

CHAPTER 1

INTRODUCTION

The status of women is one of the important determinants of the level of development in a society. A progressive trend in a society would result in the improvement of her position, elevation of her status and extension of her rights.

The status of women in Indian society is being gradually raised. The inequalities between men and women are being slowly narrowed down and women are beginning to play a role of increasing significance in social, economic, and political spheres. The spread of education among women and the improvement of their social status are among some of the developments made by modern India. However, the spread is unequal regionwise.

1.1 Higher Education, Women and Work

The educational opportunities for women in the sphere of general and professional education at the university level have expanded appreciably in the recent years. Women have responded with alacrity and have availed of various opportunities. This has resulted in an increase of enrollment

of women in all faculties and at all the levels of education. There has been a growth in the number of women enrolled in institutions of higher education. Since 1974-75, enrollment of women has gone up as seen in table 1.1.

The reasons for this advancement are many ; the most important reason is the great social awakening among women. There are collateral social factors too, such as rise in the age of marriage in advanced urban segments of society and the demand for educated and gainfully employed wives among the educated middle class.

TABLE 1.1
ENROLLMENT OF WOMEN FOR HIGHER EDUCATION

YEAR	PERCENTAGE ENROLLMENT OF WOMEN
1974-75	23.4
1980-81	27.2
1981-82	27.7
1982-83	28.1
1983-84	28.4
1984-85	29.1
1985-86	29.6

(Source : University Grants Commission (UGC) report (1985-86))

Higher education provides people with an opportunity to reflect critically on the social, economic, and cultural issues facing humanity. It contributes to national development through dissemination of specialized knowledge and skills. It is, therefore, a crucial factor for survival. Technological know how and automation imply specialization which in turn requires expansion and interlinking of higher education. Clark Karr (1980) reported : 'as a supplier of ever more complex new ideas, as an entry for higher equality of life for individuals, as a preserver and enhancer of the ever expanding cultural heritage, education will continue to be a growth sector of society.'

Much thought has been given in the post independence period to women's higher education. Radhakrishna Commission for Higher Education (1948-49) and the Education Commission (1964-66) considered education of both sexes. Some committees have been appointed to consider women's problems such as National Committee on Women's Education (1958) and the committee on 'Differentiation of Curricula for Boys and Girls' (1964). The Kothari Commission (1964-66) too commented on the need for special efforts to expand women's education at the college and university stages in view of the non-availability of educated women for taking up directional and organizational responsibilities.

The report of the Education Commission (1964-66) under the Chairmanship of Dr. D.S.Kothari points out the significance of education for girls:

For full development of human resources, improvement of homes and for molding the character of children during the most impressionable years of infancy, education of women is of even greater importance than that of men In the struggle for freedom, Indian women fought side by side with men. This equal partnership will have to continue in the fight against hunger, poverty, ignorance, and ill health.

The Committee on the Status of Women in India (1971), also paid considerable attention to women's education in its report of 1974.

It is the post independence period in India which has brought about a real advance in women's higher education . This can be seen from the phenomenal rise in enrolment of women at colleges.

Enrollment of women students in universities and colleges increased by about 12 times between 1950-51 and 1973-74. Their share was 22.10 percent in the total enrollment in higher education in 1950-51 and this increased to 28 percent by 1980, from 11,716 to 21,084. The number of doctorals awarded yearly to women has also grown from 67 in 1950-51 to 1120 by 1971-72 and 2100 in 1989.

Women working outside their homes is not altogether a new phenomenon. In rural areas, they have always been working in fields for living. The trend of women working has come to stay in urban society also. With the increase in higher education many women are going out of home for gainful employment.

Taking into account, the upward trend in the enrolment of women for higher education and also considering the increase in the cost of living, it is very likely that more and more women will seek employment.

In the early phases, teaching in secondary schools and practicing modern medicine were the principal occupations of women who had received higher education. They still retain that character, particularly in teaching which is persued by a large number of them.

In the thirties, a small trickle started entering office jobs in clerical cadre but it was really during the second world war period when economic hardships beset middle and lower middle class families to such an extent that women graduates began taking up this line in considerable numbers.

After independence, office jobs have become a common occupation with educated women. A few of them have risen to the top, but as it happens, most of them as they enter the job market tend to be relegated to lower level white collar jobs. But, undoubtedly, the variety and spread of jobs for

women with higher education have expanded. In this they are helped not only by the constitutional recognition of the right of equality but also by the larger number of available jobs in the service sector during the initial developmental period. Women graduates, a few of them, have also entered hitherto inaccessible professions like law, engineering, and business management.

In spite of graduate women's entry into jobs, a large majority of graduates are unemployed and are continuing only in household chores. According to 1971 census, only less than forty percent of the women graduates were working and thirty percent were in search of employment. Women's institutions and special need based courses run by them, creating useful job opportunities for their alumni, have a role to play. What is equally, perhaps more important is the significant improvement at the employment end of higher education where not only early vigorous efforts must be made to remove the hidden bias against qualified trained graduates but also a number of part time and own time opportunities of work must be devised to employ them.

Employment is considered to be a significant component for enhancing status of both men and women. With the widening of opportunities for gainful employment and the need to support the family, women's employment has assumed significance.

One of the major reasons for women entering the job market is economic consideration, either due to dire necessity or for supplementing the family income for maintaining higher standards of life. This has been supported by the findings of the Committee on Status of Women. As mentioned in its report (1974 p.202), 'Rising prices and levels of unemployment, added to the increasing costs of education and housing and absence of social security have increased the degree of economic pressures on the major section of this class.'

Kamat (1976), also has similar comments to make. He says, 'A large majority of women are working because of economic compulsion to avoid indigence or to better their middle class conditions.'

Another dimension of the motive for work, particularly of those who have taken professional degree, is that they would not like to sit idle and they would like to use their education and training for self-fulfillment. During the last few years the number of women in some of the new professions is increasing. It is likely that this motivation will lead more and more women to work.

Due to the impact of industrialization in India, new physical and psychological needs have been created. Standard of living and competitive spirit have gone up. Men alone find it difficult to shoulder the responsibility of

maintaining the family. With smaller families to care for, leisure time due to the use of modern gadgets, and the new urge of women to look beyond their homes for self-expression have enabled women to utilize the spare time fruitfully for the economic progress of the family.

Kapur (1970) has found out that today economic necessity is not the only reason for their seeking jobs. Various social psychological motivating factors, such as, to use their talents, to achieve an individual status of their own and to gratify their love for a particular profession also play an important role.

According to 1981 census, the urban female work participation rate was 8.32 as against 7.15 in 1971. Indian statistics on total employment of women (1986) reveal that only 19.8 percent of them as against 52.7 percent of men were economically active. (As per ILO definition). Total women employment in organized sector (1986-87) was 33.40 lakhs, (out of total women population of 32 crores) as against total male employment in organized sector amounting to 254 lakhs (out of total male population of 34 crores). Within the organized sector, the employment of women in the public sector (20.020 lakhs) exceeded that of the private sector (13.20 lakhs). (Refer Tables 1.2 and 1.3).

According to the experts, the task of human resource formation is very important for a developing society. As

women constitute about forty eight percent of the human resources and work force in India, their effective participation in all walks of life would go a long way to boost up the national economy.

Chatterji (1988) has rightly quoted Jawaharlal Nehru the first prime minister of India, in this connection :

The habit of looking upon marriage as a profession and as the sole economic refuge for women will have to go before we can have any freedom. Freedom depends on economic conditions more than political ones and if a woman is not economically free and self earning, she will have to depend on her husband or on some one else and dependents are never free.

The notably smaller number of women in employment or paid work, and their clustering in a few occupations calls for intervention in the field of education so as to enlighten and educate girls to take up paid work. In any case women have to be economically independent to change their image as well as their status. In this task, education and gainful employment would go a long way in bringing about the stipulated result in the best interest of women.

In fact, providing greater educational facilities and professional education and creating job opportunities for women on a priority basis or securing for them a fair share of employment opportunities will give them economic independence and in turn would greatly help women to gain their due status in society.

TABLE 1.2
FEMALE LABOUR STATISTICS AS IN 1986

(a) ECONOMICALLY ACTIVE POPULATION SEX-WISE

	Total Population	Economically Active Population %	
Male	343,930,423	181,080,212	52.7
Female	312,357,426	63,524,774	19.3
Total	656,287,849	244,604,986	36.8

(b) ECONOMICALLY ACTIVE FEMALES- AGE-WISE BREAK-UP (%)

0-14	15-19	20-24	25-29	30-34	35-39	40-49	50-59	60 +	?
4.3	26.3	29.3	32.1	34.7	36.4	36.1	29.8	14.0	17.5

(c) FEMALE EMPLOYMENT BY INDUSTRY (in thousands)

AGRICUL- TURE	MINING	INDUS- TRIES	ELECTRI- CITY/GAS	CONSTRU- CTION	HOTEL- ING	TRANS- PORT	BANKS	SALE
3267	86	598	23	65	24	114	131	1

* Source : International Labour Organization Yearbook, 1988.

TABLE 1.3
WOMEN EMPLOYMENT IN ORGANIZED SECTOR

YEAR	TOTAL EMPLOYMENT (in lakhs)	PUBLIC SECTOR (in lakhs)	PRIVATE SECTOR (in lakhs)
1985-86	32.67	19.52	13.15
1986-87	33.40	20.20	13.20

Source : International Labour Organization Yearbook, 1988.

1.2 Vocational Aspirations of Women

Girl's educational attainments have by and large been used in our society for her successful role as a home maker. Since the very beginning, restrictions were imposed on her out-of-doors employment. Due to various reasons such as sex biases and social conditioning, women were expected to be home makers only. Even when they took up paid jobs, it was to supplement the family income. Women were lacking in concept of personal fulfillment and economic independence, and decision making skills which could add meaning to her life. Initiative on the part of the girl herself was lacking as thousands of years of subjugation have made her psychologically poor. This kept women at the lowest ebb in terms of self-esteem, setting of her own future goals and realization of her own self in the sense of becoming a full human being.

As such, few women undertake long-term work planning. Of late, girls choosing a life career due to prolonged years of education and training have become one of the important factors in changing their lives. But, still they do not have vocational aspiration as high as that of men. Women, mostly want to take up jobs which can be combined with household work.

Aspiration means 'to desire' or 'to wish'. Eyseneck, Hoppe, Frank (1988) have given definition of 'level of Aspiration'. According to them "level of aspiration" is the

possible goal which an individual sets for himself. Haller and Miller (1975) explained the 'level of Aspiration' as an orientation towards occupational goal.

Vocational aspiration is frequently equated with vocational preference and choice, particularly in sociological frame. According to Crites (1969), 'vocational aspiration means, what the individual considers to be ideal vocation for him.' Defined in this way, aspiration is quite similar to, if not identical with, a person's fantasy choice. Vocational aspiration almost always refers to the level at which an individual wishes to work. It seldom, if ever, refers to the field which one wants to enter.

Aspirations are the target a persons sets for himself to achieve which creates a 'desire' or 'will' in him. Formation of a strong desire and ambition motivates individual to strive hard to achieve that goal. Such motivation is keenly required if one has to succeed in life. If one goes through the education on a preferred vocation, he can get job satisfaction from the vocation and the individual shall be well placed. Aspiration adds to the efficiency of the person by exhibiting the best in him on the job. Therefore before providing for education for a vocation, there is a need for planners to try to know which vocations are aspired by the students.

Home science colleges can play great role in developing as well as raising the aspirations in their students, which are mainly girls, to take up vocations. Learning experiences in home science colleges may enable the girls to explore their personalities to have a greater self-direction, to engage in long term planning, and to succeed in achieving the planned goals. The girls could be provided with vocationally relevant home science curricula, conducive learning environment, and guidance and counselling facilities with a focus on improving their career-orientation and broadening career-outlook.

1.3 Home Science at University Level

In the post independence era, a new dimension appeared in society due to the acceptance of equality of women and their need to play multiple roles. According to the first five year plan of Government of India, the general purpose or objective of men's education at the secondary and university stages was to have a vocational or occupational basis.

The Education Commission (1964-66) paid special attention to the need of full time employment of unmarried women ; those women whose children reach school going age; and part time employment for educated housewives.

Earlier it was assumed that while boys were receiving education or degrees to be able to get jobs, this was not the

reason why girls were studying. Therefore an attempt was made to introduce differentiated curricula for boys and girls. It was argued that since girls were not going to take up jobs after completion of education and were going to be married, school education should equip them to become better wives and mothers. Therefore, the curriculum should be made relevant by teaching subjects suited to perform those roles efficiently. It was argued that although the moral, emotional and intellectual make ups of women and men are common, psychologically and physically they are different. Therefore there is a need for a separate curriculum to suit these differences.

A common syllabus upto primary school was proposed except that girls were to be trained in sewing, stitching, and weaving instead of games. Such a change was not possible to implement. As long as jobs remained linked to degrees, parents would not like to give up, forever the possibility of a university career for their daughters. Change in curriculum would have meant that those who went in for purely home science and allied subjects, would be denied the opportunity for going in for a university degree and eventually a career. Later the All India Women's Conference propagated the view that education for home is crucial and this led to the founding of Lady Irwin College in November 1932. The basic idea was to utilise science for effective running of home.

The National Committee on Women's Education (1958), recommended that the curricula for boys and girls be common at the primary level while differentiation should be introduced at the middle stage. The committee argued that the curricula, the syllabi, and even the contents should differ according to the social differences between men and women.

Following this, committee on the Differentiation of Curricula for Boys and Girls (1964) rejected the traditional view that mere biological difference of sex has created different physical, intellectual and psychological characteristics between men and women. According to their opinion, these differences are the result of social conditioning. This committee recommended that in the democratic and socialistic pattern of society education will be related to individual capacities, aptitudes and interests, which are not strictly related to sex. The committee advised a common course, at all levels and inclusion of home science in the core curriculum for boys and girls both, upto the middle stage of schooling to counteract the influence of traditional attitudes.

The Committee on the Status of Women (1974) in a survey found a wide acceptance of common curriculum for boys and girls. Yet some parents wanted soft subjects for girls since they were going to be housewives. They argued in favour of

the revision of home science courses to meet the general as well as the vocational needs of girls.

Maharishi Karve, a noted pioneer in women's education first made an attempt to introduce home science at the university level. Since then it is being increasingly related to the vital sectors of the community such as nutrition, environment management, development of resources and therefore related to social welfare programmes. While in Japan, Maharishi Karve visited a women's college of home science and was very much impressed by the education it offered. On his return to India, he established similar institution (the SNDT women's university in 1916) with princely donation of Sir Vitthaladas Thackersey with the main purpose of providing education in home science (Shirgaonkar 1981).

The development of home science education in India as a regular subject of study started in early 1930's. According to Tara Bai (1956), a noted home scientist, home science came into existence in the name of domestic science in the first decade of the twentieth century. As early as 1915, St. Mary Charity School of Madras, included theory and the necessary art of housewifery in its curriculum for girls. The university of Bombay in 1926, introduced home science as an optional subject for matriculation.

According to a survey of home science teaching in Varanasi, it was discovered that home science was introduced in Vasanta college Rajghat (Varanasi) in 1913, and the Banaras Hindu University in 1929, Lady Irwin College in 1932. Madras University included home science in its curriculum by introducing a course in 'Household Arts' at intermediate level and 'Nutrition' at B.Sc. level in 1942. The Faculty of Home Science at Baroda was opened in 1950, and at Jabalpur in 1952. Many other universities added home science departments thereafter. Home science colleges quickly offered home science as a pure subject or as an elective at degree level after 1950.

Home Science gained momentum and quickly spread all over India at higher levels of education within a period of less than a century. Ever since the beginning of home science at university and college level, there has been a satisfactory out turn of students (Refer Tables 1.4 to 1.8).

Now there are more than 150 colleges in about 60 universities, which offer home science at Bachelor's level. Among these colleges more than 60 institutions offer one or more courses in home science at postgraduate level.

(Source: Hand Book of Indian Universities. (1985-86).

If postgraduate level of home science education is taken into consideration, it was reported by Chandrasekhar (1986), that only about 10 percent of the institutions offered 5-6

area of specialization, 47 percent offered 3-4 areas of specialization and the rest of the 43 percent offered only 1-2 areas in their postgraduate programme.

TABLE 1.4

STOCK OF TOTAL POSTGRADUATE SCIENTISTS AND TOTAL HOME SCIENTISTS FOR THE YEAR 1970 & 1975

YEAR	TOTAL SCIENTISTS	TOTAL HOME SCIENTISTS
1970	1,59,600 (100%)	900 (0.6%)
1975	2,68,500 (100%)	2,400 (0.9%)

TABLE 1.5

OUTTURN OF POSTGRADUATE (MASTERS LEVEL) IN HOME SCIENCE COMPARED TO ALL SCIENCES

YEAR OF ENDING	HOME SCIENCE	ALL SCIENCES
1940	—	618
1950	—	1,502
1955	—	3,261
1960	10	5,856
1965	76	10,664
1970	179	17,711
1975	350	24,500

TABLE 1.6

MASTERS DEGREE HOLDERS

	HOME SCIENCE (Percent)	ALL SCIENCES (GRAND TOTAL) (Percent)
Male	3.6	84.9
Female	96.4	15.1
Total no.	713	83,413

TABLE 1.7

DOCTORATE SCIENTISTS

	HOME SCIENCE (Percent)	ALL SCIENCES (Percent)
Male	40.0	92.2
Female	60.0	7.8
Total no.	336	8,196

TABLE 1.8
ALL POST GRADUATES

	HOME SCIENCE (Percent)	ALL SCIENCES (Percent)
Male	4.2	85.6
Female	95.8	14.4
Total no.	732	91,609

Source : The Tables (1.4 - 1.8) have been reproduced from : *Postgraduate Scientists in India*, Centre for Scientific & Industrial Research, Baseline Statistics for 1970's by Nair P.S; Sehgal V.P.; Gandhi S.N.

1.4 Vocationalization of Home Science at University Level

According to Devadas (1991, p.55) the term 'vocational education' means systematic vocational or technical or retraining given in school or college to students intending to go for gainful employment in recognized occupations.

The National Policy on Education (1986) advocated introduction of systematic, well planned and rigorously implemented programme of vocational education to enhance individual employability. To reduce the gap between the demand and supply of skilled man power, the policy advocated

the provision of an alternative for those pursuing higher education without particular interest or purpose.

The various Education Commissions appointed in India during this century have mentioned 'Education for Productivity' as one of the objectives. Productivity should be ensured through the programme of work-experience and vocationalization. Consequently education came to be regarded as a passport to employability. The wave of professionalism made its mark in home science also. This step gave a boost to home science.

Historically it appears that the development of home science has taken place in two streams : one, the old or simple home science which probably existed from the time women's education was first started in India and other countries; two, modern science or professional home science which developed recently from the time home science colleges were established.

Till India attained independence, most men and women in the country believed that the rightful place of a woman is in the home. Many enlightened women of that period were convinced that the education imparted to women should therefore be need based so as to better equip them for their specific role. In this context home science came to be regarded as a subject for women.

Home science is an amalgam of applied arts and sciences, abundant in facts, skills, and principles; all of which are of positive value to all families at all stages of development in various circumstances. Right from the beginning, the course was very well received and the demand for seats exceeded availability of them.

Due to industrialization and socio-cultural changes, there has been an unprecedented demand for women to find gainful employment outside home. The idea of vocationalization of the academic field of home science is the outcome of this demand.

Chandra and Chaudhari (1963-64) made a survey of the objectives of home science colleges in India. Forty four institutions offering home science responded to a checklist of objectives. They found that a great number of institutions (89.7%) aimed at preparing students for employment in home science and related fields.

The recommendations made by the Education Commission (1964-66) throw some light on home science as a potential field of employment, predominantly, for women. To quote the report :

Home science in addition to giving good general education, should equip students on a scientific basis to work in the professional fields of dietetics, food techniques, family welfare work, extension work in child development and welfare extension projects, research work in projects of schemes of Indian Council of Medical Research (ICMR), Indian Council of Agriculture Research (ICAR), and Council of Child Welfare. (Ministry of Education, Government of India 1971).

Rao (1966) in his talk on the role of home science in implementing the fourth five year plan said that 'home science students can participate efficiently in many voluntary and social welfare agencies even if they are married and are unable to take up full-time employment.'

In a seminar of The Home Science Association of India (1966) the home scientists felt that, job opportunities must be created for home science graduates in various fields through publicity on the content and objectives of home science education.

Tara Bai (1971), one of the leading home scientists, advocated that the scope of home science should be expanded from preparing girls to become good home makers and mothers to preparing them for employment.

Abraham's (1971) study investigated the contribution that home science institutions and their graduates are making to nutrition goals and needs in the country. After the assessment of the employment status of home science graduates and their employers, she recommended the need for vocational training in home science and provision of internship facilities. The report presents the view of home science leaders that 'the notion that home science colleges function primarily as "finishing schools" for upper and middle class girls is unfair' and adds that :

What stands out most vividly in a survey of this sort is the paucity of bridges between home scientists and their institutions on the one hand and potential employers and agencies serving community needs on the other..... . Home scientists, however must establish that they have the skills, enthusiasm and commitment to participate in this real and potential, opportunity. If more bridges are to be built, communication should be established between home scientists and public and private institutions which could benefit from their talents and resources.

A major drawback faced by the home scientists when applying for permanent professional jobs is that in Indian society women's role as a wife and mother is still considered to be primary. Thus the acceptance of such jobs depends largely upon their compatibility with the careers of their husbands and other family members.

According to Saraswathi (1976):

Vocationalization of a particular field of study is the process of orienting the field for specific jobs or in other words, the process of helping the student pursuing the field of study to develop knowledge, attitudes, and skills necessary for carrying out specified jobs considered suitable or available for them after the completion of their degree or diploma courses.

In an article in 1979, she expressed that, home science institutions have not realised their responsibilities in terms of their role in community development programmes. On the one hand the home science syllabus still retains the outdated objective of training home maker and on the other hand even when graduates receive training for developing various competencies, they end up being only teachers. ICMR has now recognized the home science degree with postgraduate

special- ization in foods and nutrition as a requirement for nutrition-related jobs in this organization. The council, in one of the seminars (1986), recommended that the post graduate qualification in home science with foods and nutrition specialization should be recognized by the central and state governments and other organizations as adequate for any position needing a high level of competence and expertise in foods and nutrition.

A few academic and governmental agencies like population and demographic study units now specify that certain posts of research field investigators be preferably filled by candidates holding home science degrees, particularly those specialized in nutrition, extension, and child development.

In course of time, the emphasis of undergraduate teaching shifted from "science for home" to "Home Science" as a basic requirement for higher education. Over the years, job opportunities have considerably increased for candidates with home science qualification. (Mathew 1982).

1.5 Employment Opportunities for Home Scientists

The available literature at present on employment opportunities for home science graduates consists of few research studies and opinion of the home scientists.

1.5.1. RESEARCH STUDIES

1.5.1.1 *Ghorai (1969)*, prepared a master career list and checked with teachers in 35 degree granting colleges for jobs available for home science graduates in India. The responses revealed 24 careers which were thought to be available for home scientists. When actually contacted by the investigator, it was found that graduates from nine degree granting colleges were working on the jobs of home science teacher, nursery school teacher, research worker, dietitian, nutritionist, interior decorator, food technologist and clerk. Majority of them were working as teachers.

1.5.1.2 *Nair et al. (1970)* also reported that the highest percentage of home scientists go for the job of teaching (Tables 1.9 to 1.12).

1.5.1.3 *Saraswathi (1974)* identified, four main types of jobs on which home scientist were employed. They were: teaching jobs, research jobs, clerical jobs and miscellaneous jobs. The number employed on teaching jobs was 98, 'and on research jobs was 15. There were 8 on clerical or allied jobs and 7 others on miscellaneous jobs. These included the jobs of a librarian, a dietitian, a business executive, assistant director, community worker and the hostel warden.

TABLE 1.9

EMPLOYMENT STATUS OF POSTGRADUATE HOME SCIENTISTS AS
AGAINST POSTGRADUATE WOMEN SCIENTISTS

EMPLOYMENT STATUS	HOME SCIENTISTS (Percent)	WOMEN SCIENTISTS (Percent)
Employee	55.4	54.5
Self employed	1.7	1.4
Students	2.9	3.0
Trainees	0.2	0.2
Unemployed (trying for job)	23.9	24.5
Unemployed (not trying)	15.5	16.1
Retired	0.4	0.3
Total number	668.0	657.0

TABLE 1.10

PERCENTAGE OF POSTGRADUATE HOME SCIENTISTS
IN DIFFERENT ORGANISATIONS

ORGANISATION	P.G. HOME SCIENTISTS (Percent)
University or College	73.4
Schools	9.6
Research and Development	5.9
Manufacturing industry (Public)	0.3
Manufacturing industry (Private)	1.3
Trade and Commerce	0.8
Government Organisations	3.7
Others	5.0
Total number	375.0

TABLE 1.11

NATURE OF ACTIVITIES AT WORK POSTGRADUATE HOME SCIENTISTS

ACTIVITY	P. G. HOME SCIENTISTS (Percent)
Teaching	72.8
Teaching and Research	9.3
Research and Development	7.5
Technical work	6.1
Administration	3.5
Other work	0.8
Total number	375.0

TABLE 1.12

FIRST EMPLOYMENT OF POSTGRADUATE AND DOCTORATE
SCIENTISTS IN HOME SCIENCE

ORGANISATION	YEAR OF EMPLOYMENT							
	Doctorates				Masters			
	Before 1950 %	1950 to 1960 %	1960 to 1965 %	1965 to 1971 %	Before 1950 %	1950 to 1960 %	1960 to 1965 %	1965 to 1971 %
Universities	80.0	100.0	100.0	—	55.6	72.0	73.4	72.8
Other educational Institutions	—	—	—	—	33.3	12.0	16.0	12.6
Research and Development	20.0	—	—	—	—	4.0	8.0	3.5
Industries /trade and Commerce	—	—	—	—	—	—	—	2.1
Govt. Organisations	—	—	—	—	11.1	10.0	1.3	4.5
Other Organisations	—	—	—	—	—	20.0	1.3	4.5
All Organisations	5.0	1.0	3.0	—	—	2.0	1.3	4.5

The Tables (1.9 - 1.12) have been reproduced from :

Source : Postgraduate Scientists in India, Centre for Scientific and Industrial Researcher, Baseline Statistics for 1970's by Nair P.S.; Sehgal V.P.; Gandhi S.N.

1.5.1.4 The results of a survey (Saraswathi 1979) presented a rather gloomy picture of the opportunities of services available to home scientists in Madras city. The survey indicated that home scientists were teaching in educational institutions, that too, mainly in colleges offering degree courses in home science. Out of the 145 employed home scientists in Madras city, 127 (87.5%) were teaching.

1.5.1.5 Saraswathi et al. (1988) obtained information related to jobs held by child development graduates from a number of sources. There appeared to be a general consensus among the various sources of information. University and school teaching absorbed the greatest number of child development graduates at all levels. About 10 percent of the masters students assumed administrative positions as heads of departments, principals of schools, directors of institutes and co-ordinators of various educational programmes. Nearly 25 percent of the B.Sc. and 10 percent of the postgraduate students obtained further qualifications and entered the professions in welfare programmes and clinical settings. About 10 percent of postgraduates became full time research workers in university departments or in national or international organizations. Jobs, in the communication media or toy manufacturing or production of children's book were taken up only by four or five individuals.

1.5.1.6 Pilot Study conducted by the investigator (1987) also showed that all most all the home science colleges reported that they were preparing the students for the jobs of college teacher, dietitian, extension worker, nutritionist, social worker, researcher, garment and textile designer.

1.5.1.7 The record of Home Science Education and Extension Alumni Association (1990), M.S.University, Baroda, revealed that majority of the working alumni were holding the job of college teacher (Table 1.13)

1.5.2 OPINION OF THE HOME SCIENTISTS

1.5.2.1 In a Symposium on 'Employment Potential of Home Science at Present and Future', held in January 1971, at the Faculty of Home Science, M.S. University, Baroda, nine employed home scientists discussed the job opportunities and responsibilities for the home science graduates. In their views, mainly the following jobs were available to home scientists in India.

- dietitian
- supervisor in hotels
- field worker in community development project
- dress designer
- extension officer
- house keeper
- receptionist

- self-employment : conducting classes in interior decoration, tailoring, equipment and cooking, and writing booklets giving the required scientific information.

TABLE 1.13

JOB'S HELD BY ALUMNI OF DEPARTMENT OF EDUCATION AND EXTENSION,
M. S. UNIVERSITY, BARODA

OCCUPATION	PERCENTAGE HOLDING THE JOB
College Teacher	64.63
School teacher	9.76
Researcher	6.10
Extension worker or social worker	6.10
Industrial administrator	2.44
Free lance audio producer	2.44
Insurance surveyor	1.22
Nursery school director	1.22
Nursery school teacher	1.22
Deputy minister	1.22
Boutique proprietor	1.22
Librarian	1.22
Bank officer	1.22

1.5.2.2 Saraswathi (1976), Chandra (1978), Devadas (1980), Pandit (1980), George (1980), Paralikar (1983), Puar (1987), Joshi (1988) have mentioned the following vocations for home scientists in the various areas of home science in their books, papers, and thesis.

General Vocations

- teacher (school and college)
- administrator
- researcher
- communicator
- journalist
- mass communicator

Child Development Vocations

- nursery school teacher
- consultant in social welfare departments and
- child and marriage counsellor
- speech therapist
- supervisor in the institutions dealing with children's welfare
- self-employment in pre-school creches, play equipment centres.

Clothing and Textile Vocations

- designer in textile centres, mills and dyeing units
- commercial pattern maker
- self-employment in tailoring, dyeing and printing units

Education and Extension Vocations

- co-ordinator for community and social service programme
- extension worker or officer
- women's welfare officer
- instructor in training centres
- public relation officer.
- educational consultant.

Foods and Nutrition Vocations

- dietitian in hospitals, health sciences, industrial cafeteria, commercial restaurants and hostels
- food service manager or supervisor of the dining rooms
- nutritionist
- self-employment in organisation and administration of catering institutions

Home Management Vocations

- interior designer
- housekeeper
- receptionist
- superintendent of hostels

1.5.2.3 Prospectuses of the Universities. The prospectuses of the universities also give guidance regarding job opportunities. To quote: the prospectus (1989-90, p.5) of the Faculty of Home Science, M.S. University, Baroda, states one of its objectives 'to be to provide vocation based

knowledge and training that will enable students to become independent economically. At the same time prospectus reveals the following vocational opportunities for home science students from various specialization.

Child Development

- teacher
- researcher
- supervisor, co-ordinators, planners for community oriented programmer

Clothing and Textiles

- textile designer
- clothing construction

Education and Extension

- teacher
- administrative personnel for educational and community development projects
- instructor in educational institutions

Foods and Nutrition

- administrator and manage jobs
- public health nutritionist
- food analyst
- researcher
- dietitian
- food service manager

Home Management

- teacher
- researcher
- house keeper in hotels
- personnel in sales department of firms
- small scale business entrepreneurs
- interior designer

1.6 Role of home science colleges in preparing students for vocations

Recent advances in home science knowledge with the government's education policy for women have contributed to a tremendous growth in the number of colleges offering home science degree programmes both at graduate and postgraduate levels. As a result of this, the turnover of home science students has increased by leaps and bounds. Also within an area of specialization, subspecialities exist which in turn increase the vocational potential of home scientists.

Home science colleges have already started preparing home science students for various vocations. But still there is a confusion in the goals of home science education at the university level as to whether the preparation is for home making and/or for a vocation. Even when the goals state that it is for both, the specific jobs for which the education is

given are not specified. This leads to confusion at the time of job-seeking by graduates. The education offered at the B.Sc. level covers a wide range of courses instead of giving in depth education of the knowledge and skills needed for a few particular jobs. There might be an actual gap between the knowledge and skills of the home science students developed during their academic career and the knowledge and skills that are needed for the jobs.

Abraham (1971) pointed out that the home scientists have been losers both ways. They have failed to give due recognition to the fact that home science education no more caters to the elite with increasingly large numbers from the middle and even lower middle class opting for the discipline. With a rather narrow objective of training home makers, home science is not generic enough for some jobs wherein a social work graduate is given preference.

With the expansion of vocational programmes of home science the competition between men and women for the same types of jobs is bound to increase.

According to Puar (1987) :

One seldom finds a home scientist occupying the top position in an organization. Even today a trained Indian home scientist has to struggle to establish her identity. She had to compete with individuals trained in allied fields, such as biochemistry, microbiology, physiology, psychology, and education for positions in academic institutions and government departments dealing with home science. The recognition that a home scientist is a professional in her own right and has training which is unique and different from those trained in allied fields, is yet to come.

With new vocational opportunities and changes in the status and roles of women, their vocational preparation has become a new responsibility of home science colleges in India. Home science colleges will have to provide quality study programme to their students for specific vocations so that they can compete in the world of employment or they will be pushed back to the old philosophy of home science for home making only.

As early as in (1976) Saraswathi found a definite lack of direction in the process of vocationalizing higher education in home science. At the same time she suggested a systematic approach to be followed in vocationalizing the field:

- identification of the home science requisite jobs
- identification of the knowledge and the skills specifically needed for successful job performance of each of the jobs identified.
- incorporation of learning experiences for the acquisition of knowledge and skills needed for specific jobs in the curriculum of home science colleges at the undergraduate and postgraduate levels in different areas of home science.
- publicity of the training given to home scientist for specific jobs.
- striving for actual employment of the trained home scientists for the jobs they are trained for.

- constant evaluation of the training in terms of quality of job performance working towards improving the training programme to better suit the jobs.

Employability of students can not be assured by mere awarding a university degree. What matters is the level of expertise in their particular vocation, extent of skill development, and depth of practical knowledge. If students acquire these requisites during their study programme, they are confident to satisfy the job requirements in service or in their own enterprise.

To make higher education relevant to national needs, UGC has advised universities to restructure their courses to reflect recent developments in various disciplines, laying more emphasis on field studies and linking theory with practice. In this context, imparting certain vocational skills to college students in order to increase their employability assumes importance.

To gain the tangible benefits from education, it must be geared towards helping the students to gain knowledge and skills essential for job related competencies. Saraswathi (1974) defined competencies for home science vocations as the abilities required of the individual responsible for the job, for carrying out the job successfully, in terms of the goals of the job.

Vincent (1981) defined competence as the sustained ability to demonstrate appropriate knowledge, skills, and attitudes. To develop competence for a vocation, the study programme must impart knowledge and develop related skills which can be measured through observable behaviour.

The components of competencies considered in this study were knowledge, abilities and affective behaviour required to carry out the job. The study does not consider the skill component.

Saraswathi (1974), defining knowledge said that it could be anything that is to be known specially for carrying out the activities of the vocation.

Saraswathi (1974) referred to ability as an organized mode of operation and generalized technique for dealing with materials and problems of the vocation. Both personal and social abilities were considered for the study.

Personal abilities are the basic abilities in the person to carry out any given tasks successfully. Personal abilities mean intellectual and physical abilities; the former requiring the use of intelligence in the person and the latter requiring the exercise of physique.

Social abilities are those abilities of the person which are specially required in dealing with others, while in the vocation; for example, co-operation, leadership, communication, and management.

Affective behaviour is having positive outlook, interests, values, and attitudes which are required whilst in the vocation.

Every vocation requires some unique competencies necessary for that vocation. Hence it is necessary for every vocation to identify the competencies essential for its workers. The unprecedented demand for competent workers must therefore be more systematically pursued with properly designed programme by the institutions which are preparing the students for vocations. The students should be trained to make the best adaptations for desirable programme outcomes.

Home science students must have sufficient depth of knowledge and understanding to enable them to be adaptable in meeting the rapid changes of the society. They must also have sufficient breadth and confidence to work in home science vocations.

Along with knowledge, preparation for a vocation is dependent on abilities, skills, and affective behaviour also. Teaching of home science includes fundamentals such as facts, theories and formulas in all its specializations. These fundamentals or knowledge are to be utilized for the development of various abilities, skills, and affective behaviour.

The abilities may range from an ability to teach effectively to an ability to write in women's magazines. The

skills are both mental as well as psychomotor and may range from a skill to make a dress to a skill in displaying a bulletin board.

The knowledge, abilities and skills lead an individual to believe in scientifically correct and socially accepted practices, attitudes and values. The acquisition of facts and principles and abilities result in a more desired behaviour. Finally knowledge, abilities and affective behaviour can be applied for the vocations student go for. So, the preparation for any vocation is dependent on knowledge, abilities and affective behaviour. All of them can be developed. Knowledge and abilities could be used to their fullest if they are matched with certain basic characteristics required in all vocations.

As a result of education in home science, a person can take up vocation of her interest. Every vocation requires certain abilities. In several vocations, ability tests have been developed to measure ability to determine fitness of a person for a vocation. Ability is an indicator to forecast one's success on a job. Most of the abilities which can be acquired in home science are of mental and physical nature.

The abilities based on mental processes such as comprehension, comparison, correlation, analysis, synthesis and evaluation of various vocations require various kinds of analyses and correlation and other mental abilities but if

basic processes are learnt, their specific application on the vocation can be done. It requires practice to learn to correlate things and ideas; to analyse a social situation; to synthesize a drug or an educational display; and to evaluate an equipment or a student's examination paper. All these mental abilities are developed to different extent through various home science courses.

The manipulative abilities or skills or the abilities requiring motor and muscular coordination are physical abilities. These are measuring, computing, demonstrating, and constructing. Home science courses offer experiences to develop these abilities.

Affective behaviour which consists of elements such as interests, attitudes, and positive outlook are necessary for all the jobs. They help a person to build up satisfying social relationships as the progress of work is dependent on social relations. Some of these qualities are; getting along with people, liking the people and desiring to work with them and work for them, getting work done co-operatively by the group of people. Development of social relationship requires broadening of attitudes, opinions, beliefs and values of people. An able worker inspite of having competence may not be able to hold her job as she does not have positive outlook for certain things. A person highly interested in research work may not become successful if she does not have an aptitude for working with numbers, as computation work is an

important part of research. Positive outlook is also required for the vocations such as, being persuasive for the job of extension worker or social worker and having a liking for laboratory for the vocation of textile chemist or biochemist. Hence home science colleges should help the students to acquire knowledge and develop required abilities and affective behaviour to take up home science vocations.

It is true that education increases creativity, knowledge, and social understanding but above all it increases the capacity to earn an income.

Occupation is one of the most important factors which determines the stability of an individual's future. Vocational aspiration is a strong desire or goal regarding future position of employment, work or occupation.

Indian girls by and large are shy and choosy about job and they do not consider working in hotels, restaurants and stores appropriate for them. To get over this and to give stability to the future of girls, positive attitude and interest towards vocations should be built in them while at college. This will help them to aspire for even non-traditional and higher level jobs.

As home science colleges have a great role in developing competence for vocations, they can play a great role in developing aspirations among girls to take up vocations so that girls can go ahead and take up responsible and

prestigious vocations. If the competencies for the vocations are developed and the girls do not want to take them up, it will be a waste of education and ultimately the girls will be confined to the role of housewives. By taking up vocations the status of women will be raised and this may bring down some of incidents like 'bride burning', 'ill treatment of female sex', and 'female foeticide'. Once the girls are educated and employed properly they can contribute financially and help the family and nation.

1.7 Students' Opinions Regarding Adequacy of Vocational preparation

Goldschmid (1976), Ratem and Glasman (1976) pointed out that students' opinion about class room instruction has assumed a position of importance in the institutions of higher learning in the developed world. The importance can be traced to the high increase in the use of student ratings as a means of improving instruction. Students can be considered the most capable persons to rate institutions regarding instruction because they are the consumer of education.

In the past, teachers were considered the authority on the act of teaching and the social sanctions permitted them to be the best judges of what is good for the students. With the acceptance of democratic principles, the idea that the teachers and learners have shared responsibilities in the process of learning has come to be accepted especially at the

level of higher education. Students are no longer considered as passive recipients of what is being fed to them. They are considered active entities, alive to the whole situation, with the ability to take the initiative and to think independently.

Both the teacher and the taught strive to achieve certain educational goals. As equal partners with the teachers in the business of education, the learners will be inclined to identify the teachers' endeavors which contribute to their gain. With the liberal class room climate, conducive to a democratic process of learning, the natural tendency amongst the students to comment and opine about the performance of the institution will take a concrete shape. If channelled by proper guidance, this process could serve the purpose of improving the academics. Mutual evaluation, if well taken by both the institution and the taught, could go a long way in ensuring excellence of educational experience.

The learner is the central pivot around which the other components of the educational scene revolve. This is indicated by the fact that the product criteria are students' attitudes and achievements, their growth and development. The learner being the recipient of the fruits of all the efforts of the institution and being sensitive, does make a judgment on the contribution made by the teacher and on the consequent climate of the institution, through study programme. His

opinions is important for the simple reason that his reaction to the study programme affect his learning either favourably or unfavourably. Educators interested in educational excellence can not ignore this strength of the students.

Home science as a study programme has found an important place in the curriculum. The success of curriculum depends largely on how much it meets students' immediate and future needs, interests and capacities.

The most immediate need of the students after completing the study programme is of entering in a vocation. If a student finds herself accomplished for the vocation for which the institution has prepared her, she can be successful in her vocation. In this regard we may know students' opinion regarding adequacy of their preparation to take up vocations.

The vocational aspirations and opinion of the students can be affected by certain factors. They can be personal factors, such as, academic achievement, socio-economic status, modernity, influence of family, sex-role confirmation, and institutional factors such as, human resources, instructional programme and physical resources. Following factors will be included in this study:

1.7.1 STUDY PROGRAMME AT B.Sc. LEVEL

B.Sc (Home Science) is a full-fledged programme of home science at undergraduate level. It has two types of programmes : (1) general programme of home science dividing the time equally for each of the five areas of home science. Evaluation is done through independent papers in each of the five areas of home science and (2) specialization in each of the five areas is offered either right from the first year or at the second or third year. Each department has a certain number of written papers as well as practicals for final evaluation.

The students who enter into masters programme of home science (in any specialization) possess a degree in B.Sc. home science with or without specialization. However, few colleges/departments admit non-home science students also from other areas such as psychology, education, and science.

A specialization may concentrate on one or a few of its sub-units and neglect other sub-units. On the other hand, a specialization may widen its horizon to include new units of study and research and thus may strengthen the knowledge of students. Student with a specialized study programme at B.Sc. may be more aware and goal oriented than the students with general B.Sc. degree. They may have long exposure in the same field. Students from general programme may feel more competent in the vocations where knowledge from all the

specializations is required. Therefore students from specialized programme may have different level of vocational aspirations and opinion regarding adequacy of preparation for vocation in comparison with the students of general home science or non home science programme.

1.7.2 ACADEMIC ACHIEVEMENT

Achievement is directly related to intelligence of the students. The relationship between academic performance and intelligence has been sufficiently established. This relationship implies that individuals who have high academic ability are more intelligent. Intelligence involves a high level of cognitive abilities such as, perception, judgment and knowledge, and a high order of realism.

The fact that individuals differ from one another as far as their psychological and biological dispositions are concerned is very well recognised by the social scientists including educationists. Generally adolescents start thinking about their own career in terms of social prestige attached to the various vocations. However, ideally the vocational aspirations should be consistent with academic achievement because they are supposed to be the most dependable predictors of success.

Aspirations may be related to academic achievement despite interference by social pressure. In case the

vocation aspired for, is not consistent with the achievement, there is a possibility of failure and maladjustment of the individual. This success of an individual in various types of vocations is likely to depend, to a considerable extent, on the academic achievement, aspirations, and aptitude.

Social pressures, tend to make people aspire to unduly high levels or inappropriate types of work while in some sub-cultures they tend to downgrade ambitions. The brighter individual is likely to be better oriented to vocations, independent and realistic in his aspirations due to his better knowledge and thought process whereas less intelligent individual is likely to be unrealistic. However it is observed that people tend to graduate toward occupational levels and toward jobs appropriate to the level of their academic ability.

We can all agree that every citizen should have the opportunity with his or her intelligence, abilities and interests. But making the best of the opportunities would vary due to the varied individual needs, desires, and abilities. A student with higher academic achievement has more ability, intelligence, and aptitude for his development. A student with higher academic achievement may acquire more competence than a student with lower academic achievement. Therefore, academic achievement of the students may be associated with their vocational aspirations as well as opinion regarding adequacy of vocational preparation.

1.7.3 SOCIO-ECONOMIC STATUS

Socio-economic status of the family appears to exercise the most potent influence on vocational development as well as vocational preparation of the individual. Socio-economic status may be thought of as a factor which brings, in its train, a number of factors which directly or indirectly affect vocational development and preparation.

The level and quality of education available and aspired for as well as the level of work accessible and aspired for are greatly affected by the family's finance and social contacts. The upper and middle class parents tend to have higher educational and vocational aspirations for their children than the lower class parents. Thus, these children may have higher aspirations either as a result of pressure from the parents or as a result of internalising parental pressures or both. If their intellectual endowment is good, the higher level of aspiration may be achieved. However, the reverse may be true. Among very affluent families the level of vocational aspiration may be low. A person with good abilities may not be sufficiently motivated to concentrate on studies and select vocational path for herself. She may fail to actualize her potentialities. Roe (1956, pp. 105-106) revealed :

There is no society of any degree of complexity in which the father's position does not in some way, influence the child's socio-economic position and, in this respect, position includes occupation. The amount and sort of education one wants or can get as well as one's occupational choice are very directly influenced.

Students from high socio-economic status may give more importance to economic factor or they may have more awareness regarding vocations available in the field. They may aspire for highly paid jobs. Students from low socio-economic status may not aspire for those vocations of which they are not aware. So socio-economic status of the family may affect the level of vocational aspiration of the students.

Persons who belong to the families of high socio-economic status may also have better chances of exploring because of the contacts of parents. Due to more exposure, students may be able to work better for their assignments and other academics. They can get benefit of the exposure to various situations in life. The type of equipment and other facilities available, which depend on the socio-economic status of the family, play a part in facilitating or hindering the development of students' abilities and interests in certain directions. Due to certain things not available to them at home, teaching at colleges does not make any sense to the students.

In a society with a tradition of upward mobility, the children of parents from the lower socio-economic level tend to aspire to occupations which are higher than those of their parents. While those who come from more privileged homes tend to have preferences for vocations which are at the relatively higher levels as those of their parents. (Nelson, 1963).

Students from low socio-economic status sometimes do not get the chance to receive full benefits of education due to economic reasons. They find very limited scope to apply knowledge, inside and outside homes. On the other hand, students from high socio-economic status may find a wider scope to apply and utilise knowledge. The feeling of adequacy regarding the education or training they are getting will largely depend upon the opportunities to utilise it.

People from various socio-economic status look at the different aspects of life in different manners. Students from low socio-economic status may feel the need for a vocation which may motivate them to develop adequacy for vocations.

1.7.4 MODERNITY

The word 'modern' refers to anything which has more or less replaced something which in the past was the accepted way of doing things. The socio-psychological approach to modernization treats it mainly as a process of change in ways of perceiving, expressing and valuing. The 'modernity' can be defined as a mode of individual functioning, a set of dispositions to act in certain ways.

Vocational aspirations may be affected by the level of modernity because a modern students would prefer to leave the vocations sanctioned by tradition and take up an occupation more intimately associated with newer ways of doing things.

A modern student may be disposed to accept new ideas and new ways of thinking and acting. She is ready to change. She may take to certain things easily that are taught during the study programme while a conservative student may not accept the same thing because she is not ready to change.

If the vocations are old fashioned like housewifery or teaching, the non-traditionally inclined student may not involve herself in these jobs. She may take less interest. Therefore aspirations and adequacy of vocational preparation, both will be affected.

1.7.5 SEX-ROLE CONFIRMATION

Sex-role confirmation is a variable that is likely to relate to plans for youth and work expectations, as well as to the values.

Sex-role orientation is clearly related to the perception of sex appropriateness of various activities and occupations. Traditional sex-role attitude adheres to rigid differentiation of labour on the basis of sex. As a result of this, children in traditional homes are conveyed the idea that certain activities or tasks are done by the members of one sex and a different set of tasks or chores are executed by the members of the other sex. The perception of sex linked task or lack of it, evidently gets extended to a wider variety of jobs and occupations in society.

Youth from traditional families see low level occupations suited for female and high level suited for males where as youth from non-traditional families see both the sexes suited for any job.

Sex-roles are assigned on the assumption that sex is the basis for difference in personality traits and therefore, discrimination in allocating the activities is justified.

In Indians, the belief strongly held is that girls and boys are different and they should be made to learn the right sex-roles. Hence the sex-conditioning assigns different qualities, activities and behaviours to men and women. Since most children internalize the adult's values, the types of behaviours labelled as 'naturally' right are learnt and enacted by them.

It has been observed that a child grasps the essentials of its sex-role and the subsequent experiences of reinforcement of such role fulfillment in the family before the age of three. Curricular contents, practices in schools, integration with peer group and other social institutions help him internalize the so called right behaviours completely. Psathas, (1968), Falk and Cosby (1978) reported:

Differences in career-orientations and expectations among girls and boys are also constructed to the developmental process; influenced by sex specific attitudes regarding definitions of what is proper and improper work for men and women. Career decisions made by women take into account their expectations for marriage and children.

According to Bernard (1976) these expectations are influenced by social norms for behaviour appropriate for men and women. The pattern of career development of women is the most significant area of concern in the context of women's welfare and rights. As this relates to the equality of opportunity for entering and adjusting in career. The gender has been affecting career development in several ways.

Fidell (1970), showed how employment opportunities are affected by sex-role stereotyping. Vetter et al. (1979) revealed that career choices of women reflect traditional learning from sex-role conditioning in early childhood. Kriedber (1978) found that sex-role stereotypes were observable in vocational aspirations of adolescent girls.

Vijayalakshmi (1989) found that women in professional courses possessed a liberal perception of sex-roles than non-professional women.

The fact that girls and boys are treated differently also calls for consideration regarding its implications for entry and adjustment into career.

1.7.6 INFLUENCE OF FAMILY ON VOCATIONAL DEVELOPMENT

The family is a social, psychological and economic entity. It is social because it consists of several people who function as a unit. It is psychological because its members have needs, attitudes, and feelings which are

important to themselves and to the functioning of the family as an entity. It is economic because it provides certain services, and manufactures or processes certain goods and distributes these goods within the family unit. The role of the family on vocational development therefore becomes very important.

Family creates or fosters needs and shapes values. It provides experiences with a variety of activities, with opportunities for acquiring information and skills relevant to occupations. It has or lacks resources in the form of equipment, funds, and contacts which make occupations accessible or inaccessible. Thus the family exerts a subtle pressure on the child and youth to make certain type of choices. Each of these kinds of influences may therefore be expected to be found at work in shaping preferences, entry into training and work, success, and satisfaction.

Children begin to acquire social attitudes and values early in life, first from their parents and then from their peers. Since vocational preferences are attitudes toward work and towards occupations, it follows that children who identify with their parents and their subculture, begin to develop preferences for the types of occupations which their parents value. As early as 1964 Berdie had shown that the students attendance in the college was largely dependent on family influence.

According to Super (1967, p.244):

How an adolescent goes about entering his chosen occupation is determined partly by the adequacy of his information about that occupation and partly by the extent to which he has been able to observe the others entering and working in that occupation. Whether or not he seeks the best type of training for it depends upon the quality of training for it, the quality of his contacts with people in that occupation, the opportunity he has had to observe others going through the same processes, and of the adequacy of the understanding of the occupational mores which he has acquired through family activities, discussions and contacts.

The experiences to which the family has exposed the developing child and youth also play a part here. Early independence training plays an important role for an entry into work. The youth who has for years been practicing making decisions and taking action has no great difficulty in seeking information himself and carrying out decisions regarding vocation. Since the degree of independence exercised by the child and youth are subjected to parental control. It is clear that the family may have much to do in developing the ease with which the youth enters the world of work and occupation.

The resources of the family constitute the basis for another kind of contribution to vocational development. It has been well established that contacts are the principal sources of jobs, and that most of the contacts of young people are through the family. This means that the youth who comes from high class family has access to any number and of different types of openings. Business or professional friends of parents and neighbours in influential positions,

provide contacts which may be discretely exploited to open up to the desired type of opportunities. On the other hand, the son or daughter of a semi-skilled worker finds his contacts limited. His father's co-workers are not employers, but employees. They are not decision makers but the means of carrying out decisions.

Family resources also include the available finance. The role played by finance in education and training is also important.

The work and play habits of the family are also important for vocational development. The youth who has seen his parents spending most of their evenings engaged in serious reading and writing, and whose family's leisure time activities included a good deal of reading and discussion of intellectual matters, develops a distinct set of values and pattern of behaviour. They are different from those who spend their childhood in a home in which evenings and holidays were spent in listening to the radio or watching television, doing domestic chores or playing cards. The former person, if he has accepted the values and attitudes of his family, is likely to view leisure time as to be used for furthering his own intellectual vocational development. The latter person, on the other hand is likely to view it as something to be used for entertainment or recreation. Other things being equal, the vocational success of the former person is likely to be more substantial than that of the

latter individual. Charters (1942) commented that, 'the eminent scholar works day and night, workdays and holidays..... happiest when working.'

Gupta (1989,p.49) reported, elaborated upon the development of self-concept which takes place through participation in various kinds of activities at home. Attitudes and values or disapproval of certain kinds of behaviour which in turn may affect their level of vocational aspirations.

1.7.7 INSTITUTIONAL FACTORS

One of the main objectives of home science colleges is to develop abilities and skills in the students for taking up vocations. Greater emphasis is now given to helping students to think critically and creatively in their approach to problem solving and to develop skills and techniques in the use of sophisticated equipment in practical field. To accomplish these goals and accommodate changing procedures, adequate provision for institutional resources must be made for a wide variety of learning activities and experiences. Hence, the teaching of home science needs a large variety of teaching equipment and aids, and other concomitant material.

Institutional factors may have a great influence on the preparation of the students. Mere changes in the curriculum for the sake of modernization, and their revision to make it

up-to-date is not enough to achieve the desired goal of education that is to enter into the world of work. With revision, development of necessary infrastructure, an effective instructional programme for the successful implementation of the curriculum, and developing competencies among students are of equal importance. Otherwise all the curriculum reform efforts will go in vain.

Institutions may vary regarding :

- human resources
- physical resources
- instructional programme
- type of department
- system of education

1.7.7.1 Human Resources. Human resources are the back bone of an academic institution. Quality and prestige of an institution depends, to a great extent, on the ability and sincerity of human resources, especially teachers. Even a well planned curriculum, well written text books, costly equipment, can not compensate for a poor teacher. Academic qualification, experience, participation in professional activities, and upto date knowledge are some of the human resources which play an important role to make the learning effective and permanent.

1.7.7.2 Physical Resources. Physical resources are equally important in influencing the learning of the

students. Class room facilities may have relationship with the adequacy of preparation to take up vocations. The atmosphere around the students, if pleasant and attractive, may give more encouragement to learn attentively. Seating arrangement, ventilation, light, facilities of drinking water, canteen, common room are also necessary to attract the students to remain in college for a longer time and work more.

The library is as important as the other resources, because it is a store house of knowledge for any educational institution, which helps the students to gain extra knowledge apart from the class and also make them updated.

It can be said that adequate or excellent institutional factors may help in developing knowledge, ability, and affective behaviour among the students necessary for any vocation in home science. A lot can be done about institutional factors. They can be changed to make them excellent, while not so much can be done about personal factors like academic achievement, socio-economic status, modernity and influence of family. Therefore institutional factors may influence the opinion of the students regarding adequacy of their preparation to take up a vocation.

1.7.7.3 Instructional Programme. Good instructional programme is motivating, and can develop a great amount of interest in the students which in turn will help them in

acquiring and developing knowledge, ability, and affective behaviour needed to take up a vocation. An instructional programme mainly consists of the following factors.

Methods and procedures of teaching followed by teachers:

Method is application of principles by the teacher by which learning takes place. There is no single method, which is most suitable to teach home science. Teaching of home science needs a combination of various methods. Methods of teaching have their own strength with respect to different teaching and learning situations.

An innovative teacher can go a long way to teach a lot by exploring the methods. Field trips, excursions, visits, and field work can help to gather enormous work experience. Students can develop their practical skills and widen their outlook through these activities, which are also the basic requirements for all the vocational courses.

The method of learning a job skill is to actually work on the job, that is, learning by doing. Tonne (1961) observes that one of the major contributions of the work experience programme is that it leads people to a job very easily. Naturally, with co-operative work experience, an employer having a student who has been proficient on the job in his office during his apprenticeship or internship period, will be eager to have his services after he graduates.

Teaching aids are no less important as a part of instructional programme. Research studies indicate that both visual and audio aids :

- are highly motivating, and develop a great amount of interest in the students;
- promote conceptual thinking by providing a basis of concrete reality;
- make learning more durable;
- provide the experience of thinking and the thought process that can not be experienced otherwise.

Co-curricular and extra curricular activities are equally important components of the academic programme. They channellise the energies of the students in a constructive way, and give scope of development of personality traits in them. The co-curricular activities such as study tours, exhibitions, debates, discussions, symposiums have proved to be fruitful for learning. In excursions and study tours, students get opportunity to observe and see things for themselves. No amount of knowledge from books can make up for practical knowledge gained through observation. This helps them in broadening their outlook and strengthening their interest. This gives students the opportunity or the challenges to apply their theoretical knowledge to practical situation. Extra curricular activities like games, sports, picnics, annual days and fairs, foster societal understanding and fellow feeling.

1.7.8 Type of Department. Facilities provided by the institutions are also likely to influence the vocational aspirations and vocational adequacy of the students. The more adequate and appropriate the facilities as per the course requirements, the more might be the aspirations and adequacy likely to be influenced positively.

In colleges of home science there are two types of course programmes. Some colleges have separate specializations with their respective laboratories equipped with facilities and equipments as per the respective specialization requirements. Some colleges offer different specializations but share common facilities and equipment. They may or may not suffice the requirements of each specialization as compared to separate laboratories for each area.

1.7.9 System of Education. At different educational institutions of higher learning, various educational systems are followed. Generally two systems are widely in practice: yearly or traditional, and semester or modern system. These systems are based on two aspects: duration of time and evaluation system.

In the traditional system, time duration is of one year and pattern of evaluation of the work of the students is external. In the modern system, time duration is of six months and assessment of the work of students is internal.

Evaluation should be an integral part of teaching, not an adjunct to teaching for the purpose of testing only. Evaluation must take place throughout the teaching and learning process, not at the end of it. The maintenance of good educational procedure requires good evaluation.

At every stage in the learning process, evaluation is needed to discover the extent of effectiveness of the curriculum with a view to bring about the desired changes in students.

Examinations have vital importance in evaluating the progress of the students. The primary objective of students' evaluation is to enhance their progress. The evaluation system focuses on the objectives to be achieved. The evaluation of students' progress is done through assessing students' performance and behaviour and to determine as to how much the instructional objectives have been achieved.

At present, in the field of education in India, the system of external examinations occupies a predominant position. It has become the only goal of education. However, adverse criticism has come up against them. The main criticism against examinations is that they determine not only the contents of education but also the methods of teaching, in fact, the entire approach of education.

External examination dictates the curriculum instead of following it, and hinders the proper treatment of subjects

and methods of teaching. They may not take into consideration the new concepts that have developed in the field of education.

Subjectivity, halo effect, examination oriented methods of teaching and variability among the examiners have made external examinations affect the educational system. Traditional system gives enough margin to the teacher to cover up the course.

In the modern system, due to evaluation process there is much burden of work and assignments in each of the subjects. Also internal marks may be more liberal.

Due to the following reasons semester system may help students to improve vocational aspirations as well as develop adequacy to take up vocations.

- continuous evaluation appraises the students as well as the teacher of the progress of a student.
 - due to number of evaluations more student - teacher contact takes place. This leads to free and frank discussion among the students and teacher.
 - teachers are more regular in their work.
- (Rajaguru et al. 1978).
- students are regular due to high frequency of tests.
 - teachers know the students' interest areas through evaluation.

- attention is retained in the class due to variety of learning experiences provided to the students.
- evaluation procedure includes term papers, practical work, home assignments, monthly tests, and semester examination.

1.8 Statement of the Problem

Keeping in view the above facts, the investigator undertook 'A study of vocational aspirations of home science college students and their opinions regarding adequacy of their preparation to take up vocations.'

1.9 Justification of the Study

The constitution of India has accepted the status of women to be equal to men. Several agencies and reformers have been working for years to emancipate women. With the result, an increasing number of women are getting educated and becoming economically independent by taking up employment. Home science, as a field of academic study widely taken up by girls, has to coordinate with the changing conditions and include provision for vocational preparation.

Much money is spent by the government and parents to keep a student in college and hence is the expectation of return from investment in the form of future employment of the graduates. Home science should get oriented towards preparing students for jobs and thus increase the dividend derived from the investment made.

Few years back women were not allowed to take up gainful employment outside home. As a result girls did not have any vocational aspiration. The study on vocational aspirations of home science students will give an understanding of how women students now view different vocations and how far their aspirations are in line with the vocational preparation. By this study we will come to know the level of vocational aspiration of women students. If the level of vocational aspiration is found low then the measures can be taken to improve the level through vocational guidance.

Home science colleges can prepare their female students for high level jobs which are generally not taken up by girls. This may take away the sex-bias, and women will start making a move towards high level jobs.

A programme of education tends to be successful when students have well understood the study programme which may increase their aspirations. In the absence of an aspiration, students will not know what to expect from the study programme. The opinions formed by the students are the index to measure effectiveness of experiences they had. The opinions of home science students regarding adequacy of their programme to take up vocations would help the educators to know the practical utility of home science education.

Home science is progressing to meet the demand for trained home scientists for various vocations. A large number of students are added every year to home science

institutions. At a juncture when the leadership in the field of home science rests with the home scientists concentrated in those institutions, it is worth having an objective and realistic look at what they are doing or, rather really achieving. Including items in the study programme is quite different from putting them in to effective practice. Efficiency in executing the study programmes may be directly assessed as well as indirectly, through the attainments of students, in order to prepare them during their study programme to take up vocations. This study may help in evaluating how effectively the institutions are executing the study programmes.

This study may help to find out whether the home science students feel prepared or not to take up various vocations. This finding will help to know that adequacy developed during a study programme for a vocation in terms of knowledge, ability and affective behaviour, matches with the job requirements or not . This will give a feed back to the administrators and the teachers of home science colleges to plan academic programme accordingly, which can be more useful and favourable to the students. The deficient areas in the curriculum can be taken up for improvement. Therefore the study will help the planners to restructure and reorganize the current home science study programmes to form a more meaningful and career oriented curricula which will meet the present and future requirements.

Home science colleges claim to prepare students for a variety of vocations. It is time now to judge if a particular specialization can prepare students for various vocations perfectly or not. In the modern era of specialization, there is increasing demand for trained persons for any employment. So the claim of home science colleges of preparing the students for various vocations can be checked. It is possible that preparation for so many vocations may not be perfect. Therefore there is a need to concentrate on a few specific vocations rather than so many vocations. This study may be able to point out the vocations which are highly aspired for as well as adequately prepared for by the students during their study programme.

Every vocation requires some specific knowledge, abilities, interests, attitudes and positive outlook towards certain things. Hence it is creditable to every vocation to identify the core skills essential for its employees. The demand for competent employees can therefore be more systematically pursued with competency based models. Describing competencies for each vocation in detail may give insight to the students what they are actually supposed to do. They can select vocation according to their capabilities.

The data of such survey and assessments are very much important for the improvement of the quality of home science education, in adopting new strategies to make up the leeway to the other end.

According to Santhanam and Govinda (1974 p.445):

Educational survey can help by presenting the administrators a general vista of the leeway to be covered in the direction of achieving educational objectives and the results of such surveys before them. The policy makers can proceed with greater clarity and specificity in designing their plan of action.

There is a dearth of studies in the field of vocational home science. The opinions of home science college students regarding adequacy of their preparation to take up vocations have not been explored as yet in India. Home science is an applied science and quite different from other disciplines, therefore, there is a felt need to conduct a study of vocational aspiration and opinions of home science college students regarding adequacy of their preparation to take up vocations. This study therefore may :

- help in identification of knowledge and abilities specifically needed for successful job performance of each of the vocations taken for study.
- suggest learning experiences for the acquisition of knowledge and abilities needed for specific vocations in the curriculum of home science colleges.
- give publicity to education given to the home science college students for specific vocations for the benefit of employers and employing organizations.
- evaluate the teaching of home science in terms of preparation for the vocations, and may suggest some improvement in the study programme to better suit the vocations

1.10 Objectives

The objectives of the study were as follows :

1. To study the vocational aspirations of the home science college students.
2. To study the differences in the vocational aspirations of the home science college students according to personal factors:
 - type of study programme at B.Sc. level
 - academic achievement
 - socio-economic status
 - overall modernity
 - sex-role confirmation
 - family's influence on vocational development
3. To study the differences in the vocational aspirations of the home science college students according to institutional factors:
 - human resources
 - physical resources
 - instructional programme
 - type of department
 - system of education
4. To study the opinion of the home science college students regarding adequacy of their preparation for the vocation of teacher regarding the aspects of knowledge, ability, and affective behaviour.

5. To study the differences in the opinions of the home science college students regarding adequacy of their preparation for the vocation of teacher according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

6. To study the opinion of the home science college students regarding adequacy of their preparation for the vocation of researcher regarding the aspects of knowledge, ability, and affective behaviour.

7. To study the differences in the opinions of the home science college students regarding adequacy of their preparation for the vocation of researcher according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

8. To study the opinion of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of child welfare officer regarding the aspects of knowledge, ability, and affective behaviour.

9. To study the differences in the opinions of the home with CD specialization regarding adequacy of their preparation for the vocation of child welfare officer according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

10. To study the opinion of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of nursery school teacher regarding the aspects of knowledge, ability, and affective behaviour.

11. To study the differences in the opinions of the home with CD specialization regarding adequacy of their preparation for the vocation of nursery school teacher according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

12. To study the opinion of the home science college students with CT specialization regarding adequacy of their preparation for the vocation of garment designer regarding the aspects of knowledge, ability and affective behaviour.

13. To study the differences in the opinions of the home with CT specialization regarding adequacy of their preparation for the vocation of garment designer according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

14. To study the opinion of the home science college students with CT specialization regarding adequacy of their preparation for the vocation of textile designer regarding the aspects of knowledge, ability and affective behaviour.

15. To study the differences in the opinions of the home with CT specialization regarding adequacy of their preparation for the vocation of textile designer according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

16. To study the opinion of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of extension officer regarding the aspects of knowledge, ability and affective behaviour.

17. To study the differences in the opinions of the home with EE specialization regarding adequacy of their preparation for the vocation of extension officer according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

18.To study the opinion of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of administrator regarding the aspects of knowledge, ability and affective behaviour.

19.To study the differences in the opinions of the home with EE specialization regarding adequacy of their preparation for the vocation of administrator according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

20.To study the opinion of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of dietitian regarding the aspects of knowledge, ability and affective behaviour.

21.To study the differences in the opinions of the home with FN specialization regarding adequacy of their preparation for the vocation of dietitian according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

22. To study the opinion of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of food service manager regarding the aspects of knowledge, ability and affective behaviour.

23. To study the differences in the opinions of the home with FN specialization regarding adequacy of their preparation for the vocation of food service manager according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

24. To study the opinion of the home science college students with HM specialization regarding adequacy of their preparation for the vocation of executive housekeeper regarding the aspects of knowledge, ability and affective behaviour.

25. To study the differences in the opinions of the home with HM specialization regarding adequacy of their preparation for the vocation of executive housekeeper according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

26. To study the opinion of the home science college students with HM specialization regarding adequacy of their preparation for the vocation of interior designer regarding the aspects of knowledge, ability and affective behaviour.

27. To study the differences in the opinions of the home with HM specialization regarding adequacy of their preparation for the vocation of interior designer according to:

(a) personal factors

- type of study programme at B.Sc. level
- academic achievement
- Socio-economic status
- overall modernity

(b) institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

28. To study the relationship between the level of vocational aspiration and the opinions of the home science college students regarding adequacy of their preparation for the vocations.

1.11 Assumptions of the Study

The study is based on the following assumptions:

1. Home science students have about five years of education in home science. At this stage they are motivated to take up vocation.
2. More and more women are becoming vocation oriented.
3. Vocations are available in the field of home science.
4. Vocation oriented content is included in the curriculum of home science colleges in India.

5. Every vocation demands specific knowledge, abilities, and affective behaviour related to that area.
6. Home science college students vary in academic achievement.
7. Postgraduate home science students come from different B.Sc. study programmes.
8. Home science college students vary according to the socio economic status.
9. Home science college students vary on the level of modernity.
10. Home science college students vary according confirmation to sex - roles.
11. Families of home science college students vary regarding their influence on vocational development of their children.
12. Home science colleges in India vary according to their human resources.
13. Home science colleges in India differ according to their physical resources.
14. Home science colleges in India differ according to their instructional programme.

15. Home science colleges in India have departments with separate specializations or two or more department are combined to form one home science department.
16. Home science colleges in India are following either semester or annual system.
17. Students being consumer of education will be able to express opinions regarding their adequacy of preparation to take up vocations in home science.
18. Majority of the students take up job after M.Sc. degree only.
19. Employers will be able to identify vocational competencies in their respective areas.

1.12 Null Hypotheses

Following null hypotheses were tested under this investigation:

1. There will be no significant differences in the level of vocational aspiration of the home science college students according to their area of specialization.
2. There will be no significant differences in the level of vocational aspiration of the home science college students according to the personal factors:

- type of study programme at B.Sc. level
 - academic achievement
 - socio-economic status
 - overall modernity
 - Sex-role confirmation
 - family's influence on vocational development
3. There will be no significant differences in the level of vocational aspiration of the home science college students according to the institutional factors:
- human resources
 - physical resources
 - instructional programme
 - type of department
 - system of education
4. There will be no significant differences in the opinions of the home science college students regarding adequacy of their preparation for the vocation of teacher regarding the aspects of:
- knowledge
 - ability
 - affective behaviour
5. There will be no significant differences in the opinions of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of teacher in terms of:
- knowledge
 - ability
 - affective behaviour

6. There will be no significant differences in the opinions of the home science college students with CT specialization regarding adequacy of their preparation for the vocation of teacher in terms of:
 - knowledge
 - ability
 - affective behaviour
7. There will be no significant differences in the opinions of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of teacher in terms of:
 - knowledge
 - ability
 - affective behaviour
8. There will be no significant differences in the opinions of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of teacher in terms of:
 - knowledge
 - ability
 - affective behaviour
9. There will be no significant differences in the opinions of the home science college students with HM specialization regarding adequacy of their preparation for the vocation of teacher in terms of:
 - knowledge
 - ability
 - affective behaviour

10. There will be no significant differences in the opinions of the home science college students regarding adequacy of their preparation for the vocation of teacher according to personal factors:
- type of study programme at B.Sc. level
 - academic achievement
 - socio-economic status
 - overall modernity
11. There will be no significant differences in the opinions of the home science college students regarding adequacy of their preparation for the vocation of teacher according to institutional factors:
- human resources
 - physical resources
 - instructional programme
 - type of department
 - system of education
12. There will be no significant differences in the opinions of the home science college students regarding adequacy of their preparation for the vocation of researcher in terms of:
- knowledge
 - ability
 - affective behaviour
13. There will be no significant differences in the opinions of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of researcher in terms of:

- knowledge
- ability
- affective behaviour

14. There will be no significant differences in the opinions of the home science college students with CT specialization regarding adequacy of their preparation for the vocation of researcher in terms of:

- knowledge
- ability
- affective behaviour

15. There will be no significant differences in the opinions of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of researcher in terms of:

- knowledge
- ability
- affective behaviour

16. There will be no significant differences in the opinions of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of researcher in terms of:

- knowledge
- ability
- affective behaviour

17. There will be no significant differences in the opinions of the home science college students with HM special-

ization regarding adequacy of their preparation for the vocation of researcher in terms of:

- knowledge
- ability
- affective behaviour

18. There will be no significant differences in the opinions of the home science college students regarding adequacy of their preparation for the vocation of researcher according to personal factors:

- type of study programme at B.Sc. level
- academic achievement
- socio-economic status
- overall modernity

19. There will be no significant differences in the opinions of the home science college students regarding adequacy of their preparation for the vocation of researcher according to institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

20. There will be no significant differences in the opinions of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of child welfare officer in terms of:

- knowledge
- ability
- affective behaviour

21. There will be no significant differences in the opinions of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of child welfare officer according to personal factors:

- type of study programme at B.Sc. level
- academic achievement
- socio-economic status
- overall modernity

22. There will be no significant differences in the opinions of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of child welfare officer according to institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

23. There will be no significant differences in the opinions of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of nursery school teacher in terms of:

- knowledge
- ability
- affective behaviour

24. There will be no significant differences in the opinions of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of nursery school teacher according to personal factors:

- type of study programme at B.Sc. level
- academic achievement
- socio-economic status
- overall modernity

25. There will be no significant differences in the opinions of the home science college students with CD specialization regarding adequacy of their preparation for the vocation of nursery school teacher according to institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

26. There will be no significant differences in the opinions of the home science college students with CT specialization regarding adequacy of their preparation for the vocation of garment designer in terms of:

- knowledge
- ability
- affective behaviour

27. There will be no significant differences in the opinions of the home science college students with CT special-

ization regarding adequacy of their preparation for the vocation of garment designer according to personal factors:

- type of study programme at B.Sc level
- academic achievement
- socio-economic status
- overall modernity

28. There will be no significant differences in the opinions of the home science college students with CT specialization regarding adequacy of their preparation for the vocation of garment designer according to institutional factors;

- human resources
- physical resources
- instructional programme
- type of department
- system of education

29. There will be no significant differences in the opinions of the home science college students with CT specialization regarding adequacy of their preparation for the vocation of textile designer in terms of:

- knowledge
- ability
- affective behaviour

30. There will be no significant differences in the opinions of the home science college students with CT special-

ization regarding adequacy of their preparation for the vocation of textile designer according to personal factors :

- type of study programme at B.Sc. level
- academic achievement
- socio-economic status
- overall modernity

31. There will be no significant differences in the opinions of the home science college students with CT specialization regarding adequacy of their preparation for the vocation of textile designer according to institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

32. There will be no significant differences in the opinions of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of extension officer in terms of :

- knowledge
- ability
- affective behaviour

33. There will be no significant differences in the opinions of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of extension officer according to personal factors:

- type of study programme at B.Sc. level
- academic achievement
- socio-economic status
- overall modernity

34. There will be no significant differences in the opinions of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of extension officer according to institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

35. There will be no significant differences in the opinions of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of administrator in terms of:

- knowledge
- ability
- affective behaviour

36. There will be no significant differences in the opinions of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of administrator according to personal factors:

- type of study programme at B.Sc level
- academic achievement
- socio-economic status
- overall modernity

37. There will be no significant differences in the opinions of the home science college students with EE specialization regarding adequacy of their preparation for the vocation of administrator according to institutional factors:
- human resources
 - physical resources
 - instructional programme
 - type of department
 - system of education
38. There will be no significant differences in the opinions of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of dietitian in terms of:
- knowledge
 - ability
 - affective behaviour
39. There will be no significant differences in the opinions of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of dietitian according to personal factors:
- type of study programme at B.Sc. level
 - academic achievement
 - socio-economic status
 - overall modernity
40. There will be no significant differences in the opinions of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of dietitian according to institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

41. There will be no significant differences in the opinions of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of food service manager in terms of:

- knowledge
- ability
- affective behaviour

42. There will be no significant differences in the opinions of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of food service manager according to personal factors:

- type of study programme at B.Sc. level
- academic achievement
- socio-economic status
- overall modernity

43. There will be no significant differences in the opinions of the home science college students with FN specialization regarding adequacy of their preparation for the vocation of food service manager according to institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- systems of education

44. There will be no significant differences in the opinions of the home science college students with HM specialization regarding adequacy of their preparation for the vocation of executive housekeeper in terms of:
- knowledge
 - ability
 - affective behaviour
45. There will be no significant differences in the opinions of the home science college students with HM specialization regarding adequacy of their preparation for the vocation of executive housekeeper according to personal factors:
- type of study programme at B.Sc. level
 - academic achievement
 - socio-economic status
 - overall modernity
46. There will be no significant differences in the opinions of the home science college students with HM specialization regarding adequacy of their preparation for the vocation of executive housekeeper according to institutional factors:
- human resources
 - physical resources
 - instructional programme
 - type of department
 - system of education
47. There will be no significant differences in the opinions of the home science college students with MM specialization regarding adequacy of their preparation for the

vocation of interior designer according to personal factors :

- type of study programme at B.Sc. level
- academic achievement
- socio-economic status
- overall modernity

49. There will be no significant differences in the opinions of the home science college students with HM specialization regarding adequacy of their preparation for the vocation of interior designer according to institutional factors:

- human resources
- physical resources
- instructional programme
- type of department
- system of education

50. There will be no significant relationship between the level of vocational aspiration and the opinions of the students regarding adequacy of their preparation for the vocations of:

- teacher
- researcher
- child welfare officer
- nursery school teacher
- garment designer
- textile designer
- extension officer
- administrator
- dietitian
- food service manager
- executive housekeeper
- interior designer

1.13 Delimitations of the Study

1. The study was limited to M.Sc final year students who would be appearing for their final examinations in the year 1990.
2. The instructional programme of the final institution of a student was only taken into account for the purpose of the study. It was not possible to study the programme of previous institution also.
3. Human resources, physical resources, and instructional programme were reported by the institutions. No observation has been done for institutional variables.
4. The tool was in English. A student had to just tick mark their responses. So, responses were not be affected adversely for non-English medium students.
5. Only those colleges were selected which can be contacted by personal visit or post only.
6. Percentage of marks scored by students at B.Sc.level were reported by themselves only. Original records have not been checked by the investigator.

1.14 Operational Definitions

1. Vocational aspiration:- A goal directed attitude which involves conception of the self in relation to a particular vocation.

2. Opinion - Formed judgment of students with regard to vocational preparation.
3. Adequacy - Students' feeling of ability.
4. Preparation to take up vocation - A total formal preparation for vocation that a student has completed in a home science education institution.
5. Vocation - a calling, as to a particular occupation, business or profession (Gainful employment).
6. Study programme - A number of courses properly organized into learning units for the purpose of attaining specified educational objectives.
7. Knowledge - The accumulated facts, truths principles and information a student had access during study programme to take up a particular vocation.
8. Abilities - Power to perform either mental or physical work necessary for a vocation, to its completion.
9. Affective behaviour - Elements with feelings such as attitude, beliefs, interest and values, a persons should have to take up a vocation.
10. Academic achievement - Knowledge attained or skill developed in the academic subjects designated by marks assigned at B.Sc. level.

11. Child welfare officer - who renders advisory services to agencies, groups of children or individual children by adopting home science subject matter in helping them to maintain normal living and satisfactory family adjustment.
12. Nursery school teacher - who works in a school for children to provide for their physical, emotional and social development, to assist them in the formation of desirable habits, and to cooperate with parents in promoting the development of the children.
13. Garment designer - who creates ideas and applies them in the production of functional and beautiful wearing apparel to meet the desires of men, women or children for fashion garments or accessories.
14. Textile designer - who creates ideas and applies them in the production of fabrics (dyeing and printing) to meet the demand of modern life.
15. Extension officer - who gives instruction on problems of rural and urban family living and community life of individual and families. Trains the field workers like gram sevikas.
16. Administrator - who manages or direct the person to whom he is committed like head of the department in the university, principal of a school or head of non-formal training centre.

17. Dietitian - who applies the science of nutrition and management in the feeding of individual as groups.
18. Food service manager - who supervises the purchasing, preparation and service of food for an institution.
19. Executive housekeeper - who supervises the furnishing, linen supplies and maintenance of an institution for guests.
20. Interior designer - who designs and executes plans for the artistic interior of a room or building in accordance with the client's desires.
21. Home science teacher - who gives instruction at any educational level from school through the university on home science related subject matter.
22. Researcher (in home science):- who searches for facts and analyze them critically for their meaning and implication in the improvement of home and family living or community.

(Definitions of vocations are as given by Ghorai, 1969)