SUMMARY, CONCLUSIONS AND SUGGESTIONS
CHAPTER VII

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INTRODUCTION

The present study entitled "Intellectual and Personality Variables as Predictors of Vocational Maturity" was undertaken to study the relationship of measures of vocational maturity with selected intellectual and personality variables as also to identify potential predictors (intellectual and personality) of vocational maturity. It was also thought that the study would make advancements in theory of vocational maturity and in giving some directional lines to vocational guidance workers in identifying more distinct factors affecting the career decision-making process and in drawing predictions from it to help a child make realistic career choices at the exploratory stage. In doing so, substantial use for its rationale was made of Super's (1955, 1957) and Crites' (1961, 1969) theoretical framework of vocational maturity with its emphasis on conceptual multidimensionality of vocational maturity, continuity of vocational development process and multiplicity of its factors.

HYPOTHESES:

The study was advanced within the framework of the following hypotheses:
I. Intelligence is positively and significantly correlated with measures of vocational maturity.

II. (i) Verbal Creativity is positively and significantly correlated with measures of vocational maturity.
     (ii) Figural creativity is positively and significantly correlated with measures of vocational maturity.

III. (i) Personality Factor A is positively and significantly correlated with measures of vocational maturity.
     (ii) Personality Factor B is positively and significantly correlated with measures of vocational maturity.
     (iii) Personality Factor C is positively and significantly correlated with measures of vocational maturity.
     (iv) Personality Factor D is negatively and significantly correlated with measures of vocational maturity.
     (v) Personality Factor E is negatively and significantly correlated with measures of vocational maturity.
     (vi) Personality Factor F is negatively and significantly correlated with measures of vocational maturity.
     (vii) Personality Factor G is positively and significantly correlated with measures of vocational maturity.
(viii) Personality Factor H is positively and significantly correlated with measures of vocational maturity.

(ix) Personality Factor I is negatively and significantly correlated with measures of vocational maturity.

(x) Personality Factor J is positively and significantly correlated with measures of vocational maturity.

(xi) Personality Factor O is negatively and significantly correlated with measures of vocational maturity.

(xii) Personality Factor Q₂ is positively and significantly correlated with measures of vocational maturity.

(xiii) Personality Factor Q₃ is positively and significantly correlated with measures of vocational maturity.

(xiv) Personality Factor Q₄ is negatively and significantly correlated with measures of vocational maturity.

IV. Intellectual and personality variables combine together with vocational maturity in different clusters in their factorial structure.

V.(i) Intellectual variables are significant predictors of vocational maturity.

(ii) Personality variables are significant predictors of vocational maturity.
(iii) Intellectual and personality variables conjointly contribute better towards the prediction of vocational maturity than their separate predictions.

SAMPLE:

The data were collected on a sample of 700 students (350 boys and 350 girls) of IX, X, XI and XII grades, selected on the basis of the technique of multi-staged stratified randomization, from government senior secondary schools of Delhi.

TOOLS:

For the data collection purposes, the following tools were used - The Standard Progressive Matrices (Raven, 1960); The Torrance Tests of Creative Thinking - Verbal and Figural, Forms-A (Torrance, 1966); High School Personality Questionnaire - Form A (Hindi version by Kapoor and Mehrotra, 1967); Career Maturity Inventory (Hindi adaptation by Chand, 1979). The measures of vocational maturity under study were based on Super's original dimensions of vocational maturity (1953, 1955) later modified and defined by Crites (1961, 1965) in two parts—the career choice competencies and career choice attitudes. These two dimensions formed the basis of 'Career Maturity Inventory' (Comprising a Competence Test and an Attitude Scale) that was used in the study.
The final data corresponded to scores on one measure of Intelligence (INT); four measures of Verbal Creativity, that is, Verbal Fluency (V_F), Verbal Flexibility (V_X), Verbal Originality (V_O), Verbal Creativity Totals (V_{CY,T}); five measures of Figural Creativity, that is, Figural Fluency (F_F), Figural Flexibility (F_X), Figural Originality (F_O), Figural Elaboration (F_E), Figural Creativity Totals (F_{CY,T}); fourteen measures of Personality factors namely 'Reserved Vs. Warm-Hearted' (A), 'Low Intelligence vs. High Intelligence' (B), 'Lower Ego-Strength vs. Higher Ego-strength' (C), Phlegmatic vs. Excitable' (D), 'Submissive vs. Dominant' (E), 'Desurgency vs. Surgency' (F), 'Lower Super-Ego Strength vs. High Super-Ego Strength' (G), 'Shy vs. Adventurous' (H), 'Tough-Minded vs Tender-Minded' (I), 'Zestful vs. Circumspect Individualism' (J), 'Self-Assured vs. Apprehensive' (O), 'Group-Dependency vs. Self-Sufficiency' (Q_2), 'Uncontrolled vs. Controlled' (Q_3), 'Relaxed vs. Tense' (Q_4); and seven measures of Vocational Maturity namely, Self-Appraisal (SA), Occupational Information (OI), Goal-Selection (GS), Planning (PL), Problem-Solving (PS), Career Choice Competency Totals (CCC) and Career Choice Attitudes (CCA).

RESULTS:

The results of the study were an outcome of multivariate analyses which involved Pearson's Product-Moment
Correlations, Hotelling's Principal-Axes method of Factor Analysis, Varimax rotation method of factors. Intercorrelations were calculated for the 31 variables used in the study. For the purpose of identifying intellectual and personality correlates of vocational maturity, only those correlations which were found significant at .05 or .01 level (a) between measures of intelligence, verbal creativity and figural creativity on one hand and measures of vocational maturity on the other, similarly (b) between measures of personality on one hand and measures of vocational maturity on the other were considered.

Intellectual And Personality Correlates of Vocational Maturity:

Intelligence was found to be positive and significant correlate of both career choice competency totals (CCC) and career choice attitudes. The analytical picture of obtained values of correlations between intelligence and sub-measures of vocational maturity (CCC) revealed that intelligence is significantly correlated with all the sub-measures of vocational maturity namely, self-appraisal (SA), occupational information (OI), goal-selection (GS), planning (PL), and problem solving (PS). These results lead to the acceptance of the hypotheses I, that "Intelligence is positively and significantly correlated with measures of vocational maturity".
Measures of verbal creativity namely, verbal fluency ($V_F$), verbal flexibility ($V_X$), verbal originality ($V_O$) and verbal creativity totals ($V_{CY,T}$) were found to be significant correlates of career choice competency totals (CCC) as well as career choice attitudes (CCA). As regards the nature of correlations between dimensions of career choice competency totals and verbal creativity measures, it was observed that positive and significant correlations existed between (a) self appraisal and verbal flexibility, verbal originality; (b) occupational information and verbal originality, verbal creativity totals; (c) goal-selection and verbal fluency, verbal originality, verbal creativity totals; (d) planning and verbal originality, verbal creativity totals; (e) problem-solving and verbal originality, verbal fluency, and verbal creativity totals.

Thus, the hypothesis II (i) that "Verbal Creativity is positively and significantly correlated with measures of vocational maturity" stands confirmed.

With respect to nature of correlations between figural creativity and vocational maturity, four out of five measures of figural creativity i.e. figural fluency ($F_F$), figural flexibility ($F_X$), figural originality ($F_O$) figural elaboration ($F_E$) and figural creativity totals ($F_{CY,T}$) were found to be significantly correlated with career choice competency totals (CCC) and career choice attitudes (CCA). While figural fluency
(F_E), figural elaboration (F_E) and figural creativity totals (F_{CY,T}) were common in correlation with CCC and CCA, figural flexibility (F_X) correlated with CCC only, whereas figural originality (F_O) correlated with CCA only. Values of correlations between the dimensions of career choice competency totals (CCC) and measures of figural creativity depicted that - (a) none of the figural creativity measure correlated with self appraisal and problem-solving dimensions of CCC, (b) figural elaboration correlated with occupational information and goal-selection, (c) figural flexibility, figural elaboration and figural creativity totals correlated with planning.

An overall view of the results pertaining to relationship of figural creativity and vocational maturity indicated that out of 35 possible correlations between figural creativity and vocational maturity measures, only 13 correlations were significant. These results thus lead to the partial acceptance of hypothesis II(ii) that "Figural creativity is positively and significantly correlated with measures of vocational maturity".

In support of third hypotheses-III(i) to III(xiv), relevant to personality correlates of vocational maturity, the obtained values of correlations revealed a mixed picture of significant and insignificant correlations. Out of the fourteen (HSPQ) factors of personality (A, B, C, D, E, F, G, H, I, J, O, Q_2, Q_3 and Q_4) only eight personality factors,
that is factor $A^+$ (Sociability), $B^+$ (Intelligence), $C^+$ (Emotional Stability), $E^-$ (Submissiveness), $G^+$ (Super-Ego Strength), $H^+$ (Adventurousness), $O^+$ (Guilt-Proneness) and $Q_3^+$ (Self-Control) were found to be correlates of vocational maturity.

Factorial Structure of Vocational Maturity:

In order to understand the factor structure of intellectual and personality variables in combination with vocational maturity, the original inter-correlation matrix (31 variables) was computerized and submitted to factor analysis and rotation of factors. Relevant to the scope of study, and meaningful for interpreting the factorial structure, eight such factors (original as well as rotated) were identified.

Out of these eight factors, four factors were found to be relevant in revealing the clusters of intellectual and personality variables sharing common variance with vocational maturity measures, namely, **Original Factor I** as 'General factor of Intellective Functioning' (19.19%) sharing common factor variance with intelligence, verbal creativity ($V_F$, $V_X$, $V_O$, $V_{CY,T}$), figural creativity ($F_F$, $F_X$, $F_O$, $F_E$, $F_{CY,T}$), career choice competency totals (CCC) and career choice attitudes (CCA); **Rotated Factor I** as 'Group factor of Figural Creativity' sharing common variance with $F_F$, $F_X$, $F_O$, $F_E$, $F_{CY,T}$ and $V_{CY,T}$; **Original Factor II** as 'General factor of Vocational
Maturity' (10.38%) sharing common variance with all the measures of vocational maturity, intelligence and personality factor G; Rotated Factor II as 'Group factor of Vocational Maturity' sharing common variance with vocational maturity measures and intelligence; Original Factor III as 'General factor of Personality Factors' (8.80%) sharing common variance with personality factors A, C, D, G, H, I, Q, Q₄ and planning (PL) and career choice competency totals (CCC); Rotated Factor III as 'Group factor of Personality Factors' sharing common variance with personality factors C, D, G, H, I, O, Q₄; Original Factor VIII as 'Self-Appraisal' (3.06%) revealed as sharing common variance with self-appraisal, and personality factor J; Rotated Factor VIII as 'Self-Appraisal' shared common variance with self-appraisal, career choice attitudes and personality factor J.

Thus, all ten sub-measures of intelligence and creativity (viz. INT.; Vᵢ, Vᵦ, Vₒ, Vᵦₑ, Fᵢ, Fᵦ, Fₒ, Fₑ and Fᵦₑ) and nine out of fourteen personality factors (A, C, D, G, H, I, J, O, Q₄) clustered together with vocational maturity in different combinations. These results lead to the acceptance of fourth hypothesis that "Intellectual and Personality Variables combine together with vocational maturity in different clusters in their factorial structure."
Predictive Efficiency of Intellectual and Personality Variables as Predictors of Vocational Maturity:

Multiple correlations and stepwise regression equations were used for the identification of potential predictors (intellectual and personality) of vocational maturity. For this purpose, those intellectual and personality variables were selected to serve as predictors which had significant relationship with career choice competencies (CCC) or career choice attitudes (CCA) and which also clustered together.

Accordingly, in all three intellectual variables - Intelligence (INT.); verbal creativity totals (\( V_{CY,T} \)), Figural Creativity totals (\( F_{CY,T} \)) and eight personality factors that is, A\(^+\) (Sociability), B\(^+\) (Intelligence), C\(^+\) (Emotional Stability), E\(^+\) (Submissiveness), G\(^+\) (Super-Ego Strength), H\(^+\) (Adventurousness), O\(^+\) (Guilt Proneness) and Q\(^+\) (Self-Control) were considered as predictor (independent) variables, for the prediction of criterion (dependent) variables - (a) career choice competency totals (CCC) and (b) career choice attitudes (CCA). To study the individual as well as conjoint effects of intellectual and personality variables for the prediction of (a) CCC and (b) CCA, three models were used.

Model I (INT. + \( F_{CY,T} \) + \( V_{CY,T} \)) allowed for finding out the significance of adding measures of intelligence, figural and verbal creativity totals in predicting the criterion variance.
on (a) career choice competency totals and (b) career choice attitudes.

Ia - $R^2_{CCC} (.204 +.000 +.001) = .205$ indicated that out of 20.50% variance explained by intellectual variables (vide Model Ia) for predicting career choice competency, 20.40% of variance was attributable to intelligence, 0% to figural creativity totals and 0.10% to verbal creativity totals. F-test, depicted that (i) only intelligence emerged as the potential predictor of CCC, (ii) figural and verbal creativity totals didn't appear as significant predictors of CCC.

Ib - $R^2_{CCA} (.107 +.001 +.006) = .114$ indicated that out of 11.40% of variance explained by intellectual variables (vide Model Ib) for predicting career choice attitudes, 10.70% of variance was attributable to intelligence, 0.60% to verbal creativity totals and 0.10% to figural creativity totals. Findings of F-test depicted that (i) intelligence and verbal creativity totals emerged as the potential predictors of CCA, (ii) figural creativity totals appeared as insignificant predictor of CCA.

By comparing models Ia and Ib, it was observed that in terms of variance - (i) contribution of intellectual variables (INT., $F_{CY,T}$, $V_{CY,T}$) was higher for predicting CCA than for predicting CCC; (ii) intelligence emerged as a potential predictor more for CCC than for CCA, (iii) figural creativity
totals emerged as an insignificant predictor for both CCA and CCC, (iv) verbal creativity totals as a potential predictor of CCA only.

In the light of these results, the fifth hypothesis V (i) that 'Intellectual variables are significant predictors of vocational maturity" is accepted only within the scope of intelligence in predicting CCC as well as CCA, and verbal creativity totals for CCA alone.

Model II (Pers.A+ B+ C+ E+ G+ H+ O+ Q+) was selected to study the effect of significant personality variables for predicting the criterion variables - (a) career choice competency totals (CCC) and (b) career choice attitudes (CCA).

IIa \( R^2_{\text{CCC}} = .007 + .024 + .000 + .010 + .004 + .002 + .022 + .008 \) = .770, indicated that out of 7.70% variance explained by the personality variables, (vide Model IIa) as seen in descending order, 2.40% was attributable to factor B+ (Intelligence), 2.20% to factor O+ (Guilt-Proneness), 1.00% to factor E− (Submissiveness), 0.80% to factor Q+3 (Self-Control), 0.70% to factor A+ (Sociability), 0.40% to factor G+ (Super-Ego Strength), 0.20% to factor H+ (Adventurousness) and 0% to factor C+ (Emotional Stability). F test depicted that (i) personality factor B+ (Intelligence) emerged as potential predictor of CCC, (ii) factor E− (Submissiveness) and factor Q+3 (Self-Control)
also emerged as significant predictors of CCC. These results indicated that in the process of career decision-making, career choice competency was better predicted by personality traits of submissiveness and self-control. However, personality factors $A^+, C^+, G^+, H^+$, and $O^+$ were found to be non-predictors of vocational maturity.

$$I_b - R^2_{CCA} (0.013 + 0.016 + 0.009 + 0.001 + 0.003 + 0.011 + 0.001 + 0.002) = 0.056$$ indicated that for predicting career choice attitudes, out of 5.60% of variance explained by personality variables, as seen in descending order, 1.60% was attributable to personality factor $B^+$ (Intelligence), 1.30% to factor $A^+$ (Sociability), 1.10% to factor $H^+$ (Adventurousness), 0.90% to factor $C^+$ (Emotional Stability), 0.30% to factor $G^+$ (Super-Ego Strength), 0.20% to factor $Q^+_3$ (Self-Control), and 0.10% each to factor $E^-$ (Submissiveness) and factor $O^+$ (Guilt Proneness).

F-test in this model depicted that (i) personality factors $A^+, B^+, C^+, G^+, O^+$ and $Q^+_3$ emerged as non-predictors of career choice attitudes, while (ii) personality factors $B^+$ (Intelligence), $C^+$ (Emotional Stability), and $H^+$ (Adventurousness) emerged as potential predictors of vocational maturity.

By comparing models IIa and IIb, it was observed that (i) contribution of personality variables was higher for predicting CCC than for CCA, (ii) personality factor intelligence ($B^+$) emerged as the most significant predictor as compared to other personality factors, for CCC as well as CCA,
(iii) personality factor $E^-$ and $Q_3^+$ also emerged as potential predictors of CCC, while for CCA, factors $C^+$ and $H^+$ emerged as potential predictors.

In accordance with these results, the fifth hypothesis V(ii) that "Personality variables are significant predictors of vocational maturity is accepted partially.

Model III (INT. + $F_{CY.T}$ + $V_{CY.T}$ + $A^+$ + $B^+$ + $C^+$ + $E^- + G^+$ + $H^+ + O^+ + Q_3^+$) was designed to study the conjoint effect of both intellectual and personality variables for predicting (a) career choice competency totals (CCC) and (b) career choice attitudes (CCA).

IIIa - $R_{CCC}^2 = (.204 + .006 + .008 + .004 + .003 + .002 + .000 + .000 + .000 + .002 = .233$ indicated that out of 23.30% variance explained by the conjoint effect of intellectual and personality variables for predicting career choice competency totals, as found in descending order, 20.40% of variance was attributable to intelligence, 0.80% to factor $O^+$ (Guilt-Proneness), 0.60% to factor $Q_3^+$ (Self-Control), 0.40% to factor $B^+$ (Intelligence), 0.30% to factor $E^-$ (Submissiveness), 0.20% each to factor $G^+$ (Super-Ego Strength) and verbal creativity totals ($V_{CY.T}$), while personality factors $A^+$ (Sociability), $H^+$ (Adventurousness), $C^+$ (Emotional Stability) and figural creativity totals ($F_{CY.T}$) did not contribute any amount of percentage for predicting career choice competencies. As founded
from the F-test, (i) the best set of intellectual and personality variables (conjointly) that emerged as potential predictors of CCC, comprised of intelligence (INT.), factor $Q^+_3$ (Self-Control) and factor $O^+_T$ (Guilt-Proneness) and (ii) $V_{CY.T}$, $F_{CY.T}$, (intellectual variables) and factor $A^+, B^+, C^+, E^-$, $G^+, H^+$ (Personality variables) emerged as non-predictors of career choice competency totals.

$$IIIb - R_{CCA}^2 = (INT. + H^+ + C^+ + B^+ + V_{CY.T} + A^+ + F_{CY.T} + Q^+_3 + G^+ + O^+_T E^-) = .107 + .014 + .006 + .005 + .003 + .001 + .002 + .001 + .000 + .000 = .144$$ indicated that out of 14.40% of variance explained by the conjoint effect of intellectual and personality variables for predicting career choice attitudes, 10.70% variance was attributable to intelligence, 1.40% to factor $H^+$ (Adventurousness), 0.60% to $C^+$ (Emotional Stability), 0.50% each to $B^+$ (Intelligence) and verbal creativity totals ($V_{CY.T}$), 0.30% to $A^+$ (Sociability), 0.20% to $Q^+_3$ (Self-Control), 0.10% each to figural creativity totals ($F_{CY.T}$) and $G^+$ (Super-Ego Strength), while none to $O^+$ (Guilt-Proneness) and $E^-$ (Submissiveness). For the prediction of career choice attitudes, F-test depicted that - (i) the best set of intellectual and personality variables (conjointly) as Potential Predictors of CCA, comprised of intelligence (INT.), adventurousness ($H^+$), emotional stability ($C^+$) and personality factor intelligence ($B^+$), (ii) the remaining intellectual variables, that is, verbal creativity totals ($V_{CY.T}$), figural
creativity totals ($F_{cy,t}$) and personality variables viz. factor $A^+, E^-, G^+, O^+$ and $Q_3^+$ emerged as non-significant predictors of career choice attitudes.

As models IIIa and IIIb were compared, it was observed that - (i) percentage variance contributed by intellectual and personality variables (in their conjoint effect) was higher for CCC than for CCA, (ii) amongst the intellectual variables, intelligence contributed greater variance for CCC than for CCA, $V_{cy,t}$ emerged as a potential predictor for CCA only, while $F_{cy,t}$ for none of the two, i.e. CCC and CCA, (iii) amongst the personality variables, factor $Q_3^+$ and $O^+$ contributed variance for CCC and factors $H^+, C^+, B^+$ for career choice attitudes.

These results lead to the acceptance of fifth hypothesis $V$, (iii) that 'Intellectual and personality variables conjointly contribute better towards the prediction of vocational maturity than their separate predictions'.

An overall view of the results vide models Ia, Ib, IIa, IIb, IIIa and IIIb indicated that - (i) for career choice competency totals (CCC), the 23.30% of variance was explained by the conjoint effect of intellectual and personality variables, which was higher than their separate contributions i.e., 20.50% and 7.70% respectively, (ii) for career choice attitudes (CCA), the 14.40% of the variance was explained by the conjoint effect
of intellectual and personality variables, which was higher than their separate contributions viz. 11.40% and 5.60% respectively. On the strength of these results, models IIIa and IIIb were accepted as the most convenient models for determining the predictive efficiency of predictor variables (intellectual and personality) for predicting vocational maturity.

CONCLUSIONS

In the light of the results pertaining to intellectual and personality variables as predictors of vocational maturity, following conclusions were drawn corresponding to the issues raised in the study:

1. Intelligence was found to be a correlate of vocational maturity both career choice competency totals (CCC) and career choice attitudes (CCA), by way of its significant relationship through product-moment correlations and constellation in factorial structure with vocational maturity. It also emerged as a potential predictor of vocational maturity both for career choice competency totals (CCC) and career choice attitudes (CCA), thereby indicating that higher the intelligence, higher is the probability that individuals with high level reasoning, speed-perceptual and motor, speed in organizing and
integrating thoughts and ideas, funded capital of diverse varied informations characterized by enriched amount of knowledge - longitudinally as well as vertically, and the like (some of the essential components of intelligence) are likely to deal more efficiently with the vocational developmental task, depicting maturity in realistic career decision-making process.

2. Verbal Creativity was also found to be correlate of vocational maturity as revealed through product-moment correlations. Factorial structure depicted a similar picture wherein verbal creativity was found to be constellating with vocational maturity. It also emerged as a potential predictor of career choice attitudes (CCA), but a non-predictor of career choice competency totals (CCC).

3. Figural creativity appeared as a correlate of both career choice attitudes and career choice competency totals (CCC), by way of its significant relationship through product-moment correlations and constellating in factorial structure with vocational maturity. Figural creativity, however, emerged as a weak predictor of career choice attitudes (CCA) as well as career choice competency totals (CCC).

It may thus be concluded that, individuals who are high in making creative responses by virtue of their sensing difficulties, problems, gaps in information, missing elements; testing these
guesses and possibly revising and retesting them; and finally in communicating the results; are likely to be more vocationally mature than the low creatives, and more efficient in making their career choice attitudes and acquiring various career choice competency skills such as involvement in the career choice process; orientation toward work; independence of decision-making; preference of career choice factors; knowing about self; knowing about world of work; goal-selection, planning; problem solving and in the conception of career choice process.

4. Out of all intellectual variables, that is, intelligence, verbal creativity and figural creativity; intelligence was found to be the most potent predictor of vocational maturity.

5. Out of fourteen personality factors (A, B, C, D, E, F, G, H, I, J, O, Q₂, Q₃, Q₄), only eight personality factors viz. A⁺ (sociability), B⁺ (intelligence), C⁺ (emotional stability), E⁻ (Submissiveness), G⁺ (Super-ego strength), H⁺ (adventurousness), O⁺ (guilt-proneness) and Q₃⁺ (self-control) were found to be correlates of vocational maturity, while nine personality factors i.e. A, B, C, D, G, H, I, J and Q₄ constellated with vocational maturity in their factorial structure. Out of eight personality correlates of vocational maturity, in their factorial structure. Out of eight personality
correlates of vocational maturity, personality factors $B^+, C^+, E^-, H^+, O^+$ and $Q_3^+$ emerged as potential predictors of vocational maturity. In other words, it was observed that personality characteristics namely, intelligence, emotional stability, submissiveness, adventurousness, guilt-proneness and self-control as found to be associated with career choice attitudes and career choice competencies are likely to predict the vocational maturity of adolescents.

6. For predicting vocational maturity, the predictive efficiency (percentage contribution of variance) of intellectual variables was higher than that of personality variables. Also contribution of variance was more for predicting career choice competency than career choice attitudes, by intellectual and personality variables in their separate as well as conjoint effects.

7. Intellectual and personality variables in their conjoint effect were found to be better predictors of vocational maturity - both career choice competency totals and career choice attitudes, than intellectual and personality variables taken up separately for the prediction of vocational maturity.

It may thus be accepted that maturity of vocational behaviour implicated in making career choice attitudes,
acquiring and displaying career choice competency skills, may better be predicted on account of an individual's conventional intelligence, creative thinking and responding verbally, as also possessing personality traits of intelligence, emotional stability, adventurousness, guilt-proneness and self-control.

The theoretical implications of the vocational maturity construct are Two-fold: first, it has subsumptive value, in that it summarizes and organizes what is known about vocational maturity. It serves as a conceptual point of reference for 'thinking about' career development processes in adolescence, and it provides a ready schema for relating them to other aspects of development which can be abstracted in similar fashion. Secondly, it has predictive value in that it generates hypotheses which would not otherwise have been formulated. It provides rules of inference through which new relations may be discovered. The research implications of the vocational maturity construct follow from its theoretical utility. In addition, it is suggestive of a few guidelines to the vocational guidance worker and counsellor in practically dealing with vocational problems.

In the present study, theoretical rationale of vocational maturity as a multi-dimensional construct has been validated. Career choice attitudes and career choice competencies, the two measures of vocational maturity along with their sub-measures,
have exhibited themselves as clustering together in factorial structure on the same factors. Career choice competencies and career choice attitudes are at the same time associated differentially with specific intellectual and personality variables in respect of group factors and correlations, indicating these measures have their own importance in the process of vocational maturity. Hence, to stimulate any career decision-making process, or to identify the pattern of factors affecting this process, it is recommended to visualize vocational maturity in terms of the career choice attitudes as well as career choice competencies.

Further, the findings suggest the possibility of making predictions of vocational maturity to a considerable extent. This can be accomplished on the basis of specific cognitive and personality variables relevant to various measures of career choice attitudes and career choice competencies. With these results of potential predictors of vocational maturity in hand, one may predict the individual's involvement in orientation towards and independence in career choice-making, and the preference of career choice factors, as also the cognitive skills of self-appraisal, occupational information, goal-selection, planning and problem-solving. Its effectiveness may further be enhanced if vocational counsellor at senior-secondary school level utilizes this information in getting the best budding amongst the adolescents by way of matching
various aspects of vocational maturity with their respective personality and cognitive characteristics. He can thus channelise the relevant qualities in a rational way to facilitate realistic vocational choices as also to deal effectively with cases of vocational immaturity. In this regard, it is recommended that intellectual capacities, personality characteristics, relevant to vocational selection process as identified in the present study be kept in records and utilized at the right time.

The presence of so many choices, so many opportunities, and so many directions causes bewilderment and distracts the young people to make career decisions realistically in order to make preparation for and an entry into an occupation. Because of this complexity of options available, students are in need of special help in identifying and acting upon vocational decisions. Results of the study have implications for the vocational counsellor to the extent that knowledge of specific qualities which go with various aspects of vocational maturity, sharpens his job-skill of providing guidance in planning and decision-making process on the strength of which he can help the individual to cope with the rapid changes in the world of work, and develop skills in students to make proper vocational decisions and adjustments within the constraints of their cognito-personological system.
This would provide the counsellor personal dignity and a sense of power to affect the future as also would help avoiding wastage of energy and human resources.

The investigator submits that the generability of conclusions based on this study are dependent upon the efficiency of the sample and tools used and are applicable to similar population. Greater confidence can be placed upon these conclusions when applied to groups rather than to individuals.

**SUGGESTIONS FOR FURTHER RESEARCH**

1. Vocational maturity process demands longitudinal studies. Boys and girls may be studied over a period of time, from junior through senior secondary school to adulthood, so as to compare the developmental pattern of vocational maturity.

2. Apart from intellectual and personality variables undertaken in the study, other important variables such as emotive factors, achievement motivation, adjustment, risk-taking, etc., need to be explored in relation to career choice competencies and career choice attitudes.

3. Like any other development, vocational development is likely to be influenced by factors other than those within the individuals. Some variables of school
climate, viz. its organizational climate, Principal's leadership behaviour, student-teacher relationship, peer-group influences, presence or absence of guidance services such as - 'self-appraisal' and 'occupational information', may be studied in relation to the family-like socio-economic status of the family, parental attitudes and aspirations affecting a child's vocational choice-making process need to be explored.

4. Replicative studies involving larger and different population as also follow-up studies may be undertaken to establish the validity of findings of the present study.