CHAPTER II

REVIEW OF RELEVANT LITERATURE

Through an intense survey of literature in the field of occupational aspirations of youth, the investigator understood that great interest have been shown in the past by scholars in the study of the sources of aspirations of youth. The important variables came across during the survey of literature are discussed below.

Parental Education and Occupation Influencing the Occupational Aspiration of Youth

Blau and Duncan (1967) give clearly a model of status attainment. The formal theory of status attainment was expressed by Blau and Duncan using conventions of path analysis (Duncan, 1966b, 1975; Wright, 1934). The status attainment model depicts that the social status of one's parents affects the level of schooling achieved which, in turn, affects the occupational levels that one aspires and achieves. An informal path diagram of this idea is (Duncan, Featherman and Duncan, 1972) Parental status $\rightarrow$ Schooling $\rightarrow$ Occupational status. In
this view schooling is intervening variable between parental status and one's own occupational status. Thus although education is one of the indicators of status, it plays a functional role in a model of process that occurs over time (Fig. 2).

By studying the path analysis given by Blau and Duncan we get specific quantitative indicators to assess direct effect, indirect effect and total effect of different variables on occupational choice and status.

Fig. 2: Blau–Duncan Path Model

Note: The number next to curved arrow is a product moment correlation. Numbers next to straight arrows are standardized partial regression coefficients.

William Sewell (1980) and his colleagues collected longitudinal data describing the career histories of a large sample of Wisconsin residents. The Wisconsin data contained rich detail on respondents, beginning in their senior year in high school (1957) and continuing through 1975 (Claridge, Sheehy and Hauser, 1977). The first wave of the Wisconsin survey collected information about parental status, educational and occupational plans of the youth, parental career expectations and encouragement to their children, perceived career plans of peers, school grades and measured mental ability. Subsequent waves of data collection have obtained information about educational experience, occupational attainment and income. Thus by the end of the last survey the Wisconsin data described the socio-economic profile of the respondents rather completely. The basic ideas in the presentation of the theory are summarised in Fig. 3.

Fig. 3: Wisconsin Model
While perceiving the ideas in Blau-Duncan model (Fig. 2) Wisconsin model contains substantially more detail. The cognitive variables included a measure of mental ability and academic performance in school. The social psychological set of variables include educational and occupational aspirations of youth before leaving high school, parental encouragement to attend college and peer plans to attend college. In short, the hypothesis in this model is that parental status affects the occupational level of their offspring.

Experimental Support

The Blau-Duncan Model was tested on a large national sample of men. As we can see in Fig. 2 the coefficient associated with the curved double headed arrow is the correlation between father's education and father's occupation. The other coefficients are sample estimates of the path coefficients. For example, the standardized partial regression coefficient of 0.440 indicates that education has direct effect on the choice of the first occupation. Further, this path analysis reveals that the indirect effect of father's occupation on son's first occupation is 0.123. Comparing this direct effect to indirect effect (0.224) shows the indirect effect to be only a little more than half the direct effect; hence the
chain of effect theory is not well supported in this instance. In contrast, the indirect effect of father's occupation on son's second job is 0.207, of which 0.144 operates through education. Hence the intervening variable model is more nearly supported by the data for second occupation than for first occupation.

The fairly close association of educational and occupational aspirations with educational and occupational attainments is important in evaluating the potential effectiveness of career guidance. In the Wisconsin data, these correlations are substantial, about 0.60 for education and 0.45 for occupation.

Examination of the role of significant others in occupational aspirations forms an important focus of the Wisconsin model studies (Alexander, Eekland and Griffin, 1975; Curry and others, 1976, 1978; Duncan, Featherman and Duncan, 1972; Duncan, Haller and Portes 1968; Featherman and Hauser, 1978; Haller and Butterworth, 1960; Hotchkiss and Chiteji, 1981; Hout and Morgan 1975; Kerckhoff, 1974; Kerckhoff and Huff, 1974; Porter, 1974; Rehberg and Hotchkiss, 1972; Sewell and Hauser, 1975; Sewell, Hauser and Wolf, 1980.
Sewell and Hauser (1975) presented a comprehensive review and refinement of the studies up to 1975. In earlier studies, parental status had been indicated by a composite socio-economic index. Sewell and Hauser said the model was not capable of explaining income attainment nearly as accurately as it explains educational and occupational attainments.

The Relationship Between Scholastic Achievement and Occupational Aspirations

It is well-known that those successful in the academic career can get occupations of high status. But there may be exceptions too. Some highly successful individuals have very little formal education and some highly educated people have had little vocational success. Nevertheless, the positive relationship between education and vocational success is generally quite strong and it has influenced very much the popular thinking about education.

One of the ways in which the education-success relationship has influenced our thinking is that we have come to attach a cash value to education, especially higher education. If only students achieve well in the educational
field they get a good chance for competing for higher jobs.

These notions about the payoff value of education make an assumption about cause and effect that needs to be examined. The assumption is that the greater success of educated people is pretty much the direct result of their education, so if it worked for them it ought to work for others. Educated people are more successful; therefore education is the pathway to success.

This cause and effect interpretation of the education success relationship tends to view educational institutions as "skill and knowledge factories" that take in raw materials (students) and somehow process them so that they emerge a few years later transformed into more finished "educated" products. And if the education factories do such a good job with those they have been processing, why not assume that they could do an equally good job with the many others who do not presently continue that far in educational institutions? The answer is clear: those who seek and attain extensive amounts of education start out more able, ambitious and advantaged on the average than those who do not.
Many studies have found positive association between the scholastic achievement and occupational aspirations and occupational success. Gist, Pihlblad and Gregory (1942) found a fairly consistent correspondence between average scholastic achievement and subsequent occupation, the professional groups showing higher academic records. Success in School and "Success in life" are related according to these authors.

Another study of the relation between high school grades and employment history and income, based on 20,000 high school graduates as subjects (Ryan and Merton 1944) found no consistent relation between school grades and occupational achievement.

A study by Raj Kumar Yadav (1979) found that scholastic achievement had positive correlation with preference in biological science area for the arts students; negative correlation with preference in business area for the commerce students and again negative correlation with preference in biological science, computational, executive, persuasive and linguistic areas for the science students.
Race and Gender Effects on Occupational Aspirations

Studies reveal that there are no persistent findings to say race and gender exercise direct effects on career choices. Nevertheless studies in the west show that there is empirical evidence of race and gender effects on occupational achievement and income. Those from minorities concentrated in the low status occupations and earn substantially less than whites (Johnson and Sell, 1976; Porter, 1974; Portes and Wilson, 1976; Reich, 1981; Smith and Welch, 1977; Stolzenberg, 1975).

Gender segregation by occupation is pronounced than differences in racial composition across occupations. Similarly income differences by gender exceed racial differences. Although educational differences by race and gender account for part of the occupation and income, disadvantages of blacks and women occupational and income differences by race and gender persist at every level of education (Stolzenberg, 1975; Suter and Miller, 1973; Treiman and Hartman, 1981; Treiman and Terrell, 1975).

Studies prove clearly that race and gender exercise strong effects on such career outcomes as educational and occupational levels and income. Human capital theory suggests
that the differences are due to 'human resource' difference between races, between males and females. Human resource variables include education and on the job training. The basic proposition is that, if human resource variables are controlled, race and sex discrepancies in income and occupational level should disappear or at least diminish by a substantial proportion (Corcoran and Duncan, 1979; Mincer and Polachek, 1974; Stolzenberg 1975; Treiman and Hartman (1981).

Caste and Occupational Aspirations

In Indian situation caste is prominent variable controlling the educational and occupational aspirations and choice. Sheo Kumar Lal (1976) in the research paper "Occupational aspirations of scheduled caste student" found that a little more than two-fifths of the students (41.2%) want to be government officers and a little more than one third (35.2%) aspire for high level professions. Somewhat more than one-tenth of the students (12.4%) like to be teachers, gramsevaks, clerks and typists. Only 1.7 per cent wanted to become political or social workers. It is interesting to see that Lal could not find even a single student who wanted
to do farming which has been the major occupation of Indian population. And only 3.4 per cent wanted to follow the occupation of their parents while 96.6 per cent wanted to enter some occupation other than those of their parents.

Another study, by Naik J.P. (1971) "Education among scheduled castes", came to the conclusion that disparities in the educational levels and literacy rates between the scheduled caste population and the general population are significant. Bernard Cohn (1956) saw that the practice of discrimination against scheduled caste students and teachers continues in the schools, particularly in the rural areas. Education is the condition for better occupations and hence these studies tell that scheduled castes still have problems in the way of aspiration for higher occupations.

Brij Raj Chauhan and Narayana G. (1976) through their research paper show that there is differential use of educational facilities among scheduled castes. They further conclude that political and economic differences within these castes over a period of time may be responsible for this situation. Thus the differences in the use of educational facilities perpetuates the inequalities already existing
within the scheduled castes. Although exceptions may be had, economically and culturally confined youth frequently acquire learned helplessness and adopt an external locus of control. The adverse circumstances of socialization for such individuals commonly include (1) highly restricted life space, that is, limited geographical and social boundaries for experiencing the world; (2) inadequate human work models among the parents and in the neighbourhood and often the permanent or long term absence of one parent from home; (3) a devaluing of both the youngsters intellectual promise and performance; (4) a 'Street Cornor' ethos, which furnishes fantasies or personal success and power that typically exclude reference to the mediating role of education and (5) a frequently held and abiding belief, acquired from and sustained by the reference group, that the prevailing social system is an efficient and watchful trap permitting few avenues of status improvement by their means (Borrow, 1966, 1968; Vontress, 1971).

Rural Urban Differences and Occupational Aspirations

Evidence of geographical effect on status attainment comes particularly from comparative studies of the socialization patterns of urban versus rural youth. Although increased
outmigration from rural areas and the spread of technologically sophisticated mass communication media have reduced the cultural isolation of country youth, a consensus suggests that a restricted range of social experiences and a comparatively low degree of geographical mobility result in a narrower view of the nation's occupational structure and somewhat lower level of aspiration scores for farm youth and rural non-farm youth in comparison with urban youth samples.

Rajendra Pande (1974) in his study "Rural urban comparison of occupational aspiration of college youth" had the following conclusions: (a) Urban youth mostly aspire for professional technical occupations and rural youth for white collar jobs. More rural youth wanted to be farm owners and more urban youth wanted to be industrialists (b) Urban youth surpass rural youth in achievement orientation (c) Rural youth give more emphasis on social service, high pay and interest in work respectively, whereas urban youth's basic emphasis is on interest in the job followed by emphasis on high pay and social service aspect of the job (d) the two groups perceive difficulties differently: urban youth have mainly personal and domestic difficulties, while rural youth have mainly social difficulties.
As for aspiration for income, urban youth tend to aspire for earning more income as compared with rural youth. The urban youth also showed greater self-confidence achieving their aspirations for income than do the rural youth.

Other important studies showing rural urban differences in occupational aspirations of college youth are the following: Beyon 1935; Laybourne, 1934, Haller, 1960; Burchinal 1961; Schwarzweller, 1968; Gore, 1968; Sharma 1970. All these studies show that the aspiration level of career choices of rural youth are lower than those of their urban counterparts.

**Economic Status and Occupational Aspirations**

Many studies show that economic status of the family is a determining factor in the occupational aspirations of college students. In the study by Sheo Kumar Lal (1976) it was found that among scheduled caste students majority of the students from a comfortable economic status chose high profession for their future career and among them 35.7 percent wanted to become government officers. But the trend was the reverse among the economically weaker sections.
Ama Ra, U. (1976) who studied the occupational aspirations of undergraduate girl students reached the conclusion that students from well-to-do homes acquire a positive attitude towards work which will benefit them economically.

Gopalapillai, P. (1975) studied students of tenth standard and found that students from low or middle income families aspire for higher occupations where they can make money and acquire status.

Ambarao, T. Uplaonkar (1983) in his study 'Occupational aspirations of college students' concludes that the proportion of women students in the high social class status category with middle occupational aspirations was higher (29%) than men (15%).

**Interests and Their Measurements**

**Interest**

Strong (1943) defines interests as "activities for which we have liking or disliking and which we go towards or away from, on concerning which we at least continue or discontinue the status quo, further more they may or may not
be preferred to other interests and they may continue over varying intervals of time" (Vocational Interests of Men and Women, 1943).

Murphy (1955) defines interest in the following way
"Interests are conditioned stimuli related to goal objectives and expressed as likes or dislikes of activities, objects, characteristics, or people in the environment" (The Cultural Context of Guidance, Personnel and Guidance Journal, 34: 1955).

Guilford (1963) says "Interest is a generalized behaviour tendency of an individual to be attracted to a certain class of incentives or activities that are vocational in nature and to those whose broad meanings transcend vocations" ("Fundamental Statistics in Psychology & Education", 1963).

The above written definitions show that interests represent a tendency to select one activity or thing in preference to something else, to choose one instead of another. The term interest has been used in many ways.

According to Super (1949) there are expressions, manifestations, tests and inventories of interests.

He defined expressed interest as the verbal expression
of interest in an object, activity, task, or occupation. If a child says, "I am going to be a doctor when I grow up" an interest in a profession is expressed. How far these expressed interests are reliable is doubtful. Many factors work upon the child to have changes in his early interests.

By manifest interest he meant actual participation in activity or occupation. If one spends his leisure time in stamp collection, gardening, making designs, imitating religious ceremonies or on some other activities, we may assume that something of interest is here for him in these areas.

Tested interests mean interests as measured by objective tests. Results of these tests are accepted on the assumption that interest in an activity will result in an accumulation of information about that activity, and the amount and type of information can be measured.

Interest inventories are questionnaire in which the items are given an experimentally determined weight, yielding a score that represents a pattern of interests.
The characteristics of interests are the following (Kochhar, 1984):

1. They are shaped by both heredity and environment.

2. They are fairly stable traits of personality.

3. They never become permanently fixed. There is a constant shaping of the detailed pattern - but broadlines of interests remain unchanged.

4. They are sufficiently unique to have special consideration in the study of an individual or group. Super feels there seem to be something magnetic about interests, putting people in their direction and holding them in place once there.

5. They vary with age and differ among individuals.

6. They gradually crystallise as the individual begins to discover himself and piles up rewarding experiences in a few fields.

Relation Among Interests, Ability and achievement

According to Cronbach (1970) "A high interest score needs to be interpreted as indicating that if a person survives
training and enters the occupation, he is likely to enjoy his work. Though interests imply motivation, their influence on success is rather small. But it can be concluded that a person with interests and abilities suitable for an occupation can and will do well in it; person with suitable abilities but unsuitable interests can do well but may not and a person with suitable interests and low aptitude will do badly" (Essentials of Psychological Testing, New York, Harper and Row, 1970, p. 427). Many studies have shown that there is a moderate relationship between intelligence and interest. A correlation ranging from +0.4 to -0.4 was found depending upon the nature of interests.

**Why Interests be Identified?**

To help the testee to identify and clarify their interests in terms of the demands of varied courses and careers and choose work and experiences consistent with their interests.

To help in the selection of the right person for the right work and thus save frustration, unhappiness and disappointment in the lives of the individuals and increase production capacity of the individual.
Use of Interest Inventories in Identifying Interests

The measurement of interests by means of inventories is a rather recent development. The nature of interest inventories can be explained by considering two most important ones. They are (1) The Strong Vocational Interest Blank for Men and (2) The Kuder Preference Record-Vocational.

Strong Vocational Interest Blank

The Vocational Interest Blank for Men was originally published in 1927 and revised in 1951. It consists of 50 categories, arranged in 11 groups. Scoring scales are available for 47 occupations, for six groups of occupations and for four special variables: interest maturity, occupational level, specialization level and masculinity-feminity. To items in some of these groups, the individual responds "like", "indifferent", or "dislike". The other groups contain items which require the individuals to indicate preference for certain vocational activities, to compare interest between two items and to rate his present abilities and characteristics. Since the inventory has no time limit, the individual is expected to respond to all items.

In scoring the inventory, each item has weights assigned to its response positions. The weight may be either positive
or negative; its direction and size depend upon how that item differentiates men-in-particular occupations from men-in-general. This method of weighting items is a distinguishing characteristic of Strong's Blank.

We shall further examine how Strong determined the weights to be assigned a particular response to an item. He carefully selected a group of blanks which had been filled out by a typical group of men, whom Strong calls "men-in-general". This group may be thought of as the basic population. He then tabulated the responses of these men-in-general. He found, for example, that these men responded to the first item, "actor", in this manner: 21 per cent liked it, 32 per cent were indifferent and 47 per cent disliked it. When he tallied their responses to "architect" he found that 37 per cent indicated "like", 40 per cent "indifferent" and 23 per cent "dislike". Using this procedure, Strong obtained a picture of how men-in-general would respond to each of the items in his blank.

As the next step in determining weights for the items, Strong gave the blanks to successful men in various occupations and then tallied their responses to each of the items. To the item "actor" the engineers answered thus: nine per cent responded "like", 31 per cent "indifferent" and 60 per cent
"dislike". To the item "architect", the percentages responding "like", "indifferent" and "dislike" were, respectively 58, 32 and 10.

With this information for each of the items, Strong computed the differences between the percentages for men-in-general and for the engineer group. By use of critical ratio formula which takes into account the significance of difference between the two percentages, Strong then computed the weight to be assigned to each of the three possible responses to an item. These weights vary from -4 through 0 to +4. Roughly speaking, they are based on the degree to which the responses of engineers, for instance are different from the responses of men-in-general. This procedure is illustrated in Table 2.1.

As the final step in constructing the scale Strong converted the scoring weights into a scoring key. This key is used to weight an individual's responses. The more nearly his answers correspond to those of engineers, for example, the higher is his score on the engineering scale. The final score thus obtained are converted into letter grades of A, B+, B, B-, C+ and C. The meaning of these grades is explained by Strong in the following words.
<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage of men-in-general tested</th>
<th>Percentage of engineers tested</th>
<th>Differences in percentage between engineers and men-in-general</th>
<th>Scoring weights for engineering scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor (not movie)</td>
<td>21 32 47</td>
<td>9 31 60</td>
<td>-12 -1 +13</td>
<td>-1 0 1</td>
</tr>
<tr>
<td>Architect</td>
<td>37 40 23</td>
<td>58 32 10</td>
<td>+12 -8 -13</td>
<td>2 -1 -1</td>
</tr>
</tbody>
</table>

"An A rating means the individual's interests agree very well with the interest of men in the occupation; a C rating means that there is no such agreement; whereas scores in the B range indicate the degree of approximation to A or C ratings. Scores should never be viewed as conclusive. They should be considered as merely suggestive, taking into account all other information bearing upon one's vocational choice. Occupations rated A or B+ should be carefully considered before definitely deciding against them; occupations rated B- and C should be equally carefully considered before definitely deciding to enter them" ("Vocational Interest of Men & Women", 1943; p. 19).

The Strong inventory may be scored for 50 occupations. A factor analysis by Strong, made at a time when 36 scales were available, revealed that certain of these scales can be grouped together. Following are the groupings of the specific occupations:

**Group I** Artist, psychologist, architect, physician, dentist.

**Group II** Mathematician, Physicist, engineer, chemist.

**Group III** Production Manager.
Group IV Aviator, farmer, carpenter, painter, mathematics—science teacher, policeman, forest service.

Group V YMCA Physical Director, Personnel Manager, YMCA Secretary, Social Science teacher, School Superintendent, Minister.

Group VI Musician

Group VII Certified public accountant

Group VIII Accountant, office worker, purchasing agent, banker

Group IX Sales Manager, Real estate salesman, life insurance salesman

Group X Advertising man, Lawyer, author journalist

Group XI President of manufacturing concern.

**Kuder Preference Record-Vocational**

The main assumption of Kuder preference record is this: Although a person's interests find expression in a multiplicity of activities, measurement of an individual's basic interest can be expressed in terms of the relative strength of his preference for certain broad categories of activity.
The Kuder Preference Record was originally published in 1939. At that time it could be scored for seven broad areas of interest. Since then there were many revisions of this inventory. In 1949 the name was changed to Kuder Preference Record - Vocational to distinguish it from an entirely new inventory - Kuder Preference Record - Personal. The latter is to measure personal characteristics not covered by the Vocational form.

The Kuder Preference Record - Vocational yields scores in the following broad areas of activity: Outdoor, mechanical, computational, scientific, persuasive, artistic, literary, musical, social service and clerical. The blank contains 504 items, each offering three possible choices. The individual reads the three choices and indicates which he likes least. A typical item is:

a. Develop new varieties of flowers
b. Conduct advertising campaign for florists
c. Take telephone orders in a florist shop

In this item if individual chooses "a" as liked, he receives credit toward his score in the scientific and artistic areas. If he chooses "b" he is credited toward the persuasive score. And if he chooses "c" he is credited
toward clerical score. By adding the credits, a total score is obtained for each area of vocational interest. The scoring is facilitated by an ingenious answer pad, which can be completely scored in about five minutes. The scores obtained are then converted to percentile ranks based on the responses of so called "people-in-general".

It is important to note that the Kuder yields scores which can only be interpreted by comparison with the scores made by persons in broad categories, such as high school girls, or male adults. In other words, the Kuder scores are not interpretable, as are those obtained by the Strong blank, in terms of similarity to specific occupational groups. The Kuder manual, however, presents data which show that persons in peculiar occupations tend to receive relatively higher scores in the corresponding Kuder areas to which their occupations are logically assigned. With the publication of another Inventory, the Kuder operational Form D, Kuder has developed specific occupational keys using an approach identical to Strong's pattern of procedure. For instance, it takes into account differences between men-in-general and men in a specific occupation. At present 42 occupational keys are available for the Kuder occupational.
In constructing the Kuder vocational inventory the first step was to prepare a large number of items which logically appeared to measure preference for activities in a certain area such as scientific activity. These items were then given to an unselected group of people and were scored according to an a-priori key. This key was necessarily based on Kuder's judgement of the kind of responses which indicated scientific interest. Each of the items was then analysed in terms of its ability to discriminate between persons who made high and low scores on a priori key. An item which discriminated was retained; one which did not was discarded. Thus the responses to items intended to measure interest in the scientific area were consistent with each other. The pattern of these responses was then embodied in the scoring key for the scientific area of interest. This process was repeated in covering each of the other broad areas of interest.

Then Kuder developed a scale of scores for each of seven interest areas. He then found that these scales were reasonably independent of each other. The correlations among the seven scales ranged from 0.19 between the scientific and computational scales to -0.34 between the scientific and persuasive scales. Kuder has developed three additional scales too. These scales have higher intercorrelations than
did the original scales, yet are sufficiently independent to be regarded as measuring separate areas of interest.

Scores on the Kuder inventory can be interpreted as indicating the relative degree of interest which a person has in each of the areas given.

The two interest inventories given above, those of Strong and Kuder is basic in developing many other interest inventories and preference records. The other interest inventories and preference records are the following.

3. **Vocational Interest Inventory (Gujarati)**

This is developed by Badami, N.D. It gives a profile showing relative interests in various occupational areas. This inventory is meant for college and senior high school students. The time limit to complete the inventory is 15 minutes. Reliability coefficients for ten different interest scores range from 0.78 to 0.90. The inventory has been validated against several professional groups. Average profile is given for comparison (Available from: Badami, N.D., Department of Psychology, Education and Philosophy, Gujarat University, Ahmedabad).
4. **Occupational and Avocational Interest Record (English)**

This record is by Bharadwaj, S.B.L. It consists of two scales, occupational and avocational. Each scale contains 140 items. This scale is for graduates and requires about two hours to complete. Percentile norms are available (Available from: Directorate of Psychological Research, West Block 8, R.K. Puram, New Delhi).

5. **Chatterji's Non-Language Preference Record**

This scale is non-verbal in nature and is used in group. It measures the interest in ten broad areas: fine arts, technical, crafts, outdoor, sports, household work, scientific, literary etc. It is meant for high school and college students. The time limit is from 45 minutes to one hour (Available from: Chatterji, S., Psychometric Unit, Indian Statistical Institute, 203 B.T. Road, Calcutta).

6. **The Interest Test Parisuchi**

This test is by Kulshrestha, S.P. It contains 350 educational and vocational activities and measures seven interest areas as arts and humanities, science, commerce, agriculture, home science, fine arts and technology. It is
a half-forced-choice and half-simple-choice. This can be applied to school and college students (Available from: Rupa Psychological Corporation, Agra).

7. **Vocational and Educational Interest Record by Kulshrestha, S.P. and Damale, O.P.**

   It contains 200 vocational and 98 educational activities, ten areas are covered in vocations and seven in education. The time limit to complete the test is 10 minutes for Vocational Interest Record and five minutes for Educational Interest Record (Available from: National Psychological Corporation, Agra).

8. **Vocational Preference Record (Hindi)**

   This is by Manovigyan Shala, Allahabad: It is a group verbal test and the scale is meant for students of class X and XII. The time required to complete the test is 30 minutes. It is used for guidance and counselling (Available from: Nideshak, Manovigyan Shala, Allahabad).

9. **Interest Inventory**

   (English and Gujarati. by Mascarenhas, J.). This
contains 150 items to measure interest in Medicine, Engineering, Commerce, Arts and Fine Arts. It is meant for 14 - 18 year old boys and girls. The time limit to complete the test is on an average 30 to 35 minutes and maximum time 40 minutes (Available from: Mascarenhas, J., St. Xavier's Institute of Education, 15, New Marine Lines, Bombay - 1).

10. Adaptation of Kuder Preference Record (Hindi) by Singh, N.P.

Here items that could fit in the local conditions have been rendered in Hindi. Others have been so modified that though the content of an item has been changed its functional value for measuring a particular interest, area remains the same (Available from: Singh, N.P., Department of Psychology, T.N.B. College, Bhagalpur (Bihar).

11. Interest Inventory Prepared by Department of Educational Psychology and Foundations of Education

This inventory has two forms: senior and junior. The senior form is meant for men between the ages 18 and 25 years and the junior form is for boys between ages of 15 and 18 years. This inventory is available in four
languages - English, Hindi, Kannada and Marathi. It has been developed for use on men only. The inventory consists of four parts each with one type of items. Part I includes situation items, Part II consists of statements, Part III consists of pairs of words (paired associates) and Part IV consists of normal checklists. No time limit is given but it is believed that better results will be obtained with the individuals giving their responses rapidly (Available from: Department of Educational Psychology, NCERT, New Delhi).

12. **Interest Record (Hindi) by Singh, R.P.**

This scale is verbal in nature and is administered in group as well as individually. It is meant for higher secondary level and it can be used also in educational and vocational counselling of young adults out of school. There is no time limit but it needs 30 to 40 minutes to complete the scale. There are 168 pairs of items with seven interest factors, (a) Mechanical, (b) Business, (c) Scientific (d) Aesthetic, (e) Social, (f) Clerical, (g) Outdoor (Available from: Smt. Sarma, R.K., 26/46, Shakti Nagar, Delhi).

13. **Comprehensive Scale of Entrepreneurship by Sharma, V.P.**

This scale is to discover the entrepreneurship
qualities among youth who aspire to hold high risk taking positions in some industry, factory, firm or business enterprises to get self-employed by running some ambitious projects or enterprises. The essence of the scale lies in evaluating the degree of entrepreneurship attributes that the individual possesses and in predicting his future success in his undertaking. It consists of six parts: (1) Self-perception, (2) Organizational ability and Managerial skill, (3) Personality maturity, (4) Executive Research Pattern Scale, (5) Human Relation and (6) Human Engineering.

The scale may be useful as a diagnostic device for the business organizations, vocational institutes, industrial managements and banks for screening, identifying and catching the young entrepreneurs when they start thinking for entering the vocations (Available from: National Psychological Corporation, Agra).

14. Thurstone Interest Schedule

It has been prepared by Thurstone, L.L. Here the subject is asked to express his preferences for different occupations. The occupations are given in pairs and he is
asked to check them to indicate his preferences. In each comparison, the subject is to assume that there is no difference in income or prestige. For each pair of occupations, the subject is to draw a ring around an occupation which he prefers out of the two, draw rings around both numbers if he likes both the occupations - and cross out both occupations if he dislikes both of them.

15. **Vocational Interest Inventory (English)** by George Mathew, V.

It consists of 7 scales which are outdoor, mechanical, clerical, persuasive, aesthetic, social work and scientific. It is meant for English knowing persons in India.

16. **Mathew Interest Inventory** by George Mathew, V.

The test measures the interest patterns of adults. The test has been standardized largely on pupils of standard X and the test is applicable from that level. The eight areas of interests measured are: Aesthetic, Social, Science, Business, Outdoor, Political, Sports, Religious.

The investigator made use of this Inventory in the present study to measure the interests of college students. The investigator got personal guidance from the author.
Dr. George Mathew, V. in administering the test. More details about this Inventory is given in Chapter III where the methodology is discussed in detail.

Classification of Occupations

The study of occupational aspirations should cover the occupational classifications also. There are two types of classification in use in our country: (1) National Industrial Classification (NIC) and (2) National Classification of Occupations (NCO).

National Industrial Classification (1970)

This classification is done by the Government of India, for the use of its various fact finding agencies. Information regarding employment and unemployment in various sectors of economy can be understood through this classification. Industry means, that sector of economic activity in which the earner is, or was, engaged eg.: textile industry, automobile industry etc. Code numbers are assigned for each industrial group on "the digit" system for the use in employment exchange records. This system is related to
the international usage as recommended by the International Labour Office.

The Sixth International Conference of Labour Statistics adopted the following definition of an occupation: "An occupation is a trade, profession or type of work performed by an individual irrespective of the branch of the economic activity to which he is attached". The concept of an occupation has been adopted in the National Classification of Occupations (NCO).

National Classification of Occupations

In 1946 Directorate General of Resettlement and Employment (Directorate General of employment and Training, the new name), published the "Guide to Occupational Classification" for day-to-day work at Employment Exchanges; such as registration of applicants, documentation of vacancies, compilation of statistical data etc. It was framed after the British pattern and this was based upon industrially biased occupational classification. As there was a plan for a new classification of occupations, the International Labour Organization (ILO) published, in 1958, a
complete classification of occupations, together with their definitions, called the International Standard Classification of Occupations, 1958.

The Directorate General of Employment and Training prepared the 'National Classification of Occupations, 1958', based upon the International Standard Classification of Occupations, 1958 and substituted the "Guide to Occupational Classification".

The NCO, 1958 was revised in 1968. The National Classification of Occupations NCO, 1968 has been prepared after the second edition of the International Standard Classification of Occupations (I.S.C.O.), 1966, published by the International Labour Organization, I.L.O., 1968. This made easy to ensure international comparability of reporting and analysing of statistical data relating to occupations, manpower, population census etc.

The National Classification of Occupations 1968 attempts to group together occupations according to combinations of specific duties, tasks and work functions concerned with, while actually performing the same or closely related work.
Consequently, job definitions or descriptions given in N.C.O. represent only the average national picture of the various occupations. Thus there could be variations in job-combinations or job-breakdowns, as also differences in job-titles of occupations, from establishment to establishment and state to state. It is also recognised, as only natural, that a group of persons engaged on the same occupation may 'inter se' vary widely in such characteristics as level of performance, education, institutional training etc. Therefore, even though the revised definitions do not describe the level of education, training or work experience required for efficient performance of the tasks and functions in an occupation, broad inferences regarding qualifications etc. could be drawn from occupational grouping and from the job description.

Major Divisions in National Classification of Occupations are given in the Appendix.