	..	..	..	..	..
14. Service Workers	..	..	..	..	..	..
15. Armed Forces	..	..	..	..	..	..
16. Apprentices	..	..	..	..	..	..
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

*The table includes only the alumni who work as employees. It excludes all those law graduates who are engaged in legal practice and are either self-employed or employers. Taking all the alumni irrespective of the employment status it is found that over 40 per cent work in legal occupations.

The pattern for the alumni with an M.A. in Social Work indicates that a little over 30 per cent of them are engaged directly in their field. Those engaged as administrative workers and as technical assistants may also be considered as employed in the field because the duties involved pertain to administration or investigation in the field. The alumni of the 1954 group seemed to be employed more within their field of specialisation than of the 1950 group.

In case of the alumni with qualification in Education, it may be said that employment in the direct field of specialisation is higher than among any other degree holders except those qualifying in Nursing. It may be seen from the table that 80 to 90 per cent of these are employed as teachers.

Like the alumni qualifying in Education, the alumni with qualifications in Library Science also find employment directly in their field of specialisation. Librarians at all levels are included in the group of Technical Assistants, in which 80 to 90 per cent of the alumni are employed.

3.18. As Clerical and Related Work is a very important occupational category absorbing university graduates, it may be of some interest to examine its composition according to degrees obtained. As can be seen from Table 39 (p. 66), 40.8 per cent of the 1954 group and 25.1 per cent of the 1950 group, who were working as employees, were engaged in this occupation at the time of investigation. The following tables show their distribution according to the last examination passed by them. Separate tables have been provided for the two groups and the degrees obtained have been arranged in the descending order of the percentages of clerical workers :

TABLE 49
Percentage distribution of 1950 and 1954 group engaged as clerical workers according to last examination passed

Serial No.	1954		Serial No.	1950	
	Last examination Passed	Percentage		Last examination Passed	Percentage
1	B.A. Pass	80.4	1	B. Com.	66.6
2	B.A. Hons.	72.9	2	B.A. Pass	63.67
3	B. Com.	68.9	3	B. Sc. Pass	62.5
4	B. Sc. Pass	57.8	4	Prof. in Law	47.7
5	Law	56.5	5	Law	40.9
6	Prof. in Law	56.3	6	M.A. Eco.-Com.-Maths .	31.9
7	M.A. His.-Phil.-Pol. Sc. .	35.6	7	M.A. His.-Phil.-Pol.Sc. .	31.3
8	B. Sc. Hons.	32.0	8	B.A. Hons.	25.0
9	M.A. Eco.-Com.-Maths. .	30.6	9	Foreign Languages . .	18.2
10	Foreign Languages . . .	28.5	10	Library Science . . .	12.5
11	Technology	25.6	11	M.A. Languages . . .	12.1
12	M.A. Languages	22.2	12	M.Sc.	11.1
13	M.A. Social Work	10.5	13	Technology	6.7
14	Library Science	9.1	14	B. Sc. Hons.. . . .	5.3
15	Education	5.9	15	Education	2.0
16	M.Sc. . . . .	..	16	M.A. Social Work. . .	..
17	Nursing . . . . .	..	17	Nursing . . . . .	..
18	Medicine . . . . .	..	18	Medicine . . . . .	..

The above table shows that clerical workers are drawn from as many as 15 out of 18 examination categories in the case of both the 1950 and the 1954 group of alumni. Although the percentages are given in order, the order may not be interpreted strictly in view of the small frequencies involved in case of some of the examination categories. The fact that sizeable percentages of alumni obtaining professional qualifications have also to work as clerks is deplorable. The highest percentages are drawn from B.A. Pass, B.Sc. Pass, B.Com., Law and Prof. in Law. The alumni with M.A. degrees seem to claim medium percentages. In case of alumni with B.Sc. (Hons.) we find medium percentage in case of the 1954 group, but a low percentage in case of the 1950 group. The alumni with professional degrees have the lowest percentages.

A marked change of order is noted in case of alumni with B.A. (Hons.) and B.Sc. (Hons.) of the 1950 and the 1954 group. An appreciably lesser percentage of alumni with B.A. (Hons.) of the 1950 group than of the 1954 group are engaged as clerks. The same situation holds good in case of B.Sc. (Hons.).

3.19. We may now briefly comment on the occupations of the alumni who are in the category of 'Employers', 'Self-employed' and 'Unpaid Family Workers'. As was shown in Section 2, that of the total number of alumni found employed at the time of investigation, 3.6 per cent of the 1954 group and 4.5 per cent of the 1950 group were working as 'Employers', 10.2 per cent of the 1954 group and 13.3 per cent of the 1950 group were working as 'Self-employed' and 2.1 per cent of the 1954 group and 1.4 per cent of the 1950 group were working as 'Unpaid Family Workers'.

Among those engaged as 'Employers', it is found that a very large majority are engaged in wholesale and retail business. The nature of the business has no relationship with the education obtained by them. 90 per cent of the 'Employers' of the 1954 group and 80 per cent of the 'Employers' of the 1950 group are engaged in different types of wholesale and retail business. The remaining are having their business in the field of Engineering, Medicine and Agriculture.

Among the alumni in the category of 'Self-employed' it is observed that the largest majority have a legal practice. Nearly 78 per cent of the 'Self-employed' of the 1954 group and 72 per cent of the 'Self-employed' of the 1950 were engaged in legal practice. Next comes the proportion of those engaged in wholesale and retail business. About 15 per cent of the 1954 group and 14 per cent of the 1950 group were in this category.

Among the 'Unpaid Family Workers', it is observed that a very large proportion of them are helping the family in their wholesale and retail business. 64 per cent of the 1954 group and all of the 1950 group are helping their families in this capacity. The remaining are assisting their families in the legal practice and in manufacturing business.

Thus it may be seen that except for those who qualified in Law, Engineering, Medicine and Commerce, the occupations of the alumni, in categories other than 'Employees' do not bear any relationship with their education.

4. Employing Agencies :

4.1. In this section, we present an account of the employing agencies of the alumni who were found working as "employees" at the time of investigation. The data would be helpful in understanding the various broad sectors of economy as far as their employing value is concerned. The comparative examination of the two year groups reflects the changes that are taking place in the employing capacity of the different sectors. The data, it is hoped, will be of interest and value in vocational guidance work with university students.

4.2. All employing agencies were classified into six categories : (1) Private organization, (2) Central Government and allied organizations, (3) State governments and allied organizations, (4) Universities, (5) Foreign diplomatic agencies and foreign countries, and (6) Local bodies. The data shows that the Central Government and allied organizations employed a higher percentage of alumni covered in the Survey than any other single type of employing agency. Private organizations accounted for quite a 'Sizable' majority in both the year groups.

Of the 1,149 alumni of the 1954 group working at the time of investigation, information regarding employing agencies was available for 966. Of the 442 working alumni belonging to the 1950 group, this information was available for 357 who were employees.

It was found that only a very small proportion of alumni in either year group were working in foreign diplomatic agencies or local bodies. The percentages for the 1954 group of alumni were 1.3 and 3.4 respectively ; and for the 1950 group they were 1.1 and 2.5 respectively. Universities accounted for 10.0 per cent in 1954 group and 9.0 per cent in 1950 group. Thus one out of ten alumni, roughly, worked in a university. Details about the various employing agencies are given in the table below :

TABLE 50

Percentage distribution of the alumni according to the Employing Agency

Employing Agency	1954	1950
I. <i>Public Sector</i>	68.3	58.5
1. Central Government and allied bodies	53.0	39.8
2. State Government & allied bodies	11.9	16.2
3. Local bodies	3.4	2.5
II. <i>Private Sector</i>	20.4	31.4
III. <i>Universities</i>	10.0	9.0
IV. <i>Foreign & Diplomatic agencies</i>	1.3	1.1
TOTAL PERCENTAGE	100.0	100.0
Number	966	357

4.3. The relationship between examinations passed by alumni in either group and the employing agencies is revealed by the table below. It ignores foreign diplomatic agencies and local bodies which together account for a negligible proportion of alumni. In the analysis which follows each of the four types of employing agencies mentioned in the table are considered individually.

TABLE 51

Percentage distribution of 357 employees of 1950 group and 966 employees of 1954 group in each examination category according to the four main types of employing agencies

Examination Passed	Employing Agencies				
	Central Govt. & allied bodies	State Govt. & allied bodies	Universities	Private organizations	Total percentage in four types of agencies
A. 1954					
1. B.A. Pass	67.0	3.0	2.0	23.0	95.0
2. B.Sc. Pass	65.9	4.5	2.3	25.0	97.7
3. B. Com.	71.8	7.0	2.8	14.1	95.7
4. B.A. Hons.	62.5	4.2	2.1	27.1	95.9
5. B.Sc. Hons.	72.0	16.0	8.0	4.0	100.0
6. M.A. Lang.	32.5	17.4	30.4	13.0	93.3
7. M.A. Hist.-Pol. Sc.- Phil.	47.7	4.5	9.1	13.8	75.1
8. M.A., Eco.- Com.- Math.	58.9	3.7	22.4	13.1	98.1
9. M.A. Social Work	10.5	22.2	5.3	52.6	90.6
10. M.Sc.	65.7	5.5	24.7	4.1	100.0
11. Library Science	27.3	9.1	27.3	18.2	71.9
12. Law	63.4	2.5	6.3	19.0	91.2
13. Prof. in Law	54.5	17.1	..	22.2	93.8
14. Education	13.3	33.9	1.1	34.4	87.7
15. Nursing	16.7	33.8	..	..	100.0
16. Medicine	25.0	41.7	16.7	12.5	95.9
17. Technology	56.8	9.1	4.6	27.3	97.8
18. Foreign Language	44.4	0.0	36.2	19.4	100.0
TOTAL	52.9	11.9	10.0	20.4	95.2

TABLE 51—*contd.*

Examination Passed	Employing Agencies				Total percentage in four types of agencies
	Central Govt. & allied bodies	State Govt. & allied bodies	Universities	Private organizations	
B. 1950					
1. B.A. Pass	42·9	21·4	..	28·6	92·9
2. B.Sc. Pass	50·0	12·5	..	25·0	87·5
3. B.Com.	50·0	11·1	..	33·3	94·4
4. B.A. Hons.	15·4	15·4	7·7	61·5	100·0
5. B.Sc. Hons.	66·6	5·6	..	27·8	100·0
6. M.A. Langs.	21·2	24·2	15·2	36·4	97·0
7. M.A. Hist.-Pol.Sc.-Phil.	68·8	6·2	12·5	12·5	100·0
8. M.A. Econ.-Com.-Maths.	66·0	8·5	6·4	19·1	100·0
9. M.A. Social Work	62·5	25·0	..	12·5	100·0
10. M.Sc.	44·8	13·8	20·7	20·7	100·0
11. Library Science	50·0	..	12·5	25·0	87·5
12. Law	47·0	6·5	4·8	41·7	100·0
13. Prof. in Law	54·5	18·2	..	13·6	86·3
14. Education	7·1	33·9	10·7	48·3	100·0
15. Nursing . . . . .	..	..	100·0	..	100·0
16. Medicine	12·5	37·5	25·0	12·5	87·5
17. Technology	18·2	..	..	81·8	100·0
18. Foreign Languages	25·0	16·7	33·3	25·0	100·0
TOTAL	39·8	16·2	9·0	31·4	96·4

(A) Central Government and allied bodies :

The figures for 1954 show that these agencies provided employment to half or more than half of the alumni in all examination categories except M.A. Language, M.A. Social Work, Library Science, Education, Nursing and Medicine. On the other hand, the figures for 1950 show similar proportions in the categories of B.Sc. Pass, B.Com., B.Sc. Hons., M.A. (except M.A. Languages), M.Sc., Library Science, Law and Proficiency in Law. Thus these agencies did not provide as much scope of employment to M.A.'s in Languages as to M.A.'s in other subjects.

It will also be seen that while in the 1950 group, the highest percentages were found in M.A. categories (except M.A. languages), in the 1954 group they were found in B.A.—B.Sc. categories. For both the groups the lowest percentages were found among the categories of Nursing, Medicine, Education and M.A. Languages. There were pronounced differences between the

two year groups in so far as the categories of M.A. Social Work, Engineering and Technology, B.A. Hons., and Library Science were concerned. The percentages in categories of Engineering and Technology and B.A. Hons., were much higher for the 1954 group than for the 1950 group, while for the categories of M.A. Social Work and Library Science the percentages were considerably higher for the 1950 group than for the 1954. It was surprising that only 10 per cent M.A.'s in Social Work, in the 1954 group could find employment in the Central Government and allied bodies as against two-thirds of them from the 1950 group.

The fact that on the whole, a higher proportion of the 1954 alumni than of the 1950 alumni found employment in Central Government and allied bodies is understandable in view of the fact that in the course of Five Year Plans there has been an expansion in the nature as well as extent of the activities of these bodies under Central Government. The figures for most of the individual examination categories bear out this supposition. Only in the case of M.A. Social Work and Library Science we find that the figures are strikingly contrary to expectations. But as the frequencies involved in these two examination categories were rather small, no definite conclusion can be reached on this point.

(B) State Governments and allied bodies :

These agencies provided employment to a substantial percentage of alumni in the categories of Education and Medicine in both the year groups. Education and health are primarily the responsibility of State Governments and not of the Central Government. Hence we find that the percentages for the categories of Education and Medicine are higher than for any other examination category, particularly in the case of the 1954 group.

Figures for the 1950 group show that one out of every four alumni in the categories of M.A. Languages and M.A. Social Work found work in State Governments while the proportion in the case of Education and Medicine was slightly more than one in every three. In the 1954 group, roughly two out of every five alumni in the categories of Education and Medicine found employment in such agencies. M.A.'s in Social Work had one out of every five in State Governments. In most of the examination categories, percentages for 1954 are lower than for 1950. This is probably due to the fact that most of the alumni in this category were working in Delhi and there has been a shrinkage in the activities of Delhi State administration.

(C) Private Organizations :

These agencies employed, on the whole, about twice as many employees as the State Governments. The overall percentage for 1950, however, is a little more than one and a half times the percentage for 1954. Except in the case of M.A. Social Work, M.A. Political Science-History-Philosophy, Proficiency in Law, and Nursing and Medicine, the percentages for the 1950 group are higher than those for the 1954. Only in the case of M.A. Social Work we find a considerably higher proportion for the 1954 than for the 1950 group. This would imply that private social welfare organizations had considerably increased employment opportunities for such alumni, while governmental bodies had lagged behind. For instance privately owned mills and factories,

orphanages and rescue homes are coming to utilize an increasing number of professionally trained personnel in their activities. Increasing public consciousness and governmental pressure are both responsible for this welcome change.

(D) **The Universities :**

Universities provided employment to a negligible proportion of alumni in the categories of B.A., B.Sc., B.Com., B.A. Hons., B.Sc. Hons., M.A. Social Work, Law, Proficiency in Law and Engineering and Technology. The highest proportions in both year groups to find employment in the universities were in the categories of M.Sc., and Foreign Languages. Apart from these, the figures indicate that higher proportions were found in the categories of M.A. Languages, M.A. Econ.-Com.-Maths. and Library Science in the 1954 than in the 1950 group. Persons in these categories had more employment opportunities in the universities after 1954 than before it.

4.4. The relationship between employing agencies and the occupations of the alumni working in them was examined next.

It may be recalled that as many as 96.2 per cent of the employee alumni in the 1954 group and 94.7 per cent of the employee alumni in the 1950 group fell in the occupational categories of Professional and Technical workers, Administrative and Executive workers and Clerical workers. More than half of the alumni in either group were Professional and Technical workers.

The table below shows how the alumni in each of the three major occupational categories mentioned above were distributed according to the employing agencies :

TABLE 52

Percentage distribution of alumni in each occupational division by the employing agency

Occupational division	Total No.	Public Sector			Private Sector		Total	Un- versi- ties	
		Central Govt. etc.	State Govt. etc.	Local bodies	Private orga- nisa- tions	For- eign dip. agencies			
A. 1954									
1. Professional and technical workers.	488	38.0	17.8	3.7	59.5	20.7	1.2	21.9	18.6
2. Administrative and executive workers.	52	40.4	17.3	1.9	59.6	40.4	..	40.4	..
3. Clerical workers	392	74.5	3.8	3.1	81.4	15.0	1.8	16.8	1.8
B. 1950									
1. Professional and technical workers.	212	29.8	17.4	2.4	49.6	32.1	0.9	33.0	17.4
2. Administrative & executive workers.	37	29.7	18.9	2.7	51.3	46.0	..	46.0	2.7
3. Clerical workers	88	65.9	8.0	4.6	78.5	18.2	2.3	20.5	1.0

TABLE 53—*contd.*

Occupations	Cent. Govt. & quasi-Cent. Govt.	State Govt. & quasi-State Govt.	Universities	Foreign diplomatic agencies	Local bodies	Private organisations
B. 1950 (N-357)						
1. Professional, tech. workers.	45.0	66.1	94.8	50.0	50.0	63.5
2. Adm. executive workers	7.9	12.5	2.6	..	10.0	15.9
3. Clerical workers . . .	41.4	12.5	2.6	50.0	40.0	15.0
4. Sales workers . . .	..	..	..	..	..	3.7
5. Mining workers . . .	..	..	..	..	..	..
6. Transport & Com. worker.	..	..	..	..	..	..
7. Production process workers.	0.7	..	..	..	..	..
8. Sport & Service workers	2.1	8.9	..	..	..	..
9. Defence workers . . .	2.9	..	..	..	..	..
10. Apprentices . . .	..	..	..	..	..	1.9
TOTAL . . .	100.0	100.0	100.0	100.0	100.0	100.0

The highest percentage of Clerical workers was found among Central Government and quasi Central Government agencies. The percentage of Clerical workers among such agencies was 41.4 in the 1950 group and 57.1 in the 1954 group. Thus more than half of the alumni from the 1954 group engaged in these agencies were clerks. The percentage of Professional Technical workers in these agencies had on the other hand fallen from 45.0 in the 1950 group to 35.5. This finding would suggest that while the Central Government and quasi Central Government agencies employed a higher proportion of Professional and Technical workers in the 1954 than in the 1950 group, the total number of Clerical workers absorbed was much larger in the 1954 group. The clerical work, in other words, had expanded much more than professional and technical work in these agencies. It may also mean that in Central Government and quasi Central Government agencies people are not directly recruited as Professional and Technical workers, but that they have to work their way up to the posts requiring professional, technical skills.

Even the Administrative and Executive workers were a smaller proportion of employees in Central Government and quasi Central Government agencies in the 1954 than in the 1950 group suggesting a relative fall in employment opportunities for such persons in these agencies. A slight increase is found in 1954 group as compared to 1950 group in the percentages of Professional and Technical employees in State Government and quasi State Government agencies, and there was a reduction in the proportion of

Administrative, Executive workers. This would suggest that while employment opportunities for Professional workers had improved a little from 1950 to 1954, there was a fall in the opportunities for Administrative as compared to other types of workers.

The proportion of Professional and Technical workers was the highest in the universities. Roughly 19 out of every 20 alumni employed in the Universities were of the type. The proportion of such workers in the universities was far higher than that of similar workers in other types of agencies. This is obviously due to the fact that the universities need mainly professionally qualified persons to impart education to students in classroom and in laboratories.

About half of the employees in private organizations, in the 1954 group, were Professional Technical persons, while in the 1950 group two-thirds of them were such persons. Thus the proportion of such persons had fallen from the 1950 to the 1954 group. There was a slight fall in the proportion of Administrative and Executive workers also among employees in private organizations. Only in the case of Clerical workers there was an increase in the percentage.

5. Means of securing employment :

5.1. This section is devoted to an examination of the means employed by the alumni to find the employment in which they were engaged at the time of the Survey. Attempt has been made to relate the means of securing employment to variables like the type of higher education and the class or division obtained by the alumni in their last examination. The role played in this context by the agencies rendering employment assistance has also been assessed.

5.2. The analysis of the information gathered from the 1149 employed alumni of the 1954 group and the 442 similar alumni of the 1950 group revealed that the alumni had, in a large number of cases, made use of their own personal contacts and the contacts of their parents, relatives, friends, neighbours, etc. A smaller proportion resorted to the method of responding to job advertisements appearing in the newspapers and secured employment through interviews and tests given by the employers. This is shown in the following table :

TABLE 54

Distribution of the employed alumni according to the means of securing present employment*

Means of securing employment	1954		1950	
	Number	Percentage	Number	Percentage
I. Through contacts :				
1. Personal	340	29.6	152	34.4
2. Parents or relatives	72	6.3	41	9.3
3. Family friends or neighbours	28	2.4	13	2.9

*By "present" employment is meant employment at the time of investigation.

TABLE 54—*contd.*

Means of securing employment	1954		1950	
	Number	Percentage	Number	Percentage
II. Advertisements	360	31.3	105	23.7
III. Employment Exchanges	140	12.2	24	5.4
IV. Public Service Commissions	52	4.5	33	7.5
V. Teachers	23	12.0	11	2.5
VI. Social Workers	3	0.3	10	2.3
VII. Promotion	80	7.0	38	8.6
VIII. Others	43	3.7	15	3.4
N.A.	8	0.7	..	..
TOTAL	1149	100.0	442	100.0

In examining the above table, it may be borne in mind that in a few cases the alumni stated that they had used more than one means of securing employment. However, the figures given in the table relate only to the principal means.

It may be noted that nearly one-third of the alumni state to have obtained the employment in response to advertisements. In considering this proportion the factor of contacts, personal or otherwise, may also be included. It is significant that the other social institutions for securing employment are not much used. For example, employment through the agency of Employment Exchanges accounts for only 5.4 per cent in the 1950 group and 12.2 per cent in the 1954 group.

A comparative view of the two year groups shows that a large proportion of the alumni of the 1950 group were able to secure employment through contacts, personal or otherwise. This is probably due to the fact that having been in the employment market for a longer period they are better able to make use of contacts. This is borne out also by the lesser percentages of this group who had to resort to advertisements and Employment Exchanges for getting employment. A higher proportion of the alumni of the 1950 group could get employment through public service commissions. This shows the importance of job experience in securing employments through this agency.

5.3. Analysis of means employed by different types of graduates showed that the alumni with general education and degrees in Law had depended more on their personal and family contacts. On the other hand those with technical and professional qualifications, who had wider employment opportunities, had direct contacts with the employers through advertisements, employment exchanges or the public service commissions. This is shown in the following Table :

TABLE 55

*Percentage distribution of the alumni according to last examination passed
and means of securing present employment*

Last Examination	Total No.	Personal and family contacts	Teacher, Social Worker	Advertisement, interview tests	Employment Exchange	Public Service Commission	Promotions	Others	N.A.
A. 1954									
1. B.A. Pass	123	43.1	0.8	26.0	18.7	..	7.3	4.1	..
2. B.Sc. Pass	50	30.0	..	52.0	12.0	..	2.0	4.0	..
3. B.Com.	86	37.2	..	34.9	15.1	5.8	4.7	2.3	..
4. B.A. Hons.	53	41.5	1.9	34.0	7.5	7.5	3.8	3.8	..
5. B.Sc. Hons	25	16.0	..	36.0	28.0	8.0	8.0	..	4.0
6. M.A. Languages	49	20.4	2.0	45.0	12.3	6.1	2.0	10.2	2.0
7. M.A. Hist.-Pol.Sc-Phil.	50	48.0	2.0	16.0	16.0	12.0	2.0	4.0	..
8. M.A. Eco.-Com.-Math.	13	37.0	4.5	34.5	11.5	8.0	2.7	1.8	..
9. M.A. Social Work	19	31.6	..	47.3	5.3	5.3	10.5	..	..
10. M.Sc.	74	18.9	8.1	32.5	25.7	8.1	1.3	2.7	2.7
11. Library Science	11	27.3	9.1	45.4	9.1	..	..	9.1	..
12. Law	114	44.7	0.9	25.4	9.6	0.9	14.0	4.4	..
13. Prof. in Law	183	64.5	..	15.3	4.4	2.7	10.4	2.7	..
14. Education	85	29.4	2.4	50.6	7.1	2.3	4.7	3.5	..
15. Nursing	6	..	..	33.3	16.7	..	16.7	33.3	..
16. Medicine	25	20.0	..	40.0	..	4.0	24.0	12.0	..
17. Technology	41	24.4	2.4	22.0	26.8	12.2	12.2	..	..
18. Foreign Languages	42	14.3	14.3	40.4	4.8	4.8	7.1	4.8	9.5
TOTAL	1149	38.3	2.3	31.3	12.2	4.5	7.0	3.7	0.7

TABLE 55—contd.

Last Examination	Total No.	Personal and family contacts	Teacher, Social Worker	Advertisement interview tests	Employment, Exchange	Public Service Commission	Promotion	Others	N.A.
B. 1950									
1. B.A. Pass	40	52.5	5.0	13.0	12.5	7.5	5.0	2.5	..
2. B.Sc. Pass	12	75.1	8.3	..	8.3	..	..	8.3	..
3. B.Com.	25	56.0	..	24.0	..	12.0	8.0	..	..
4. B.A. Hons.	15	60.0	..	26.6	..	6.7	6.7	..	..
5. B.Sc. Hons	21	52.4	14.3	19.0	..	4.8	9.5	..	..
6. M.A. Languages	35	37.1	5.8	40.0	..	2.9	2.8	11.4	..
7. M.A. Hist.-Pol.-Phil.	20	50.0	15.0	20.0	10.0	5.0	..	..	..
8. M.A. Eco.-Com.-Maths.	48	20.8	2.1	33.4	6.2	14.6	20.8	2.1	..
9. M.A. Social Work	7	14.3	..	14.3	14.3	28.6	28.5	..	..
10. M.Sc.	27	25.9	3.7	25.9	14.8	14.8	..	14.8	..
11. Library Science	8	12.5	..	50.0	..	..	25.0	12.5	..
12. Law	37	64.9	2.7	5.4	8.1	..	16.2	2.7	..
13. Prof. in Law	61	68.9	3.3	9.8	1.6	6.6	9.8	..	..
14. Education	52	38.5	5.7	42.4	1.9	7.7	1.9	1.9	..
15. Nursing	1	..	..	..	..	..	100.0	..	..
16. Medicine	7	42.8	..	28.6	..	14.3	14.3	..	..
17. Technology	15	60.0	6.7	13.3	13.3	6.7	..	..	..
18. Foreign Languages	11	18.2	9.1	45.4	9.1	..	9.1	9.1	..
TOTAL	442	46.6	4.8	23.7	5.4	7.5	8.6	3.4	..

It is seen in respect of general degree courses that the alumni with B.A. Pass and Honours, B.Com., M.A. Hist.-Pol. Science.-Phil. and M.A. Econ.-Com.-Maths. had depended to a large measure on personal and family contacts. It may be recalled in this context that large proportions of these alumni were engaged in clerical occupations or had started their own business. Most of those who had taken B.Sc. Pass and Honours, M.A. Languages, M.A. Social Work, and M.Sc. degrees had secured employment with the help of job advertisements or Employment Exchanges. High percentages of these alumni were engaged as teachers, technical assistants and social scientists and these jobs are generally advertised in newspapers or filled through the Employment Exchanges.

In regard to technical and professional courses, it is noticed that a large proportion of Law graduates had found work through their personal or family contacts. This is understandable in view of the fact that an appreciable proportion among them were engaged in clerical occupations or in legal practice. The alumni who had specialised in Library Science, Education, Nursing, Medicine and Engineering had got employed in their own field through advertisements and Employment Exchanges. It is interesting to note that an appreciable proportion of engineers had got jobs through the medium of Employment Exchanges.

5.4. The analysis of the data relating to the means of securing employment to the class or division obtained by the alumni in their last examination revealed that the means chosen by the alumni were determined by the level of their academic achievements. Those with a First tend to compete in the open market through the media of job advertisements and public service commissions, whereas others who got lower divisions tend to find work through their personal and family contacts and Employment Exchanges. This is shown in the table at the next page :

TABLE 56

Percentage distribution of the alumni according to divisions obtained in the last examination and means of securing present employment.

Divisions	Means of Securing Employment									
	Total No.	Personal and family contacts	Teacher Social Worker	Advertisement interview tests	Employment Exchange	Public Service Commission	Promotion	Others	N.A.	
A. 1954										
First	106	20.8	6.6	47.2	5.7	9.4	7.5	0.9	1.9	
Second	362	35.0	1.7	30.7	14.4	6.9	5.5	5.0	0.8	
Third	178	33.2	2.8	33.6	15.7	4.0	6.2	4.0	0.5	
Pass	478	45.0	1.7	28.0	11.1	2.1	8.2	3.5	0.4	
Pass for Honours	13	54.5	..	30.8	..	..	0.7	..	..
N.A.	12	75.1	..	8.3	8.3	..	8.3	..	..
TOTAL	1149	38.3	2.3	31.3	12.2	4.5	7.0	3.7	0.7	
B. 1950										
First	57	29.8	7.0	31.6	3.5	15.8	8.8	3.5	..	
Second	131	42.0	5.3	25.2	6.1	7.6	10.7	3.1	..	
Third	91	40.8	3.3	29.7	7.7	2.2	10.9	5.4	..	
Pass	152	58.0	4.6	16.4	4.6	7.9	5.9	2.6	..	
Pass for Honours	5	80.0	..	20.0	..	..	..	..	..
N.A.	6	83.3	..	16.7	..	..	..	..	..
TOTAL	442	46.6	4.7	23.7	5.4	7.5	8.5	3.6	..	

5.5. Attempt has been made to know the extent to which assistance rendered by the Employment Exchanges was availed of by the alumni. This has been done by asking the alumni whether they were registered with an Employment Exchange for finding the employment in which they were engaged at the time of the survey. The analysis of their responses showed that 31.3 per cent of the alumni of the 1954 group as against 15.6 per cent of those of the 1950 group were registered with an Exchange. The percentage for the 1954 group was twice as large as that for the 1950 group. One possible explanation is that the alumni of the older group i.e., 1950 had a longer occupational career than the alumni of the 1954 group and were able to cultivate useful contacts as well as utilize their family influence. They, therefore, depended less on the medium of Employment Exchanges for securing present employment. The following table gives details on this point with regard to various types of graduates :

TABLE 57

Percentage in each examination category of the alumni who were registered with an Employment Exchange for securing present employment.

Last examination	Percentage of those registered with Employment Exchange	
	1954	1950
1. B.A. Pass	43.7	33.3
2. B.Sc. Pass	41.7	33.3
3. B.Com.	43.4	22.0
4. B.A. Hons.	23.1	..
5. B.Sc. Hons.	43.5	27.8
6. M.A. Languages	18.0	11.4
7. M.A. Hist.-Pol. Sc.-Phil.	34.8	25.0
8. M.A. Econ.-Com.-Maths.	36.4	22.9
9. M.A. Social Work	47.1	12.5
10. M.Sc.	50.1	24.0
11. Library Science	27.3	12.5
12. Law	29.0	5.7
13. Prof. in Law.	20.0	10.3
14. Education	29.9	14.3
15. Nursing	16.7	..
16. Medicine . . . . .	..	14.3
17. Technology	32.6	..
18. Foreign Languages	14.3	8.3
TOTAL	31.3	15.6

It may be observed from the above table that a sizable proportion of the alumni with different educational background sought the assistance of the Employment Exchange, in securing their last employment. In other words, it may be said that the Employment Exchanges were used by the

alumni with general education as well as those with technical and professional education. It may be noted that among the alumni of the 1954 group none of the Medical graduates sought the assistance of Employment Exchange and among the alumni of the 1950 group none of the alumni with qualifications in Engineering sought their assistance.

5.6. It may be of some interest to analyse the alumni using the employment exchanges according to the degrees obtained by them. It is found that among the greatest users of Employment Exchanges are alumni with B.A. Pass, M.A. Economics-Com.-Maths. Education and B.Com. Among those who make less use of the exchange are included alumni with qualifications in Nursing, Medicine, Engineering, Foreign Language, M.A. Languages, M.A. Social Work, Law and Proficiency in Law, and Library Science. The following table gives the degree-wise distribution of the alumni using the Employment Exchange :

TABLE 58

Percentage distribution of the alumni registered with an employment exchange for the present employment according to degree obtained.

Degree	1954	1950
1. B.A. Pass	14.5	16.2
2. B.Sc. Pass	5.6	5.9
3. B.Com.	10.1	4.4
4. B.A. Hons.	3.4	..
5. B.Sc. Hons.	3.1	7.3
6. M.A. Languages	2.5	5.9
7. M.A. Hist.-Pol. Sc.-Phil.	4.8	7.3
8. M.A. Eco.-Maths.-Com.	11.2	16.2
9. M.A. Social Work	2.2	1.5
10. M.Sc.	10.4	8.8
11. Library Science	0.8	1.5
12. Law	8.7	4.4
13. Prof. in Law	9.5	5.9
14. Education	7.3	11.7
15. Nursing	0.3	..
16. Medicine . . . . .	..	1.5
17. Technology	3.9	..
18. Foreign Languages	1.7	1.5
TOTAL	100.0	100.00

The above analysis may be compared with a similar analysis made by the D.G.E.&T. of all the graduates registered with employment exchanges in May, 1957. The table below is reproduced from the data given in the *Pattern of Graduate Unemployment**:

TABLE 59

Percentage distribution of the unemployed graduates registered in the Employment Exchanges (All India Live Register) in May, 1957, according to the degrees obtained.

Degree	Percentage
B.A.	48.5
B.Sc.	22.7
B.Com.	12.8
B.A. Hons.	1.9
B.Sc. Hons.	0.7
B.Com. Hons.	0.1
M.A.	7.2
M.Sc.	2.5
M.Com.	1.7
M.B.B.S/M.B/M.S	0.6
B.E/A.M.I.E/B.Sc.(Eng.)	1.0
Others	0.3
TOTAL	100.0

Although the two analyses are not strictly comparable owing to difference in the period of registration, it is interesting to note that among the graduates on the All India Live Register of the Employment Exchanges over 70 per cent are constituted by B.A. and B.Sc.-degree holders as against 20 per cent in case of the alumni of Delhi University. On the other hand alumni with M.A. and M.Sc. degree and technical qualifications of the Delhi University make greater use of Employment Exchange than is shown by the All India figures.

*Employment and Unemployment Studies No. 1 *The Pattern of Graduate Unemployment*, New Delhi, December 1957, page 4.

5.7. Examination of the data relating to the registration of the alumni with the Employment Exchange to their occupation at the time of the Survey revealed that the percentage of the registrants was the highest among Clerical workers. This is shown in the following table :

TABLE 60

Percentage of alumni who were registered with the Employment Exchange before securing present employment according to present occupation.

Occupation	1954			1950		
	Total No.	Registered No.	Percentage	Total No.	Registered No.	Percentage
<i>I. Professional, technical and related workers</i>	586	148	35.3	266	35	13.2
1. Engineers	20	..	..	8	..	..
2. Physical Scientists	3	1	33.3	6	..	..
3. Medical Workers	27	2	7.4	10	2	20.0
4. Teachers	170	39	22.9	107	10	9.3
5. Jurists	124	11	8.9	57	3	5.3
6. Social Scientists	50	10	20.0	26	3	11.5
7. Artists & Writers	2	..	..	..	..	..
8. Tech. Assistants	190	85	44.7	52	17	32.7
<i>II. Administrative Workers</i>	52	12	23.1	37	3	8.1
<i>III. Clerical and related workers</i>	393	184	46.8	89	27	30.3
<i>IV. Sales Workers</i>	87	12	13.3	32	3	9.4
<i>V. Others</i>	31	4	12.9	18	1	5.6
1. Farm workers . . . . .	..	..	..	2	..	..
2. Transport workers	3	1	33.3	..	..	..
3. Craftsmen	4	..	..	2	..	..
4. Service workers	8	..	..	8	..	..
5. Armed Forces	5	1	20.0	4	..	..
6. Apprentices	11	2	18.2	2	1	50.0
TOTAL	1149	360	31.3	442	69	15.6

It can be seen that in case of Clerical workers about half the alumni of the 1954 group and one-third of the 1950 group were registered with an exchange. The proportion of registrants was also significant for Professional

and Technical workers and Administrative workers. The percentage of registrants among Sales workers was low because a large number were engaged in their own or family business and had never sought paid employment.

It will be of interest to observe from the breakdown of the Professional and Technical workers that the proportion of the registrants was very high among those who were engaged as Technical Assistants and Teachers and was low in case of Legal workers, Engineers, Medical workers, Artists and Writers.

To conclude, among all the means used for securing employment, the use of contacts stands out as the one most extensively adopted. The alumni who had scientific, technical and professional education had a tendency to compete openly through job advertisements, employment exchanges, and public service commission whereas those who had general education or specialised in the field of Law exploited their personal and family contacts. Further, those getting a good division used the former means whereas those who got lower division had to resort to greater use of contacts.

6. Employment within the field of specialisation :

6.1. An attempt was made in this Survey to obtain an indication of the utilization of education in employment by ascertaining how many of the alumni under investigation were employed in the field in which they had specialized. Determination of this point is not a simple matter as objective criteria for employment within the field of specialization are not easy to formulate. In many cases, job designations are not good indicators of employment within the field. For example, a graduate with qualifications in statistics employed as a statistical assistant may not be considered as employed within the field if his duties do not go beyond simple computations. A person with an engineering degree or diploma employed as a section officer in a Government department may or may not be considered as employed within the field, depending upon the nature of his duties and the amount of time he has to devote to non-technical aspects of his job. To avoid such difficulties, it was considered advisable to use the subjective criterion, that is, to leave it to the alumni themselves to say whether or not they are employed within the field of their specialization.

6.2. As B.A. Pass and B.Sc. Pass degrees are regarded as general degrees, this information was not sought from alumni whose university education terminated with these degrees. It is however likely that some of them may have obtained a non-university qualification after their graduation. Some of them, particularly among the B.Sc. degree holders, may have been in an employment in which one or more of the subjects studied by them may be directly useful. Hence the question of employment within the field may be pertinent in case of some of these degree holders.

Although data on this point was collected in respect of all employments held by the alumni, the estimate has been given for employment at the time of investigation only. It was found that as many as one-fifth of the alumni of the 1950 group and one-third of the alumni of the 1954 group are not

in their field of specialization. The following table gives the estimate in terms of percentages :

TABLE 61
Alumni within the Field of Specialization

Year Group	Alumni in the field of specialization	Alumni not in the field of specialization
1954	67.4 per cent	32.6 per cent
1950	79.0 per cent	21.0 per cent

The greater proportion in case of the alumni of the 1950 group than in case of those of the 1954 group suggests that with the passage of time more and more of the alumni were able to find employment within their field of specialization.

6.3. We may now examine the relationship of education with employment in the field of specialization and see whether the incidence of employment outside the field varies with the degree obtained. The following table gives the distribution of alumni employed outside the field of specialization according to education :

TABLE 62
Percentage distribution of alumni employed outside the field of specialization according to education.

Last Examination passed	Alumni outside the field of specialization (Percentages)	
	1954	1950
B.Com.	51.0	28.0
B.A. Hons.	55.0	40.0
B.Sc. Hons.	29.0	28.0
M.A. Languages	23.0	9.0
M.A. Hist.-Pol. Sc.-Phil	45.0	37.0
M.A. Econ.-Com.-Maths	30.0	37.0
M.A. Social Work	12.0	14.0
M.Sc.	18.0	11.0
Library Science	9.0	25.0
Law	44.0	26.0
Prof. in Law	34.0	23.0
Education	18.0	6.0
Nursing	20.0	..
Medicine	9.0	..
Technology	20.0	..
Foreign Languages	24.0	..

It may be observed from the above table that the incidence of employment outside the field of specialization is on the whole quite pronounced in case of alumni with B.Com., B.A. Hons., B.Sc. Hons. M.A. Hist.-Pol. Sc.-Phil., M.A.Econ.-Com.-Maths, Law and Prof. in Law degrees. The incidence is markedly low in all professional degrees except Law.

We have seen that the total incidence of employment outside the field is greater in respect of the 1954 group than for the 1950 group. When the incidence among the two groups is examined with reference to degrees obtained, it is found that the greater incidence in case of the 1954 group occurs among all degrees except M.A. Eco.-Com.-Maths, M.A. Social Work and Library Science. This feature probably suggests that the opportunities for employment in these fields of specialization were more for the 1954 group than for the 1950 group.

6.4. Another important question to consider is the relationship of employment in the field of specialization to the "class" obtained in the examination or the specialized degree. It is assumed that the graduates with higher "classes" tend more to find employment in their field than graduates with lower "classes". This hypothesis is borne out by our study as shown in the table given below:—

TABLE 63

Percentage distribution of alumni employed in the field of specialization according to class obtained in the last examination passed.

Class obtained in the last examination	Alumni in the field of specialization	
	1954	1950
1st Class	89.0	76.2
2nd Class	67.9	78.4
3rd Class	47.7	65.2

It can be seen from the table that in case of the alumni of the 1954 group, employment in the field of specialization increases directly with the class obtained. This is however not true in case of the alumni of the 1950 group as the percentage of those employed in the field is a little greater for the 2nd class than for the 1st class. Also the range between the percentages of those in the 1st class and those in the 3rd class is smaller for the 1950 group than for the 1954 group. This difference indicates that with the passing of years the division is of lesser value in obtaining employment in the field of specialization.

7. Employment Mobility :

7.1. The previous section gives an account of the various aspects of the employment held by the alumni at the time of the Survey. It is desirable at this stage to study mobility in employment by considering how frequent, the alumni had changed their employment. As the duration of

their employment at the time of investigation also throws some light on employment mobility; data on this point have also been presented in this section.

For the purposes of the Survey change in employment has been defined to occur as a result of change in any one or more variables, which are, employment status, occupation (designation), and employing agency. It also includes change in designation arising out of departmental promotion. While interpreting changes in employment, it may well be borne in mind that for most of the alumni the change was for the better in the sense that the new employment carried higher salary; a better designation or occupation, or a larger measure of security.

7.2. The analysis of the relevant data revealed that the number of employments held by the alumni upto the time of the Survey was in some cases more than seven and in a solitary case obtained in the 1954 group it was as high as ten. This is shown in the following table :

TABLE 64

Distribution of the alumni according to the number of employments held.

No. of employments held	1954		1950	
	No.	Percentage	No.	Percentage
Nil	167	12.1	16	3.3
One	549	39.8	156	32.4
Two	358	25.9	144	29.9
Three	177	12.8	88	18.3
Four	80	5.8	33	6.8
Five	33	2.4	33	6.8
Six	8	0.6	7	1.5
Seven	6	0.4	3	0.6
Eight and above	3	0.2	2	0.4
TOTAL	1381	100.0	482	100.0

It will be seen from the above table that about one-eighth of the alumni of the 1954 and a smaller proportion of the 1950 group had never been in employment till the time of the inquiry. The highest proportion of the alumni, 40 per cent of the 1954 group and 32 per cent of the 1950 group had been in the same employment throughout their occupational career. In other words, they were unable to find better employment and had to stick to the same job.

It will also be observed that the proportions of the alumni who had never been employed or who had never changed employment were smaller for the 1950 group than for the 1954 group. Those who had 2, 3 or more employments formed a higher proportion of the former group. This indicates that the alumni of the 1950 group had changed employment more frequently than those of the 1954 group because they had a longer occupational career.

7.3. We may now examine the relationship between education and the number of employments held by the alumni and see whether the mobility of employment was influenced by the degree obtained. The following table presents the data:

TABLE 65

Last Examination	Total No.	1954			1950			
		Number of employments			Total No.	Number of employments		
		Nil	One	Two or more		Nil	One	Two or more
			Percentage			Percentage		
1. B.A. Pass	162	21.6	40.2	38.2	47	12.8	36.2	51.0
2. B.Sc. Pass	59	11.9	50.8	37.3	14	7.1	42.9	50.0
3. B. Com.	89	1.1	46.1	52.8	26	3.8	53.9	43.3
4. B.A. Hons.	65	15.4	53.9	30.7	21	19.0	33.3	47.7
5. B.Sc. Hons.	29	10.3	41.4	48.3	21	4.8	33.3	61.9
6. M.A. Languages	76	22.4	40.8	36.8	39	5.1	38.5	56.4
7. M.A. Hist.-Pol. Sc.-Phil.	77	24.7	40.2	45.1	22	4.5	40.9	54.6
8. M.A. Eco.-Com.-Maths.	137	12.4	43.8	43.8	50	..	36.0	64.0
9. M.A. Social Work	23	8.7	17.4	73.9	8	..	..	100.0
10. M.Sc.	86	10.5	51.3	38.2	29	..	27.6	72.4
11. Library Science	11	..	27.3	72.7	8	..	..	100.0
12. Law	127	13.4	37.0	49.6	38	..	28.9	71.1
13. Prof. in Law	199	3.0	37.2	59.8	62	..	40.3	59.7
14. Education	111	14.4	28.8	56.8	61	..	21.3	78.7
15. Nursing	6	..	33.3	66.7	2	..	50.0	50.0
16. Medicine	29	6.9	6.9	86.2	10	..	10.0	90.0
17. Technology.	49	6.1	32.7	61.2	12	..	16.7	83.3
18. Foreign Languages	46	6.5	43.5	50.0	12	..	16.7	83.3
TOTAL	1381	12.1	39.8	48.1	482	3.3	32.3	64.4

It is seen from the table that the proportion of those who had no employment was very high among the alumni who had general education, particularly those who had terminated their education with B.A. Pass, B.A. Hons., and M.A. Languages, History, Political Science and Philosophy. This was

due largely to the fact that a large number of women had not sought employment after completion of their education and quite a few of the remaining alumni were found continuing their education at the time of the Survey and were not in search of employment.

It will also be observed that mobility of employment is higher for the alumni who specialized in the field of Medicine, Technology, Library Science, Social Work, Education and Nursing than for the alumni who had other types of education. It suggests that the alumni who had technical and professional education had wider employment opportunities and got higher value in the employment market as a result of which they either got more frequent departmental promotions or could find better employment in the course of time.

7.4. It may be of some interest to examine the duration of the present employment of the alumni and find out whether it had any bearing on their employment mobility.

As was expected, the analysis of the data showed that the present employment that is, employment at the time of investigation was of longer duration for the alumni of the 1950 group than for those of the 1954 group. Of the alumni who were found employed at the time of the Survey only 9 per cent of the former group as against 43 per cent of the latter group had been engaged in their present employment for less than one year, only 26 per cent of the former group as against 43 per cent of the latter group had been employed for a period ranging from one to three years, and only about 18 per cent of the alumni of the 1950 group as compared with 29 per cent of those of the 1954 group had been in the present employment for three to five years. Those who had been continuing in the present employment for more than five years formed 44 per cent of the 1950 group as against only 7.5 per cent of the 1954 group. The position regarding different types of graduates is given in the following table :

TABLE 66

Percentage distribution of 1949 alumni of the 1954 group and 442 alumni of the 1950 group, who were employed at the time of Survey according to the last examination passed and duration of present employment.

Last examination	Duration of present employment (years)						Total
	less than 1	1-3	3-5	5-7	7 & more	N.A.	
A-1954							
1. B.A. Pass	9.1	51.3	32.2	1.7	4.9	0.8	100.0
2. B.Sc. Pass	14.3	47.0	34.7	2.0	..	2.0	100.0
3. B.Com.	15.7	53.0	28.9	..	1.2	1.2	100.0
4. B.A. Hons.	22.7	34.0	39.7	1.8	..	1.8	100.0

TABLE 66—*contd.*

Last examination	Duration of present employment (years)						Total
	less than 1	1-3	3-5	5-7	7 & more	N.A.	
5. B.Sc. Hons.	16.0	40.0	40.0	..	4.0	..	100.0
6. M.A. Languages	22.0	54.0	24.0	..	..	..	100.0
7. M.A. Hist.-Pol. Sc.-Phil.	24.5	45.0	26.5	2.0	2.0	..	100.0
8. M.A.Eco.-Com.-Maths.	34.8	43.7	16.1	..	0.9	4.5	100.0
9. M.A. Social Work	31.6	47.4	21.0	..	..	..	100.0
10. M.Sc.	19.2	54.8	21.9	..	4.1	..	100.0
11. Library Science	27.3	18.2	27.3	18.2	9.0	..	100.0
12. Law	15.0	36.4	26.2	8.4	11.2	2.8	100.0
13. Prof. in Law	13.9	29.5	37.5	5.8	11.2	2.1	100.0
14. Education	25.6	47.8	18.9	1.1	6.6	..	100.0
15. Nursing	33.3	33.3	16.7	..	16.7	..	100.0
16. Medicine	28.0	48.0	12.0	8.0	4.0	..	100.0
17. Technology	17.5	34.8	39.2	2.1	2.1	4.3	100.0
18. Foreign Languages	7.0	39.5	32.5	4.7	11.6	4.7	100.0
TOTAL	18.9	42.7	28.6	2.5	5.0	2.3	100.0
B-1950							
1. B.A. Pass	5.7	20.0	20.0	25.7	28.6	..	100.0
2. B.Sc. Pass	16.7	16.7	16.7	33.3	16.7	..	100.0
3. B.Com.	4.0	20.0	8.0	24.0	44.0	..	100.0
4. B.A. Hons.	..	31.2	25.0	6.3	31.2	6.3	100.0
5. B.Sc. Hons.	5.0	25.0	15.0	35.0	15.0	5.0	100.0
6. M.A. Languages	5.7	17.1	14.3	28.6	34.3	..	100.0
7. M.A. Hist.-Pol. Sc.-Phil.	5.0	30.0	25.0	20.0	20.0	..	100.0
8. M.A. Eco.-Com.-Maths.	6.2	39.7	14.6	27.1	6.2	6.2	100.0
9. M.A. Social Work	14.3	42.8	28.6	14.3	..	..	100.0
10. M.Sc.	10.3	38.0	17.2	20.7	10.3	3.5	100.0
11. Library Science	12.5	50.0	12.5	12.5	12.5	..	100.0
12. Law	19.4	16.7	11.1	19.4	25.1	8.3	100.0
13. Prof. in Law	6.7	15.0	21.7	30.0	23.3	3.3	100.0
14. Education	15.8	24.6	12.3	21.0	24.6	1.7	100.0
15. Nursing	..	100.0	..	..	..	..	100.0
16. Medicine	..	44.5	33.3	..	11.1	11.1	100.0
17. Technology	27.3	27.3	27.3	18.1	..	..	100.0
18. Foreign Languages	..	25.0	41.7	8.3	16.7	8.3	100.0
TOTAL	9.0	25.6	17.9	22.2	21.7	3.6	100.0

It will be observed in case of the 1950 group that the proportion of the alumni who have been in their present employment for less than one year, for one to three years, and for three to five years was higher among those who had professional and technical education than among those who had general education. Further the proportion of those with present employment of five to seven years and of more than seven years was higher among the alumni who had general education. Figures for the alumni of the 1954 group do not form as clear a picture though they exhibit similar trends.

The analysis therefore lends support to the conclusion reached in para 7.3 that the alumni who had technical and professional education were more mobile in employment than those who had general education. They changed employments more frequently and as a result their present employment was of shorter duration.

8. Shifts in Employment :

8.1. In the previous section we obtained a general picture of mobility and immobility in employment. We observed that only 48.1 per cent of the alumni of the 1954 group and 64.4 per cent of the alumni of the 1950 group experienced mobility in employment. In this section we propose to study the nature of mobility in terms of shifts in occupation, shifts in employing agency, and shifts in employment status.

8.2. Shifts in Occupation: We may begin our study of shifts in occupation with a definition of such change. For the purposes of this a shift in occupation is considered to have occurred when the change is from one occupational "division" to another occupational "division" of the National Classification of Occupations. However, in case of Division 'O' namely, Professional and Technical Workers, we have considered the change from one occupational "group" to another occupational "group" also as constituting a shift in occupation. Thus an individual changing his status from clerical and related worker to administrative and executive worker is said to have undergone a change in occupation. Similarly, a technical assistant in a physical laboratory becoming a physical scientist involves a shift in occupation.

A shift in occupation may occur with or without a corresponding shift in employing agency or employment status. Thus a departmental promotion involving a change from one occupational division to another is considered as a change in occupation. On the other hand, a change in employing agency does not necessarily mean a change in occupation. For example, an economic investigator serving in a Government department, when he takes up the same job in a private firm does not change his occupation.

As stated in another section, some of the alumni had several changes in employment, the number of changes in a few cases going beyond seven. Most of the alumni had, however, only one change in employment. In examining the shifts in occupation, we have considered only the change as between first employment and employment at the time of investigation (present employment). The intermediate shifts, as for example, changes from second employment to third employment and from third employment to fourth employment, etc. have not been considered. Thus the account of shifts, which follows, gives only an overall picture of the occupational change.

Of the 696 alumni of the 1954 group who had a change in employment, 227 or 32.6 per cent had a change of occupation. Similarly, of the 326 alumni of the 1950 group who had a change in employment, 143 or 43.8 per cent had a change in occupation. The larger proportion of those who could change their occupation in case of the 1950 group is of course due to the longer employment history of these alumni.

8.3. We may now investigate the directions in which the occupational changes occurred in case of the alumni of the two year groups. The following table gives the number of occupations to which alumni changed from their occupation in their first employment :

TABLE 67

Number of directions (occupations) in which changes took place in various occupational groups

Occupation in the first employment	No. of directions (occupation) in which changes occurred
Clerical workers	12
Sales workers	11
Teachers	9
Administrative workers	8
Technical Assistants	7
Service workers	4
Medical workers	3
Transport workers	3
Armed Forces	3
Physical Scientists	3
Engineers	1
Social Scientists	2
Farm workers	1

Among the different directions of change revealed by this table, it may be noticed that the variety of occupational changes was quite marked in case of Clerical and Related workers, Sales Workers, Administrative Workers, Technical Assistants, and Teachers.

8.4. An examination of the changes in occupation of those alumni who were Clerical and Related Workers in their first employment shows that quite a large percentage of them were able to get out of this occupation and improve their occupational status. Of the 293 alumni of the 1954 group who began their career as Clerical and Related Workers, 114 or 38.2 per

cent could change their occupation. Of the 99 alumni of the 1950 who began their career in this occupation, 61, that is, 62 per cent could change their occupation. The following table gives a picture of the occupational changes undergone by them :

TABLE 68

Distribution of the alumni who were Clerical and Related Workers in their first employment according to their present occupation

Occupation in the employment at the time of investigation	1954 (N=114)	1950 (N=61)
Legal workers	30	13
Technical Assistants	27	10
Administrative workers	10	14
Teachers	18	9
Social Scientists	13	9
Sales workers	6	2
Engineers	5	..
Transport workers	1	1
Service workers	1	2
Physical Scientists	0	1
Medical workers	2	..
Production workers	1	..

It is observed from the above table that the change from Clerical and Related workers to Legal Workers, Administrative Workers, Technical Assistants and Teachers occurred more frequently than other changes. The change to Administrative Workers is greater in case of the 1950 group than in case of the 1954 group on account of the longer employment history of the former group. The change to Engineers in case of the 1954 group is mostly in respect of alumni with qualification in Technology who were employed as Section Officers in the C.P.W.D. Department. The fact that they changed to engineering occupation reflects the aversion of such workers to work in the administrative departments.

8.5. The study of the alumni who began their career as Sales Workers also shows a diversified pattern of change. Of the 37 alumni of the 1954 group who had this occupation in their first employment, 27 or 73.0 per cent changed their occupation. In case of the 1950 group out of 26 alumni who began as Sales Workers, 16 or 61.5 per cent changed their occupation

Thus on the whole, more of the Sales Workers could change their occupation than the Clerical Workers. The table showing the pattern of change among Sales Workers is given below :

TABLE 69

Distribution of the alumni who were Sales Workers in their first employment according to their present occupation

Occupation in the employment at the time of investigation	1954 (N=27)	1950 (N=16)
Clerical workers	16	7
Legal workers	4	2
Physical Scientists . . . . .	..	1
Teachers . . . . .	..	1
Medical workers	1	..
Social Scientists	1	1
Technical Assistants	1	2
Administrative workers	1	1
Transport workers	1	..
Service workers	2	..
Armed Forces . . . . .	..	1

It may be observed that the greatest amount of shift in case of the Sales Workers has occurred in the direction of Clerical Workers. It is also important to note that there is a greater flow from Sales Workers to Clerical Workers than from Clerical Workers to Sales Workers. This suggests that sales occupation in our country is not sufficiently attractive for University graduates. The fairly large number of occupations to which the Sales Workers changed, shows that alumni with different qualifications take to sales work in the beginning of their career but later change the occupations for which they feel they are properly qualified.

8.6. The change from Administrative work to other occupations is less diversified though quite appreciable in size. Out of 23 alumni of the 1954 group who started their career as Administrative Workers, 16 or 70 per cent changed their occupations. Of the 13 such alumni of the 1950 group as many as 11 *i.e.*, 84.6 per cent changed their occupation. Although the change is quite large in size, it must be stated that the flow from other occupations into Administrative work is larger than the flow from Administrative work into other occupations. This is presumably so because a large number of

technically qualified persons take up administrative posts in Government departments for security and other favourable conditions of Government jobs. The distribution of the alumni who changed from Administrative work to other occupations is given below :

TABLE 70

Distribution of the alumni who were Administrative Workers in their first employment, according to their present occupation

Occupation in the employment at the time of investigation	1954 (N=16)	1950 (N=11)
Teachers	4	2
Clerical workers	6	3
Legal workers	2	2
Medical workers	1	0
Social Scientists	1	1
Sales workers	1	2
Production workers	1	0
Farm workers	0	1

The changes from Administrative Workers to Teachers, Medical Workers, Legal Workers, Social Scientists may not be considered as significant occupational changes. They represent rather the changes in employing agencies rather than strictly occupational changes as the alumni who had administrative designations in the administrative departments of the Government get occupational designations in their later employment. This is, however, not true of changes into non-professional type of occupations.

8.7. The changes undergone by alumni who were Technical Assistants in their first employment is of special interest because in their cases, the changes show largely upward occupational mobility. As mentioned in a previous section of this chapter, this category includes all those who join technical and professional work at a junior level. It includes junior workers in diversified fields such as physical science, natural sciences, social sciences, etc. Hence the pattern of occupational change in their case is highly diversified as shown in the table on the next page. Although the change is diversified, the size of the change is not so large. Of the 96 alumni of the 1954 group who began their career as Technical Assistants, only 37 *i.e.*, 38.5 per cent could change their occupation. Similarly among the 34 such alumni of the 1950 group, 15 or 44.1 per cent could change their occupation.

TABLE 71

Distribution of the alumni who worked as Technical Assistants in their first employment according to their present occupation.

Occupation in the employment at the time of investigation	1954 (N=37)	1950 (N=15)
Teachers	9	6
Administrative workers	6	2
Engineers	6	2
Clerical workers	9	1
Physical Scientists	0	2
Legal workers	4	0
Social Scientists	2	2
Service workers	1	0

It may be noted that although a large percentage of these alumni were able to climb to the next stage in the occupational ladder as shown by figures for Engineers, Physical Scientists, Social Scientists, Legal Workers and Administrative Workers, there were some alumni who did not rise in their occupation. In this connection, the change of 9 alumni of the 1954 group into Clerical Workers is rather significant.

8.8. The pattern of change in case of the alumni who began their occupational life as Teachers is diversified but not appreciable in size. The large variety of occupations to which they change reflects the poor conditions of employment prevailing in this occupation. Of the 144 alumni of the 1954 group who were Teachers in their first employment, 61 or 42.4 per cent could change over to other occupations. Similarly, of the 101 such alumni of the 1950 group, 29 switched over to another occupation. The smaller percentages of those who changed is probably due to large number of women alumni in this occupation who usually do not change their occupation. The following table shows the pattern of change :

TABLE 72

Distribution of the alumni who worked as Teachers in their first employment according to their present occupation

Occupation in the employment at the time of investigation	1954 (N=61)	1950 (N=29)
Technical Assistants	19	6
Clerical workers	17	7
Administrative workers	6	7
Engineers	0	2
Physical Scientists	2	1
Medical workers	0	2
Legal workers	11	2
Social Scientists	4	2
Armed Forces	2	0

The change from Teaching to Engineering, Physical Science, Medicine, Law, Administrative work and Social Science represents the changes in case

of those alumni who were working as teachers in colleges and then changed over as applied workers in their specialised fields. The change from Teachers to Technical Assistants and Clerical Workers is mostly in case of school teachers, many among whom had not taken a degree in Education and had entered the employment market as teachers in private schools.

8.9. In conclusion, it may be said that the variety and size of the occupational changes presented above throw some light on the nature of employment market for the university graduates. Two features are thrown up by the study : firstly, it is unfavourable to the new entrants in the sense that it obliges some of them to accept jobs outside their field and secondly, it is flexible enough to allow considerable mobility.

8.10. Shifts in Employment Status : Of all the alumni, who had a change in employment, it was found that 17.7 per cent of the 1950 group and 14.5 per cent of the 1954 group had a change in employment status. Shifts in employment status, though not as large and as varied as shifts in occupation, are of significance in case of certain educational categories. The following table shows the relationship between education and change of employment status :

TABLE 73

Percentage distribution of the alumni who had a change of Employment Status according to Education

Last Examination Passed	1954 (N=636)	1950 (N=300)
B.A. Pass	8.6	25.9
B.Sc. Pass	5.0	42.9
B.Com.	6.5	18.2
B.A. Hons.	5.9	28.6
B.Sc. Hons.	0.0	23.1
M.A. Languages	0.0	0.0
M.A. History-Pol. Sc.-Philosophy	13.3	15.4
M.A. Eco.-Com.-Maths.	10.5	6.5
M.A. Social work	0.0	0.0
M.Sc.	0.0	5.0
Library Science	0.0	0.0
Law	20.6	40.7
Prof. in Law	49.1	45.7
Education	1.7	4.7
Nursing	0.0	0.0
Medicine	0.0	0.0
Technology	3.3	0.0
Foreign Languages	13.0	18.2

It may be observed that the alumni with professional degrees with the marked exception of Law and Proficiency in Law experienced little or slight change of employment status. Nearly 50 per cent of those with Proficiency

in Law experienced this change. All types of changes are noticed in their case, but a large majority of them changed from employee to self-employed. The change in case of general degree holders *viz.*, B.A. Pass and B.Sc. Pass is also quite marked particularly in case of the alumni of the 1950 group. These alumni changed mostly from unpaid family workers to employees. The alumni with M.A. in Eco-Com-Maths changed from unpaid family workers to employees.

8.11. The table below gives some details of the nature of changes in employment status. It is found that the type of change which occurs most frequently is the change from employee to self-employed, while the next most frequent type of change is from self-employed to employee.

TABLE 74

Percentage distribution of the alumni who had a change of Employment Status according to type of change

Type of Change	1954 (N=92)	1950 (N=53)
From Employer to Self-employed	2.2	3.8
From Employer to Employee	4.3	11.3
From Self-employed to Employer	2.2	1.9
From Self-employed to Employee	27.2	22.6
From Unpaid Family Worker to Employer	1.1	..
From Unpaid Family Worker to Self-employed	3.3	..
From Unpaid Family Worker to Employee	10.8	11.3
From Employee to Employer	5.4	7.5
From Employee to Self-employed	41.3	39.7
From Employee to Unpaid Family Worker	2.2	1.9
TOTAL	100.0	100.0

It may be further noted that among those who changed from self-employed to employees, about two-thirds were Law graduates. These were the lawyers who had in all probability failed to make good as lawyers and were obliged to seek employment.

8.12. Shifts in employing agencies : In order to study changes in the distribution of alumni by different types of employing agencies, data was collected on the first employment as compared with employment at the time of investigation. These were available only for 652 alumni of the 1954 group and 286 alumni of the 1950 group. It was found that, as compared with the employment at the time of investigation, a higher proportion of the alumni in the first employment had been working in private organisations and a smaller proportion in Central Government and quasi-Central Government organisations. There was no appreciable difference so far as the

other types of employing agencies were concerned. The following table presents the data :

TABLE 75

Percentage of alumni working in different types of agencies in the first and the present employment

Type of employing agency	In first employment	In present employment
A-1954		
I. <i>Public Sector</i>	55.0	68.3
1. Central Government	38.6	53.0
2. State Government	10.7	11.9
3. Local Bodies	5.7	3.4
II. <i>Private Sector</i>	36.1	21.7
4. Private Organisations	34.7	20.4
5. Foreign Diplomatic agencies	1.4	1.3
III. <i>Universities</i>	8.9	10.0
TOTAL	100.0	100.0
B-1950		
I. <i>Public Sector</i>	43.0	58.5
1. Central Government	26.9	39.8
2. State Government	11.2	16.2
3. Local Bodies	4.9	2.5
II. <i>Private Sector</i>	47.6	32.5
4. Private Organisations	46.2	31.4
5. Foreign Diplomatic agencies	1.4	1.1
III. <i>Universities</i>	9.4	9.0
TOTAL	100.0	100.0

The Central Government and quasi-Central Government bodies account as a result of the Five Year Plans the governmental and quasi-governmental bodies (particularly Central Government and quasi-Central Government Bodies) were emerging as the main employers of the Delhi University alumni.

8.13. It was further found that the above overall picture of changes in the distribution of employees according to the type of employer was true of most examination categories. So far as the private organisations were concerned, only the examination categories of Nursing, Medicine and Technology failed to show a fall from the proportion of alumni in the first employment to the one at the time of investigation. It may be hypothesized that employment opportunities in private organisations for graduates of these types had not declined.

The Central Government and quasi-Central Government bodies accounted for larger proportions in the employment at the time of investigation as compared to the first employment of alumni in all examination categories except Education, Nursing, Medicine and Technology. Education, Medical and Health services are the main responsibility of State Governments and

consequently the employment opportunities in Central Government bodies for such graduates naturally did not increase but rather decreased from the first employment to the employment at the time of investigation. The position of alumni in the examination categories of Engineering and Technology remained unchanged from the first employment to the employment at the time of investigation.

9. Unemployment :

9.1. No single problem in the field of employment has engaged as much attention of the administrators and educationists of the country as the problem of unemployment among the educated. The Study Group on the Educated Unemployed* set up by the Government of India in September 1955 had estimated that of the 5.5 lakhs. educated persons unemployed in the country in the year 1955, having an educational qualification of matriculation or above, 1.2 lakhs were graduates. As this section is devoted to unemployment among the two particular groups of graduates, it does not throw much light on the overall magnitude of unemployment among graduates. The material provided in this section will be useful in analysing the concept of unemployment among graduates and in understanding the educational and other characteristics of this group of the unemployed.

The nature and extent of unemployment among the graduates has been judged in this study in three ways: (1) the proportion of the unemployed at the time of investigation, (2) the time lag between completion of education and obtaining first employment or the initial period of unemployment, and (3) the total duration of unemployment suffered by the alumni. It is not enough to judge the extent of unemployment by the figures of the unemployed at a given point of time. The time lag between education and employment is also an important measure of unemployment. For a better assessment of unemployment, the initial period of unemployment needs to be supplemented by subsequent spells of unemployment, which gives us our third measure viz., the total period of unemployment suffered. These three measures are particularly useful in making comparative estimates as between graduates of one university and another, as between one type of graduates and another, etc.

In judging unemployment it must be borne in mind that the alumni did not have a uniform period of employment history. At the time of investigation in 1958, the group of 1954 had an employment history of 4 or less years, as several of them proceeded for higher education after obtaining their degree from the University of Delhi in 1954. Similarly, the group of 1950 had an employment history of 8 years or less. Hence the two year groups are not strictly homogenous from the standpoint of employment history. However, it would be safe to presume that the alumni of 1950 group had on an average twice as much employment history as the alumni of the 1954 group.

9.2. The extent of Unemployment : It was found that the proportion of the unemployed at the time of investigation was 7.2 per cent in case of the 1954 group. For the 1950 group this proportion was found to be 3.3

**Outline Report of the Study Group on Educated Unemployed*, Govt. of India, Planning Commission, New Delhi (January, 1956), p. 11.

per cent. Among the 1381 alumni of 1954 group who could be interviewed, 232 were found to be without work at the time of investigation. Of these 133 were not seeking employment and hence only 99 could be considered unemployed. Among the alumni of the 1950 group of the 482 who could be interviewed 40 were found to be without work. Of these 24 were not seeking work and hence only 16 could be regarded as unemployed. Thus the number of those not seeking employment in both the year groups was greater than the number of unemployed at the time of investigation. The comparative picture is shown in the table below :

TABLE 76

Alumni Unemployed

Year group	Total No. of Alumni interviewed	Alumni without employment	Alumni not seeking employment	Alumni unemployed	Percentage of unemployed
1954 . . .	1381	232	133	99	7.2
1950 . . .	482	42	24	16	3.3

It is seen from the above table that the alumni of the 1950 group having twice as much employment history as those of the 1954 group have half as much unemployment. Although the difference in the proportions is largely a matter of duration of employment history, the influence of other factors such as the nature of employment market around 1950 and 1954 may also be taken into account. The sex composition of the unemployed shows that in both the year groups the proportion of unemployed was more among women than among men. Out of a total of 180 women alumni of the 1954 group, unemployed or seeking employment, 38 or 21.1 per cent were found unemployed. Similarly, out of a total of 57 women alumni of the 1950 group, 7 or 17.5 per cent were unemployed. The corresponding percentages for men alumni are 5.7 and 2.2 for the 1954 and the 1950 groups, respectively. The larger proportion of the unemployed among women points to the greater difficulty experienced by them in finding employment. This may be attributed to a variety of reasons including the concentration of their choice of employment over a narrow occupational range, geographical immobility on account of the desire to remain near home, and the tendency on the part of those who engross themselves in domestic life and do not seek employment in the initial stages but enter into employment market later when the domestic conditions permit them.

Judging unemployment by the second measure *viz.*, duration of initial unemployment, it is found that about 10 to 20 per cent were already employed before they completed their education, and about 41 per cent found employment in less than 3 months. In other words, it may be said that about 50 to 60 per cent were unemployed for less than three months. The

table below gives a picture of the period of initial unemployment :

TABLE 77
Duration of initial unemployment
(Figures in percentages)

	1954	1950
	N=1062	N=398
Employed during the period of education	10.1	18.1
Less than a month	32.5	33.7
Between 1—3 months	9.0	7.0
Between 3—6 months	14.3	10.8
Between 6—9 months	12.0	8.3
Between 9—12 months	4.2	2.5
Between 1 year to 1½ years	10.2	10.3
Between 1½ year to 2 years	3.8	3.0
Between 2 years or above	3.9	6.3
TOTAL	100.0	100.0

This table includes only those alumni who were employed during their educational career and had no initial unemployment as well as those who were without work for some time after the completion of their education and sought employment during this period. It excludes all those who were not seeking work during this period for various reasons.

It may be seen from the above table that nearly 80 per cent of the alumni could find employment within a year after the completion of education. The remainder, only about 20 per cent, had to remain unemployed for over a year.

On examining the extent of unemployment in terms of the total duration of unemployment suffered after completion of education, it is found that about 45 to 50 per cent of the alumni had to remain unemployed for less than 3 months and about 25 per cent had suffered unemployment ranging from 3 months to one year. This is shown in the following table :

TABLE 78
Total duration of unemployment
(Figures in percentages)

	1954	1950
	N=1080	N=405
Nil	4.1	10.9
Less than 3 months	40.5	38.0
Between 3 and 6 months	13.7	10.4
Between 6 months and 1 year	19.4	14.3
Between 1 year and 1½ years	11.8	11.1
Between 1½ years to 2 years	4.3	4.2
Between 2 years and 3 years	6.1	10.6
Between 3 years and 4 years . . . . .	..	..
Between 4 years and above	0.1	0.5
TOTAL	100.0	100.0

It may be observed that about 75 per cent of the alumni of both the groups had a total unemployment of less than one year. We have already seen that about 80 per cent of the alumni had an initial unemployment ranging over the same period. The small difference between these two figures suggest that initial unemployment was much more important in determining the duration of unemployment and that unemployment during the period of employment was not so important. Nevertheless it did exist to some extent as can be seen from the following table which is derived from the previous table :

TABLE 79
Duration of Unemployment
(Figures in percentages of those suffering unemployment)

Period	1954 group		1950 group	
	Initial	Total	Initial	Total
1 year to 1½ years	10.2	11.8	10.3	11.1
1½ years to 2 years	3.8	4.3	3.0	4.2
More than 2 years	3.9	6.2	6.3	9.1

9.3. Unemployment and Education : After reviewing the broad trends of unemployment among the alumni, we may study the relationship of unemployment to the various types of university education. In other words, our attempt will be to find out which degree holders are liable to greater or less unemployment. The Unemployment and Employment Study on the Pattern of Graduate Unemployment* conducted by the D.G.E. & T. has investigated this point with the aid of the figures of the unemployed on the Live Registers of the Employment Exchanges. According to that study the greater percentages of unemployed are drawn from those with Bachelor Pass degrees. The data of the present study shows that the higher percentages are of those with M.A. and other professional degrees. Only the figures of the 1954 group are compared with corresponding figures of the D.G.E. & T. study as the frequencies of the 1950 group are too small for the purposes of comparison.

TABLE 80
Distribution of unemployed graduates on the Live Register of Employment Exchanges and according to present study

Last examination passed	Percentage of unemployed registrants on the Live Register	Percentage of unemployed alumni of 1954 group
B.A.	48.5	9.1
B.Sc.	22.7	5.1
B.Com. & B.Com. Hons.	12.9	3.0
B.A. Hons.	1.9	4.1
B.Sc. Hons.	0.7	1.0
M.A.	7.2	40.4

**The Pattern of Graduate Unemployment, Employment and Unemployment Studies*, No. 1, N. E. S., Ministry of Labour and Employment, D. G. E. & T., New Delhi (December, 1951), p. 4.

TABLE 80—*Contd.*

Last examination passed	Percentage of unemployed registrants on the Live Register	Percentage of unemployed alumni of 1954 group
M.Sc.	2.5	3.0
M. Com.	1.7	1.0
Others	1.9	33.3
TOTAL	100.0	100.0

In understanding the differences between the two sets of figures, it must be remembered that the Employment Exchange figures represent the graduates of the country as a whole whereas the figures of this study represent only the graduates of Delhi University. The former represent the unemployed graduates who seek employment through the Employment Exchanges whereas the latter represent all the unemployed. From the differences in the above table it appears that unemployment among M.As. and other professional degree holders is quite appreciable but such unemployed do not seek the assistance of Employment Exchanges as much as the Bachelor degree holders do.

The incidence of unemployment among various degree holders can also be studied by finding the percentage of unemployed among the alumni in each examination category. Such examination-wise percentages for the two year groups are given below :

TABLE 81
Relative Incidence of Unemployment

Last examination passed	Percentage unemployed	
	1954 (N=99)	1950 (N=17)
B.A. Pass	5.6	12.8
B. Sc. Pass	8.5	7.1
B.Com.	3.4	..
B.A. Hons.	6.2	..
B.Sc. Hons.	3.4	4.8
M.A. Languages	19.7	2.6
M.A. His.-Pol.Sc.-Phil.	15.6	4.5
M.A. Eco.-Com.-Maths.	9.5	2.0
M.A. Social work.	4.3	..
M.Sc.	3.5	..
Library Science . . . . .	..	..
Law	9.4	2.6
Proficiency in Law Education	4.5	3.2
Nursing	6.3	3.3
Medicine . . . . .	..	..
Technology . . . . .	..	..
Foreign Languages	6.1	8.3
	4.3	..
TOTAL	7.2	3.5

The above table reveals that the pattern of unemployment for the two-year groups is somewhat different. The difference may be partly due to the small frequencies in case of the 1950 group. The pattern for the 1954 group shows that the highest incidence of unemployment is among M.A. Languages followed by M.A. History, Political Science and Philosophy. The holders of M.A. Economics, Commerce and Mathematics and Law degrees come next in the liability to unemployment. The pattern for the 1950 group shows that the holders of B.A. Pass and B.Sc. Pass are most liable to unemployment. It may be inferred that among the higher age groups the incidence of unemployment is more among the Bachelor's degree holders than among Master's degree holders.

The question of relative incidence of unemployment may now be examined from the standpoint of initial unemployment. It has been shown earlier that nearly 20 per cent of the alumni in both the groups had to wait for a period of one year or more before finding their first employment. It is found that larger proportion of such alumni are drawn from holders of Bachelor's degree and Master's degree in Languages and History, Political Science, Philosophy and Law. The following table shows the percentages among different degree holders who had to wait for a year or more before finding their first employment :

TABLE 82

Percentage distribution of the alumni who had to wait for a period of one year or more before finding their employment to the total number in each category

Last examination passed	1954	1950
B.A. Pass	25.7	25.0
B.Sc. Pass	46.7	10.0
B.Com.	23.3	17.6
B.A. Hons.	28.6	46.6
B.Sc. Hons.	15.4	11.7
M.A. Languages	8.6	26.3
M.A. His.-Pol.Sc.-Phil.	26.8	15.0
M.A. Eco.-Com.-Maths.	18.4	20.0
M.A. Social work	9.5	0.0
M.Sc.	10.4	14.8
Library Science	9.1	0.0
Law	18.8	37.9
Proficiency in Law	17.4	18.4
Education	12.6	20.4
Nursing	0.0	..
Medicine	0.0	11.1
Technology	2.2	8.3
Foreign Languages	10.0	8.3

It may be seen from the table that very few of the alumni with professional qualifications such as Library Science, Medicine and Technology had to wait for this long period.

When the relative incidence of unemployment is studied from the standpoint of total duration of unemployment, more or less the same degree-holders were found liable to long duration of unemployment as in the case of long periods of initial unemployment. From Table No. 78 we observe that on the whole, 11.1 per cent of the alumni of the 1950 group and 6.2 per cent of the alumni of the 1954 group had to suffer a total period of the unemployment of over the two years. The following table gives the percentages among the degree holders who had to suffer a total period of unemployment of over two years :

TABLE 83

Percentage of alumni who had a total period of unemployment of over two years to the total number in each examination category

Last examination passed	1954	1950
B.A. Pass	7.9	17.0
B.Sc. Pass	13.3	10.0
B.Com.	2.7	5.9
B.A. Hons.	5.7	22.2
B.Sc. Hons.	7.4	5.3
M.A. Languages	1.8	11.4
M.A. His.-Pol.Sc.-Phil.	12.3	10.0
M.A. Eco.-Com.-Maths.	2.7	11.1
M.A. Social work	4.3	..
M.Sc.	2.6	7.1
Library Science	8.3	12.5
Law	10.6	10.7
Proficiency in Law	11.9	10.5
Education	3.2	12.3
Nursing . . . . .	..	..
Medicine . . . . .	..	..
Technology	2.1	0.8
† Foreign Languages	2.6	..

It may be noted that the incidence of unemployment is somewhat less as judged by the total period of unemployment than by the initial period of unemployment in case of B.Com., B.A. Hons., and M.A. Languages of the

1954 group, and B.Sc. Pass, B.Com., M.A. History-Pol. Sc.-Philosophy of the 1950 group. This would suggest that although these alumni find difficulty to obtain their first employment, they suffer less from unemployment subsequently. The total duration of unemployment is nil or much below the average in case of all other professional degree holders except in case of Education and Library Science.

9.4. Reasons for Unemployment: Reasons for unemployment were sought directly from the concerned alumni. Although the reasons may be considered as subjective in nature, they are of some value in understanding the phenomenon of unemployment. The following table gives the distribution of the stated reasons :

TABLE 84

Reasons for unemployment according to sex

	Men		Women	
	1954 (N=60)	1950 (N=9)	1954 (N=38)	1950 (N=7)
1. No influence or approach	20	3	6	..
2. Required type of job not available.	18	2	11	3
3. Tight employment situation	9	1	9	3
4. Passed the examination in 3rd division.	4	..	3	..
5. Overage for the employment sought	.. 2	1	..	..
6. Job not available nearby . . . . .	.. 1	..	3	1
7. Bad luck	2	..	..	..
8. Made efforts recently	1	1	3	..
9. Serious efforts not made	3	1	3	..

It may be noticed that among the men, the largest majority gives the reason that they had no influence. The next most frequently stated reason is that the required type of job is not available. By this, they mean that either the job in their field of specialisation is not available, or it is not available at the remuneration that they expect. Among the women the reason of "no influence" was not so frequently stated as the "unavailability of the required type of job". It is interesting to note that among the 29 alumni who gave "no influence" as the reason, 9 were seeking an administrative or executive position.

9.5. An attempt was made to investigate whether their income expectation had any relationship with their state of employment. The following table gives an account of the income expected of the unemployed :

TABLE 85

Distribution of unemployed alumni according to education and income expected

Degree	Income expected (Rs.)				
	100—200	200—300	300—500	500—750	750—1000
A.1954					
N=92					
B.A., B.Sc. Pass	5	5	3	..	..
B.A., B.Sc. Hons.	5	2	..	1	..
Law and Prof. in Law	2	10	2	..	..
M.A., M.Sc.	3	29	10	1	1
Education	3	4	1	..	..
Engineering/Tech.	1	..	2	..	..
Foreign Languages	1	1	..	..	..
B-1950					
N=16					
B.A., B.Sc. Pass	3	2	..	..	1
B.A., B.Sc. Hons. . . . .	..	1	..	..	..
M.A., M.Sc. . . . .	..	3	1	..	..
Law and Prof. in Law . . . . .	..	2	1	..	..
Education . . . . .	..	1	..	..	..
Engineering/Tech. . . . .	..	..	..	1	..

A comparison of the above table with the tables on actual earnings in Chapter VII shows that the expected incomes are not higher than the income earned by the alumni in their respective degrees. Therefore, it may be said that high income expectation does not seem to be a factor underlying their state of unemployment.

9.6. Registration with the Employment Exchanges: It is generally believed that the assistance of Employment Exchanges is not largely sought by graduates. This assumption is not borne out by the present study. It was found that 49 per cent of the unemployed men and 42 per cent of the

unemployed women were registered with an Employment Exchange. The following table shows the different occupations which they were seeking through the Employment Exchanges :

TABLE 86

Unemployed alumni registered with Employment Exchanges.

Type of Employment sought	Men		Women	
	1954	1950	1954	1950
	N=23	N=3	N=17	N=2
Lecturer/Teacher	6	2	14	1
Administrative/Executive	5	..	..	..
Legal Assistant/Inspector	5	..	1	..
Economic Investigator/Statistical Assistant.	2	1	1	..
Clerical/Stenography	4	..	..	..
Traffic Apprentice	1	..	..	..
Labour Welfare	1	..	..	..
Any Job	1	..	1	1

It may be noted that the employments sought through the Employment Exchanges were mostly in the Teaching, Administrative and Clerical fields. When the occupations sought by those registered with the employment exchanges are compared with the occupations of those not so registered, it is found that those trying for administrative and executive positions did not seek the assistance of Employment Exchanges so much as those seeking teaching positions. There was no other significant difference between the two groups.

Conclusion :

To sum up it may be said that although the proportion of the unemployed alumni at the time of investigation was not large, the total duration of unemployment suffered by the alumni was of considerable magnitude. Among the various degree holders, the incidence of unemployment was quite high among the Master's degree holders of the 1954 group and among the Bachelor's degree holders of the 1950 group. Unemployment was slight among those holding professional and technical degrees except in the case of Law. Contrary to expectation, a larger percentage of women graduates are unemployed than men graduates. Quite a large percentage of the unemployed sought the assistance of Employment Exchanges. Among the reasons for their state of unemployment, "no influence or approach" was stated most frequently.

10. Alumni not seeking Employment :

10.1. As stated in the beginning of this chapter, the alumni found without employment at the time of investigation consisted of those who were unemployed and those who were not seeking employment. A study of the latter group would be of some interest in assessing the wastage of education from employment point of view.

The proportion of the alumni not seeking employment at the time of investigation is shown below :

TABLE 87

Number and percentage of alumni not seeking employment

Year group	Total number of alumni interviewed	Number of alumni not seeking employment	Percentage of alumni not seeking employment
1954	1,381	133	9.6
1950	482	24	5.0

It can be observed that the proportion of alumni not seeking employment was higher among the 1954 group than among 1950.

10.2. The distribution of these alumni according to sex is given below :

TABLE 88

Distribution of alumni not seeking employment according to sex

Year Group	Men	Women
1954	45	88
1950	6	18

In both the year groups about two-thirds of the alumni, roughly, were women. This is understandable in view of the fact that there are many pressures in the Indian society to prevent women from working. It may be added that in the 1950 group 17 out of 18 women were married, while in 1954 group, 65 out of 88 women were married. In the case of women, marriage becomes a factor that seems to act as a deterrent to the search for employment.

10.3. It was found that a high proportion of the alumni not seeking employment had not done any work at any time, as shown by the data presented below:

TABLE 89
Percentage distribution of alumni not seeking employment according to sex and the number of employments held

Sex	Number of employments held					
	Total No.	None	1	2	3	More than 3
A-1954						
Men	45	77.8	15.6	4.4	2.2	..
Women	88	70.1	16.1	3.4	2.3	1.1
B-1950						
Men	6	16.6	66.8	..	..	16.6
Women	18	50.0	33.3	11.1	..	5.6

In the case of alumni in 1950 group the proportions of those who had not done any work were smaller than in the case of alumni in 1954 group. This is particularly true in the case of men in the 1950 group. These findings are in line with expectation. Over a longer period of working at the disposal of the 1950 group of alumni, a smaller proportion of them, especially in the case of men alumni, would be expected to have done no work at all.

10.4. Those who were not seeking employment did so for various reasons. The major reason among the men was that they were pursuing further study or training. The chief reason among the women was marriage after which nearly 50 per cent of them cease to work. The various reasons for not seeking work with their frequencies are given in the following table. Some of the reasons are of subjective nature; it is not possible to find the true reasons.

TABLE 90
Reasons for not seeking employment

Reasons	1954			1950		
	Men	Women	Total	Men	Women	Total
Pursuing further study or training	35	10	45	4	1	5
Preparing for competitive examination	6	1	7	..	..	..
Marriage	1	45	46	..	11	11
Parents' disapproval or that of parent-in-law.	..	8	8	..	..	..
Illness	..	..	..	1	1	2
Not necessary to work	1	17	18	1	2	3
Other reasons	1	6	7	..	1	1
Reasons not available	1	1	2	..	2	2

10.5. When the relevant data was examined to discover the examination categories of the alumni not seeking employment, it was found that there were no such alumni in the categories of Library Science, Nursing and Technology. In other words there was no wastage of education among alumni in these examination categories. The data is presented below :

TABLE 91

Distribution of alumni not seeking employment according to sex and examination categories

Examination categories	1954			1950		
	Men	Women	Total	Men	Women	Total
B.A. Pass	5	25	30	2	4	6
B. Sc., Pass	3	5	8	1	..	1
B.Com.	1	..	1	1	..	1
B.A. Hons.	2	8	10	..	4	4
B.Sc. Hons.	3	..	3	..	..	..
M.A. Languages	4	8	12	..	5	5
M.A. Hist.-Pol.-Sc.-Phil.	5	12	17	..	1	1
M.A. Com.-Econ.-Maths.	7	5	12	1	..	1
M.A. Social Work	..	2	2	..	..	..
M.Sc.	5	3	8	..	..	..
Library Science	..	..	..	..	..	..
Law	9	3	12	1	..	1
Proficiency in Law	..	2	2	..	..	..
Education	1	12	13	..	2	2
Nursing	..	..	..	..	1	1
Medicine	..	3	3	..	1	1
Engineering/Technology	..	..	..	..	..	..
Foreign Languages	..	..	..	..	..	..
TOTAL	45	88	133	6	18	24

In the 1954 group, the highest figure of those not seeking employment was found in the category of B.A. Pass course, and the lowest frequencies were found in the categories of B.Com., M.A., Social Work, Foreign Languages and Proficiency in Law. The total for B.A. Pass and B.A. Hons. is 40 as compared to the total of all M.A. categories which is 43. Women accounted

for 82.5 per cent of the B.A. categories and 62.8 per cent in the M.A. categories. These categories accounted for about 62.4 per cent of all the alumni not seeking work. Although it would seem that an appreciable proportion of women in B.A. and M.A. categories were not planning to use their education in any occupation, even specialised education leading to a degree in Education, and Medicine, or a certificate of Proficiency in Law was wasted in the case of a noticeable proportion of women alumni. The figures for the 1950 group support the above findings.

The above data indicates that there is an appreciable wastage of education among women alumni. This is particularly true of the women in the examination categories of B.A. Pass, B.A. Hons., M.A.'s Education and Medicine.

CHAPTER VII

EARNINGS

The data on earnings of the alumni, on which this chapter is based, were obtained in Block IIIA on 'Employment'. Information was obtained about monthly earnings* in all of the employments held by the alumni. The data included in the present chapter have, however, been confined to the earnings from the employment in which the alumni were engaged at the time of the Survey (present employment). It would have been of considerable interest to study changes in earnings during the occupational life of the alumni. It has, however, been realised that this may not be meaningful in view of the fact that occupational life was not of the same duration for all the alumni. As has been seen in Chapter 5 on 'Education' quite a few of the alumni of both the year groups pursued further studies after the years 1950 and 1954 for varying length of time and started their occupational career at different points of time. Attempt has been made to study the patterns of earnings in relation to the type of education and the nature of the present occupation of the alumni and also to the class or division obtained by them in their last examination.

1. Earnings from present employment :

1.1. It has been mentioned earlier that 1149 alumni of the 1954 group and 442 alumni of the 1950 group were found in employment at the time of the Survey. Information regarding earnings was obtained from 1102 or 95.9 per cent of the former group and 431 or 97.5 of the latter group. Of 47 alumni of the 1954 group about whom the information could not be obtained, 24 were engaged as unpaid family workers and the remaining 23, most of whom were engaged in their own business, did not disclose their income. Of the 11 similar alumni of the 1950 group, 6 were unpaid family workers and the remaining 5 did not give the desired information.

1.2. Analysis of the relevant data showed that the earnings of a large number of the alumni ranged from Rs. 100 to Rs. 500. This is shown in the following table :

TABLE 92

Distribution of the alumni according to monthly earnings in present employment

Monthly Earnings (in Rupees)	1954		1950	
	Number	Per cent	Number	Per cent
Below 100	12	1.1	..	..
100—200	338	29.4	58	13.1
200—300	398	34.7	135	30.5

*The figure for monthly earnings refers to the monthly average of the total earnings of an alumnus in the last year of employment.

TABLE 92—Contd.

Monthly Earnings (in Rupees)	1954		1950	
	Number	Per cent	Number	Per cent
300—500	274	23.8	145	32.9
500—750	51	4.4	50	11.3
750—1,000	13	1.1	19	4.3
1,000 and above	16	1.4	24	5.4
Unpaid family workers	24	2.1	6	1.4
N.A.	23	2.0	5	1.1
TOTAL	1,149	100.0	442	100.0

It is seen that the alumni of both the groups are concentrated in the income brackets of Rs. 100-200, Rs. 200-300, and Rs. 300-500. Only a few were earning over Rs. 1,000.

It may also be observed that the pattern of earnings of the 1954 group is different from that of the 1950 group. Thus a few alumni of the 1954 group forming above 1 per cent of the total number were earning less than Rs. 100. None of the 1950 group was earning so little. About 29 per cent of the 1954 group as against only 13 per cent of the 1950 group were earning Rs. 100-200 and about 35 per cent of the former group as compared with 31 per cent of the latter were earning Rs. 200-300. The proportion of the alumni who were earning more than Rs. 300 was appreciably lower among the 1954 group than among the 1950 group. This shows that the alumni of the 1950 group were earning more than those of the 1954 group because of their longer employment history.

2. Earnings and Education:

2.1. An examination of the data relating earnings with the type of education of the alumni showed that those who had specialised in the field of Medicine, and Engineering and Technology were the best paid and those who had passed B.A. Pass and B.Com. examinations were the least paid of all the alumni. This is shown in the following table:

TABLE 93

Percentage of the alumni according to last examination passed and earnings from present employment

	Monthly earnings (in Rupees)				
	Total No.	Below 200	200—300	300—500	500 and more
A-1954					
B.A. Pass	188	61.1	20.3	10.2	8.4
B.Sc. Pass	47	55.3	27.7	17.0	..
B.Com.	83	60.3	27.7	9.6	2.4
B.A. Hons.	49	40.8	36.7	12.2	10.3
B.Sc. Hons.	24	41.7	54.1	4.2	..
M.A. Languages	48	31.3	33.2	29.2	6.3

TABLE 93—Contd.

	Monthly earnings (in Rupees)				
	Total No.	Below 200	200—300	300—500	500 and more
M.A. Hist.-Pol. Sc.-Phil.	48	35.4	37.5	20.8	6.3
M.A. Eco.-Com.-Maths.	110	22.7	38.3	33.6	5.4
M.A. Social Work	19	5.3	31.6	36.8	26.4
M.Sc.	74	8.1	66.2	24.3	1.4
Library science	11	..	72.7	27.3	..
Law	106	27.3	35.0	26.4	11.3
Prof. in Law	167	25.7	33.0	28.7	11.6
Education	85	31.8	55.2	11.8	1.2
Nursing	6	16.7	33.3	50.0	..
Medicine	24	..	12.5	79.1	8.4
Technology	41	2.4	26.8	56.1	14.7
Foreign Languages	42	16.7	30.0	45.2	7.2
TOTAL	1,102	31.8	36.1	24.9	7.2
B-1950					
B.A. Pass	40	45.0	30.0	12.5	12.5
B.Sc. Pass	10	30.0	..	30.0	40.0
B.Com.	25	20.0	40.0	8.0	32.0
B.A. Hons.	15	6.7	40.0	13.3	40.0
B.Sc. Hons.	20	5.0	25.0	30.0	40.0
M.A. Languages	34	14.7	29.4	47.1	8.8
M.A. Hist.-Pol.Sc.-Phil.	19	10.5	42.1	31.6	15.8
M.A. Eco.-Com.-Maths.	47	10.6	38.3	44.7	6.4
M.A. Social Work	7	..	28.6	28.6	42.8
M.Sc.	27	..	18.5	59.3	22.2
Library Science	8	..	50.0	37.5	12.5
Law	36	5.5	25.0	25.0	44.5
Prof. in Law	57	14.0	22.8	45.7	17.5
Education	52	11.5	50.1	32.7	5.7
Nursing	1	..	100.0	..	..
Medicine	7	..	28.6	14.3	57.1
Technology	15	..	13.3	46.7	40.0
Foreign Languages	11	18.2	18.2	27.3	36.3
TOTAL	431	13.5	31.3	33.6	21.6

It will be observed from the table that among the holders of a Bachelor's degree those with a B.Sc. Pass degree were earning slightly more than those with B.A. Pass and B.Com. degrees and the alumni with B.A. Hons. and B.Sc. Hons. degree were doing better than the holders of a Pass course degree.

The alumni who had obtained a Master's degree in different subjects had fared better than those who had ended up with a Bachelor's degree. Of these, the alumni with qualifications in Social Work were the best paid and those with a degree in History, Political Science, Philosophy were the least paid. The holders of an M.Sc. degree had done slightly better than those of an M.A. degree in all subjects except in Social Work and the alumni with a Master's degree in Economics, Commerce and Mathematics had fared better than the alumni who had obtained similar degrees in Languages or History, Political Science and Philosophy.

The alumni with technical and professional education were earning more than those who had obtained Bachelor's and Master's degrees in Arts and Science. In the case of the former, the earnings of those with qualifications in the field of Medicine and Engineering were the highest and of those with a degree in Education (teachers) were the lowest. The alumni who had specialised in Library Science had done a little better than those with qualifications in Law and the latter had done just as well as holders of an M.A. degree in Economics, Commerce or Mathematics. Those who had qualified in Foreign Languages seem to be earning more than the holders of Master's degree in Arts and Science. It might be remembered that most of these alumni had a Master's degree as their previous qualification.

2.2. A comparative view of the two groups indicates that the alumni of the older group *i.e.* 1950 were earning more than those of the 1954 group. It is of interest to note in this regard that the disparity for the alumni with B.Sc. Pass, B.Sc. Hons., M.Sc., and Medicine degrees was wider than that for the alumni of other types. This suggests that alumni with degrees in science and medicine improved their earnings faster than other types of alumni.

3. Earnings and Occupation :

3.1. It is desirable at this stage to examine the patterns of earnings of the alumni engaged in different occupations. The analysis of the relevant data showed that the alumni engaged as Clerical and Related workers were paid the least and those working as Architects, Engineers and Doctors were paid the highest. Details about different occupations follow in the table below :

TABLE 94

Percentage distribution of the alumni according to the occupation in present employment and monthly earnings

Occupation	Monthly earnings (in Rupees)				
	Total No.	Below 200	200-300	300-500	500 and more
<i>A-1954</i>					
1. Architects, Engineers etc.	20	..	10.0	60.0	30.0
2. Physical Scientists	3	..	33.3	66.7	..
3. Doctors and Nurses	27	7.4	22.3	63.0	7.4
4. Teachers	170	26.5	41.7	30.0	1.8

TABLE 94—Contd.

Occupation	Monthly earnings (in Rupees)				
	Total No.	Below 200	200-300	300-500	500 and more
5. Legal Workers	111	23.4	27.0	36.1	13.5
6. Social Scientists	50	26.0	38.0	24.0	12.0
7. Artists	2	50.0	50.0		
8. Technical Assistants	189	10.6	63.0	24.3	2.1
9. Administrative Workers	51	9.8	17.6	45.2	27.4
10. Clerical Workers	390	57.1	29.7	12.1	1.1
11. Sales Workers	65	13.8	23.1	29.2	33.9
12. Farm Workers					
13. Transport Workers	3	66.7	33.3		
14. Craftsmen	4	25.0	25.0	50.0	
15. Service, Sports Workers	6	16.7	33.3	33.3	16.7
16. Armed Forces	3	33.3	33.3		33.4
17. Apprentices	8	12.5	50.0	12.5	25.0
TOTAL	1,102	31.8	38.1	24.9	7.2
B-1950					
1. Architects, Engineers etc.	8			62.5	37.5
2. Physical Scientists	6	16.7		33.3	50.0
3. Doctors and Nurses	13		23.1	30.8	46.1
4. Teachers	105	15.2	38.1	43.8	2.9
5. Legal Workers	56	7.1	23.2	37.6	32.1
6. Social Scientists	25	12.0	24.0	32.0	32.0
7. Artists					
8. Technical Assistants	51		39.2	45.2	15.6
9. Administrative Workers	34	14.7	29.4	26.5	29.4
10. Clerical Workers	87	37.9	43.8	17.2	1.1
11. Sales Workers	29	34.5	13.8	24.1	58.7
12. Farm Workers					
13. Transport Workers					
14. Craftsmen	3	66.7			33.3
15. Service, Sports Workers	5		80.0	20.0	
16. Armed Forces	4				100.0
17. Apprentices	2			50.0	50.0
TOTAL	431	13.5	31.3	33.6	21.5

It will not be possible to study the patterns of earnings of the alumni engaged as Physical Scientists, Artists, Farm workers, Transport workers, Craftsmen, Service and Sports workers, Armed Forces and Apprentices on account of very small frequencies.

It will be observed that the proportion of the alumni who were earning more than Rs. 500 was very high among Sales workers, Architects and Engineers and Administrative workers. The percentage of those whose monthly earnings ranged from Rs. 300-500 was very high among Architects.

and Engineers, Doctors and Administrative workers. This shows that the alumni in these occupations were earning more than the alumni engaged in other occupations. It may also be noticed that of the alumni engaged in other and professional occupations, Teachers were earning the least and Social scientists, Legal workers and Technical Assistants were doing comparatively better.

4. Earnings and Class/Division :

4.1. As will be shown in the chapter on 'Occupational Choice and Adjustment' the proportion of the alumni who were satisfied with their employment was greater among those who had secured higher division than among those who had got lower division in their last examination. Further, it was found that inadequate income was the largest single factor leading to dissatisfaction in employment. It is, therefore, pertinent to investigate the relationship between earnings and the division obtained in the last examination.

4.2. In examining the relevant data it was seen that the division in the last examination had no bearing on earnings of the alumni who passed professional examination, such as, in Library Science, Law, Proficiency in Law, Education, Medicine, Engineering and Foreign Languages. It was a factor of little importance in the case of B.Sc. Hons. category also. In case of B.A. Pass and B.Sc. Pass examinations, an insignificantly small proportion of the alumni contacted for the Survey had obtained first division. All the rest had been awarded pass degree without division. Division was not, therefore, a factor influencing the occupational career or earnings of these groups.

This factor turned out to be of considerable importance in the determination of earnings of alumni who had passed B.Com., B.A. Hons., M.A., and M.Sc., examinations. The data for each of these examinations are presented separately.

(A) B.Com. : There seemed to be a positive relationship between the division obtained and monthly earnings. The proportion of alumni earning less than 200 rupees a month was found to rise steeply with fall in the division. This is shown in the following table :

TABLE 95

Distribution of B. Com. graduates according to class/division obtained and monthly earnings

Division	Monthly earnings (in Rupees)				Total
	Below 200	200-300	300-500	Over 500	
A-1954					
First	..	1	2	..	3
Second	10	12	2	..	24
Third and Pass	40	10	4	4	58
TOTAL	50	23	8	4	85
B-1950					
First	..	..	..	..	..
Second	1	1	1	4	7
Third and Pass	4	9	1	4	18
TOTAL	5	10	2	8	25

The data for 1954 show that none of the first divisioners were earning less than 200 rupees a month. About 42 per cent of second divisioners were earning less than 200 rupees a month. In the case of the third divisioners there were nearly 68 per cent of persons with similar incomes.

The proportion of individual earning Rs. 200 or more a month decreased with fall in division. The figures for the 1950 group indicate a somewhat wider dispersal of alumni according to earnings in spite of much lower frequencies than in the 1954 group but the trend is the same as in the case of the latter group.

(B) B.A. Hons : The same relationship as obtained in the case of B.Com. graduates was found in the case of B.A. Hons. graduates, but it is not as sharp as in case of the former.

TABLE 96

Distribution of B.A. Hons. graduates according to class/division obtained and monthly earnings

Division	Monthly earnings (in Rupees)				Total
	Below 200	200-300	300-500	Over 500	
A. 1954					
First	1	1	1	..	3
Second	4	7	1	4	16
Third and Pass	15	10	4	5	34
TOTAL					53
B. 1950					
First	..	..	..	1	1
Second	..	1	..	3	4
Third and Pass	1	5	2	2	10
TOTAL					15

It will be seen that the second and third divisioners among B.A. Hons. graduates were as a group better placed with regard to earnings than such persons among B.Com. graduates. The proportion of alumni in higher income categories was higher among B.A. Hons. than among B.Com. graduates. In the 1954 group, 25 per cent of the second divisioners among B.A. Hons. graduates were earning less than 200 rupees and the percentage of third divisioners was 44.1.

The broad trend indicated by the figures for the 1954 group is confirmed by the figures for the 1950 group.

(C) M.A. : In the case of the alumni who took an M.A. degree higher income went along with a higher division. The figures for the 1954 group show that as in the case of B.Com. and B.A. Hons. graduates the modal monthly income for first divisioners among M.A.s was Rs. 300 to Rs. 500, for the second divisioners it was Rs. 200-300 and for the third divisioners it was Rs. 100-200. It will, however, be noticed that quite a few of the alumni who had got third division were earning over Rs. 500 per month. Details are given in the table below :—

TABLE 97

Distribution of the alumni who passed M.A. examination according to class/ division obtained and monthly earnings.

Division	Monthly earnings (in Rupees)				Total
	Below 200	200-300	300-500	Over-500	
A. 1954					
First	5	8	19	2	34
Second	21	49	33	3	106
Third	32	25	16	12	85
TOTAL ..	58	82	68	17	225
B. 1950					
First . . . . .	..	3	15	2	20
Second . . . . .	..	10	19	3	32
Third	12	25	11	7	55
TOTAL .	12	38	45	12	10

The figures for the 1950 group corroborate the findings from the figures for the 1954 group in indicating a positive relationship between the division obtained and average monthly earnings.

(D) M.Sc. : The range of earnings for the alumni who passed M.Sc. examination was the smallest of all the examination categories discussed above. In the 1954 group modal income of the first divisioners was Rs. 300-500, and for the second divisioners it was Rs. 200-300. The number of third divisioners was too small to yield any trend. The figures for 1950 group fail to indicate any trend. It suggests that in the long run division matters less for the M.Sc.s than for the M.A.s.

TABLE 98

Distribution of the alumni who passed M.Sc. examinations according to class/division obtained and average monthly earnings.

Division	Monthly earnings (in Rupees)				Total
	Below 200	200-300	300-500	Over 500	
A. 1954					
First		7	11	..	18
Second	3	40	5	..	48
Third	3	2	2	1	8
TOTAL					74
B. 1950					
First	..	1	5	3	9
Second	..	4	7	2	13
Third	..	..	4	1	5
TOTAL					27

A comparison of the 1954 and the 1950 groups indicates that with the passage of time there is an increase in the proportions of persons in the higher income groups regardless of the division obtained. Some of the third divisioners in course of time do improve their earnings and may do better than first and second divisioners. On the whole, however, lower division does act as a factor limiting average monthly earnings.

To sum up, over two-thirds of the alumni of the 1954 group were earning less than Rs. 300, about one-fourth were earning from Rs. 300 to Rs. 500, and only 7 per cent were earning over Rs. 500. Of the alumni of the 1950 group, only 45 per cent were earning less than Rs. 300, 33 per cent were earning from Rs. 300 to Rs. 500 and as many as 22 per cent were earning over Rs. 500. With regard to the relationship between occupation and earnings this study confirms the general impression that doctors and engineers earn the highest amount and clerks and teachers earn the least. Investigation into the relationship of the division with earnings shows that class or division is an important factor in determining the income level among certain types of degree holders only, namely, B.Com., B.A. Hons., M.A., and M.Sc.

CHAPTER VIII

OCCUPATIONAL CHOICE AND ADJUSTMENT

By occupational choice is meant not only the choice of occupation but also of the courses and subjects at different stages in the educational career which determine the ultimate choice of occupation. Underlying these acts of choice at different stages is a process in the individual characterised by development of interests and preferences and knowledge and understanding about occupations and the world of work. It is conditioned by various psychological, social and economic factors including influences and pressures from different persons in the environment of the individual. The process technically known as "vocational development" in vocational guidance literature is of considerable interest not only to guidance workers but also to those concerned with manpower planning and employment problems.

Occupational adjustment implies not only satisfaction from the work involved in occupations but also satisfaction with other aspects of occupation such as salary, prospects, relationship with persons concerned in the job, etc. The importance of occupational adjustment in national efficiency and progress cannot be underestimated. The wastage caused by vocational misfits in actual job performance and that involved in educating persons for the occupations which they never enter, must remain incalculable. Hence, it is proper that consideration of employment problems of university graduates should include a probe into their mis-employment or vocational maladjustment.

The data presented in this chapter is an organisation of responses on all the items of Block IV "Vocational Development" of the General Schedule and on a few items pertaining to choice of subjects and courses in Block II "Education" of the General Schedule. Data relating to employment in the field of specialisation which has great bearing on vocational adjustment has, however, been included in the previous chapter on "Employment", as it logically belongs to the subject matter of that chapter. With regard to occupational choice, this chapter presents an account of the vocational aim during the college years, factors influencing choice of occupations and choice of courses or subjects at the school leaving stage, and occupational models. The material on occupational adjustment deals with the degree of satisfaction or dissatisfaction with current employment and their reasons. The opinion of the alumni on the value of vocational guidance has also been included.

1. Vocational Aim during the college years :

1.1. It is well-known that a number of college students have no vocational aim during their university career. The analysis of the relevant data shows that nearly 18 per cent of the alumni interviewed went through their entire university career without any vocational aim. This figure may be

regarded as somewhat under-estimated as it is believed that some alumni would not have liked to have admitted such a state of aimlessness. Details are given in the following table :

TABLE 99

Percentage distribution of alumni with regard to vocational aim

Year group	Alumni who had vocational aim at the time of joining college	Alumni who developed vocational aim subsequently	Alumni who did not develop vocational aim at any time
1954	65.6	16.5	17.9
1950	61.6	19.3	19.1

In the 1954 group, out of a total of 1381 alumni covered by the investigation, 906 or 65.6 per cent had an aim regarding the choice of career at the time of joining college. The remaining, that is 475 or 34.4 per cent entered college without any vocational aim. Of these, 228, that is 16.5 per cent of the total developed such an aim sometime during or after their educational career in college. The remaining 247, that is, 17.9 per cent did not develop a vocational aim at any time.

The state of aimlessness among the alumni of the 1950 group is of almost the same dimensions. Out of a total of 482 alumni of this group, 297 or 61.6 per cent had an aim at the time of joining college, 185 or 38.4 per cent had none. Among these 93, that is, 19.3 per cent of the total developed an aim subsequently ; the remaining 92, that is, 19.1 per cent of the total did not develop an aim at any time.

1.2. Analysis of those who did not have any vocational aim at the time of joining the college may be of some interest. An educational breakdown shows that the proportion of the alumni without initial aim is relatively higher among B.A. Pass and Honours M.A.'s in all subjects and those who specialised in Library Science, Law, and Education than among the rest of the alumni. Those who took Bachelor's and Master's degrees in Science or specialised in Medicine, and Engineering and Technology tend to have vocational aim in comparatively larger proportions. The following table gives a relative picture of the lack of a definite aim among different types of graduates.

TABLE 100

Distribution of the alumni who did not have initial aim and of those who developed an aim subsequently according to the last examination passed

Last examination	Alumni covered in the enquiry		Alumni without initial aim				Alumni who developed aim subsequently			
	1954	1950	No. (1954)	%	No. (1950)	%	No. (1954)	%	No. (1950)	%
1. B.A. Pass	162	47	72	44.4	22	46.8	24	14.8	6	12.8
2. B.Sc. Pass	59	14	7	11.9	4	28.6	1	1.7	1	7.1
3. B.Com.	89	26	20	22.5	7	26.9	6	6.7	2	7.7
4. B.A. Hons.	65	21	23	35.4	9	42.9	10	15.4	2	9.5
5. B.Sc. Hons.	29	21	9	31.0	3	14.3	4	13.8	..	..
6. M.A. Languages	76	39	30	39.5	18	46.2	16	21.1	9	23.1
7. M.A. His.-Pol. Sc.-Phil.	77	22	36	46.8	7	31.8	17	22.1	5	22.7
8. M.A. Eco.-Com.-Maths.	137	50	51	37.2	23	46.0	26	19.0	12	24.0
9. M.A. Social Work	23	8	10	43.5	5	62.5	9	39.1	5	62.5
10. M.Sc.	86	29	19	22.1	12	41.4	8	9.3	9	31.0
11. Library Science	11	8	4	36.4	5	62.5	4	36.4	1	12.5
12. Law	127	38	42	33.1	15	39.5	18	14.2	8	21.1
13. Proficiency in Law	199	62	76	38.2	22	35.5	46	23.1	14	22.6
14. Education	111	61	57	51.4	24	39.3	25	22.5	14	23.0
15. Nursing	6	2	2	33.3	..	..	..	..	..	..
16. Medicine	29	10	1	3.4	2	20.0	1	3.4	1	10.0
17. Technology	40	12	2	4.1	1	8.3	2	4.1	1	8.3
18. Foreign Languages	46	12	14	30.4	6	50.0	11	23.9	3	25.1
TOTAL	1,381	482	475	34.4	185	38.4	228	16.5	93	19.3

1.3. The aim which the alumni had at the time of joining the college or which they subsequently developed underwent many changes. In the 1954 group, 476 or 42.0 per cent out of total of 1134, who had an initial aim or developed an aim subsequently, changed their aim. Of these, 426 or 89.5 per cent changed their aim once; 46 or 9.7 per cent, twice; and 4 or 0.8 per cent, thrice. In the 1950 group, out of a total of 390 alumni who had an aim at some stage, 148 or 37.9 per cent changed their aim: out of these, 130 or 87.8 per cent changed their aim once; 16 or 10.8 per cent, twice and 2 or 1.4 per cent, thrice.

Educational breakdown of those who changed their aim shows that on the whole those who obtained degree or diploma in Engineering did not change their aim. Change of aim is quite marked in case of those who obtained Proficiency in Law. Greater adherence to the original aim is shown in case of those who graduated with B.A. Pass, B.Sc. Hons., M.A. in Social Work, B.Ed. and other teaching degrees and diplomas. The following table shows the change of aim for different educational groups:

TABLE 101

Distribution of the alumni according to the last examination passed and whether they changed the aim

Last Examination	Alumni who had an initial aim or developed aim subsequently		Alumni who changed their aim			
			1954		1950	
	1954	1950	No.	%	No.	%
1. B.A. Pass	114	31	45	39.5	15	48.4
2. B.Sc. Pass	53	11	28	52.8	5	45.4
3. B.Com.	75	21	33	44.0	8	38.1
4. B.A. Hons.	52	14	24	46.2	6	42.8
5. B.Sc. Hons.	24	18	7	29.2	10	55.5
6. M.A. Languages	62	30	16	25.8	5	16.6
7. M.A. His.-Pol.Sc.-Phil.	58	20	24	42.4	9	45.0
8. M.A. Eco.-Com.-Math.	112	39	44	39.3	14	35.9
9. M.A. Social Work	22	8	8	36.4	4	50.0
10. M.Sc.	75	26	34	45.3	9	34.6
11. Library Science	11	4	4	36.4	1	25.0
12. Law	103	31	54	52.4	15	48.3
13. Prof. in Law	169	54	99	58.6	18	33.3
14. Education	79	51	29	36.7	20	39.2
15. Nursing	4	2	1	25.0	..	..
16. Medicine	29	9	1	3.4	1	11.1
17. Technology	49	12	9	13.4	3	25.0
18. Foreign Languages	43	9	16	37.2	5	55.6
TOTAL	1134	390	476	42.0	148	37.9

1.4. Educational breakdown of the frequency of change of aim shows that in the case of all educational groups stated above the change occurred mostly once only. In both the 1954 and 1950 groups over 85 per cent of the alumni in case of all educational groups changed their aim once only.

1.5. An examination of different vocational aims at the time of joining college or developed subsequently shows that the most favoured choices are Engineering and Technology, Medicine, Teaching and the least favoured are Research, and Arts and Aesthetics. The following table shows the distribution of the aims stated by the alumni of the 1954 and the 1950 group :

TABLE 102
Distribution of the alumni by type of initial aim

Vocational aim	Alumni who entered the aim	
	No.	%
A. 1954		
Engineering and Technology	191	16.9
Medicine	131	11.6
Teaching-school	113	10.0
Accounting and auditing	99	8.7
Administrative and Executive	95	8.4
Lecturer, Professor and the like	94	8.3
Legal practice	89	7.8
Contractor, Agent, Manufacturer	84	7.4
Research, experimentation study in Phys. and Natural Sciences	65	5.7
Defence Services	20	1.8
Research work in Social Sciences	41	3.6
Some job in Government	17	1.5
Journalism	14	1.2
Literary pursuits	11	1.0
Research in Social Sciences (Subordinate)	10	.9
Army job	8	.7
Research work in Maths. and Statistics	7	.6
Fine Arts	6	.5
Librarian, Archivist	5	.4
Subordinate Tech. and related occupations	5	.4
Banking	5	.4
Subordinate, Executive and Administrative Occups.	4	.4
Research work in Physical and Natural Science (subordinate)	4	.4
Police Service	3	.3
Other Health services	3	.3
Salesman	3	.3
Ministerial occupations	3	.1
Farming	1	.1
Research work in Maths. and Statistics	1	.1
Departmental promotion	1	.1
Others	1	.1
TOTAL	1134	100.0

TABLE 102—*Contd.*

Vocational aim	Alumni who entertained the aim	
	No.	%
B-1950		
Engineering and Technology	70	17.9
Teaching and Training	60	15.4
Legal practice	47	12.0
Contractor, Agents, Manufacturer, etc.	35	9.0
Medicine	34	8.7
Lecturer, Professor and the like	28	7.2
Accounting and Auditing	26	6.7
Administrative, Executive	23	5.9
Research Experimentation and study in Physical & Natural Science.	18	4.6
Research work in Social Sciences	14	3.6
Journalism	8	2.0
Defence Services	7	1.8
Some job in Government	6	1.5
Any job	3	0.8
Fine arts	2	.5
Literary Pursuits	2	.5
Research work in Physical & Natural Science (Subordinate)	2	.5
Banking	2	.5
Librarian and Archivist	1	.3
Subordinate Administrative & Executive occupations	1	.3
Research work in Social sciences	1	.3
TOTAL	390	100.0

1.6. The above vocational aims changed due to several factors to be discussed later. Change is evinced more in those occupations which were chosen more, *viz.*, Engineering and Technology. This is, however, not true of Teaching and Legal practice. A large proportion of the alumni who aimed at becoming Engineers and Technologists, Doctors, or Accountants, probably changed the aim because of the difficulties in fulfilling these aims. The admission requirements for these aims are very high with the result that only a small fraction of the aspirants can be selected. A comparatively smaller proportion of those whose aim was to become a Lawyer or a Teacher had to change the aim. It was much easier for them to fulfil their aspirations. This is shown in the table on the next page.

By and large, the analysis of the development and change of vocational aim suggests that the choice of the aim in respect of a large number of the alumni was unrealistic. The spectacle of aimlessness and unrealistic choices points to an urgent need for developing vocational guidance programmes both in schools and colleges.

TABLE 103

Distribution of the alumni according to type of first aim and whether the aim had to be changed

Vocational Aim	Alumni who entertained the aim	Alumni who had to change the aim	Percentage of those who had to change the aim
A. 1954			
Engineering and Technology	191	120	62.8
Medicine	131	80	61.1
Teaching-School	113	26	23.0
Accounting and Auditing	99	56	56.6
Civilian Occupation	95	28	29.5
Lecturer, Professor and the like	94	35	37.2
Legal practice	89	26	29.0
Contractor, Agent, Manufacturer	89	24	27.4
Research experimentation etc. in Physical and Natural Sciences.	65	18	27.7
Research in Social Sciences	41	14	34.2
Defence Services	20	11	55.0
Some job in Government	17	5	29.4
Journalism	14	3	21.4
Literary pursuits	11	4	36.4
Research in Social Science (Subordinate)	10	2	20.0
Any job	8	3	36.4
Research work in Maths. and Statistics	7	3	42.8
Art and Aesthetics	6	3	50.0
Librarian and Archivist	5	1	20.0
Banking	5	1	20.0
Subordinate Executive and Administrative occupations	4	2	50.0
Research work in Physical and Natural Sciences (Subordinate).	4	..	50.0
Police Service	3	3	100.0
Other Health Services	3	1	33.3
Salesmen	3	1	33.3
Ministerial occupations	3	2	66.7
Farming	1	1	100.0
Research work in Maths. and Statistics (Subordinate).	1	..	..
Departmental promotion	1	1	100.0
Others	1	..	..
TOTAL	1,134	476	42.0

TABLE 103—*Contd.*

Vocational Aim	Alumni who en- tained the aim	Alumni who had to change the aim	Percent- age of those who had to Change the aim
B. 1950			
Engineering and Technology	70	40	57·1
Teaching and Training	60	7	11·6
Legal practice	47	11	23·4
Contractor, Agent, Manufacturer	35	13	37·1
Medicine	34	19	55·8
Lecturer, Professor and the like	28	7	25·0
Accounting and Auditing	26	17	65·3
Civilian occupations	23	6	26·1
Research experimentation in Physical & Natural Sciences	18	8	44·4
Research work in Social Sciences	14	4	28·6
Journalism	8	2	25·0
Defence Services	7	7	100·0
Some job in Government	6	2	33·3
Any job	3	1	33·3
Art and Aesthetics	2	1	50·0
Literary pursuits	2	1	50·0
Research work in Physical & Natural Sciences (Subordinate)	2	..	..
Banking	2	2	100·0
Librarian and Archivist	1	..	..
Subordinate, Administrative and Executive occupations.	1	..	..
Research work in Social Sciences (Subordinate)	1	..	..
TOTAL	390	148	37·9

2. Influences underlying choice of subjects and occupations :

2.1. A study of the reasons for the choice of subjects and courses and of occupations is of considerable interest to guidance workers. It is well-known to all who deal with the education of the young that the choice of subjects, both in school and college, is dictated by reasons which have little relationship with vocational planning. Reasons such as desire to remain

with a close friend in the next class have frequently been observed. The influence of other persons such as parents, relatives, teachers, etc., is often considerable without being explicit.

However, according to the statements made by the alumni of Delhi University, we find that over three-fourths claim to have selected the subjects or the occupation on their own. Among the external influences, the strongest was provided by parents and the family. The high percentage of those claiming to have chosen on their own may not be taken at its face value and may be interpreted as the alumni's inability to express the real reason or influence. It is pertinent to note that the choice of subjects was made several years ago and the effects of fading memory on the point should be taken into account.

2.2. The most frequent reason given by the alumni in both the 1950 and the 1954 groups for selecting their subjects for the school leaving examination was their own free choice, irrespective of the subjects offered at the university level. In all 1062 persons in the 1954 group out of a total of 1381, amounting to 76.9 per cent, stated that they had selected their subjects for the final school examination of their own choice. Out of the 482 persons in the 1950 group, 376 or 78 per cent, gave the same reason for selecting subjects for the school leaving examination. The following table shows the percentages of such persons offering each of the subject groups, in 1954 and in 1950.

TABLE 104

Percentage Distribution of alumni who selected subjects of their own choice

Subjects offered	1954	1950
Pure Arts	77.9	76.3
Commerce	78.1	83.6
Science-Medical and Non-medical	73.3	77.1
Science-Medical	88.3	81.5
Science-Non-medical	76.7	78.2

The next most frequent reason advanced was the compulsion or persuasion by parents. This accounted for 180 cases or 13.0 per cent in the 1954 group. Teachers in both the groups played an insignificant role, accounting for only 2.4 per cent of the 1954 group, and 1.9 per cent of 1950 group. The other influences investigated, e.g., brothers other relatives, neighbours, some important personage, etc., were even less important.

2.3. A majority of the alumni in both the 1954 group and the 1950 group expressed the opinion that they were able to offer the subjects they desired for the school leaving examination. Only 148 persons or 10.7 per cent in the 1954 group and 32 or 6.6 per cent in the 1950 group stated that

they were unable to do so. Of those who selected their subjects on their own (1062 in all) in the 1954 group only 5.6 per cent stated that they would have liked to offer different subjects. And of the 376 such persons in the 1950 group only 3.5 per cent expressed this opinion. The position of those who selected their subjects under the influence of parents/guardians and teachers is shown below :

TABLE 105

Showing the number and percentages of those alumni who selected their subjects under influence of parents/guardians and teachers and who wanted to offer different subjects

Reasons of choice of subjects	Total no. of persons		No. and percentage of those who wanted to offer different subjects			
	1954	1950	1954		1950	
			No.	%	No.	%
Suggested by parents/guardians.	180	66	33	18.3	8	12.1
Suggested by teachers	35	9	14	40.0	1	11.1

When the figures in the above table are compared with the figures regarding those who exercised their own choice in the selection of their subjects, it becomes clear that a larger percentage of those who chose subjects under external influence would have preferred to take up different subjects for school leaving examination. It is significant that 40 per cent of the alumni in the 1954 group who chose their subjects under the influence of teachers expressed preference for different subjects. This may imply that the persuasion or compulsion by teachers failed to a large extent to take into account the interests of their students.

The above table also indicates that the percentage of those expressing preference for some other subjects, different from ones they took up, is higher among the 1954 group than in the 1950 group. This may be due to the fact that memory traces of any disapproval of selected subjects had been erased to a greater extent among those constituting the latter group, or that they had through the passage of time become reconciled to a greater extent to their past.

When the alumni are classified according to the combination of subjects taken up, we find the same high percentage of persons in each category who express their contentment with the subjects they actually did choose

for the final school leaving examination. The following table would illustrate the point :

TABLE 106

Showing the numbers and percentages of alumni according to the groups of subjects offered and whether they wanted to offer different subjects

Subjects offered	Total No.		Incidence of those who wanted to offer different subjects			
	1954	1950	1954		1950	
			No.	%	No.	%
Pure Arts	490	176	75	15.3	23	13.1
Commerce	160	62	29	18.1	3	4.8
Science-Medical and Non-medical.	137	36	7	5.1	..	..
Science-Medical	94	27	10	10.6	1	3.7
Science Non-medical	478	172	24	5.0	4	2.3
Information not available	22	9	3	13.6	1	11.1
TOTAL	1,381	482	148	10.7	32	6.6

The figures for the 1954 group in the above table indicate that preference for subjects other than those offered was obtained far more frequently among the alumni who offered pure arts or commerce subjects than among science students. No such trend is to be found among the alumni in the 1950 group. The results obtained from the 1954 group are, however, understandable in view of more uncertain prospects of occupational satisfaction among the students with pure arts or commerce subjects.

The directions in which preferences of subjects lay are revealed by the following table :

TABLE 107

Distribution of the alumni who preferred subjects other than those offered by them according to subjects offered and preferred for the school final examination

Subjects offered	Subjects preferred						Total
	Arts	Com-merce.	Sc.-Med. Non-med.	Sc.-Med.	Sc.-Non-med.	N.A.	
A. 1954							
Arts	3	..	3	2	52	15	75
Commerce . . . . .	..	..	5	3	20	1	29
Science-Medical & Non-medical.	2	..	..	1	1	3	7
Science-Medical . . . . .	..	..	..	..	8	2	10
Science-Non-med.	3	1	2	1	3	14	24
N.A.	1	..	..	..	1	1	3
TOTAL	9	1	10	7	85	36	148

TABLE 107—*Contd.*

Subjects offered	Subjects preferred						Total
	Arts	Com- merce.	Sc.-Med. Non- med.	Sc.-Med.	Sc.- Non- med.	N.A.	
B. 1950							
Arts	1	3	13	6	23
Commerce	3	..	3
Science-Medical & Non-medical.
Science-Medical	1	..	..	1
Science-Non-med.	1	..	2	1	4
N.A.	1	..	..	1
TOTAL	2	5	18	7	32

The figures for those who stated a definite preference for other subjects and/or those who were undecided have been combined in the above table.

The figures for the 1954 group show that the most preferred combination of subjects was that of non-medical science group. Out of 148 alumni, 85 or 57.4 per cent expressed preference for this combination. Of the 75 alumni with pure arts subjects as many as 52 or 69.3 per cent would have liked to offer science non-medical subjects. 20 or 69.0 per cent of those with commerce subjects would have liked it. Even among those who offered the science-medical-non-medical groups or science-medical groups of subjects, preference for the non-medical group was the common most, in so far as 9 out of 17 such students would have liked it. Non-medical science students, on the other hand, had no clear preference for any combination of subjects. 14 out of 24 of them could not say what other subjects they would have liked to offer. Possibly external pressure on them from parents and others to take up the combination was strong.

It is significant that in all as many as 36 out of 148 or 36.3 per cent could not give any answer as to what other subjects they would have liked to take up. Apart from the 14 such persons with non-medical group of subjects, 15 had pure art subjects. Presumably these persons selected whatever subjects they were advised or persuaded to take up without having any preferences of their own.

The same broad picture emerges from the table for alumni in 1950 group.

The above findings suggest the need for educating and orienting the parents on the occupational choice of their wards.

2.4. As in the selection of subjects, so in the choice of vocation also we find that most of the alumni claimed to have chosen their occupation on their own. This is indicated in the following table :

TABLE 108

Percentage distribution of the alumni in each examination category according to the source of help in the choice of vocation

Last exam. Passed	Sources of help in choice of vocation					
	Self		Parents & relatives		Others	
	1954	1950	1954	1950	1954	1950
1. B.A. Pass	68.5	72.7	24.1	25.0	7.4	2.3
2. B.Sc. Pass	70.7	76.9	22.4	23.1	6.9	..
3. B.Com.	71.9	61.5	24.4	30.8	4.6	7.7
4. B.A. Hons.	73.9	70.0	21.5	30.0	4.6	..
5. B.Sc. Hons.	63.0	42.2	37.0	36.8	..	21.0
6. M.A. Languages	74.7	70.3	18.3	16.2	7.0	13.5
7. M.A. His.-Pol. Sc.-Phil.	82.7	77.3	16.0	22.7	1.3	..
8. M.A. Eco.-Com.-Maths.	72.3	71.4	20.2	18.4	7.5	10.2
9. M.A. Social Work	75.9	100.0	18.2	..	5.9	..
10. M.Sc.	81.9	77.3	15.7	9.1	2.4	13.6
11. Library Science	63.6	75.0	..	25.0	37.4	..
12. Law	63.7	72.2	28.2	22.2	8.1	5.6
13. Proficiency in Law	68.1	52.5	25.6	37.7	6.3	9.8
14. Education	75.5	72.9	17.9	18.6	6.6	8.5
15. Nursing	66.7	100.0	33.3	..	..	..
16. Medicine	58.7	44.4	37.9	55.6	3.4	..
17. Technology	53.1	75.0	44.9	16.7	2.0	8.3
18. Foreign Languages	84.7	83.3	10.9	16.7	4.4	..
TOTAL	71.2	68.1	22.8	24.1	5.9	7.8

It is seen that the next important external influence is that of parents or guardians with whom brothers and other near relatives may be combined. Teachers were found to be of even less consequence than neighbours and others. Those of the 1954 group who chose their vocation for themselves accounted to more than 60 per cent of alumni included in all examination categories except in the case of those who passed their final examination in Engineering or Technology and in Medicine. The same broad trend is apparent in the 1950 group. Only in one instance, that is, in the case of the alumni who passed examinations in Library Science in the 1954 group, others' did play a significant role in helping them to choose a vocation. Presumably, the 'others' were better informed about the job opportunities for librarians than relatives were. Relatives (including parents or guardians) exercised a comparatively greater influence in the case of categories of B.Sc. Hons., Medicine or Engineering or Technology.

3. Occupational Model :

3.1. Researches in the field of occupational psychology have shown that identification with a person in the family or the social environment plays a considerable part in the choice of an occupation. In other words, the choice is influenced by a model. It is of some importance to know what proportion of University graduates choose their occupation on the basis of a model, and to what extent is the occupational aim and the choice of subjects influenced by the model. The information on this point was sought by asking the question, "Did any person serve you as an occupational model? If so, who?"

3.2. The analysis of the relevant data shows that over four-fifths of the alumni of both the groups had no occupational model before them. If further researches bear out this finding, it would be right to infer that most of the graduates of Indian universities are capable of determining their vocational aim without the operation of the mechanism of identification.

Of the 1381 alumni of 1954, 232 or about 17 per cent and of the 482 alumni of the 1950 group, 88 or about 18 per cent had an occupational model. The analysis did not reveal any clear relationship between the first occupational aim and the having of the model. This is indicated in the table below :

TABLE 109

Alumni by type of first aim and the percentage of those with occupational models

First aim	Percentage of alumni with an occupational model	
	1954	1950
1. Administrative and Executive	17.5	21.6
2. Engineering and technology	21.5	10.3
3. Scientific Research	14.2	14.3
4. Medicine and Health	20.0	35.3
5. Teaching	17.9	30.7
6. Law	21.4	33.4
7. Sales jobs	26.4	11.4
8. Accounting and Auditing	6.1	3.8
9. Others	9.7	1.5
10. Without any aim	17.5	19.9
TOTAL	16.8	18.3

In the table all the occupational aims are grouped into eight broad categories. It shows the percentage of the persons in each of these categories who had an occupational model. Lowest percentage of such persons are to be found among those whose aims lay in the field of accountancy and auditing.

3.3. The following table also bears out the rather minor role played by occupational models in determining the educational and vocational careers of different types of graduates :

TABLE 110

Percentage distribution of alumni who had occupational model in each examination category

Last examination	Percentage of alumni who had model	
	1954	1950
1. B.A. Pass.	16·7	12·8
2. B.Sc. Pass	16·9	14·3
3. B.Com.	3·4	7·7
4. B.A. Hons.	27·7	9·5
5. B.Sc. Hons.	13·8	14·3
6. M.A. Langs.	18·4	15·4
7. M.A. His.-Pol. Sc.-Phil.	13·0	27·3
8. M.A. Eco.-Com.-Maths.	14·6	10·0
9. M.A. Social work	17·4	37·5
10. M.Sc.	15·1	20·7
11. Lib. Science	18·2	37·5
12. Law	11·0	7·9
13. Prof. in Law	20·6	27·4
14. Education	21·6	21·3
15. Nursing	83·3	50·0
16. Medicine	13·8	60·0
17. Technology	22·4	8·3
18. Foreign Languages	17·4	25·0
TOTAL	16·8	18·3

It will be seen that the proportion of the alumni who had occupational model was the lowest among those who got Bachelor's degree in Commerce and it was very high among those who had specialised in Nursing and Medicine. It may also be noticed that the proportion of such alumni was higher among those who had attained Proficiency in Law than among the holders of degrees in Law. The possible explanation is that the former alumni undertook the professional training with a view to adopting legal profession whereas most of the alumni who took degrees in Law studied the subject mainly to add to their qualifications.

3.4. It will be of interest to study the relative influence of different types of occupational models. The analysis of the relevant data revealed that parents or guardians and near relatives served as models more frequently than others. This is indicated in the following table :

TABLE 111

Distribution of the alumni who had occupational model by the type of the model

Type of model	1954		1950	
	No.	%	No.	%
Parents or guardians	66	28.4	19	21.6
Brothers	22	9.5	12	13.6
Near relatives	48	20.7	21	23.9
Teachers	21	9.1	5	5.7
Neighbourers	27	11.6	10	11.4
A great figure	31	13.4	16	18.1
Others	17	7.3	5	5.7
TOTAL	232	100.0	88	100.0

The table shows that the influence of teachers was the weakest. Even in case of those who aimed at research or teaching occupations, teachers played a very minor role. This may be due to the rather low degree of prestige which teaching profession has in the contemporary Indian society or the poor remuneration to be expected in these areas of work, or the rather unflattering opinion which the alumni had of their teachers.

If we take an overall view of the data regarding occupational models, the conclusion is inescapable that from whatever angle we may look at it, most of the alumni went through their educational career and embarked on their vocational life without having any occupational model before them. As many as 80 per cent of the alumni went through their educational career and took up occupations without any effective external influence of any kind in the form of a model.

4. Vocational Satisfaction :

4.1. A grown up individual normally spends the largest portion of his time in occupational pursuits. It is but natural, therefore, that the degree of satisfaction, that he derives in his work, should play a vital role in conditioning all the major phases of his life. The qualities of a person as a citizen depend largely on the degree of his vocational satisfaction. It is an important factor in determining the extent of his efficiency in his work also.

In view of this well-known fact it was considered desirable in the present Survey to discover how far the alumni of the Delhi University had been able to achieve a measure of vocational satisfaction, and to discover the possible reasons for dissatisfaction in the case of those who had failed to achieve it.

It should be borne in mind, however, that vocational satisfaction is a relative phenomenon and that it does not mean quite the same thing for every working person. The socio-economic condition of the country as a whole, of the community to which a person belongs and also any individual's angle of vision regarding what aspect of his working conditions and work activities he considers to be personally meaningful or satisfying—all these have a bearing on the question of what exactly vocational satisfaction signified to a particular person.

In the course of this Survey an attempt was made only to discover the extent to which the alumni of the Delhi University felt that they were vocationally satisfied. No effort was made to find out the exact nature of satisfaction or its implications. The results show, broadly, that about half of the alumni interviewed during the course of the Survey expressed a high degree of satisfaction with their occupations at the time of the Survey. The importance of economic factors in determining vocational satisfaction was highlighted. No other factor emerged as even half as important. Personal interests, contrary to expectation, were found to be far less important than income as a determinant of dissatisfaction. With the passage of time, however, more and more persons tend to find economically satisfying occupations, or they get reconciled to whatever occupation they have.

4.2. Of the 1149 alumni of 1954 who were found working at the time of the Survey, 1099 or 95.6 per cent responded to the question regarding satisfaction with their present employment. In the case of 442 such alumni of the 1950 group, 411 or 93.0 per cent gave the relevant information. Analysis of the data revealed that about half of the alumni of the two groups (47 per cent of 1954 and 57 per cent of 1950) were very satisfied; about one-third, moderately satisfied; and the remaining alumni, one-fifth of the 1954 and one-eighth of the 1950 group, were dissatisfied with their employment. Details for different types of the alumni are given in the following table:

TABLE 112

Percentage distribution of the alumni employed at present according to the last examination passed and degree of satisfaction with present employment

Exam. Passed	Total	Very satisfied	Moderately satisfied	Not at all satisfied
		(Percentages)		
A.1954				
1. B.A. Pass.	119	36	30	34
2. B.Sc. Pass	48	30	35	35
3. B.Com.	84	42	36	22
4. B.A. Hons.	53	36	28	36
5. B.Sc. Hons.	24	33	46	21
6. M.A. Languages	44	50	36	14
7. M.A. His.-Pol. Sc.-Phil.	45	36	44	20
8. M.A. Eco.-Com.-Maths.	111	56	28	16
9. M.A. Social Work	17	59	41	..
10. M.Sc.	65	35	49	16

TABLE 112—*Contd.*

Exam. Passed	Total	Very satisfied	Moderately satisfied	Not at all satisfied
11. Library Science	11	73	27	..
12. Law	103	46	33	21
13. Prof. in Law	180	52	33	15
14. Education	85	61	28	11
15. Nursing	5	60	40	..
16. Medicine	23	70	22	8
17. Technology	41	39	39	22
18. Foreign Languages	41	66	22	12
TOTAL	1,099	47	33	20
B.1950				
1. B.A. Pass	32	43	38	19
2. B.Sc. Pass	10	50	20	30
3. B.Com.	25	64	28	8
4. B.A. Hons.	15	60	20	20
5. B.Sc. Hons.	18	39	50	11
6. M.A. Langs.	32	62	25	13
7. M.A. His.-Pol. Sc.-Phil.	19	58	21	21
8. M.A. Eco.-Com.-Maths.	46	46	39	15
9. M.A. Social Work	7	43	43	14
10. M.Sc.	27	56	33	11
11. Library Science	8	76	12	12
12. Law	35	60	29	11
13. Prof. in Law	58	66	26	8
14. Education	52	56	38	6
15. Nursing	1	100	..	..
16. Medicine	5	80	20	..
17. Technology	10	60	40	..
18. Foreign Languages	11	75	17	8
TOTAL	411	57	31	12

It is seen that the proportion of the very satisfied alumni was appreciably higher among the M.A.'s in Social Work and those who had studied Nursing, Medicine, Education, Library Science, and Foreign Languages than among other types of alumni. A larger proportion of the former as compared to that of the latter, as will be shown in the following pages had found employment within their field of specialisation and in keeping with their occupational interests and aspirations.

4.3. It may be noticed that there is some difference between the two groups of alumni in regard to the degree of satisfaction experienced in their present employment. The percentage of alumni reporting high degree of satisfaction is higher in the 1950 group and the percentage of those dissatisfied is higher in the 1954 group.

4.4. The following table presents the differences, in each examination category, between the two groups in relation to the degree of satisfaction with the employment held at the time of the Survey.

TABLE 113

Showing the differences in each examination category between the two year groups in relation to the degree of satisfaction with the employment held at the time of the Survey

Last Examination	Percentage highly satisfied in 1950 group minus percentage highly satisfied in 1954	Percentage moderately satisfied in 1950 minus percentage moderately satisfied in 1954	Percentage not at all satisfied in 1950 minus percentage not at all satisfied in 1954
1. B.A. Pass	7	8	-15
2. B.Sc. Pass	20	-15	-5
3. B.Com.	22	-8	-14
4. B.A. Hons.	24	-8	-16
5. B.Sc. Hons.	6	4	-10
6. M.A. Languages	13	-11	-1
7. M.A. Hist.-Pol. Sc.-Phil.	22	-23	1
8. M.A. Eco.-Com.-Maths.	-10	11	-1
9. M.A. Social Work	-16	2	14
10. M.Sc.	21	-16	-5
11. Library Science	2	-15	12
12. Law	14	-7	-7
13. Prof. in Law	14	-7	-5
14. Education	-5	10	-5
15. Nursing	40	-40	..
16. Medicine	10	-2	-8
17. Technology	21	1	-22
18. Foreign Languages	9	-5	-4
TOTAL	10	-2	-8

The table clearly indicates that the incidence of high degree of satisfaction was greater among the 1950 group than among the 1954 group in fifteen of the eighteen examination categories. The percentages of the moderately satisfied were higher in the 1954 than in 1950 group in twelve out of 18 categories. The percentages of those not at all satisfied showed even more strongly the tendency revealed by the moderately satisfied ones. Thus while the highly satisfied alumni predominated in the 1950 group, those not at all satisfied and those only moderately satisfied predominated in the 1954 group. This may be due to the reason that those in the 1950 group had either in course of longer period of time found satisfying occupations or that they had in the course of longer period of time found reconciled themselves to whatever occupations they could get. In other words the alumni in the 1950 group had "settled down" to a greater extent than those in the 1954 group, and had become resigned to a greater extent to their current position.

An obvious but interesting picture is presented in the following table which shows the importance of income in determining of job satisfaction.

TABLE 114

Distribution of alumni by final examination passed, degree of satisfaction with present employment and monthly earnings

Examination passed	1950						1954					
	Very satisfied		Moderately satisfied		Not at all satisfied		Very satisfied		Moderately satisfied		Not at all satisfied	
	Up to Rs. 300	Above Rs. 300	Up to Rs. 300	Above Rs. 300	Upto Rs. 300	Above Rs. 300	Up to Rs. 300	Above Rs. 300	Up to Rs. 300	Above Rs. 300	Up to Rs. 300	Above Rs. 300
1. B.A. Pass	9	5	12	..	5	1	23	17	33	2	38	3
2. B.Sc. Pass . . . . .	..	5	..	1	3	..	8	5	16	1	14	2
3. B.Com.	7	9	6	1	2	..	26	7	28	2	18	1
4. B.A. Hons.	2	7	3	..	2	1	8	8	12	3	18	..
5. B.Sc. Hons. . . . .	..	7	4	4	..	2	7	..	10	1	5	..
6. M.A. Languages.	4	16	6	2	4	..	9	18	11	4	5	1
7. M.A. His.-Pol. Sc.-Phil.	4	6	4	..	3	1	9	6	17	3	6	2
8. M.A. Eco.-Com.-Maths.	5	15	10	8	6	1	27	32	24	7	16	2
9. M.A. So. Work . . . . .	..	3	1	2	..	1	3	7	3	4	..	..
10. M.Sc.	4	6	2	7	..	3	15	8	24	8	9	1
11. Library Science	3	3	1	..	..	1	4	4	3	..	..	..
12. Law	1	19	6	4	3	1	18	26	24	8	17	3
13. Prof. in Law	5	30	10	5	4	..	36	46	42	13	20	8
14. Education	18	11	14	6	..	3	44	8	21	3	9	..
15. Nursing . . . . .	..	1	..	..	..	..	1	2	1	1	..	..
16. Medicine	1	3	1	..	..	..	3	13	1	4	..	2
17. Technology . . . . .	..	6	1	3	..	..	5	11	3	13	5	4
18. Foreign Languages	3	5	1	1	..	1	12	15	7	2	4	1
TOTAL	66	157	82	44	32	16	258	227	280	79	184	30
TOTAL	223		126		48		485		359		214	
TOTAL			397*				1058*					

*The table has information about 1058 alumni of 1954 group and 397 alumni of 1950 group. These figures are less than the figures given in the preceding table, as the table excludes all those alumni who did not give information about their monthly earnings.

In the table both the groups show the same trend. In the 1954 group, those with monthly earnings of below Rs. 300 formed 53 per cent of the alumni who were very satisfied with their employment; the remaining 47 per cent of the very satisfied alumni were earning over Rs. 300 per month. Among those moderately satisfied, the percentage of the alumni with monthly income of under Rs. 300 was 78 per cent and of those who were not at all satisfied, the monthly income of under Rs. 300 accounted for as many as 86 per cent.

In the 1950 group, of those very satisfied, only 30 per cent were earning under Rs. 300 a month. of those moderately satisfied, 65 per cent had similar earnings and of those not at all satisfied, 67 per cent had monthly earnings of under Rs. 300.

In both the groups the difference between those moderately satisfied and those not at all satisfied was less than the difference between those very satisfied and either of the above. It may be that, on the matter of satisfaction with the present employment, moderately satisfied and not at all satisfied were only two different ways of expressing dissatisfaction and not degrees of satisfaction or dissatisfaction.

The table also seems to suggest that in the 1954 group, income was not a prominent factor among those very satisfied. It assumed a much greater importance among the moderately satisfied ones and those not at all satisfied. This may be a highly significant finding. Low income may be a more important factor in determining dissatisfaction with employment than high income is in determining satisfaction.

4.5. Analysis of the data concerning the reasons for dissatisfaction with the present employment, given by the alumni who were partially or completely dissatisfied with the employment revealed three important reasons advanced by the alumni, which were, 'low income', 'not interested in the nature of work' or 'the work is not in line with field of study, and 'no future prospects'. This is shown in the following table:

TABLE 115

Distribution of the alumni who were partially satisfied or completely dissatisfied with their present employment according to reasons for dissatisfaction

	Alumni			
	1954		1950	
	No.	%	No.	%
1. Low earnings	330	56.4	83	46.6
2. Not interested in the nature of work/not in his field.	138	23.6	38	21.5
3. No future prospects	39	6.7	18	10.2
4. Job temporary/insecure	9	1.5	5	2.8

TABLE 115—*Contd.*

	Alumni			
	1954		1950	
	No.	%	No.	%
5. Not considered as a respectable occupation/low status.	11	1·9	4	2·3
6. No cordial relations with superiors	3	0·5	2	1·1
7. No scope for initiative	4	0·7	4	2·3
8. No scope for research	3	0·5	3	1·7
9. Unhealthy atmosphere at place of work	8	1·4	2	1·1
10. Heavy work	4	0·7	1	0·5
11. Desire to be self-employed	2	0·3	..	..
12. Others	29	4·9	15	8·5
13. N.A.	5	0·9	2	1·1
TOTAL	585	100·0	177	100·0

It is seen that about half the alumni complained of low income ; about one-fifth felt that the employment was not connected with the type of education they had received and they were, therefore, not interested in the nature of work ; and a smaller proportion, about 7 per cent of the 1954 group and 10 per cent of the 1950 group, were discouraged by the dim future prospects. There were a host of other reasons given by the alumni. None of these was, however, of any importance.

The relative incidence of the three major factors contributing to dissatisfaction with the present employment is given in the following table :

TABLE 116

Percentage of the alumni in each examination category according to the major factors leading to dissatisfaction with the present employment

Exam. Categories	Total No.	Low income	Not interested in nature of work	No prospects	Total
		(Percentages)			
A-1954					
1. B.A. Pass	76	59	29	6	94
2. B.Sc. Pass	34	47	29	15	91
3. B.Com.	49	71	12	4	87
4. B.A. Hons.	34	67	15	12	94
5. B.Sc. Hons.	16	44	19	6	69
6. M.A. Languages	22	54	27	..	81
7. M.A. His.-Pol. Sc.-Phil.	29	59	14	7	80
8. M.A. Eco.-Com.-Maths.	49	49	33	2	84

TABLE 116—Contd.

Exam. Categories	Total No.	Low income	Not interested in nature of work (Percentages)	No prospects	Total
9. M.A. Social Work	7	43	29	..	72
10. M.Sc.	42	59	24	12	95
11. Library Science	3	66	..	..	66
12. Law	56	57	27	4	88
13. Prof. in Law	87	56	26	5	87
14. Education	33	48	21	9	78
15. Nursing	2	50	..	..	50
16. Medicine	7	28	14	14	56
17. Technology	25	56	16	12	84
18. Foreign Languages	14	64	29	..	93
TOTAL	585	56	24	7	87

B-1950

1. B.A. Pass	18	61	22	6	89
2. B.Sc. Pass	5	20	80	..	100
3. B.Com.	9	33	44	..	77
4. B.A. Hons.	6	33	..	33	66
5. B.Sc. Hons.	11	36	27	27	90
6. M.A. Languages	12	58	8	8	74
7. M.A. His.-Pol. Sc.-Phil.	8	75	25	..	100
8. M.A. Eco-Com.-Maths.	25	56	24	4	84
9. M.A. Social Work	4	50	50	..	100
10. M.Sc.	12	42	25	17	84
11. Library Science	2	..	50	..	50
12. Law	14	14	43	14	71
13. Prof. in Law	20	55	5	20	80
14. Education	23	52	4	4	60
15. Nursing . . . . .	..	..	..	..	..
16. Medicine	1	..	..	..	..
17. Technology	4	25	..	25	50
18. Foreign Languages	3	67	..	..	67
TOTAL	177	47	21	10	78

The table clearly shows that the three major factors mentioned above, *i.e.*, low income, lack of interest, and no further prospects account for a high proportion of dissatisfaction among alumni in both the 1950 and the 1954 group irrespective of the final examination passed. The figures regarding the 1954 group present a somewhat bolder picture than those for the 1950 group because of the larger numbers involved in it. Only in two of the eighteen examination categories in the 1954 group does the total weight of these three factors falls noticeably below 60 per cent. These two categories are Nursing and Medicine. In all cases the total weight of these three factors is above 60 per cent.

4.6. The alumni found in employment at the time of the Survey were asked also whether their employment was in accord with their occupational interests and aspirations. The analysis of the information gathered from them shows results which were similar to their responses to the question regarding their employment within their field of specialisation. This is indicated in the table below :

TABLE 117

Distribution of the alumni according to whether their present employment is within their field of specialisation and whether it is in keeping with their occupational interests and aspirations.

Present Employment	In keeping with occu- pational interests	Not in keep- ing with oc- cupational interests	Total
A-1954			
Within field of specialisation . . .	625	7	632
Not within field of specialisation . . .	..	306	306
TOTAL .	625	313	938
B-1950			
Within field of specialisation . . .	288	6	294
Not within field of specialisation . . .	..	78	78
TOTAL .	288	84	372

It is seen that of 938 alumni of the 1954 group 632 were working within their field of specialisation, and of these, 99 per cent feel they were in employment which was in keeping with their interests and aspirations. * All

of the 306 alumni who were not working within their field found that their work was not in line with their interests and aspirations. Figures of the 1950 group present identical picture. There is, thus, a direct and a strong relationship between whether a person is employed within his field of specialisation and whether he finds his occupation in keeping with his occupational interests.

4.7. It will be desirable to enquire into the probable relationship between the division obtained by the alumni in their last examination and whether their present employment is in line with their occupational interests and aspirations. The following table presents the relationship :

TABLE 118

Percentage distribution of the alumni according to the division obtained in the last examination and whether their present employment is in keeping with their occupational interests.

Division obtained	Percentage of alumni in congenial em- ployment	
	1954	1950
First or Distinction	84.2	78.0
Pass Degree	60.0	77.0
Second	66.7	75.2
Third	43.4	67.8
Pass degree instead of honours	43.8	75.0

The table shows that the proportion of the alumni who could find congenial employment was the highest among those who had got a First or Distinction in their last examination and it was the lowest among those who got a Third. The proportion among the alumni who got a Second was lower than the proportion among those who got a First and it was higher than the proportion among those who got a Third or were granted a pass degree in place of honours. It is, thus, clear that finding of a congenial employment depended on the class or division obtained in the examination.

It may as well be noticed that the percentage of the alumni congenially placed in employment is for all divisions, except the First, higher in the 1950 group than in the 1954 group. It suggests that in the course of time more and more people tend to find employment in line with their occupational interests and aspirations.

5. Opinion on Vocational Guidance :

5.1. In the complex socio-economic world of today a realistic choice of an occupation and progress in it depends upon an individual's ability to take into account varied external environmental and inner psychological factors. Unaided, this important task cannot be performed by a vast majority of people. It has been felt by the educators as well as administrators that there is a definite need for guidance from those who are professionally qualified to give it. An effort was made in this Survey to find out how far the university alumni were aware of the need or usefulness of vocational guidance. This was ascertained by asking the question "Do you think guidance from a specialist regarding the choice of course of education/career during your student life would have helped you?" In judging the findings of this section, it is desirable to bear in mind that vocational guidance being a new service in the country, it is likely that its exact nature and utility could not be conceived by the alumni who had no experience of it.

5.2. About a third of the alumni of each of the selected groups felt that vocational guidance would have helped during their student life. The extent of help that could be derived from the guidance is indicated in the table below :

TABLE 119

Distribution of the alumni according to the extent of help from vocational guidance.

Extent of help from vocational guidance	1954		1950	
	No.	%	No.	%
Very materially	280	20.3	127	26.3
Slightly	132	9.6	36	7.5
Not at all	564	40.8	150	31.1
Can't say	378	27.4	158	32.8
N.A.	27	1.9	11	2.3
TOTAL	1,381	100.0	482	100.0

It is seen that over a fifth of the alumni of the 1954 group and a fourth of the 1950 group felt that vocational guidance would have helped them very materially. A small proportion, under a tenth, consisted of those who thought the guidance could have been slightly useful. A very large proportion, 41 per cent of the 1954 group and 31 per cent of the 1950 group, felt the guidance could have been of no use, and about 27 per cent of the 1954 group and 33 per cent of the 1950 group were not certain of its utility. The following table presents details about different types of graduates.

TABLE 120

Distribution of the alumni according to last examination passed and whether they felt vocational guidance would have been helpful.

Last Examination	1954			1950		
	Alumni who thought vocational guidance would have helped			Alumni who thought vocational guidance would have helped		
	Total	No.	%	Total	No.	%
1. B.A. Pass	162	50	30.9	47	14	29.8
2. B.Sc. Pass	59	22	37.2	14	6	42.8
3. B.Com.	89	19	21.3	26	5	19.2
4. B.A. Hons.	65	17	26.2	21	9	42.9
5. B.Sc. Hons.	29	10	34.5	21	10	47.6
6. M.A. Hist.-Pol. Sc.-Phil.	77	23	29.9	22	11	50.0
7. M.A. Lang.	76	20	26.3	39	7	17.9
8. M.A. Eco.-Maths.-Com.	137	33	24.1	50	27	54.0
9. M.A. Social Work	23	7	30.4	8	2	25.0
10. M.Sc.	86	24	28.0	29	9	31.0
11. Library Science	11	2	18.2	8	2	25.0
12. Law	127	41	32.3	38	10	26.3
13. Prof. In Law	199	81	40.7	62	22	35.6
14. Education	111	34	30.6	61	21	34.4
15. Nursing	6	4	66.7	2	..	..
16. Medicine	29	5	17.2	10	2	20.0
17. Technology	49	9	18.4	12	3	25.0
18. Foreign Languages	46	11	24.0	12	3	25.0
TOTAL	1,381	412	29.9	482	163	33.8

The table shows that the proportion of the alumni, who thought that vocational guidance would have been helpful, was higher among those included in the categories of B.Sc. Pass, B.A. Hons., B.Sc. Hons., M.A. History, Political Science, Philosophy, M.A. Economics, Maths, Commerce, Law, and Proficiency in Law than among the remaining alumni including those in categories of technical and professional courses. It may be mentioned here that the alumni included in the former categories of general education showed also, high degree of aimlessness and were dissatisfied with their present employment in appreciable proportions.

5.3. There was a slight tendency for persons passing in lower divisions to appreciate the usefulness of vocational guidance to a somewhat larger extent than those who passed their examinations in the higher classes. The data is presented below :—

TABLE 121

Percentage of alumni in each class/division who appreciated the usefulness of vocational guidance.

Division obtained	Percentage of alumni who felt the usefulness of vocational guidance	
	1954	1950
First or Distinction	22.8	29.4
Second	30.9	34.5
Third	28.2	37.6
Pass without division	31.1	29.9
Appeared for Honours but granted Pass degrees.	35.3	66.7

It is seen that the proportion of the alumni who felt the need for vocational guidance was the lowest among those who had obtained a first division, was higher among those who secured a second or a third and it was the highest among those who appeared for honours course examination but were granted a pass degree.

It may also be noticed that the realization of need for guidance was stronger among the alumni of the 1950 group than among those of the 1954 group.

5.4. The alumni who felt the need for vocational guidance were asked to indicate the manner in which guidance would have helped them. The three main opinions advanced by them were :

- (a) "It would have helped in choosing a technical or professional course."
- (b) "It would have helped in the proper choice of subjects in the earlier states of student life and avoided the waste of efforts on the study of subjects for which I was not suited", and
- (c) "It would have been better to have expert guidance."

It was found that in case of both the groups many more alumni felt the need for vocational guidance in choosing and preparing for a technical or professional career rather than in making a proper choice of subjects.

5.5. The whole evidence presented in this section points to the conclusion that there was somewhat greater appreciation of the value of vocational guidance in the 1950 group than in the 1954 group. This may be due to the fact that the alumni in the 1950 group had acquired a greater degree at maturity by the time of the Survey than those in the 1954 group.

CHAPTER IX

EMPLOYMENT OF WOMEN

This chapter is concerned with characteristics about employment of women as well as their views and attitudes towards some aspects of vocational life. Most of the data utilized in this chapter were obtained in response to Part III of the Special Schedule which contained special questions for women.

1. Women in Employment :

1.1. Women formed a sizable portion of the alumni, constituting nearly one-fifth of the total. In the 1954 group, out of a total of 2,456 alumni, 493 that is 20.1 per cent were women. In the 1950 group, they were 207 out of a total of 1,124, constituting 18.4 per cent. The greater percentage for the 1954 group confirms the rising trend in women's higher education.

1.2. Of the 493 women who graduated in 1954, 268 could be contacted and data obtained from them. Among these 142, that is, 53 per cent were found employed at the time of investigation. Of the 207 alumni of the 1950 group, data could be obtained from 75 and among these 50 were found employed, the percentage of the employed for this group working out to 67.

1.3. The remainder consisted of women who were seeking employment and were not able to find one, and also of those who were not seeking employment as they had decided to terminate their career temporarily or permanently. It is only the former category that can be considered as truly unemployed. The size of the employed women may be judged from the following table :

TABLE 122

Women in employment at the time of investigation

Year group	Total of women alumni	Women alumni from whom data was obtained	Women alumni in employment	Women alumni unemployed or not seeking employment
1954 . . .	493	53 per cent	53 per cent	47 per cent
1950 . . .	207	35 per cent	67 per cent	33 per cent

1.4. It is rather surprising that a larger percentage of women alumni among those contacted, are employed in the 1950 group than in the 1954 group. The higher percentage of 1950 group may be explained on several grounds. The lesser percentage of women contacted for 1950 suggests that the Survey staff was not able to contact sufficient number of women who were unemployed or not seeking employment. The contact with the employed women was relatively easier. It may also be assumed that women of

the 1950 group not seeking employment felt less interested in the Survey than their counterpart of the 1954 group and hence did not respond to the request for information.

1.5. Another possible reason which may be advanced is that the women of the 1950 group have their children more grown-up than those of the 1954 group and hence a larger proportion of them could go in for employment. In order not to make the interview schedule too lengthy, the data on children was not sought. Hence the validity of this reason could not be investigated.

2. Employment status of women :

2.1. In comparison with men, a larger percentage of women were working as employees. The proportions of employees were found to be 96.0 and 98.6 respectively for the 1950 and 1954 groups. The corresponding figures for men are 78.9 per cent and 82.0 per cent. In the 1950 group, one woman was found working as an employer and one as self-employed, whereas in the 1954 group one was an employer and one as an unpaid family worker.

3. Utilisation of education in employment :

3.1. Considerable interest centres round the question of utilisation of education by women for the purpose of employment. The relevant data thrown up by the Survey shows that quite a large proportion of women alumni are either in employment or are seeking employment. Particularly for women who qualified in Teaching, Nursing and Medicine, the proportion of those not seeking employment is very little. For the total group of the 1954 women alumni who could be interviewed, the percentage of those not seeking employment or out of labour force is 32.1. For the group of the 1950 women alumni, this percentage amounts to 24.0. The higher percentage for the 1954 group may be explained on the same grounds as the higher percentage in respect of employment, mentioned earlier. These figures, however, are not stable estimates of the proportion who could be treated as being out of the labour force. A woman may leave and enter the labour force intermittently either by choice or compulsion. The following table gives a picture of the proportion of women not seeking employment :

TABLE 123

Women not seeking employment (out of labour force)

Year group	Women alumni				Percentage of not seeking employment
	Inter-viewed	Employed	Seeking employment	Not seeking employment	
1954	268	142	39	87	32.1
1950	75	50	7	13	24.0

3.2. When the question of women not seeking employment is examined in relation to their education it is found that the larger number is of those who obtained B.A. Pass, B.Sc. Pass and B.A. Hons. The following table presents the relative picture of women in employment or seeking employment and women not seeking employment as related to their education. As the numbers involved are small, the percentages in respect of each educational course have not been worked out.

TABLE 124

Demand for employment by women according to education.

Final Examination passed	1954			1950		
	Total inter-viewed	Em-ployed or seek-ing emp-loyment	Not seeking employ-ment	Total inter-viewed	Em-ployed or seek-ing emp-loyment	Not seeking employ-ment
1. B.A. Pass . . .	38	13	25	8	4	4
2. B.Sc. Pass. . .	5	..	5	..	..	..
3. B.A. Hons. . . .	17	9	8	4	..	4
4. B.Sc. Hons. . . .	2	2	..	..	..	..
5. M.A. Languages . .	36	28	8	18	13	5
6. M.A. His.-Pol.-Sc.-Phil.	28	16	12	7	6	1
7. M.A. Eco.-Com.-Maths.	17	12	5	5	5	..
8. M. A. Social work . .	5	3	2	1	1	..
9. M. Sc.	12	9	3	..	..	..
10. Library Science . .	4	4	..	1	1	..
11. Law	15	10	5	1	1	..
12. Teaching	56	44	12	22	20	2
13. Nursing	6	6	..	2	1	1
14. Medicine	22	19	3	5	4	1
15. Foreign Languages . .	5	5	..	1	1	..
TOTAL	268	180	88	75	57	18

3.3. An examination of the employment of women according to their marital status revealed that unmarried women were more keen on getting employment. Of the women who were found unmarried, about 85 per cent of the 1954 group and all of the 1950 group were either employed or seeking employment. Of the married women only 46 per cent of the 1954 group and 61 per cent of the 1950 group were employed or sought work.

4. Occupations entered by women :

4.1. The occupations entered by the women alumni cover almost all types and levels of occupations in the categories of Professional and Administrative workers. The variety of occupations is greater in case of the 1954 group than the 1950 group. This shows the trend of women to enter more and more fields of work. It may also be partly due to more educational facilities for women.

4.2. The analysis of women alumni employed at the time of investigation shows that a very large majority join the teaching profession. In case of the 1950 group over three-fourths were engaged in teaching at different levels (college, school, etc.). In case of the 1954 group, however, the proportion employed as teachers was only 45 per cent. The following table presents data on the occupations of the women at the time of investigation :

TABLE 125

Percentage distribution of employed women by occupation.

Occupations	1954		1950	
	No.	%	No.	%
1. Administrative, executive and managerial workers.	6	4.2	1	2.0
2. Physical & natural scientists	1	0.7	4	8.0
3. Social scientists	2	1.4	..	..
4. Physicians and surgeons	19	13.4	..	..
5. Teachers	64	45.1	38	76.0
6. Legal workers	1	0.7	..	..
7. Librarians	8	5.6	2	4.0
8. Professional and tech. workers (Subordinate).	23	16.2	1	2.0
9. Social workers, etc.	17	12.0	3	6.0
10. Fashion designer	1	0.7	..	..
11. Poultry workers . . . . .	..	..	1	2.0
TOTAL	142	100.0	50	100.0

The figures in the above table suggest that diversification is taking place in women's occupations. In other words, a greater number than before work as high officials in government departments as investigators in occupations concerned with social sciences, statistics, physical and biological sciences, and clerks, typists and stenographers.

4.3. The relationship between education and employment in case of women alumni seems to be satisfactory. Those who obtained professional degrees were found to be employed in their own profession. Taking both the year groups together, it is found that out of 57 employed women who

obtained a degree in education, as many as 53 are employed as teachers. All of the seven employed women who had training in nursing have been working in the profession. Of the 24 employed women who had medical education 20 were engaged in their field.

Those who have obtained non-professional degrees are, however, scattered among different occupational groups, although their concentration is more in teaching and clerical occupations. Taking the year groups together, it is found that out of 11 employed women who obtained the B.A. Pass degree, 7 are in clerical occupations. Out of 28 who obtained a Master's degree in a language, 22 are working as teachers. Similarly, out of 19 who obtained a Master's degree in History, Philosophy, and other social sciences, 9 are working as teachers. Those who graduated with Master's degree in Mathematics or Economics tend to join a professional occupation at a subordinate level such as investigators. In case of Law, which may be considered partly as professional education and partly as general education, it was found that of the 5 employed women alumni only one is in the profession, one is in the administrative occupation, one is working as a librarian, one is engaged in a professional occupation at a subordinate level and one is in the clerical occupation.

4.4. It may be of some interest to consider the effect of marriage on the occupational pattern of women. The point of inquiry is whether as a result of marriage, women tend to go out of labour force in certain occupations. The data presented here is in respect of employed women only and does not include those seeking employment and hence is not adequate for answering the query. The following table gives the distribution of married women alumni of 1950 and 1954 groups :

TABLE 126

Percentage distribution of married women alumni by occupations entered by them.

	1954		1950	
	No.	%	No.	%
Administrative, executive and managerial.	3	7.5	1	4.2
Research workers and social scientists	1	2.5	1	4.2
Physician and surgeons	5	12.5	3	12.5
Teachers	21	52.5	16	66.5
Librarians	2	5.0	1	4.2
Professional & Technical Workers (Subordinate)	6	15.0	1	4.2
Clerical and related workers	1	2.5	1	4.2
Fashion designer	1	2.5	..	..
TOTAL	40	100.0	24	100.0

When the above table is compared with Table 125 giving the occupational pattern of the total group of women alumni (married and unmarried), certain noticeable differences are found. In the case of 1954 group, it is noticed that a larger proportion of married women are engaged in teaching than in case of the total group. For the 1950 group, the reverse is true. This probably suggests that soon after marriage women tend to continue in their teaching jobs but after a few years, a few of them are obliged to give up their jobs. Those engaged in clerical occupations tend to leave their jobs and this trend has been shown by both 1950 and 1954 groups.

5. Career versus Non-Career Types of Women :

5.1. With regard to attitude to occupation, women may be divided into two categories, the career-type and the non-career type. Among the career-type there is genuine occupational interest and women in this category take to an occupation with the intention of making a career of it. Among the non-career type, the decision to do a job is guided more by non-career motives such as contributing to family income, engaging one's time profitably, etc. The inquiry relating to career and non-career types among the alumni of Delhi University was made by asking the question, "Do you intend to make your profession a life-long career?" Replies were invited in three categories "Yes", "No", and "Cannot say". Only those responding in "Yes" were considered as career-type. This question was put to all women in employment and those seeking employment, those not seeking employment being regarded as non-career type. It is found that a very large number of the women alumni under investigation are career-type. The percentages of the career-type among those who are employed and those who seek employment, for the 1950 and the 1954 group are 82.5 and 65.0 respectively.

5.2. It is generally assumed that those who are career-type tend not to marry. The data thrown up by the enquiry suggest that this is not true, as the proportion of the married among the career-type is not less than among the total group, of the employed and of those seeking employment. The following table compares the proportion of the married in the two groups:—

TABLE 127

Percentage distribution of married women among the career-type and in the total group

Year group	Percentage of the married among the employed and employment seeking	Percentage of the married among the Career-type
1954	31	38
1950	45	47

6. Interference from marriage in occupational life :

6.1. A related question is how far marriage interferes with occupational life. This point was investigated from the replies to a straightforward question to all married women alumni. "Has your marriage interfered with

occupational life?" It is found that out of 24 such alumni of the 1950 group, only 3, and out of 40 such alumni of the 1954 group, only 8 replied to this question in the affirmative. Thus the percentage stating that marriage interfered in their occupational life works out to 12.5 per cent and 30 per cent respectively for the 1950 and the 1954 groups. When the question was investigated further, a majority stated that family responsibilities and looking after children interfered with occupational life. Out of the 11 women this reply was given by 7. Only one of them stated that her working was objected to by her husband and parents-in-law.

6.2. An attempt was made to investigate whether there were some occupations in which holding a job interfered with domestic responsibilities more than others. The replies from 64 married women alumni of both the year groups suggest that teaching in spite of its several holidays and vacations was considered to be more interfering in the carrying out of domestic responsibilities than other occupations. The frequencies for positive and negative responses are mentioned below :—

TABLE 128

Interference by employment in carrying out domestic responsibilities according to occupations.

Occupation	Interference	
	Yes	No.
Administrative and Executive workers	1	4
Teachers	17	13
Librarians	2	1
Physicians and Surgeons	1	9
Social Scientists	1	..
Professional workers (subordinate)	1	6
Clerical and related workers	1	2
Fashion designer	..	1
TOTAL	24	36

6.3. In many Indian cultures, the employment of married women is related significantly to the approval of parent-in-law to their working. The data from the Survey show that in case of a large majority the working of married women has been approved by their parents-in-law. In case of the 1954 groups parents-in-law of the 75 per cent and in case of the 1950 group, parents-in-law of the 88 per cent have approved of their working. The figures also show that there are some women, although small in proportion, who go in for work against the wishes of the elder members of their family.

CHAPTER X

SUMMARY OF FINDINGS

1. This Survey of selected alumni of the Delhi University was conducted by the University during the months of February-September, 1958, in collaboration with the Ministry of Labour and Employment (D.G.E.&T.) and the Planning Commission. The main objectives were—

- (i) to investigate the relationship between education imparted in the University and the subsequent occupations of the alumni.
- (ii) to evaluate the curricula of different faculties and departments of the University in terms of their utility in job performance, and
- (iii) to study the occupational thinking, the factors determining the choice of subjects and the career patterns of the alumni.

The Field of Enquiry :

2. All those who got a degree, diploma or a certificate of Delhi University in 1950 and 1954 were selected as the subjects of the Survey.

The Method :

3. The Survey was conducted chiefly by the interview method. Of the 1,863 alumni of the two groups, from whom the data were obtained, 1,776 or 95.3 per cent were actually interviewed. Of these, 1,436, who were residing in Delhi, were interviewed by specially appointed investigators and the remaining 340, staying outside Delhi, were interviewed by the Officers of the National Employment Service. Data from the remaining 87 alumni, who were accessible neither to investigators nor to the Employment Officers, were obtained by the questionnaire method.

Coverage :

4. 1,381 or about 56 per cent of the alumni of the 1954 group and 482 or 43 per cent of the 1950 group could be contacted and the data obtained from them. The coverage for the men and the women was respectively 53 per cent and 49 per cent for the 1954 group and 44 per cent and 36 per cent for the 1950 group.

General characteristics of the alumni :

5. About four-fifths of the total number of the alumni in both the groups were men. The proportion of women has risen with time to form about 30 per cent of the total number in 1958.

6. Women preferred the study of Arts and Education. However, over the period 1950-58, an increasing proportion of them joined courses in Economics, Mathematics, Library Science and Foreign Languages.

7. The average age of the alumni at the completion of school (Higher Secondary) education was 16.57 years for the men and 15.95 for the women in the 1954 group and 16.60 for the men and 15.65 for the women in the 1950 group. Both in 1950 and 1954, about two-thirds of the first graduates

were of the ages below 21 years and about 60-70 per cent of the double graduates were of the ages ranging from 21-24 years. More than 50 per cent of the alumni in each of the professional categories of Library Science, Law and Education were above the age of 25 years.

8. Only about 39 per cent of the men as compared with about 70 per cent of the women married before taking up employment.

9. In respect of only about a tenth of the alumni the family income at the time they joined the college was less than Rs. 150 per month. The rest were distributed almost equally among the four family income brackets of Rs. 150-299, Rs. 300-499, Rs. 500-999 and Rs. 1000 and above. In the case of women alumni the family income was higher than in the case of men alumni. Relatively, higher proportions of the alumni who studied Arts, Commerce and Science than those who qualified in technical and professional courses had family incomes of more than Rs. 500 per month.

10. About two-thirds of the alumni belonged to Delhi and had their school education also in Delhi. About 21-27 per cent came from the adjoining States of Punjab and Uttar Pradesh. About three-fourths of those who qualified in technical and professional courses went to school in places outside Delhi.

11. A high percentage of the alumni who qualified in Law (from 51 to 55 per cent), Education (37 to 67 per cent) and even in Arts (25 to 50 per cent) had taken science at their school leaving examination. An appreciable proportion had, therefore, studied science in their school days but did not or could not study Science, Engineering or Medicine at the University.

12. At their school leaving examination over half the alumni had passed in the second division, about a third secured a first division, and the remainder, a third division. Alumni with a good school career tended to join courses in Science, Engineering and Medicine.

13. More Science than Arts and Commerce graduates, and double graduates secured a first or a second division in the 1950 and 1954 examinations. These results, compared with the results of the school leaving examinations, showed that a little under half the alumni, for whom the comparison could be made, had obtained a lower division; about two-fifths had got the same division; and only 7 to 9 per cent secured a higher division in the University examination. There again Science graduates and double graduates did better than those of Arts and Commerce.

14. Of the alumni who had terminated their education, 16 per cent of the 1954 group and 14 per cent of the 1950 group would have studied further had financial difficulties not prevented them.

15. The education of over three-fourths of the alumni of both the groups was financed by their parents, guardians, or other near relatives. Less than a fifth, mainly part-time students of Law, depended upon tuition and clerical work during their student life. About half of them in this manner earned over Rs. 150, about a fourth earned Rs. 100-150, and the remainder earned below Rs. 100 per month. Only about 2 per cent depended on merit scholarships or aid from their colleges.

16. 51 per cent of the 1954 group and 58 per cent of the 1950 group, had breaks in their educational career in the sense that they did not pass the series of examinations in the prescribed course of time. These interruptions were caused mainly by examination failures, intervening periods of employment and illness. Alumni, who had later specialised in Law or Education, had proportionately longer breaks than those with other degrees. Most of them had taken up these courses after long spells of employment.

Employment :

17. At the time of the Survey, 83.2 per cent of the 1381 alumni of the 1954 group were employed, 7.2 per cent were unemployed, and the remainder, 9.6 per cent, were not seeking work. Of the 482 alumni of the 1950 group, 91.7 per cent were in employment, 3.3 per cent were unemployed, and 5.0 per cent were not seeking employment. Proportion of employed persons among men was 90.3 per cent in the 1954 group and 96.3 per cent in the 1950 group ; for women the corresponding figures are 53.0 per cent and 66.7 per cent. Among women 33.8 per cent of 1954 and 24.0 per cent of 1950 group were not seeking employment.

Employment Status :

18. Of the alumni found in employment, 84.1 per cent of the 1954 group and 90.8 per cent of the 1950 group were working as employees. 10.2 per cent of the 1954 group and 13.3 per cent of the 1950 group were self-employed. Only 3.6 per cent of the 1954 group and 4.5 per cent of the 1950 group had become employers. The remaining graduates, 2.1 per cent of the 1954 group and 1.4 per cent of the 1950 group, were unpaid family workers. The proportion of employees was higher among women than among men. It was also greater among the alumni with professional qualifications than among those with general degrees except in the case of Law and Medicine.

Occupational Patterns of Employees :

19. 59.7 per cent of the 1950 group and 50.3 per cent of the 1954 group were employees in professional and technical occupations. 25.0 per cent of the 1950 group and 40.3 per cent of the 1954 group were clerical workers. 9.8 per cent of the 1950 group and 5.3 per cent of the 1954 group were administrative, executive and managerial workers. Having more time to do so, a larger proportion of clerical workers of the 1950 group had become administrative, professional and technical workers.

20. Of the professional and technical employees, more than half of the 1950 group and over a third of the 1954 group were teachers. Technical Assistants* were next in magnitude and formed 23.6 per cent of the 1950 group and 38.7 per cent of the 1954 group. Engineers and scientists at senior level accounted for under 5 per cent.

*Technical Assistants : This group includes scientific assistants in physical and chemical laboratories, statistical assistants, economic investigators and others, engaged in technical and professional work at a junior level. It also includes library workers at all levels.

21. Nearly a third of the 1950 B.A. Hons. degree holders were engaged as administrative workers and about a fourth were employed as clerical workers. Of similar alumni of the 1954 group, under a tenth were engaged as administrative workers and nearly three-fourths were working in clerical occupations. The holders of a B.Sc. Hons. degree had found employment mostly as technical assistants, although the proportion of clerical workers was quite high (about a third) in the 1954 group.

22. Of the holders of a Master's degree in Arts, a majority of those specialising in languages (over three-fourths of the 1950 group and over half of the 1954 group) were found working as teachers. Of those specialising in History, Political Science or Philosophy, nearly one-third were working as teachers and an equal proportion as clerks. Among those specialising in Economics, Commerce or Mathematics, the proportion of clerical workers was about the same (about one-third of both the groups). But the reduction in the proportion of teachers was accompanied by increase in the high percentage of technical assistants.

23. The holders of a Master's degree in Science were mostly employed as technical assistants and teachers. A small proportion (1.4 per cent of the 1954 group and 3.7 per cent of the 1950 group) were engaged as full-fledged scientists. Although a majority of those with a diploma in engineering were working as engineers, a fair number were working as technical assistants or were in administrative or clerical posts related to engineering, e.g., as Section Officers in C.P.W.D.

24. Of the employees with qualifications in Medicine, about 67 to 71 per cent were engaged in medical practice and the rest occupied teaching and administrative positions.

25. Of the employees with qualifications in Law and Proficiency in Law, only a tenth were working in their own field. Nearly 50 per cent were found working in clerical and related occupations and about 20 per cent were employed in administrative posts. Taking into consideration those of the Law graduates who were working as employers or self-employed persons, it is found that only about 40 per cent of all the Law Graduates were definitely working in their own field.

26. Of the employees with qualifications in Social Work, a large proportion (nearly half of the 1954 group and about two-thirds of the 1950 group) were found employed within their field of specialisation, either as social scientists (32 per cent of the 1954 and 43 per cent of the 1950) or administrative workers (16 per cent of the 1954 and 29 per cent of the 1950). Almost all the graduates with qualifications in Teaching and Library Science were engaged in their own profession.

Occupations of the Self-employed and the Employers :

27. Nearly three-fourths of the self-employed workers had a legal practice. Most of the remainder were engaged in wholesale and retail business.

28. 60 alumni became employers. 38 out of the 40 employers of the 1954 group and 16 out of the 20 of the 1950 group were in retail or wholesale business. The remainder, who were qualified in Law, Engineering and Medicine, were in their respective professions.

Employment within the field of Specialisation :

29. As job designations do not in all cases indicate whether they are actually working in their field of specialisation, alumni, other than those with B.A. Pass and B.Sc. Pass degrees, were asked whether they considered themselves to be working in their specialised field. The reply was in affirmative from 79 per cent of 1950 group and 67 per cent of the 1954 group. The difference between the two groups suggests that with the passage of time, alumni are able to find employment within their own field. The proportion of those working outside their field was very high in respect of those with B.A. Hons., and M.A. degrees in subjects like Economics, Mathematics, Commerce, Political Science, History and Philosophy. It ranged from 37 to 40 per cent for the 1950 and 30 to 55 per cent for the 1954 group. It was fairly high in respect of B.Com. and Law graduates, being 23 to 28 per cent for the 1950 group and 34 to 51 per cent for the 1954 group.

30. The proportion of those working outside their field of specialisation seems to be related to the division obtained in the examination ; the higher the division, the fewer working outside their field.

Employing Agencies :

31. About 68 per cent of the employees of the 1954 group as against 59 per cent of those of the 1950 group were employed in the public sector and about 22 per cent of the former group as against 33 per cent of the latter group were engaged in the private sector*. The remainder, forming about 10 per cent of both the groups, were working in the universities and affiliated institutions. This indicates that as the time passed by the public sector absorbed more and more of the alumni.

32. Of the 488 employees of the 1954 group, who held technical and professional posts, 290 were employed in the public sector, 107, in the private sector, and the remainder, 91, in the universities. Of the 52 administrative workers, 31 were engaged in the public sector and 21, in the private sector. Of the 392 clerical workers, 319 were in the public sector, 66, in the private sector, and the remainder, 7, in the universities. The figures for the 1950 group exhibited similar pattern.

Mobility of Employment † :

33. 40 per cent of the 1954 group and 32 per cent of the 1950 group did not change their employment during the period reported on. Nearly 40 per cent of the 1954 group and nearly 50 per cent of the 1950 group held two or three employments.

*Public sector has been defined to include Central and State Governments and allied departments and local bodies. Private sector comprises private establishments and foreign concerns including diplomatic offices.

†Change in employment may occur as a result of change in any one or more variables, namely, employment status, occupation (designation), and employing agency. It includes also change in designation arising from departmental promotion

Shifts in Occupation* :

34. Of the graduates who changed their employment at any time, about 33 per cent of the 1954 group and about 14 per cent of 1950 group had a change in their occupation. The change benefited most of them either in respect of status or emoluments or both. A high degree of occupational mobility was found among those who had started as clerical workers, teachers, administrative workers and technical assistants.

35. More than two-thirds of those who had started as clerical workers and changed their occupation, had subsequently become professional workers, mainly, lawyers, technical assistants, teachers, and social scientists.

36. There was no clear pattern of occupational shifts among administrative workers and technical assistants. Among those who started as school teachers the main shifts were towards employment as technical assistants and clerical workers. Most of those who started as teachers had not taken a degree in Education and many had entered the employment market as teachers in private schools. This seems to have been an interim arrangement resulting from the state of the employment market. The shift among college teachers was towards senior professional and technical occupations.

Shifts in Employing Agency :

37. Between the time of first employment and the time of the Survey there was a striking shift of the alumni from the private to the public sector. The number of the alumni of the 1954 group who had jobs in the public sector went up from 55 per cent at the time of first employment to 68 per cent at the time of the Survey. The percentage of the 1950 group rose from 43 to 59 per cent. This shift from the private to public sector seems to have resulted from the urge to find secure employment. No change occurred among those who took up careers in the universities.

Means of securing Employment :

38. The method by which the alumni secured employment were through contacts, advertisements, Employment Exchanges, and Public Service Commissions. Nearly 47 per cent of the 1950 group as against about 38 per cent of the 1954 group obtained their last employment exclusively through personal and family contacts and nearly a fourth of the former group as against under a third of the latter claimed to have obtained it in response to newspaper advertisements. Employment Exchanges placed 12 per cent of the 1954 alumni in their last employment as against over 5 per cent of the 1950 group. About 5 per cent obtained their last employment through the Public Service Commission.

39. The alumni who had scientific, professional and technical education and those with a good division showed a greater tendency to compete openly through job advertisement, Employment Exchanges and Public Service Commission. Those who had general education or who had specialised in Law made greater use of personal and family contacts.

*Shifts means in this study only changes of occupation, employment status, and of the employing agency between the first employment and employment at the time of the investigation. The intermediate shifts have not been considered.

Unemployment—General :

40. The number of alumni unemployed at the time of the investigation constituted 7.2 per cent in the 1954 group and 3.3 per cent in the 1950 group.

Unemployment—Duration :

41. An examination of the total duration of unemployment experienced by the alumni after the completion of their education showed that about 49 per cent of the 1950 group and 45 per cent of the 1954 group, remained unemployed for less than three months. About 25 per cent of the 1950 group and about 33 per cent of the 1954 group were unemployed for periods ranging from three months to one year. The remainder, about 25 per cent of both the groups, expressed total unemployment for more than one year during the 8 and 4 year periods, respectively.

Unemployment in relation to degrees :

42. Unemployment was comparatively very high among the holders of Master's degree in Language, History, Political Science and Philosophy. It was slight (about 5 per cent) among those holding professional and technical degrees except in the case of Law (over 9 per cent in case of the 1954 group).

Alumni not seeking employment :

43. About 10 per cent of the alumni of the 1954 group and about 5 per cent of those of the 1950 group were not seeking employment. About two-thirds of such alumni were women. The men, who were not seeking employment were still studying at the time of the Survey. The main reason advanced by about a half of the women for not seeking employment was marriage. The proportion of such women was the highest among the holders of a B.A. Pass degree.

Earnings :

44. About a third of the employed alumni of the 1954 group and an eighth of those of the 1950 group were earning less than Rs. 200 per month. A third of both the groups were earning from Rs. 200 to Rs. 300. Nearly a fourth of the 1954 group and a third of the 1950 group earned from Rs. 300 to Rs. 500. About 7 per cent of the former group and 22 per cent of the latter group earned over Rs. 500.

45. The alumni who had specialised in the field of Medicine and Engineering were paid the highest. Those with a B.A. Pass or a B.Com. degree were paid the least. Of the holders of a Master's degree in Arts or Science, those with a degree in Social Work were earning the highest. Those with Bachelor's or Master's degrees in Science were earning more than the alumni with corresponding degrees in Arts and Commerce.

46. Among the alumni with technical and professional qualifications, those who took Engineering and Medicine earned the highest, whereas those with a degree in Education (Teaching) earned the least. Law graduates fared only a little better than graduates in Education.

47. The earnings of the alumni with B.Com., B.A. Hons., M.A. and M.Sc. degrees had a positive relationship to the division obtained in the examination. The higher the division, the better the pay. The difference was not, however, as marked for the 1950 group as for the 1954 group. This suggests that as time passes competence at work (after gaining experience) tends to improve emoluments. The class or division at the time of examination counts less.

Vocational Aim :

48. About a sixth of the alumni of both the groups went through their entire educational career without any vocational aim. An equal proportion had not developed any aim at the time of joining the college but formed it during their university career. About two-thirds of the alumni claimed to have an aim before joining the college.

49. The most favoured aims were Engineering, Medicine and Teaching and the least favoured were Journalism and Research Work.

50. Nearly 40 per cent of those who had an aim, changed it at one stage or the other as they could not fulfil it on account of various difficulties such as inability to gain admission to the desired course, financial stringency, etc.

Choice of Subjects and Occupations :

51. More than three-fourths of the alumni of both the groups were not guided or influenced in the selection of their subjects or occupations; they made the choice on their own. The most prominent source of influence or advice for the remaining alumni was that of parents and the family. *The reported influence of teachers was negligible.*

52. The proportion of those who would have preferred other subjects was greater among those who selected the subjects for the school leaving examination under external influence than among those who did so on their own. The proportion of those who expressed this preference was higher among the alumni who had offered pure Arts or Commerce than among Science students. This was particularly so in the case of the 1954 group.

Occupational model :

53. Over four-fifths of the alumni of both the groups had no occupational model before them. The commonest models in the case of the remaining one-fifth of the alumni were parents or guardians and near relatives. Again the influence of teachers was reported to be very minor even in the case of those who aimed at research or teaching occupations.

Vocational Satisfaction :

54. About half of the alumni expressed a high degree of satisfaction with their current occupations. Those who passed professional and technical examinations were, on the whole, more highly satisfied than those with other degrees. The proportion of those not satisfied was the highest among the holders of B.A. Pass and B.Sc. Pass degrees. The percentage of the satisfied alumni was higher in the 1950 group than in the 1954 group.

55. The most important of the causes for dissatisfaction was, as might be expected, low income. This was mentioned by as many as half of the dissatisfied alumni of both the groups. The next important cause was that the nature of the job was not in line with the interests of the graduates or it did not fall within the field of specialisation prepared for. This cause was mentioned by nearly a fourth of the alumni of the two groups.

56. A good examination result played an important part in finding congenial employment leading to vocational satisfaction. It had become less important for the 1950 than for the 1954 group.

Employment of Women :

57. Of the women of the 1954, 53 per cent were employed, 14 per cent were unemployed and the remainder, as many as 33 per cent, were not seeking employment. Of the women of the 1950 group, a higher proportion, *i.e.*, 67 per cent were employed, 9 per cent were unemployed, and only 24 per cent were not seeking work. Among those not seeking employment, the proportion of the women with B.A. Pass, B.Sc. Pass and B.A. Hons. degrees was higher than among those with other degrees.

58. Of the women who were unmarried, about 85 per cent of the 1954 group and all of the 1950 group were either employed or seeking employment at the time of investigation. Of the married women only 46 per cent of the 1954 group and 61 per cent of the 1950 group were employed or sought work.

59. Although women were employed in a variety of occupations, over three-fourths of the 1950 group and a little less than half of the 1954 group were engaged in the teaching profession.

60. The selection of occupations was more diversified in respect of the women of the 1954 group than of the women of the 1950 group. A larger proportion of the former group as compared with that of the latter was engaged in administrative, semi-professional and clerical occupations.

Special Aspects of the Employment of Women :

61. A further enquiry into the effects of marriage on employment showed that women engaged in clerical occupations tend to leave their jobs after marriage. Those engaged in teaching tend to continue although a few are obliged to give up their jobs after a few years of married life.

62. 63 per cent of the 1950 group and 44 per cent of the 1954 group had taken to their employment with a definite view to making a career. Married women appear to express with greater certainty than unmarried women their intention to make their profession a life-long career.

63. Over a third of the working women regarded their employment as interfering with their domestic responsibilities. Interference in occupational life by domestic duties was affirmed by a much smaller proportion among them.

APPENDIX A

**EMPLOYMENT PATTERN SURVEY
OF THE ALUMNI**

DELHI UNIVERSITY

SCHEDULES

Information asked for in these schedules will
be treated as **CONFIDENTIAL** and shall be
used only for the purpose of this enquiry.

Serial No. _____

Reference No. _____

Interviewed by _____ on _____
Scrutinized by _____ on _____
Checked by _____ on _____
Coded by _____ on _____

1. GENERAL SCHEDULE

1. Identification

1. Name _____

2. (a) Residential address _____

(b) Schedule filled at _____

3. Father/Guardian :

(a) Name _____

(b) Present address _____

4. Age _____ Code _____ 5. Sex _____ 6. (a) Marital Status _____ (b) If married,
when _____

7. Economic Status _____ 8. State you belong to _____ Code _____

9. Mother tongue _____ Code _____

10. Languages known _____ Codes _____

11. Interview : (a) Visits : (i) Date _____ Time _____

(ii) Date _____ Time _____

(iii) Date _____ Time _____

(b) Total time (in minutes) _____ Code _____

II. Education

A.

Examination passed			Year of passing	Board/University		Class/Div.	Elective subjects offered		Reasons for choice of subjects/course in col. 8	Whether wanted to take different subjects/course	If so, jects/c	
Sl. No.	Name			C	C		C	C				C
	2	3											4	5	6	7	8	9	10	11	12
1.												
2.												
3.												
4.												
5.												
6.												
7.												

B.

1. Breaks, if any :—

Sl. No.	Stage of educational career		Duration (in months)		Reasons
	2	3	4	5	
1.					
2.					
3.					
4.					

III. Employment (Present and previous)

A.

Sl. No.	Employment status	If Employer or self-employed or Family worker of col. 2, Nature of business		If Employee		Date of commencement (as)	Remarks
				Nature of work or Designation			
		C	4	C	6	C	
1	2	3	4	5	6	24	25
	Present Employment.						

B. For those presently unemployed

1. How long have you been without work ? _____

2. Have you been seeking employment during this period ? _____

3. If Yes, its nature and salary/income expected :

(i) Nature _____ Code _____

(ii) Salary/income per month Rs. _____ Code _____

4. If Yes, (a) are you registered at the employment office ? _____

(b) What are the other means, if any, employed ? _____

Code _____

Code _____

IV. Vocational Development

1. (a) Did you have any aim regarding the choice of career when you entered college ? Yes—1 No—2

(b) If Yes, aim _____
 _____ Code _____

(c) If No, did you develop any aim subsequently during your college career. Yes—1 No—2

(d) If Yes in (c), aim _____
 _____ Code _____

(e) Did the aim in (b) or (d) change subsequently ? Yes—1 No—2

(f) If Yes in (e), changes :

Sl. No.	Aim		Stage		Reasons for change	
		C				C
1	2	3	4	5	6	7
1.						
2.						
3.						

2. Who helped you in taking decisions regarding the choice of subjects/career ? Code _____

3. (a) Did any person serve you as an occupational model ? Yes—1 No—2

(b) If Yes, who ? Code _____

4. (a) Do you think guidance from a specialist regarding the choice of course of education/career during your student life would have helped you ?

Code _____

(b) If 1 or 2 in (a), how : _____

Code _____

V. Family

1. Education and occupation

Sl. No.	Relationship		Education				Occupation				
			General		Technical/ professional		When entered college		Present		
			C		C		C		C		
1	2	3	4	5	6	7	8	9	10	11	

2. What was your family income when you :

- (a) Entered college : Rs. _____ Code _____
- (b) Left college : Rs. _____ Code _____

3. (a) Did you have dependents during your student life ?
Yes—1 No—2

(b) If Yes, details :

Sl. No.	Sex	Relationship		Partially dependent—1 Fully dependent—2
		3	4	
1	2	3	4	5

2. SPECIAL SCHEDULE
Part I for all subjects

1. Subject/Papers :

Sl. No. of Employment as in III A.	Subject/Papers found								Subject to be added			
	Very Useful				Moderately useful							
	Name		Examination		Name		Examination		Name		Examination	
		C		C		C		C		C		C
1	2	3	4	5	6	7	8	9	10	11	12	13

2. In what respects, other than those connected with your profession, has your education been beneficial to you ?
 _____ Code _____
3. (a) Did you have adequate library facilities in your student life ? Yes—1 No—2
 (b) If No, in what way were these inadequate ? _____
 _____ Code _____
4. (a) Did you get the opportunity to attend lectures, seminars, symposia, etc. by visiting professors or experts during your student life ? Yes—1 No—2

(b) If so, have you found these useful in :—

(i) Studies Yes—1 No—2

(ii) Employment Yes—1 No—2

5. (a) Did you feel the need for any kind of practical training during your period of study ?

Yes—1 No—2

(b) If Yes, specify details _____

Code _____

(c) If No, would you change your opinion now in the light of your experience after leaving the university ? Yes—1 No—2

(d) If yes in (c), what kind of practical training do you think would have been useful to you if it were given during your college life? _____

Code _____

6. (a) Did you have tutorial system ? Yes—1 No—2

(b) If Yes, how did it differ from the ordinary lectures ? _____

Code _____

(c) How far did the tutorial system give opportunity for (i) personal contact with the teacher :

Very much—1 A little—2 Not at all—3

(ii) development of your own personality as an individual :

Very much—1 A little—2 Not at all—3

7. Which system of examination would you prefer ? Code _____

8. What should be the medium of examination and instruction in your subject ? _____

Code _____

9. (a) Are you doing anything to further the knowledge of the subject of your specialisation ?

Yes—1 No—2

(b) If Yes, (i) How _____ Code _____

(ii) For what purpose _____

Code _____

(c) If no, reasons _____ Code _____

(d) What facilities, if any, do you desire for this purpose ? _____

Code _____

10. (a) In case you are not working in your field of specialisation, would you like to change to employment in your field ? Yes—1 No—2

(b) If Yes, specify employments in the order of your preference :

First _____ Code _____

Second _____ Code _____

Third _____ Code _____

Part II Questions for Subject Groups

I. Economics

1. (a) Did you have any experience of field investigation during your university career ? Yes—1 No—2

(b) If so, has it been helpful to you in your occupational life ? Yes—1 No—2

II. Social Work

1. Was the field training given to you in your M.A. Class :

(i) Adequate : Yes—1 No—2 (ii) Appropriate : Yes—1 No—2

2. What suggestions, if any, would you make for its improvement ?

_____ Code _____

III. English, Hindi, Sanskrit, Urdu, Arabic, and Persian

1. (a) In your courses of study did you have proper balance between :

(i) Literature and the language : Yes—1 No—2

(ii) Modern and classical literature : Yes—1 No—2

(b) If No, nature of imbalance _____ Code _____

2. Have you found the knowledge of literature of any value in your occupational life ? Yes—1 No—2

3. Has the proficiency in the language been helpful to you in your occupational life ? Yes—1 No—2

4. (For English only) Which of the literary and linguistic skills acquired by you as a student do you find most useful in your occupational life ? Code _____

IV. Mathematics and Mathematical Statistics

1. (a) In your course of study did you have proper balance between pure and applied mathematics, theoretical and practical statistics ? Yes—1 No—2

(b) If No, nature of imbalance _____

_____ Code _____

V. Zoology, Physics, Chemistry, Botany

1. (a) In your course of study, did you have proper balance between lectures and practicals ? Yes—1 No—2

(b) If No, nature of imbalance _____

 _____ Code _____

2. In your university courses did you have enough time to complete your practical work along with theory ? Yes—1 No—2

3. (For Zoology only) From the point of view of efficiency in your employment, which is better ?
 Study of Indian forms (Locally available)—1 Material procured from foreign countries—2

4. (For Physics only) Do you think that some lessons in workshop practice in subjects like carpentry, turning, glass blowing, etc. would have been helpful to you ? Yes—1 No—2

VI. Anthropology

1. Has field work training been helpful to you in getting desired employment ? Yes—1 No—2

VII. Agriculture

1. (a) In case you are in service, do you want to do independent farming ? Yes—1 No—2

(b) (i) If Yes, what type ? Agriculture—1, Horticulture—2, Botanical—3.

(ii) Reasons for preference _____
 _____ Code _____

(c) If No in (a), reasons _____
 _____ Code _____

VIII. Technology

1. (a) In your course of study did you have proper balance between lectures and practical work ? Yes—1 No—2

(b) If No, nature of imbalance _____ Code _____

2. (a) Do you think exhibition of student's work during their study at the institution makes the course of study useful and instructive ? Very much—1 To some extent—2 Not at all—3

(b) Have the educational tours been helpful to you in your employment ? Very much—1 To some extent—2 Not at all—3

3. Which system of practical training do you like ?
 Obligatory during summer vacation—1 Voluntary during summer vacation—2

Any other (Specify) _____ —3

4. (a) Should humanities be included in your course of study ? Yes—1 No—2

(b) In either case, reasons _____
 _____ Code _____

IX. Education

- (a) In your courses of study did you have proper balance between theory and practice in teaching? Yes—1 No—2
- (b) If No, nature of imbalance _____ Code—
2. (a) Have you taken part in any workshop, seminar or conference organised under any extension service or in-service programme? Yes—1 No—2
- (b) If Yes, has it been helpful to you in your occupational life? Yes—1 No—2

X. M. B., B. S.

1. (a) Did you experience difficulties in the practical field during the first year of your professional carrier after completing your education? Yes—1 No—2
- (b) If so, were these due to any defect in the educational system? Yes—1 No—2
- (c) If Yes in (b), defect _____ Code—
2. Did you get ample opportunities of learning clinical subjects on the bed side? Yes—1 No—2

XI. Law

1. (a) Are you in practice? Yes—1 No—2
- (b) If so,
- (i) Nature of practice : A. Civil—1 Tax—2 Criminal—3
Miscellaneous—4
B. Original—1 Appellate—2
- (ii) Courts in which you usually practice : _____ Code—
- (iii) Did any one help you to pick up practice? Yes—1 No—2
- (iv) If Yes in (iii), who (relationship)? _____ Code—
- (v) How long had you to wait to earn an income? (Months) _____ Code—
- (vi) If you wish to give up practice, what other profession or career would you choose? _____ Code—

2. Whose lectures did you generally find useful?

Of full time teachers—1 Part-time teachers in practice—2 Part-time teachers not in practice—3

XII. Foreign Languages

1. Do you think you have been losing your knowledge of the language due to lack of practice, reading or contacts ? Yes—1 No—2
2. (a) Do you think a second course in the language would have been more helpful to you ? Yes—1 No—2
- (b) If Yes, should it be in : Literature—1 Service—2 An advanced general course covering science and humanities—3

Part III Questions for Women

1. In case you are in employment or seeking employment :
 - (a) Do you intend to make your profession a life-long career ? Yes—1 No—2 Cannot say—3
 - (b) If 2 or 3 in (a), reasons _____
_____ Code _____
2. (a) Did you have any difficulty in finding employment ? Yes—1 No—2
- (b) If Yes, what _____
_____ Code _____
3. (a) Are you married ? Yes—1 No—2
- (b) If so,
 - (i) Has your marriage interfered with your occupational life ? Yes—1 No—2
 - (ii) If Yes in (i), how _____
_____ Code _____
 - (iii) Do you think that holding a job interferes with your carrying out domestic responsibilities ? Yes—1 No—2
 - (iv) Do your parents-in-law approve of your working ? Yes—1 No—2

EMARKS

APPENDIX B

Total and covered population of the alumni in 1950 and 1954 according to the examination passed

Examination	Number of alumni in			
	1954		1950	
	Total	Covered	Total	Covered
I. B. A. Pass	428	251	238	94
1. B. A. Pass	428	251	238	94
II. B. Sc. Pass	175	105	74	29
1. B.Sc. Pass	154	97	74	29
2. B.Sc. Home Science	21	8	..	..
III. B. Com.	174	133	74	43
1. B.Com.	174	133	69	43
2. Diploma in Commerce . . . . .	..	..	5	..
IV. B.A. Hons.	327	172	132	52
1. English	35	16	21	6
2. Hindi	28	17	12	4
3. Urdu	1	1	1	..
4. Sanskrit	24	14	5	1
5. Persian . . . . .	..	..	1	..
6. Arabic . . . . .	..	..	1	..
7. Political Science	13	7	..	..
8. History	38	15	21	8
9. Philosophy	10	5	3	2
10. Economics	124	66	39	17
11. Mathematics	54	31	25	14
12. Combined Honours . . . . .	..	..	3	..
V. B. Sc. Honours	157	86	99	49
1. Physics	49	25	43	19
2. Chemistry	40	22	35	16
3. Botany	17	13	7	4
4. Zoology	18	9	5	1
5. Agriculture	33	17	9	9
VI. M. A. Languages	71	43	50	21
1. English	31	16	10	3
2. Hindi	24	15	31	14

Examination	Number of alumni in			
	1954		1950	
	Total	Covered	Total	Covered
3. Urdu . . . . .	..	..	1	1
4. Sanskrit	14	10	7	2
5. Persian	2	2	1	1
VII. M. A. Hist.-Pol.Sc.-Phil.	72	36	18	3
1. History	45	19	15	3
2. Political Science.	11	6	..	..
3. Philosophy	16	11	3	..
VIII. M. A. Econ.-Com.-Maths.	112	57	60	18
1. Economics	60	29	44	14
2. Commerce (M.Com.)	15	13	4	1
3. Mathematics	26	10	12	3
4. Economics Administration (Dip.)	11	5	..	..
IX. M. A. Social Work	33	16	20	7
1. Social Work	33	16	20	7
X. M.Sc.	68	39	41	16
1. Physics	23	12	10	2
2. Chemistry	20	12	20	6
3. Botany	8	6	..	..
4. Zoology	10	5	..	..
5. Anthropology	7	4	11	8
XI. Library Science	14	9	9	8
1. Diploma in Lib. Science	12	8	8	7
2. M. Lib. Sc.	2	1	1	1
XII. Law	284	171	132	61
1. LL.B.	276	169	128	58
2. B.C.L.	1	..	4	3
3. LL.M.	7	2	..	..
XIII. Proficiency in Law	213	110	25	18
1. Proficiency in Law	213	110	25	18
XIV. Education	88	51	81	41
1. B.Ed.	63	38	65	31
2. M.Ed.	25	13	16	10

Examination	Number of alumni in			
	1954		1950	
	Total	Covered	Total	Covered
XV. <i>Nursing</i>	14	6	4	3
1. B.Sc. Honours	14	6	4	3
XVI. <i>Medicine</i>	58	29	23	9
1. M.B.B.S.	40	22	10	4
2. D.T.D.	18	7	13	5
XVII. <i>Engineering & Technology</i>	95	42	16	2
1. Dipl. in Elec. Engg.	51	23	..	..
2. Dipl. in Mech. Engg.	13	4	..	..
3. Dipl. in Textile Tech.	20	6	9	2
4. Dipl. in Architecture	11	9	..	..
5. Dipl. in Chem. Engg. . . . .	..	..	7	..
XVIII. <i>Foreign Languages</i>	73	25	28	8
1. Dip. in Russian . . . . .	..	..	8	2
2. Certificate in Russian	11	3	20	6
3. Certificate in German	34	11	..	..
4. Certificate in French	20	9	..	..
5. Certificate in Italian	8	2	..	..
TOTAL	2,456	1,381	1,124	482