

CHAPTER - VI

SUMMARY, CONCLUSIONS AND SUGGESTIONS

SUMMARY

The present investigation was undertaken to study the relationship of measures of career maturity with selected socio-psychological factors for boys and girls of grades VIII, X & XII. Developmental theory of Super (1955, 1957) and Crites (1961, 1965) which emphasized the continuity of vocational development process, and the role of multiple factors affecting this process formed the basis of the study.

The measures of career maturity being studied are based on Super's original dimensions of vocational maturity (1953, 1955) later modified and defined by Crites (1961, 1965) in two parts, career choice attitudes and career choice competencies. These two dimensions form the basis of Career Maturity Inventory (CMI) (Crites 1973, 1978) which was adapted for use in the study.

The first two hypotheses of the study are related to studying the relationship of career maturity measures namely: career choice attitudes, self appraisal, occupational information, goal selection, planning and problem solving with grade and sex, with a view to ascertain, the pattern of career development across three grades VIII, X & XII and sex differences underlying this process of development.

The other two hypotheses are related to studying the relationship of career maturity measures with socio-economic status, intelligence, level of vocational aspiration, participation in extra-curricular activities and personality, for boys and girls at three grades VIII, X & XII. Moreover, best set of independent variables which will significantly predict choice attitudes and choice competency measures for each grade and sex have been identified.

The investigation was carried out on a sample of 869 students (boys and girls) of grade VIII, X and XII of Delhi Schools.

Besides the adapted version of Career Maturity Inventory, other behavioural measures which were administered on the selected sample included Culture Fair Intelligence Test (Cattell & Cattell 1961, adapted Singh & Rao 1965), Junior/Senior High School Personality Questionnaire (HSPQ) (Cattell 1963, adapted Kapoor & Mehrotra 1967), Occupational Aspiration Scale (Grewal 1975) and students Extra-Curricular Activities Inventory (especially prepared for study).

Observations collected through the above measures were treated statistically to study the nature of relationship between career maturity measures and the selected socio-psychological variables as stated above.

A 2 x 3 analysis of variance was carried out to study the relationship of career maturity with grade and sex.

Product moment correlations were computed to study the relationship of career choice attitudes and career choice competency measures with SES, Intelligence, Level of Vocational Aspiration, Participation in school and out-of-school activities and fourteen HSPQ factors.

Step wise multiple regression analysis was used to identify the best set of predictor variables for predicting choice attitude and choice competency dimensions for boys and girls at each grade level VIII, X and XII.

Findings:

1. Results indicate significant differences in the career maturity measures across three grades with an incremental trend in scores, showing significant relationship of career maturity with grade. A continuous pattern of growth provides support to the developmental theory of career behaviour in relation to exploratory stage.
2. Sex differences have appeared on some dimensions of career maturity with girls appearing more mature than boys on self appraisal at VIII grade and boys appearing more mature than girls, on occupational

information and planning at X grade and choice attitude and planning at XII grade. However, there are no sex differences on other competency measures.

3. A significant positive relationship of career maturity measures is seen with socio-economic status, intelligence, level of vocational aspiration and participation in school and out of school activities.
4. There is a significant positive relationship of career maturity measures with personality factors; sociability, ego-strength, surgency, super-ego strength and adventurousness and a negative relationship with excitability, dominance, sensitivity and ergic tension.
5. Step wise multiple regression analysis shows intelligence and socio-economic status as most significant variables contributing to prediction of career maturity. However, their contribution is more at VIII & X grades than at XII grade.

Level of vocational aspiration also appears as a significant variable in the best set of predictors of occupational information and planning for X grade girls, and choice attitude and occupational information for XII grade girls.

Participation in school activities appears amongst the best set of predictors for self appraisal for X grade boys. Participation in out of school activities is predicting choice attitudes for VIII grade girls and X grade boys, and goal selection for X grade boys.

Personality factors of sociability, adventurousness, super-ego strength, self control and surgency have appeared as significant variables in the prediction of career maturity for both boys and girls. However, ergic tension and self sufficiency have only appeared for the girls and sensitivity, dominance and ego strength have appeared only for boys. Personality variables, as compared to intelligence and socio-economic status tend to be contributing less to the variance in the criterion measures.

CONCLUSIONS

1. Findings of the study confirm that vocational behaviour in a sample of Indian school students tends to show a progression across three grades to provide support to the developmental theory of career choice. Results have show a systematic increase in the scores on all the career maturity measures in both boys and girls across three grades indicating that career maturity is a developmental process, particularly in relation to exploratory stage. ✓

The developmental nature of career maturation seems to suggest that attitudes and competencies in career decision making do develop as early as class VIII and in the process of growth and learning, students experience a greater specification, differentiation, and crystallization of their career related behaviour. Results show that vocationally relevant traits, attitudes and behaviours become progressively more evident as students mature through higher secondary school years. Thus, the view that career maturity is one aspect of general development tends to find support.

2. Sex differences have been observed only in some of the career maturity measures. At VIII grade, girls

have a slight edge over boys on self appraisal, but at X & XII grades these differences disappear. At X grade, boys are more mature than girls on occupational information and planning and at XII grade boys have more maturity in choice attitudes and planning. On other criterion measures, no sex differences appeared at school leaving stage.

Sex differences appearing on some aspect of career maturity tend to reflect the differences in early socialization of boys and girls and their growing up with different sex role perceptions and sex role responsibility, especially in the context of pattern of bringing up of boys and girls in the Indian homes. But the results at XII grade also indicate that boys and girls both have the same level of maturity on self appraisal, occupational information, goal selection and problem solving which suggests that perhaps changes are coming about due to equal emphasis of educational and vocational planning for both boys and girls. On most of the choice competencies, boys and girls do not seem to differ at the school leaving stage. Results at lower levels, however, suggest some differences at one or two places.

The development of career maturity marked by sex differences at some places tends to suggest that guidance workers should take into cognizance the sex differences in the career development of students and look into the special needs of respective sex groups, and orient them on the need to work and how it can bring about success and satisfaction in their life in terms of intrinsic and extrinsic rewards. This will help in a great way in changing their lot, especially of women in India as it may enable them to lead a more fruitful and happier life.

3. Correlational analysis shows that socio-economic status is significantly and positively associated with measures of career maturity at VIII & X grades but at XII grade, on some choice competencies, the relationship is not significant. This shows that perhaps some other factors such as parental attitudes and aspirations, role models, peer group influences, scholastic achievement etc. are playing a greater role at XII grade and thus boys and girls who were earlier not so mature also become mature. However, findings largely indicate students coming from high socio-economic background to be more career mature.

The guidance worker needs to understand the social forces operating in the life space of adolescents and the differential influence of these social factors at different stages of school life and their differential influences on boys and girls with respect to different aspects of career maturity. He should identify an individual's social class, including occupation and income of parents, place and type of residence, and cultural level of the family to identify developmental deficiencies and the reasons for them. Programmes adhered to the needs of students coming from varied socio-economic backgrounds will facilitate career maturity.

Special parent programmes may provide lower and middle SES parents with career information activities to use at home with children.

4. Significant positive relationship is also seen between career maturity measures and intelligence at all grade levels except for XII grade girls where occupational information and problem solving do not yield significant correlations. The results largely tend to affirm the theoretical expectation that more intellectually bright will be more career mature and that individuals with high intellectual capacity could be expected to deal more efficiently with the

vocational developmental tasks of a particular life stage. However, lower correlations at XII grade may be due to complexity of other factors which also play their role, especially in girls, who face the conflicts of preparing for the dual role of a housewife and the role of a career woman.

5. Significant positive relationship is seen for level of vocational aspiration for girls at all the grades for all career maturity measures except problem solving. For boys on the other hand, significant relationship with all career maturity measures have been observed only at VIII grade. At X & XII grades, though choice attitudes are significantly related, on choice competencies, only a few significant correlations appear. However, positive association of career maturity on some measures tends to show that level of occupation aspired to, acts as a motivating force for students, especially girls, to get better oriented and involved in career decision making activities.
6. Similarly, significant positive relationships of participation in school extracurricular activities with career maturity measures appear at VIII grade.

The positive relationship on almost all measures at VIII grade perhaps shows the greater emphasis on extracurricular activities at lower grades than at X & XII. There is more emphasis on scholastic achievement at higher grades which may be contributing more towards career maturity at these grades.

Participation in out-of-school activities is also positively associated with all career maturity measures for boys at VIII & X grades. For girls, however, only some of the choice competencies have shown significant relationship. At XII grade, a few significant relationships have been obtained. Choice attitudes in both sexes are consistently associated with participation in out-of-school activities.

Positive relationships at lower grade levels tend to show that adolescent exploration through participation in extracurricular activities, at home and in school, may aid students at VIII & X grades in their search for exploring themselves and their environment better and, thus, contribute to greater maturity in choice attitudes and competencies.

Results suggest the importance of providing facilities to students, more so at lower grades,

to engage in games, clubs, hobbies, cultural and social programmes. More specifically, counselor could arrange visits to places of educational, vocational & cultural interests and arrange picnics, career talks, debates, essay competitions, career conferences etc. Through meetings with parents, importance of providing facilities to engage in various indoor and outdoor games may be highlighted.

7. Correlations of personality factors with career maturity measures have also shown variation in relationship with variation in grade and sex. However, the general trends indicate friendly, sociable, out going, active, adventurous, resourceful, conscientious, emotionally stable to be more career mature on its various aspects and excitable, dominant, sensitive, tense and worried to be low in career maturity. The positive relationships tend to indicate that perhaps career maturity is related to personal adjustment.
8. The results of step-wise multiple regression analysis bring into focus the best combination of variables which are contributing maximum to career maturity of boys and girls at each grade level.

At VIII grade for boys, on all career maturity measures except problem solving, intelligence appears as the most significant predictor, exercising its maximum influence. On problem solving, however, SES appears as most significant. Among the personality traits, sensitivity, adventurousness and dominance appear as significant predictors contributing to various career maturity measures. For predicting choice attitudes, level of vocational aspiration also appears as one of the predictors.

For girls at this grade level, choice attitude is being predicted most by participation in out of school activities, intelligence and ergic tension. On choice competencies, there are variations as for self appraisal, socio-economic status, and for goal selection, intelligence, are the sole significant predictors. The temperamental traits which are adding to the prediction show relaxed, calm, sociable, adventurous and conscientious girls to be more career mature.

X grade boys career choice attitudes and career choice competencies are being predicted most by social class factors. Participation in extra-curricular activities, emotional stability and intelligence are the other factors which are further

adding to the prediction. Except on choice attitudes and self appraisal, on none of the other criterion measures personality traits make any contribution.

The results for X grade girls show, intelligence making its maximum contribution to maturity in choice attitudes but for choice competencies, social class factors show a greater influence. Level of vocational aspiration is also contributing toward occupational information and planning behaviour. Among personality traits, adventurousness and surgency add to the prediction of self appraisal and planning.

XII grade boys choice attitudes are being best predicted by a combination of social class and psychological factors but for choice competencies only psychological variables appear as significant predictors. Personality traits of sociability, self control, adventurousness and surgency also facilitate maturity in career decision making.

XII grade girls choice attitudes have the maximum influence of level of vocational aspiration. However, for predicting choice competencies such as goal selection and planning, a combination of

intelligence and personality traits appear with intelligence making maximum contribution. For self appraisal, only personality makes a significant contribution, though the prediction is low.

At XII grade in both sexes, it is seen that conative aspect of decision making (choice attitudes) are being affected more by intelligence and social class factors, whereas cognitive aspects, the choice competencies are being contributed to only by intelligence and personality, though one would expect the conative aspects to be more influenced by psychological variables.

The overall results show intelligence as the most significant predictor for various criterion measures at three grade levels. According to Crites (1969) "in general, the indices of vocational maturity both within and between points in time are correlated more highly with intellectual than with non intellectual variables." However, the results indicate that on some criterion measures, socio-economic status is also appearing as a significant predictor along with intelligence, which suggests that perhaps career maturity is related to living in both, intellectually as well as culturally stimulating environment.

Some personality traits have appeared as significant predictors but their contribution to variance is largely smaller in comparison to intelligence and social class factors. Nevertheless, this should not undermine the role of personality factors in career development as complexity of factors interacting together at times tend to keep their impact at a low ebb in certain samples.

The multiple correlations are largely higher at VIII grade than at X & XII grades showing lesser influence of the predictor variables at higher grade levels, which brings into focus the role of variety of other psychological, situational and environmental factors which may also be important at school leaving stage.

The findings of the study highlight the need for a curriculum designed to serve the needs of students of varied socio-economic status and intelligence groups; a curriculum which would feed the growing intellectual and emotional capacities of students.

Provision of activities, such as reading materials, debates, literary competitions, cultural and social programmes, as mentioned earlier, may prove intellectually stimulating and emotionally satisfying to the students. Such a curriculum would also contribute in developing a personality characterized by a temperament of adventurous-

ness, friendliness, sociability, responsibility, preserver-
ance, emotional stability and sense of moral standards
which would aid students in dealing better with the
challenges of decision making and may help them in relating
themselves to the world-of-work more realistically.

Especially, in the context of Indian educational
and occupational scene, large scale unemployment and
resulting frustration could perhaps be avoided, if students
are aided from the very beginning, during school years,
in developing maturity in their attitudes towards work and
in acquiring skills of career decision making.

Responsibility of developing such a personality
lies heavily on teachers and guidance workers, as modern
family can contribute relatively little, to the development
of vocational skills in a society which is becoming more
and more complex. In India, moreover, large majority of
families are not in a position even to fulfill the basic
needs such as providing food, and clothing to the children;
what to speak of providing with an environment in which
children can learn positive attitudes towards work and
skills for effective career behaviour. Therefore, career
guidance and counseling should help the students who are
in need of specialized help and help all the others in
their quest for self-knowledge and knowledge of the working
environment so that they can plan their life in the light

of personal-social factors on one hand, and job opportunities on the other.

Thus, guidance has to involve experiences which¹ would contribute to changes in attitudes and values as they relate to work and life. The students may also be aided in learning realistic and compromising ways to solve vocational choice problems and newer ways of viewing the work environment.

Vocational guidance strategies and process may be geared to the needs of specific groups and to the goal of facilitating smooth and healthy vocational development of individuals at all the life stages, broadly speaking, to the goal of greater self development and personal growth of individuals.

SUGGESTIONS FOR FURTHER RESEARCH

Researches on career development reviewed earlier, are mostly based on samples of students drawn from highly developed societies. Very few studies have ventured to explore this area. There is, therefore, a dire need of research in career development on samples of Indian students to provide practicing counselors and curriculum planners information pertaining to career development of Indian students. Some of the areas which need further research are being suggested below:

1. The very concept of career development demands longitudinal studies. Boys and girls of differing socio-economic backgrounds and intellectual ability may be studied over a period of time through junior-senior secondary school to adulthood, so that, it could be possible to compare the pattern of development of such differing groups.
2. Since developmental tasks are generally determined by social and cultural demands, it is necessary that specific developmental tasks be identified in our culture. For the identification of developmental tasks a comprehensive longitudinal research is very much needed to understand career maturity and its development in relation to Indian society and culture.

3. Findings of the study have indicated that, at school leaving stage, the variables taken for study are exercising a lesser influence at XII grade than at earlier grade levels. The role of some other factors such as: peer group influences, school climate, influence of teachers, scholastic achievement etc. need to be explored in relation to choice attitudes and choice competencies. This will provide an understanding of such influences on attitudes and competencies related to career development.
4. Students adjustment in the family may be an important factor in their career development. The influence of emotional climate in the family, identification with parents, parental attitudes and aspirations on career maturity may also be studied. Study of the role of the family, in career development may reveal interesting facts and such a knowledge, based on a systematic study, will enable guidance workers to work out suitable and practical guidance strategies.
5. A few items on factor B (HSPQ) showed positive relationship of this factor (crystallized intelligence) (Gc) with career maturity but these could not be compared with results obtained on intelligence, (culture fair intelligence test) (Gf). A comparative study of Gf and Gc with career choice attitudes and

career choice competencies may be made to find out whether verbal intelligence (Gc) rather than abstract intelligence (Gf) would relate more highly to verbally expressed vocational behaviours.

6. Findings on the relationship of personality factor self sufficiency (Q_2) indicate that this factor is related differently with different career maturity measures and with sex. Results show no relationship of this factor for boys. For girls, it is positively contributing to choice attitudes but negatively to self appraisal and goal selection which is contrary to theoretical expectation. It is, therefore, suggested that self sufficiency which is a major factor of introversion may further be studied in relation to career maturity to get a better understanding of this factor.

Similarly, self control (Q_3) (self regarding sentiment) is positively associated with choice attitudes and some choice competencies for boys, but for girls at XII grade, it is negatively associated with self appraisal. It is therefore, suggested that Q_3 which reflects on self concept may be studied using a separate measure of self concept in relation to career maturity.

7. HSPQ factors D, O and Q_4 which are related to anxiety, do not also yield clear cut results. Therefore, the role anxiety in career maturity may be investigated to understand the influence of anxiety on career maturity.
8. Results have indicated that school leaving stage is marked by greater maturity in choice attitudes and competencies than the lower grades. Similar assessment of career maturity across grade levels in terms of consistency and realism in vocational choice may be studied.

A comparative study of students standing on choice attitudes, competencies, consistency and realism in decision making across grade levels, may be made to identify dimensions of career maturity at various grade levels. Appropriateness of dimensions of career maturity for different grade levels and age levels will prove useful in the development of curricula suited to the needs and demands of our society.

9. Although a number of studies (Westbrook 1976a, 1976c, 1976d, Westbrook & others 1980) have already attempted to test Crite's theory and model (1965, 1973, 1978) and suggested that group factors of

choice competencies would correlate more highly with each other than they correlate with attitude scale, this needs further confirmation in the Indian context.

10. Some support for the internal validity of the Crite's model has appeared in the study as it appears that career maturity is more highly differentiated at grade twelve than at grade ten and eighth. However external validity of the model may be tested by studying whether career maturity measures correlate more highly among themselves than with other non career maturity measures to establish that career maturity has a construct of its own, separate from other existing constructs.