

CHAPTER II

REVIEW OF RELATED LITERATURE

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2.1. Introduction

Some of the important studies concerning vocational development and vocational maturity are reviewed in the present chapter. The available studies are classified into two groups, one comprising of studies pertaining to factors in vocational development and the other pertaining to measurement of vocational maturity. The various investigations that have so far been carried out have tried to develop instruments for the measurement of vocational maturity, to examine their predictive validities, to identify the various indices of maturity, and to search for the correlates of vocational maturity. It is necessary that the researcher should know what researches concerning the area of his interest have been carried out, what methodologies have been used by other researchers, which areas have been studied and to what extent, what tools have been devised and to what extent they are adequate from the point of view of measurement. It is with

this view point that the review of past researches is presented in this chapter.

2.2. Studies Concerning Factors in Vocational Development

In an investigation of ' accuracy of occupational stereotypes of grade twelve boys', Banducci⁽¹⁾ examined the accuracy of occupational stereotypes of 679 high school seniors boys in relation to socio-economic status, academic development, crystallization of plans, vocational interest and range of experience. Ss were asked to rate 12 occupations in terms of traits required by worker for successfully performing a job. Job qualification profile ratings given in Dictionary of Occupational Titles (D.O.T.) were used to compare responses of the Ss. Score was computed in terms of discrepancy. Results showed that Ss having high academic development had more accurate stereotypes of high level jobs whereas Ss with low academic development and belonging to low socio-economic status had more accurate stereotypes of low level jobs. Besides, subjects who were found to be realistic, intellectual and enterprising types on Vocational Preference Inventory, had most accurate occupational stereotypes.

Resnik, Fauble, and Osipow⁽²⁾ studied ' Vocational Crystallization and Self-Esteem in College Students.' They

assessed positive relationship between vocational crystallization and self-esteem in 216 undergraduates by observing differences on two measures of vocational crystallization in students high and low in self-esteem scores on the Tennessee Self-Concept Scale. The number of Kuder Preference Record scores greater than the 75th percentile constituted one criterion measure. No differences according to self-esteem were observed on this criterion measure. The high and low self-esteem subjects differed in respect of certainty. No sex differences were found in the relationship between self-esteem and vocational crystallization.

In a study entitled ' Persistence of Occupational Choice and Personality Congruence, ' Southworth and Morningstar⁽³⁾ took a sample of 102 freshmen engineering students with a view to examine the predictive value of Holland Vocational Preference Inventory (VPI) in ascertaining perseverance in engineering. On the basis of their status at the beginning of their junior year, Ss were divided into 3 groups: (a) 43 Ss who continued to major in engineering, (b) 33 Ss who gave up engineering but still attended university, and (c) 26 Ss who had left the university. VPI scale scores for each S were subjected to a multivariate analysis of variance which turned out to be significant ($D^2 = 28.26$ $p \leq .01$). This result shows that the scales were sufficiently

differentiating the 3 groups. Social and artistic scales of VPI yielded maximum differentiation.

Helen Astin⁽⁴⁾ took a sample of 817 female Ss from the project TALENT Data Bank to investigate the career development of girls during high school years. These subjects were first tested in 1960 and retested three years later when they were in the senior high school year. Subjects were assigned to an apriori seven-group occupational classification according to their choice of careers at both testings. This constituted the criterion variable. Twentysix IXth grade measures of students' personal characteristics and three measures of characteristics of school environment were selected as predictor variables.

Discriminant analysis showed that twelfth-grade girls planning careers in science or teaching were differentiated from those planning to become housewives or to do office work on the basis of several ninth-grade measures. Ninth grade characteristics of high school girls were predictive of their career expectations at graduation. There were differences in career plans of girls attending larger and smaller high schools. This suggests the possibility that important differences in environment exist between high schools of different sizes.

Counselling for college plans and for job yielded differences in twelfth grade career plans. Mahalanobis distance

matrix revealed that post high school vocational plans of girls can be viewed in terms of a career-versus-noncareer dichotomy.

In an investigation entitled ' Personal Adjustment and Career Development ', Osipow and Gold⁽⁵⁾ divided their sample of freshmen into two groups : those requesting personal-adjustment counselling (PA) and those not requesting such counselling (C). Their hypothesis was that the career development of PA group would be more disrupted than that of C group. On comparison it was found that the PA Ss had fewer SVIB patterns and had more flat SVIB profiles than did the C Ss.

For the PA group there was a greater proportion of no primary pattern than the C group. This suggests that PA Ss' career development is less mature. One important finding is that the PA Ss had interest patterns contrary to social expectations. This was true for both the male and the female PA Ss. Though there were differences on SVIB between PA and C groups differences were not observed in occupational preferences of the two groups. This suggests that career preferences of the PA group were not consistent with their inventoried interests. The results substantiated their hypothesis about differences in career development of the two groups.

Helen Astin⁽⁶⁾ in 'Patterns of Career Choices over Time,' initially tested ninth grade subjects in 1960 and retested them in 1963 when they were about to finish the twelfth grade. This sample of 650 boys was classified into seven major occupational groups according to their choice of careers namely, Business, Science, Engineering, Education, Professions, Non-college careers and unclassified careers. On the basis of expected careers of these subjects at ninth and twelfth grade levels, the percentage distribution for seven groups was computed. Differences in distribution at ninth and twelfth grade levels indicated that there were net gains in Business and Education whereas the remaining five groups showed net losses. Project TALENT staff have also reported similar patterns in the data collected by them.

From the finding of this study, it can be inferred that the choices in the ninth grade are in fluid state and are crystallized toward the termination of twelfth grade. Net losses in Non-college careers and unclassified careers indicate that the boys' decision to go to college comes at almost the time of leaving high school.

In 1960, John Flanagan and associates administered a composite battery of aptitude and achievement tests, interest

and personality inventories, and biographical questionnaires, to 4,40,000 boys and girls at several grade levels. It is a longitudinal study whose major objectives are the analyses of the determinants of vocational plans and choices and of the distribution and use of talents.

Ability of the student and socio-economic level of his family were found to be major determinants of post-high school education. In terms of ability, junior college students were more like non-college students than like four-year college students. However, in family socio-economic level junior college students were like four-year college students.

In the Clerical and Semi-skilled occupations largest percentage of boys was employed, whereas in the clerical and sales field largest percentage of girls was employed.

The stability of career plans during the high school years and one year after high school was low which shows that earlier occupational preferences are poor predictors of later preferences.

In a longitudinal investigation to study the development of the child's conception of vocations from the first to the eighth grade of elementary school, Damjan and Makarovic⁽⁸⁾ took a sample of 122 male and 129 female pupils from first to eighth grades in Ljubljana, Yugoslavia.

They were interviewed so as to reveal their knowledge of parents' profession and their attitude toward parental profession. The number of attributes which pupils could mention constituted the measure of knowledge of parents' profession and this increased particularly from 4th grade onwards. There was an increase in the number of correct namings of parents' profession from 30% in the 1st grade to about 90% in the 8th grade. With age, there was decrease in preference for parents' profession. Comparison of attitudes towards father's profession, revealed that in lower grades, 77% had positive and 18% had negative attitudes toward father's profession while percentages for upper grades were 40 and 54 respectively.

It can be generalized from this that greater number of pupils changed their attitudes from positive to negative as they progressed from lower to upper grades

Damjan and Makarovic⁽⁹⁾ studied the same Ss who were used in the first part of their investigation. They used interview method to obtain information about further aspects of their conception of vocations. Their knowledge of vocations was measured in terms of number of vocations recalled by them. In terms of this measure, their knowledge increased from 5 occupations on an average in the 1st grade to 58 in the 8th grade. Only in the higher grades, parental educational level

showed positive effects on knowledge of pupils. Three criteria used for tabulating vocations were : (1) percent of pupils having knowledge of these vocations, (2) pupils' knowledge in terms of the number of mentioned attributes, and (3) their preference. Two important findings of the study are : (1) all pupils except 10% of 1st and 2nd graders had a vocational preference, and (2) vocational preferences showed increasing stability upto the 6th grade and then on stability decreased at the same rate.

The first finding runs contrary to Ginzberg theory that the choice process does not appear until about the age of 11.

Second finding about increasing stability upto 6th grade and then decreasing stability afterwards does not conform to Ginzberg's theory as the course of decreasing stability after 6th grade comes close to the crystallization stage in which a person in fact determines his choice.

In a study entitled, ' Achievement motivation and fear of failure as determinants of vocational choice, vocational aspiration, and perception of vocational prestige, ' Tseng and Carter⁽¹⁰⁾ took a sample of 228 male high school students and obtained their perceptions of occupational prestige (OPS),

occupational aspirations (OAS), and occupational choices. Occupational choices were coded both by Dictionary of Occupational Titles (DOT) system and the National Opinion Research Center (NORC) scheme. Need achievement (n Ach) and fear of failure (FF) were taken as independent variables. The data thus collected were analyzed by analysis of variance and multiple comparisons revealed significant differences ($p < .05$) between the group having high achievement motivation and low fear of failure and that having low achievement motivation and high fear of failure on OPS, OAS, and NORC. Chi-squares were computed between the high and low resultant motivation groups with regard to OPS, OAS and NORC which revealed significant differences between these groups. More accurate perceptions of occupational prestige ($p < .001$) and higher occupational aspirations ($p < .05$) were observed in Ss whose motivation to approach success was greater than that to avoid failure as compared to Ss whose motivation to avoid failure was greater than that to approach success.

Dole⁽¹¹⁾ used three samples of high school freshmen and seniors to investigate the relationship between educational and vocational decisions. He also studied the factors affecting educational and vocational decisions. His conclusions are that (1) high school decision structure

is related to college attendance, (2) educational decision process is multifactor and multidimensional; (3) factors affecting educational choice are similar to those determining vocational decisions; and (4) personal and social variables are not associated with the motivational factor structure.

In an investigation entitled, ' Cognitive styles and educational - vocational preferences and selection', Osipow⁽¹²⁾ tested the hypothesis that individuals selecting vocationally distinctive educational pathways have different cognitive styles, which are related to the ease and nature of vocational decision making. Sample consisted of 328 female students drawn from nursing, special education, home economics and dental hygiene, so also an undecided group and 37 males from pharmacy and fisheries technology. They were administered the Vocational Preference Inventory (V.P.I.) and were also given several measures of cognitive style. The study revealed some relationship between cognitive style and personality. However, no relationship was found between cognitive style and vocational preference or vocational selection.

Kunert⁽¹³⁾ conducted an investigation to study 'Psychologic concomitants and determinants of vocational choice.' He developed the Vocational Life Pattern (VLP) Q Sort and used it to investigate the relationship between personality and vocational choice. Seventy five Ss were drawn from each of the schools of law, medicine, theology and engineering, out of

which fifty Ss from each group were utilized for initial study and twenty five Ss from each group were utilized for crossvalidation study. Results of the student Q - sort distributions confirm that the motivational and personality self-concept descriptions of the VLP Q Sort do distinguish these different vocational groups at highly significant levels. The investigator has presented descriptions of the different personality patterns and vocational patterns of the four groups. Conclusion of the study was that the VLP Q Sort was useful in studying the relationship between the personality and vocational choice. It was suggested that in the study of more elusive constructs of vocational maturity this procedure will prove useful.

In an investigation, ' Stimulating vocational exploration through film-mediated problems', Jones and Krumboltz⁽¹⁴⁾ took a sample of 270 high school students from different socio-economic neighbourhoods. They assigned these 270 Ss randomly to 7 treatments. There were three experimental film treatments and four control treatments. The 3 experimental film treatments about banking jobs were (a) active-overt participation in which Ss solved occupational problems and wrote their answers, (b) active-covert participation in which Ss solved occupational problems but were not asked to write their answers, and (c) passive participation in which occupational problems were not assigned to Ss.

The four control treatments were regular films concerning banking career, printed information about banking career, printed general career information, and filler film. Expressed and inventoried interests in banking occupations, attitude toward banking, and vocational exploratory activities of Ss constituted the criteria of the study.

Their findings can be stated as follows: Experimental treatments were generally more effective than control treatments. Active participation in film mediated problem-solving and generated more interest in banking occupations than passive participation. Efficacy of overt and covert active participation could not be determined on many of the criteria.

Osipow and Alderfer⁽¹⁵⁾ investigated the effects of vocationally oriented speech course on the vocational planning behaviour of high school students. Their sample consisted of 407 students from tenth, eleventh and twelfth grades. The vocational attitudes and behaviours of the students were measured before and after the speech course for making comparisons. Speech course was oriented toward assignments pertaining to career development and decisions. Important finding of the study was that both male and female students reported that they had discussed more frequently about career development after the course than they did before. The girls expressed greater certainty about their educational plans

subsequent to the course than they did prior to it. Girls also lowered their expectations about life earnings. Comparison of the scores of boys and girls on the Vocational Maturity Scale of the Vocational Development Inventory revealed that girls had obtained higher scores both before and after the course.

This experiment stimulated student discussion about career plans with their friends outside the classroom setting. For both male and female eleventh grade students, increase in the frequency was most marked. Observation by teachers also indicated an increase in the informal discussion of career plans among the students. This is a desirable outcome of the speech course as such behaviour may help in movement toward vocational maturity.

Female students showed increased concern about their career plans compared to male students. However, male students expressed less concern over their career plans after the speech course than before. Concern was one of the several variables on which the girls scored higher than the boys, and all these variables might have contributed to higher V.M. scores of the girls. Students in the higher grade expressed more concern over their career plans than those in the lower grades. This seems appropriate as the students in the higher

grades have to make immediate decisions.

One of the limitations of the study was that the subjects were their own control. Another limitation was that the specific contents of the speeches given in the various classes had some variations whose effects could not be determined in the investigation.

It can be said from this study that even speeches which are vocationally oriented can accelerate movement toward vocational maturity. Such speeches seem to motivate the students to think in vocational terms.

Dowds⁽¹⁶⁾ et. al. investigated the effect of mental hospital volunteer work on career choice. Their sample consisted of 316 undergraduates who participated in summer volunteer programme in mental hospital. They studied the effect of participation on the subsequent career plans and activities of their subjects. Two control groups were used so as to make comparison of responses of the volunteers on follow-up questionnaires with those of the control groups. As a result of participation, the number of volunteers planning careers in mental health professions increased significantly whereas little change was shown by the control groups. Volunteers reported that their experience was useful for their career plans and a high percentage stated that they would engage in mental health activities again. It can

be said that the professional training increases the awareness of choice and brings consistency to it.

2.3. Some Important Findings

The various studies reviewed above have indicated that vocational choice or preference is influenced by a number of factors. In one study it was reported that persons with high academic achievement and high socio-economic status tend to possess more accurate occupational stereotypes of high level jobs than those with low academic achievement and low socio-economic status; Such persons tend on the contrary to possess accurate stereotypes for low level jobs. It was also reported that realistic, intellectual and enterprising types on Vocational Preference Inventory (VPI) had more accurate stereotypes. In another study high and low self-esteem subjects were shown to differ with respect to certainty criterion of vocational crystallization. The hypothesis that subjects asking for personal adjustment counselling will have disrupted career patterns than those not asking for it, was borne out in one more study. Subjects with high motivation and low fear of failure have better ideas regarding occupational prestige, occupational aspirations and occupational choices than those with low motivation and high fear of failure. This expectation was also confirmed in

one of the studies. Cognitive styles have been found to be unrelated to vocational preferences. Three studies have demonstrated that career patterns improve considerably with training or instructional courses.

There are a few studies pertaining to the prediction of later career development from some of the predictors in lower grades. In one study it was found that ninth grade high school girls displayed characteristics that were predictive of career expectations at graduation. In another study it was reported that choices in the ninth grade are in a fluid state and that they are crystallized toward the termination of twelfth grade. In a study designed to find out the determinants of vocational plans and choices it was found that the activity of students and their socio-economic status are considerably influential in determining post-school education. It was also observed that earlier occupational preferences are not good predictors of later preferences.

Two studies are reported in which children's conceptions of vocations from the first grade to the eighth grade were investigated. It was found that knowledge about parents' profession increased from fourth grade onwards. It was also reported that with the increase in age the tendency to prefer parental profession decreases. The significant finding of this study was that the attitudes of subjects towards

occupations change as they become more and more matured. Another important finding of this study is that the vocational choices are made even at a very early age. Three things are quite obvious from these studies. One is that vocational choice is not something which takes place at a particular stage of an individual's development, but rather it is a chain of processes over a long period of time from childhood to adolescence. The second point is that there are many factors that influence vocational choice. The third point is that later vocational preferences can be fairly accurately predicted from certain predictors at an early stage of development.

In the section to follow, some studies concerning vocational maturity are presented.

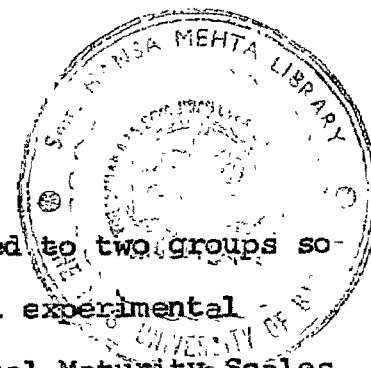
2.4. Studies Concerning Measurement of Vocational Maturity

Maynard and Hansen⁽¹⁷⁾ studied 'Vocational maturity among inner-city youths' to find out the efficacy of the Vocational Development Inventory (V.D.I.). The sample of the study consisted of 180 white and 180 black inner-city boys and 90 white suburban boys. The V.D.I. and intelligence test were administered to these subjects. Scores on intelligence test were converted to standardized T scores. The mean vocational maturity scores showed considerable differences

among the groups. The differences were wiped^{out} on controlling intelligence by analysis of covariance. It was concluded that a variety of intellectual and social variables need to be taken into account by researchers and counsellors working with the vocational maturity of inner-city youth.

Isabelle and Dick⁽¹⁸⁾ investigated clarity of self-concepts in vocational development of male liberal arts students within the framework of Super's theory. Seventyfour male liberal arts undergraduates formed the sample of the study. They were divided into two groups of high and low clarity respectively by judges' ratings on the basis of directly expressed self-concepts of the subjects. Cross-sectional and longitudinal comparisons of subjects were made on the Thurstone Interest Schedule, 2 versions of Gouge-Heilbrun Adjective Check-list, and the SVIB. From the analysis of test-retest scores on the Thurstone test it was found that high clarity group had eliminated more occupational preferences over an interval of 2½ years than the low clarity group. The Adjective Check list was administered on two different occasions. Discrepancy between self-descriptions and descriptions of the 'successful' person in one's preferred occupation was computed. It was found that low clarity group had greater discrepancy than the high clarity group.

In a study of vocational maturity of junior high school girls, Anderson and Heimann⁽¹⁹⁾ took a sample of sixty 8th grade



girls. These 60 girls were then assigned to two groups so as to form a control group of 30 and an experimental group of 30. They used revised Vocational Maturity Scales, the Occupational Information Test, and tools for knowledge of self and of occupations. 30 girls of experimental group were given short-term individual, vocational counselling. Significant changes on the revised Vocational Maturity Scales were found between the experimental group and the control group. Difference between the two groups on the Occupational Information Test and on measures of self-knowledge and knowledge of occupations were not statistically significant.

It can be said from these results that if vocationally immature persons are identified, they can be helped by vocational counselling to attain vocational maturity.

LoCascio⁽²⁰⁾ investigated continuity and discontinuity in vocational development by taking a sample which was fairly heterogeneous in socio-economic background and intelligence. Such heterogeneity of the sample was essential as he wanted to construct and validate the three developmental units which he posited. Data for the study were collected in 1951-52 and there were three follow-ups. The subjects were asked to give their occupational preferences in all the four contacts. The predictor variable selected for the study was

the stability of vocational field preferences. Two different methods of scoring the stability were used. In the first method, the number of subjects who had changed the preference field between each data collection yielded stability measure. In the second method Roe's classification of vocational fields in circular array was utilized. A score was obtained by computing average fields moved in the circular array. This was multiplied by 100 to avoid fractions. Vocational preference implementation had three categories; immediate implementation, delayed implementation and non-implementation. This was taken as the criterion variable. Three implementation groups showed no significant differences between ages 15 and 18. However, the three groups showed significant differences between ages 18 and 21 and ages 21 and 25. Highest proportion of subjects with high field stability scores were found in immediate implementation group, second highest in the delayed implementation group and the lowest proportion was found in the non-implementation group.

One of the conclusions is that theories which include both continuity and discontinuity of vocational development should use same pool of constructs. The other conclusion is that there is a positive relationship between stability of vocational field preferences and continuity of vocational development.

In an attempt to test some of Super's notions about the content and growth of vocational maturity Gribbons and Lohnes⁽²¹⁾ studied a sample of 110 boys and girls. Initial study was conducted when these subjects were in 8th grade and 3 follow ups were carried out at 2 year intervals. Data were obtained through extensive structured interviews which yielded their self-concept imagery at the four specified stages. On the basis of the free-response protocols, a series of quantitative scales were derived of which some represented objective ratings of S's circumstances and some represented subjective evaluations of the qualities of subject's life adjustments.

The purpose of the study was to establish predictive validities for eight Readiness for Vocational Planning (RVP) scales and also to compare the validities of RVP scores collected respectively in eighth and tenth grade. The judged success of the immediate post-high-school vocational adjustment constituted a dichotomous criterion variable. Investigators believe that this criterion variable is significant for Career Development Study since the vocational adjustments of subjects turn into rigid patterns.

It was found that the RVP scales based on eighth grade interviews were consistently predictive of criterion variables based on interviews conducted seven year later,

whereas the RVP scale scores based on tenth grade interviews could not predict any criterion variable based on interview five years later. It appears from this that in the eighth grade, subjects project their self-images in interview and the dimensions of these self-images have significant predictive validities for subsequent career development.

That the RVP score set based on eighth grade were predictors of judged success or failure in career adjustment two years out of high school was the most interesting finding.

For the purpose of selecting career development criteria and also for validating V.M. scales, Gribbons and Lohnes⁽²²⁾ thought it necessary that the scaling of V.M. be done in early adolescence. Taking only 111 subjects, a new univariate VM scaling has been described by Gribbons and Lohnes. The VM scores, sex, socio-economic status and I.Q. are related by MANOVA - technique to a set of career-tree-structure variables observed at 2-years' intervals over a period of nine years. It is concluded that VM is related to career development in a manner that complements the relations of sex, socio-economic status and I.Q.

John Friend⁽²³⁾ in 'Vocational Maturity ratings of inner-city high school seniors' took 168 inner-city high school

seniors for experimental group, 112 seniors as controls.

Experimental group seniors were exposed to a 2-year programme of structured career-related activities.

Instrument was prepared after thorough review of literature about components of vocational maturity. This instrument, the Vocational Education Survey for High School Seniors (V - ES) was developed to yield a score for each of the six components of vocational maturity. Sum of the six sub-scores constituted VMR of an individual. Vriend's hypothesis was that the experimental group would have higher VMRs than the control group when variables such as school, curriculum and sex were compared. Other hypotheses were that in the combined group, VMRs of college preparatory seniors would be higher than VMRs of those in any other curriculum, that seniors in commercial curriculum would have higher VMRs than those in any other curriculum excepting college preparatory and that VMRs of girls in the combined group would be higher than those of boys.

Findings supported the hypothesis that mean VMRs of E group seniors would be higher than those of controls. E group obtained significantly higher mean sub-scores on each of the component of V-ES. Between like curricular groups, E group seniors had higher VMRs than those of C group. Hypothesis that

college preparatory seniors would have higher VMRs than seniors in any other curriculum was also supported. Also supported was the hypothesis that commerce curriculum seniors in the combined group would score higher VMRs than those in any other curriculum except college preparatory. However, the hypothesis that girls in the combined group would score higher VMRs than boys was not supported.

Compared to the controls, Experimental group had significantly higher vocational expectations whereas the two groups did not differ significantly in vocational aspirations. The finding of particular relevance is that E group seniors in general category, in which generally least motivated and lowest achieving students were falling, achieved higher VMRs than the controls in the college preparatory curriculum. The C group seniors in the 'other' category scored the lowest VMRs in comparison to any group in the study. The C group seniors had significantly lower mean scores than the other two curricular groups.

Crites and Semler⁽²⁴⁾ studied interrelationships of adjustment, educational achievement and vocational maturity as dimensions of development in adolescence.

In the initial test in 1957, there were 247 boys and 236 girls studying in fifth grade and in retest, during 1963-64

there were 180 boys and 166 girls. In this study both cross-sectional and longitudinal data were collected. Adjustment was assessed by the Rating Scale for Pupil Adjustment and Vocational Maturity by Attitude Scale of Vocational Development Inventory. The composite score of the Iowa Tests of Educational Development was obtained from school records which was the measure of academic achievement. By knowing the position of the chosen occupation in the hierarchy of levels, each student was assigned a Level of Vocational Choice (LVC) score.

Findings support that adjustment, educational achievement, and vocational maturity constitute distinct, yet interrelated dimensions of development in adolescence. Also early adjustment is predictive of later adjustment and is related to both educational achievement and vocational maturity. From these findings, construct of development emerges as a hierarchical one than a coordinate one. The better adjusted adolescent is more educationally advanced and more vocationally mature. It can be expected that earlier adjustment would be related to later adjustment as well as educational and vocational development.

Career Development Study was begun by Gribbons and Lohnes⁽²⁵⁾ in 1958, taking 111 eighth-grade boys and girls. In their longitudinal study of these subjects they used some

of the modified procedures of Career Pattern Study. At 2 year intervals they collected data by interview and questionnaire methods, from eighth grade to 2 years after high school.

Readiness for vocational planning (RVP) scales were constructed by scoring the interview data. The scores on RVP showed an increase from eighth to tenth grade which suggests that the scales measure vocational maturity.

Findings of the CDS can be summarized as follows : Eighth-grade RVP scores predict curriculum choice and level of occupational preference better than the scores two and half years later. Eighth - grade RVP scores are better predictors of twelfth-grade educational and occupational planning than those of the tenth grade. Eighth-grade RVP also gives better predictions of educational and occupational levels and field and level of actual occupation two years after high school, and post-high school career adjustment.

Higher predictive validities of eighth grade readiness when compared with those of tenth grade indicate that they may be inadequate scales.

Super⁽²⁶⁾ in his Career Pattern Study took a sample of 142 ninth grade boys in 1951-52. The principles of differentiation, realism and independence served as basis for deriving the indices of vocational maturity. Tests,

inventories, and interviewing were employed for collecting data. Out of twenty indices grouped into six dimensions, six indices had a sufficient number of significant positive interrelations and hence they were considered as measures of vocational maturity. These six indices were later reduced to five. These five indices are Concern with Choice, Acceptance of Responsibility for Choice and Planning, Specificity of Information about Preferred Occupation, Specificity and Extent of Planning Activity for the Preferred Occupation, and Use of Resources in Orientation. It was concluded that vocational maturity in the ninth grade consisted of behaviour preparatory to vocational choice as well as planning and looking ahead. The indices of consistency, Crystallization, Independence of Work Experience and Wisdom were not significantly intercorrelated among themselves. They were, therefore, not considered as indices of characterizing the maturity of ninth-grade boys. Since vocational preferences of the ninth-grade^{boys} are not consistent and realistic and since they have not begun to find a place for themselves in the world of work, their maturity is not characterized by goal-attainment.

Factor analytic study of twelfth-grade maturity⁽²⁷⁾, both as a trait and a predictor of success and satisfaction in young adulthood, showed that the structure of vocational maturity in the twelfth grade is similar to that of ninth

grade. This study led to the generalized conclusion that the high school years are essentially years of vocational exploration rather than of preparation for an occupation. Despite the fact that the young person gathers much knowledge about the world of work so as to fit into it, he does not choose the life work during this period.

2.5. Some Important Findings

The studies presented in this section are all similar in that they are concerned with vocational maturity. In one study vocational maturity scores were obtained by administering VDI to different groups of subjects. It was concluded that the group did differ with respect to the maturity scores. There are other studies which show that the short term individual vocational counselling or long term career-related activity program do increase the maturity scores. In both the studies reported in this section experimental groups differed significantly from control groups in measures of maturity with experimental groups obtaining higher scores than control groups.

One study emphasized the continuity of vocational development. Also the relation between the stability in vocational field preferences and continuity of vocational development was found to be positive. In a study designed to

find out predictive validities for Vocational Planning Scales (RVP) and to compare the validities of RVP scores collected respectively in eighth and tenth grades, it was found that RVP scales based on eighth grade interviews were consistently predictive of criterion variables based on interviews conducted seven years later. It was concluded that eighth grade dimensions of self-images have significant predictive validities for subsequent career development.

Interrelationships of adjustment, educational achievement and vocational maturity, as dimensions of development in adolescence, were studied in one investigation. It was reported that early adjustment is predictive of later adjustment and that it is also related to both educational achievement and vocational maturity. It was further suggested that the construct of vocational development is hierarchical and not a coordinate one. In one longitudinal study a modified career pattern procedure was used to find out predictive validity of eighth grade Readiness for Vocational Planning test (RVP) by collecting data at two year intervals from eighth grade to two years after high school education. The RVP scales were found to measure vocational maturity since the scores showed increase from eighth to tenth grade. It was also found that the eighth grade RVP scores were better predictors of educational and vocational planning than those

of tenth grade. Super, in his pioneering work for the measurement of vocational maturity of ninth grade^{boys,} developed six dimensions of maturity which were reduced to two later on. It was observed in his study that vocational maturity in the ninth grade consisted of behaviour preparatory to vocational choice, as well as planning and looking ahead. It was also found that the structure of vocational maturity in twelfth grade was very similar to that in the ninth grade. In general, it was observed that the maturity in ninth and twelfth grades is to be understood in terms of the exploratory behaviour rather than in terms of preparation for an occupation.

The review of some of the important studies point to the fact that there are very few empirical investigations which could be described as sufficiently comprehensive. Much more extensive work is needed in our country on various aspects of vocational maturity.

2.6. Summary

Studies relevant to the present investigation are reviewed in this chapter. The studies are classified into two groups for review, one group comprising of studies concerning factors in vocational development and the other pertaining to measurement of vocational maturity. It can be

said from the findings of these studies that vocational choice is not an event but a process spanning the period between childhood and adolescence. There are many factors that influence vocational choice. Vocational preferences can be predicted with fair accuracy, from certain predictors, at an early stage of development. The finding of one study is that early adjustment is predictive of later adjustment and that it is also related to both educational achievement and vocational maturity. In another study it was found that vocational maturity measures obtained in eighth grade were better predictors of later educational and vocational planning than those obtained in tenth grade. Super, in his pioneering investigation to measure vocational maturity of ninth grade boys found that behaviour preparatory to vocational choice, as well as planning and looking ahead comprise the vocational maturity of ninth grade boys. He also found that the structure of vocational maturity in the twelfth grade is similar to that in the ninth grade. He concluded that exploratory behaviour rather than preparation for an occupation characterizes vocational maturity in ninth and twelfth grades.

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