C H A P T E R V

RESULTS AND DISCUSSION

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5.1. Introduction

Thurstone's work[139] marked the starting point in study of personality-perception relationship. The study was further carried on by Bruner and Postman[25], Witkin et al.[158], Klien et al.[83][82] and Vernon,M.D.[147]. The present investigation also attempts at the same. The problem and other relevant matters regarding this investigation have been discussed at length in the forgone chapter. This chapter offers the details of the results and interpretation of the experiment carried out.

As is made clear in the earlier part of this report, relation between perception and personality is studied in terms of specific personality traits and perceptual tasks. The subjects were administered measures of 16 traits (in all) of personality and 6 perceptual tasks. The scores on each of the said perceptual characteristics were analysed by the statistical technique of analysis of variance on scores in a

2 X 2 X 2 factorial design to examine the main effects as well as the inter-action effects of the variables (that is, age or education, sex and habitation), each at two levels (of school and college, male and female as well as rural and urban). The results in the present chapter are discussed in two parts, that is Part I : perceptual differences and Part II : Correlation of each of the personality traits with each of the perceptual characteristics (or perception-personality relation).

5.2. Interpretation of Scores on Various Tasks

As explained in the previous chapter, various tools have been used to study the main problem, viz. relation between perception and personality. This problem has been studied by a number of psychologists by using different approaches and research tools; and yet, some of the issues have remained unanswered or many of the findings are found to be less satisfactory. The present undertaking is one more experimental attempt in the same direction. Some new and some common tools are used in a new situation (on a sample); and a study of the contribution, if any, of sex, educational level and habitation or environment, is also attempted at. For this purpose, six perceptual tests giving eight types of scores and the Personality Assessment Scale

(Standardized by Dr.A.S.Patel) consisting of fourteen subtests and yielding nineteen types of scores on different personality traits were administered on a sample of 400 subjects in a 2 X 2 X 2 factorial design formed by two levels of each of the three factors, viz. sex, education and habitation, as explained earlier. All these scores were analysed statistically and the results have been presented and discussed in this chapter. However, it is felt that understanding of the results would be more clear if the meaning of each type of scores obtained through various tests used is explained at the onset before the results are discussed. This is all the more essential in this case, since a large number of varied types of scores have been studied and correlated. In some cases the meaning of higher and lower score do not remain the same or show the trend in the same positive or negative direction. Thus, the meaning of positive or negative correlation is also likely to get confused in absence of clear understanding of the scores An attempt is, therefore, made here to clarify pointedly and briefly once again the specific meaning of the scores, in the following summary sheet for ready reference.

Summary Sheet showing the Meaning of Scores on Perceptual Tasks and Personality Traits

A : Perceptual Tasks :

Perception Test	Meaning of the Score
1. Length discrimination test (Muller-lyer Illusion Board) in Milimeter	Lower score indicates better length discrimination.
2. Size Constancy Test (Thurstone's Triangle) Judgment in inches	Higher discrepency score shows poorer size Constancy and lower discrepency score indicates more of constancy.
3. Reversible figure Test (Frequency of Fluctuation)	(i) Higher (more) fluctuations show positive attitude (ii) Lower (lesser) fluctuations show negative attitude.
4. Emotionally toned Word Test. (% of words)	Lower score shows more of emotional stability.
5. Form and Colour dominance test.(No. of figures recalled as form and colour)	(i) Higher score shows more of Form dominant. (ii) Higher score shows more of colour dominant.
6. Embedded Figure Test (Time in seconds)	Lower time shows more of field independency.

B : Personality Assessment Scale (PAS) :

Personality Traits	Meaning of the Score
1. Happy go lucky/seriousness.	Higher score shows being more Happy-go-lucky in nature.
2. Self-sufficiency/Dependency	Higher score shows greater self-sufficiency.
3. Dominance-submission	Higher score shows being more dominant in nature.

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Personality Traits	:	Meaning of the Score
4. Leadership	:	Higher score shows more of leadership qualities.
5. Introversion-Extraversion	:	Higher score shows being more introvert in nature
6. Radicalism-Conservatism	:	Higher score shows more of radicalism.
7. Neuroticism	:	Higher score shows more of neuroticism.
8. Hostility or aggressiveness:		
SC - Self-criticism or lack of confidence		Higher score shows greater self criticism or greater lack of self confidence
SA - Self-abasement or self-humiliation or lowering of self-general guilt feeling - Self fault finding		Higher score means greater self abasement
SR - Self reproachment or self-remorse (severe guilt feeling)		Higher score means greater self reproachment
IH - Impunitive hostility-passice, condoned type of hostility directed to others.		Higher score means greater impunitive hostility
AH - Acute and active hostility directed to others.		Higher score means greater acute hostility
PH - Paranoid hostility-delusional hostility directed to others - he feels that others attack or after him		Higher score means greater paranoid hostility.
9. Emotional stability	:	Higher score shows more of emotional stability.
10. Honesty	:	Higher score shows more of honesty.
11. Masculinity-feminity	:	Higher score shows more of masculinity.
12. Self interests	:	Higher score shows greater interest in sex.
13. Rigidity-flexibility	:	Higher score shows greater rigidity
14. Suggestibility	:	Higher score shows greater suggestibility

Keeping these meanings in mind all results should be interpreted.

PART I

PERCEPTUAL DIFFERENCES

PART I : PERCEPTUAL DIFFERENCES

In order to study the differences, if any, in perceptual tasks of subjects due to their educational level or age, sex and habitation. The analysis of variance technique was applied to data on each of the six tests analysed in 2 X 2 X 2 factorial design. The summary results of analysis of variance on data of each of the six perceptual tasks are summarized in the following Tables 3 - 10.

5.3. Length Discrimination Task

Analysis of scores on Müller-Lyer Illusion test (Length discrimination) are summarized in Tables 3(A) and 3(B). It should be observed that lower score indicates lesser extent of illusion i.e. better length discrimination.

Table 3A : Showing the Mean Scores and Standard Deviation on Perceptual Task : Length Discrimination test (N = 50 in each cell, Total N = 400)

Sex	Urban				Rural			
	School		College		School		College	
	Mean	S D	Mean	S D	Mean	S D	Mean	S D
Boys	50.38	9.43	49.72	9.67	48.98	8.31	50.26	10.47
Girls	50.10	8.03	49.32	9.3	50.30	10.55	50.18	10.25

Education : 49.65 School Level Mean : 49.94 College Level Mean : 49.87

Habitation :49.40 Urban Mean : 49.88 Rural Mean : 49.93

Sex : 50.11 Boys Mean : 52.33 Girls Mean : 49.90

Overall Mean : 50.03

Table 3B : Showing the Results of Analysis of Variance on Perceptual Task : Length Discrimination Test

Source	df	S S	M S	F ratio	Remarks
Level of Education	1	.50	.50	.01	Not Sig.
Habitation	1	.25	.25	.00	Not Sig.
Sex	1	1.95	1.95	.02	Not Sig.
Interaction (E x H)	1	42.25	42.25	.46	Not Sig.
Interaction (H x S)	1	23.06	23.06	.25	Not Sig.
Interaction (S x E)	1	14.45	14.45	.15	Not Sig.
Interaction overall (S x E x H)	1	10.22	10.22	.11	Not Sig.
Errors	392	35417.72	90.37		
Total	399	35617.72			

It can be seen from the results shown in the tables 3(A) and (B) taken together that none of the variables, viz. level of education, habitation and sex played any significant role so as to have any differential effect on length discrimination task as a result of varying that factor at two levels, i.e. there were no education, habitation and sex

differences in length discrimination. Subject from the College (M = 49.87) did not differ significantly from subjects from the school (M = 49.94). Similarly, urban subjects (M = 49.88); did not differ from rural subjects (M = 49.93); and boys (M = 52.33) did not differ much from girls (M = 49.90) on this perceptual task of length discrimination on Muller-lyer illusion. Not only were there no differences in main effect, but there were also no significant interaction between any of the factors studied.

5.4. Size Constancy Test

Results of performance on the size constancy test have been summarized in Tables 4A and 4B. It should be noted here that higher discrepancy score shows poorer constancy effects and lower discrepancy score means more of constancy effects.

Table 4A : Showing the Mean Scores and Standard Deviation on Perceptual Task : Size Constancy Test (n = 50 in each cell. Total N = 400)

Sex								
	School		College		School		College	
	Mean	S D	Mean	S D	Mean	S D	Mean	S D
Boys	51.48	17.30	43.00	19.32	46.60	12.01	49.62	10.25
Girls	49.78	10.21	56.30	6.98	48.18	15.45	50.34	10.70

Education : 49.41 School Level Mean : 49.01 College Level Mean : 49.81

Habitation : 49.41 Urban Mean : 50.14 Rural Mean:48.68

Sex : 49.41 Boys Mean : 47.67 Girls Mean:51.15

Overall Mean : 49.41

Table 4B : Showing the Results of Analysis of Variance on Perceptual Task : Size Constancy Test

Source	df	S S	M S	F Ratio	Remarks
Level of Education	1	46.20	46.20	.25	Not Sig.
Habitation	1	249.55	249.55	1.37	Not Sig.
Sex	1	1122.25	1122.25	6.15**	Sig. at .01 level
Interaction (E x H)	1	364.94	364.94	2.00	Not Sig.
Interaction (H x S)	1	484.09	484.09	2.65	Not Sig.
Interaction (S x E)	1	1339.60	1339.60	7.34**	Sig. at .01 level
Interaction overall (S x E x H)	1	1672.68	1672.68	9.17**	Sig. at .01 level
Error	392	71538.49	71184.43		
Total	399	[illegible]			

Results in Table 4A reveal that education level and place of habitation were not statistically significant factors on the whole as far as the performance of subjects on the size constancy test was concerned. (School subjects Mean = 49.01 and College subjects Mean = 49.81, Urban subjects Mean = 50.14 and rural subjects Mean = 48.68). However, sex was a significant factor (F = 6.15 significant at .01 level) ; girls scored

significantly higher (M = 50.15) than boys (M = 47.67) i.e. girls were lower or poor in maintaining size constancy, while boys exhibited more constancy effect. This finding is confirmed to some extent by earlier study by Ardis and Elizabeth[6] who observed that females showed lower shape constancy than the males. The present investigation finds sex difference on size constancy and Ardis and Elizabeth found sex differences on shape or form constancy. Both show practically the same direction i.e. girls being lower or poorer than boys on constancy phenomenon.

Further, it should be noted that this sex effect should not be interpreted so directly as shown by the average main effect, in view of this significant interaction effect between sex and education (F = 7.34 significant at .01 level) and overall interaction between sex, education and habitation (F = 9.17 significant at .01 level). It would be seen from the cells in Table 4A that urban school boys scored higher (51.48) than urban school girls (49.78), while girls at all other levels scored more than boys, and particularly the urban college girls (56.30) far more than urban college boys (43.00), this difference was highly significant, while other differences were not much considerable (as revealed by the Least Significant Difference Test).Anyway, this differential trend between boys and girls of different habitation and educational level accounted for significant

interaction between sex and education as well as sex, education and habitation. Yet it can be safely said that girls were poorer in size constancy effect, particularly college girls residing in urban areas, while school boys from urban areas are also poorer in constancy effect.

5.5. Reversible Figure Test

The results of statistical analysis of scores on reversible figure test are presented in Table 5 - 6 (A) and (B). It should be observed in this case that scores represent the frequency of fluctuations or shifts. In case of maintaining positive attitude, subjects were allowed as many fluctuations as they could between the two figures, in negative attitude, they were instructed to restrict any shift or strike to the same figures as long as possible, in neutral case no instructions were given and subjects were mearly to note the shifts made by them from one figure to other. In case of positive attitude, the score consisted of total shifts under positive attitude minus shifts under neutral attitude. In case of negative attitude, the score consisted of total shifts under negative attitude minus shifts under neutral attitude. Thus, higher score shows ability to maintain positive attitude to shift in first case, and in the second

case lower scores negative attitude to restrict or not to shift.

Table 5A : Showing the Mean Scores and Standard Deviation on Perceptual Task : Reversible Figure Test (Positive attitude).
(n = 50 in each cell, Total N = 400)

Sex	Urban				Rural			
	School		College		School		College	
	Mean	S D	Mean	S D	Mean	S D	Mean	S D
Boys	50.00	9.84	49.94	10.94	49.44	10.71	50.04	10.00
Girls	50.48	12.42	50.18	9.96	50.00	4.08	50.02	9.78

Education : 50.02 School Level Mean : 49.98 College Level Mean : 50.05
Habitation : 50.01 Urban Mean : 50.15 Rural Mean:49.87
Sex : 50.01 Boys Mean : 49.85 Girls Mean:50.17

Overall Mean : 50.01

Table 5B : Showing the Results of Analysis of Variance on Perceptual Task : Reversible Figure Test. (Positive Attitude).

Source	df	S S	M S	F ratio	Remarks
Level of education	1	.40	.40	.01	Not Sig.
Habitation	1	7.60	7.60	.07	Not Sig.
Sex	1	9.90	9.90	.10	Not Sig.
Interaction (E X H)	1	6.00	6.00	.06	Not Sig.
Interaction (H x S)	1	.20	.20	.00	Not Sig.
Interaction (S x E)	1	4.30	4.30	.04	Not Sig.
Interaction overall (E x H x S)	1	.70	.70	.01	Not Sig.
Error	392	39849.90	101.66		
Total	399				

Table 6A : Showing the Mean Scores and Standard Deviation on Perceptual Task : Reversible Figure Test (Negative attitude).
(n = 50 in each cell. Total N = 400)

Sex	Urban				Rural			
	School		College		School		College	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Boys	49.80	9.73	49.38	9.47	49.88	9.63	49.66	10.35
Girls	48.84	8.23	49.70	9.95	49.88	9.81	49.98	9.84

Education : 49.64 School level Mean : 49.60 College level Mean : 49.68
Habitation : 49.61 Urban Mean : 49.43 Rural Mean: 49.80
Sex : 49.64 Boys Mean : 49.68 Girls Mean: 49.60
Overall Mean : 49.63

Table 6B : Showing the Results of Analysis of Variance on Perceptual Task : Reversible Figure Test. (Negative attitude)

Source	df	S S	M S	F ratio	Remarks
Level of education	1	.63	.63	.01	Not Sig.
Habitation	1	17.63	17.63	.19	Not Sig.
Sex	1	.63	.63	.01	Not Sig.
Interaction (E x H)	1	2.00	2.00	.02	Not Sig.
Interaction (H x S)	1	5.80	5.80	.06	Not Sig.
Interaction (S x E)	1	16.40	16.40	.17	Not Sig.
Interaction overall (E x H x S)	1	5.69	5.69	.06	Not Sig.
Error	392	37675.78	96.21		
Total	399				

The results reveal that there were no significant differences between levels of any of the factors studied, i.e. subjects of all groups behaved similarly on this test, as on

Müler-Lyer Illusion test. Level of education, habitation or sex made no difference in the performance on the Reversible Figure Test, taken either with positive attitude or negative attitude, as explained above. Neither the main effects nor the interaction effects were significant. All subjects boys or girls, either from school or college, from urban or rural area, were almost the same in their performance on the reversible figure test, in their capacity to make shifts or in their capacity to resist shifts.

5.6. Emotionally Toned Words Test

Next, the subjects were administered the Emotionally Toned Words Test, as described in the earlier chapter and the percentage of emotionally toned words recalled by each subject formed the score. These scores were statistically analysed and the tables 7A and 7B give the summary of results.

Table 7A : Showing the Mean Scores and Standard Deviation on Perceptual Task : Emotionally Toned Words Test. (n = 50 in each cell, Total N = 400)

Sex	Urban				Rural			
	School		College		School		College	
	MEan	S D	Mean	S D	Mean	S D	Mean	S D
Boys	50.10	9.90	50.06	10.03	50.24	9.50	49.78	9.84
Girls	50.18	9.92	50.00	10.00	50.14	10.20	50.30	9.48

Education : 50.09	School level mean : 50.16	College level Mean	: 50.03
Habitation: 50.09	Urban Mean : 50.08	Rural Mean	: 50.11
Sex : 50.09	Boys Mean : 50.04	Girls Mean	: 50.15
	Overall Mean : 50.09		

Table 7B : Showing the Results of Analysis of Variance on Perceptual Task : Emotionally Toned Words Test

Source	df	S S	M S	F Ratio	Remarks
Level of aspiration	1	1.60	1.60	.02	Not Sig.
Habitation	1	.00	.00	.00	Not Sig.
Sex	1	1.20	1.20	.01	Not Sig.
Interaction (E x H)	1	.20	.20	.00	Not Sig.
Interaction (H x S)	1	1.10	1.10	.01	Not Sig.
Interaction (S x E)	1	1.50	1.50	.02	Not Sig.
Interaction overall (E x H x S)	1	3.40	3.40	.04	Not Sig.
Error	392	38905.00	99.20		
Total	399				

It should be noted that the lower the score, the more stable the subject is emotionally. The results again indicate that there were no significant differences due to any of the factors studied, i.e. all subjects, boys or girls, whether from school or college, from urban or rural area, performed almost equally on the Emotionally Toned Words Test, scored the same number of emotionally toned words, indicating that they

were equally stable in recall of emotional words. (overall mean = 50.09). Here it should be noted that Bruner and Postman[25] had studied a little different aspect of emotionally toned words and observed that such words took longer time for correct recognition.

5.7. Form-Colour Dominant Test

Again, the subjects were administered the Form-Colour Dominant Test, and the number of figured recalled, whether the response pertained to the form of the figure or the colour of the figure (whatever was dominant in his mind), constituted the score for each subject. These scores on form and colour for subject were separately analysed for the total sample and the summary of results has been presented in Tables 8 - 9 (A) and (B) respectively for form and colour.

Table 8A : Showing the Mean Scores and Standard Deviation on Perceptual Task : Form - Colour Dominance Test (Form dominant). (n = 50 in each cell, Total N = 400)

Sex	Urban				Rural			
	School		College		School		College	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Boys	50.18	10.04	48.94	8.99	50.30	9.80	49.66	9.04
Girls	49.76	7.95	49.90	10.33	49.78	9.33	50.88	9.21

Education : 49.97 School level mean : 50.0 College level mean : 49.95

Habitation: 49.92 Urban mean : 49.69 Rural Mean:50.15

Sex : 49.92 Boys mean : 49.77 Girls Mean:50.08

Overall mean : 49.93

Table 8A : Showing the Results of Analysis of Variance on Perceptual Task : Form-Colour Dominance Test (Form dominant)

Source	df	S S	M S	F ratio	Remarks
Level of education	1	2.25	2.25	.03	Not Sig.
Habitation	1	21.15	21.15	.23	Not Sig.
Sex	1	9.55	9.55	.10	Not Sig.
Interaction (E x H)	1	15.23	15.23	.17	Not Sig.
Interaction (H x S)	1	.23	.23	.00	Not Sig.
Interaction (S x E)	1	60.91	60.91	.67	Not Sig.
Interaction overall (E x H x S)	1	.73	.73	.01	Not Sig.
Error	392	36211.45	92.40		
Total	399				

Table 9A : Showing the Mean Scores and Standard Deviation on Perceptual Task : Form-Colour Dominance Test (Colour dominant) (n = 50 in each cell, Total N=400)

Sex	Urban				Rural			
	School		College		School		College	
	Mean	S D	Mean	S D	Mean	S D	Mean	S D
Boys	48.00	13.64	51.20	6.84	49.96	9.87	50.10	9.71
Girls	49.90	10.86	50.14	9.92	50.50	9.40	50.06	10.27

Education : 49.98 School level mean : 49.59 College level mean : 50.37
Habitation: 49.98 Urban mean : 49.81 Rural mean:50.15
Sex : 49.85 Boys mean : 49.81 Girls mean :49.90
Overall mean : 49.93

Table 9B : Showing the Results of Analysis of Variance on Perceptual Task : Form-Colour, Dominance Test (Colour dominant)

Source	df	S S	M S	F ratio	Remarks
Level of education	1	61.60	61.60	.59	Not Sig.
Habitation	1	11.90	11.90	.11	Not Sig.
Sex	1	11.20	11.20	.11	Not Sig.
Interaction (E x H)	1	87.47	87.47	.84	Not Sig.
Interaction (H x S)	1	.77	.77	.01	Not Sig.
Interaction (S x E)	1	78.39	78.39	.75	Not Sig.
Interaction overall (E x H x S)	1	35.31	35.31	.34	Not Sig.
Error	392	41360.26	104.41		
Total	399				

It should be noted that the higher score in form response shows that the subject is more form dominant, and the higher score on colour response indicates that he or she is more colour-dominant. Now, the results in Table 8 (A) and (B) again reveal no significant differences arising due to the play of any level of factors studied. All subjects; boys or girls, from school or college, from urban or rural area, were equally form-dominant and also equally colour-dominant. (Overall mean

on form dominance = 49.93 ; and over-all mean on colour dominance = 49.93).

Further, the comparison of results in Table 8A and 9A shows that subjects show a general tend to be slightly more colour-dominant (M = 49.93) than to be form-dominant (M = 49.93), though this difference is not statistically significant. The highest score on form-dominance (50.88) was obtained by rural, college girls and the lowest (48.94) by urban, college boys ; while the highest score on colour dominance (51.20) was obtained by urban, college boys, and the lowest (48.00) by urban school boys, it also appears that school boys were somewhat more form-dominant (urban mean = 50.18 and rural mean = 50.30 in comparison to their colour dominance mean being 48.00 and 49.96 respectively), while all other groups were more colour-dominant. At the same time, it should be noted that not a single variable viz. sex, education or habitation contributed significantly to form-dominance or colour-dominance, as observed from results in Tables 8B and 9B. The studies of Klein(82) and Granger(66) can be quoted here to point out individual differences in colour-form attitude in perception.

5.8. Embedded Figure Test

Finally, the results of subjects on Embedded Figure Test have been summarized in Tables 10A and B. Time taken by subjects to locate or recognize the specific simpler figures embedded in the

wider complex configuration formed the score for each subject. It is assumed that the field-dependent subjects would take more time; and the field-independent would take less time. Thus, the lower score shows more of field-independence, and higher score shows field-dependence.

Table 10A : Showing the Mean Scores and Standard Deviation in Seconds on Perceptual Task : Embedded Figure Test. (n = 50 in each cell, Total N = 400).

Sex	Urban				Rural			
	School		College		School		College	
	Mean	S.D.	Mean	S.D	Mean	S.D.	Mean	S.D.
Boys	48.26	14.79	50.32	9.61	50.24	10.72	49.88	9.18
Girls	50.16	9.93	50.08	9.21	50.06	12.07	50.26	8.23

Education : 49.90 School level mean : 49.68 College level mean : 50.13
Habitation: 49.90 Urban mean : 49.70 Rural Mean:50.11
Sex : 49.90 Boys mean : 49.67 Girls mean:50.14
Overall mean : 49.90

Table 10(B): Showing the Results of Analysis of Variance on Perceptual Task : Embedded Figure Test.

Source	df	S S	M S	F ratio	Remarks
Level of education	1	28.05	28.05	.27	Not Sig.
Habitation	1	23.00	23.00	.22	Not Sig.
Sex	1	29.10	29.10	.28	Not Sig.
Interaction (E x H)	1	21.25	21.25	.20	Not Sig.
Interaction (H x S)	1	8.52	8.52	.08	Not Sig.
Interaction (S x E)	1	10.35	10.35	.10	Not Sig.
Interaction overall (E x H x S)	1	56.09	56.09	.53	Not Sig.
Error	392	45419.00	115.00		
Total	399				

Again, the results show that neither the main effects nor the interaction effects of any of the factors studied were statistically significant. All subjects, boys or girls, from school or college, from urban or rural area, were almost equal in their dependence or independence of the field. (Overall mean = 49.90). The works by Witkin[158], Nunally[112] and Blumberg Morton[13] can be mentioned here; but most of them have studied the relation of this perceptual characteristic with personality trait; hence this will be better discussed later on in the second part. However, Blumberg Morton found that females were more field dependent than males. The present study also shows that to some extent girls scores higher (M = 50.14) than boys (M = 49.67) (through not significantly), showing that were somewhat more field-dependent.

In short, the overall results on all the perceptual tasks show that all the three factors, viz. sex, education and habitation, made no significant contribution; there were no statistically significant differences between different levels of any of these factors in performance on any of the perceptual tasks, except that sex played a significant role in size constancy phenomenon. These findings are useful while discussing the relation of these perceptual tasks with some of the personality traits studied and described in the next part. Since sex, education and habitation or environment had no important contribution in most cases, it would be fair even to combine the scores of all groups and study

the relation between perception and personality scores of the total sample too, in addition to that separately in case of each of eight sub-groups formed by sex, education and habitation. The main problem of study, viz. relation between perception and personality, is now discussed in the following second part, after first examining the contribution of various factors in the first part above.

PART II

PERCEPTION - PERSONALITY RELATION

PART II : PERCEPTION - PERSONALITY RELATION

The earlier section has included discussion on the role of sex, education and habitation, played in any of the perceptual tasks under study. This section now examines the main problem, viz. the relation of these perceptual tasks to varied personality traits.As described in the earlier chapter, 4oo subjects classified in the 2 x 2 x 2 factorial design formed by two levels of each of the three factors, viz. sex, education and habitation, not only served as subjects for various perceptual experiments, but were also administered the fourteen factor Personality Assessment Scale (PAS) constructed and standardized by Dr.A.S.Patel in Gujarati(given in Appendix B).Their raw scores on this scale were converted into T-scores for better statistical accuracy, and these scores on each of the personality trait were correlated with the scores on the performance on each of the perceptual tasks of the total sample as well as of each of

8 sub-groups of subjects, in order to study the extent of relation between the two. The method to compute the Product-Moment Coefficient of Correlation was adopted and computations were carried out with the help of IBM computors. All these results are presented in Tables 11-18 and discussed in the paragraphs that follow. Specifically, the significant results have been discussed fully.

5.9. Length Discrimination Test and Different Personality Traits

The scores of performance on Length Discrimination Task (Müller-Lyer Illusion Board) were correlated with the scores on different personality traits assessed by Personality Assessment Scale, and the summary of coefficients of correlations for total sample as well as each group are presented in Table 11.

The results in the Table 11 reveal that as far as the length discrimination task of the total sample (N = 400) was concerned, there was only one significant correlation, viz. that between the length discrimination (or extent of Müller-Lyer illusion) process and suggestibility trait; it was .09 just significant at .05 level. This means that the lower the score on discrimination task, i.e. the better the discrimination (or the less the illusion) the lower is the person on suggestibility. In other words the less illusioned or better discriminators are less suggestible. This confirms what is expected. All other correlations were insignificant, ranging

Table 11 : Showing the Correlation between Perceptual Task : Length Discrimination Task and Different Personality Traits of Total Sample as well as Sub-groups

Personality Traits	Total Sample N = 400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Happy-go-lucky/seriousness	.04	.12	-.09	-.19	-.16	.18	.12	.07	.15
Self-sufficiency/Dependency	-.04	.16	-.25	-.16	-.04	.10	.05	.32*	-.04
Dominance-Submission	-.00	-.03	-.18	-.08	-.11	.05	-.12	.12	.13
Leadership	-.07	-.07	-.15	-.26	.03	-.18	.00	.10	-.03
Introversion-Extraversion	-.03	-.11	-.06	.02	.08	-.14	-.00	.23	-.22
Radicalism-conservatism	-.01	.09	.08	-.16	-.00	.02	-.10	.02	.04
Neuroticism	-.04	-.02	.10	-.11	.18	.07	-.07	-.26	-.25
Hostility or Aggressiveness (Self criticism or lack of confidence- SC.)	.04	.08	.04	-.09	.27*	.15	.26	.18	-.07
Hostility or Aggressiveness (Self abasement or self-humiliation or lowering of self - General guilt feeling-self-fault finding- SA.)	.03	-.13	-.12	-.26	.06	.14	.16	.15	.15
Hostility or aggressiveness (Self-reproachment or self-remorse- Severe guilt feeling- SR.)	.02	-.15	-.10	.00	.00	.01	.18	.00	.11
Hostility or aggressiveness (Impunitive hostility - passive, condoned type of hostility directed to others - IH.)	-.04	-.09	.08	-.07	-.18	.11	.04	.01	-.32*

(continued)

(Table 11 continued)

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Hostility or aggressiveness (Acute and active hostility directed to others - AH.)	-.03	-.08	-.25	-.10	.02	.03	.09	-.14	.05
Hostility or aggressiveness (Paranoid hostility - delusional hostility directed to others - he feels that others attack or after him. - PH.)	-.02	.08	.12	-.14	-.04	-.02	.13	-.14	.18
Emotional stability	-.07	-.26	.15	-.15	-.08	-.20	-.17	.31*	-.14
Honesty	.07	.22	.11	-.15	-.25	-.11	.04	.12	.15
Masculinity-Feminity	-.04	.05	-.07	-.09	-.07	-.23	-.00	.15	-.10
Sex interest	-.05	.30*	.21	-.01	.09	-.11	-.21	-.07	-.05
Rigidity-flexibility	.02	.05	.07	.19	.06	-.02	-.09	.18	-.05
Suggestibility	.09*	.12	.17	.09	.03	-.03	-.15	.22	.25

* For 400 .09 at .05 level and .12 at .01 level : For 50 * .27 at .05 level and ** .35 at .01 level

U = Urban R = Rural M = Male F = Female

S = School going C = College going

from -.07 to .04. There was a slight trend toward positive relation with respect to traits, such as happy-go-lucky nature, hostility directed inwards, honesty and rigidity; slight negative trend has been revealed with respect to the rest, viz. traits of self-sufficiency, dominance, leadership, introversion, radicalism, neuroticism, outward hostility, emotional stability, masculinity and sex interest.

However, when the data were (N = 400), analysed separately for each of eight groups (n = 50) there were observed some differences. In these cases, the length discrimination scores had positively significant correlation with sex interest (.30) in case with urban school going boys group (UMS) with self-sufficiency (.32) and emotional stability (.31) in case of rural college-going boys group (RMC) ; while it has negatively significant correlation with inward hostility (SC - lack of self confidence) (-.27) in case of rural school-going girls (RFS) and with outward hostility (IH - passive, condoned type of hostility directed to others) (-.32) in case of rural college going girls (RFC). Thus, the less illusioned or better discriminators tend to be less interested in sex (UMS group), less self-sufficient (RMC) and less stable emotional (RMC) group; while they tend to be more inwardly hostile (SC) i.e. greater lack of self-confidence (RFS group) and more having impunitive hostility (IH) to others (RFC group). All other correlations were mostly insignificant.

It should be noted here that on the whole it was revealed that better discriminators (low scorers) were significantly less suggestible (also low scorers), but there was lack of significant correlation between the two in case of all sub-groups. Most of the sub-groups showed a positive trend and a few (only urban college students) showed a negative trend of relationship and all together combined with a very large size of sample showed a positively significant correlation. It seems strange that better discriminators from urban college group, both boys and girls, tended to be more suggestible. So also, positive relationships of some groups (UMS, RMC) with sex interest is expected, while with self-sufficiency and emotional stability it is least expected; while negative relationships in some groups with both inward (SC) and outward (IH) hostility at the same time are also less expected. Anyway, since the earlier part shows no significant differences in contribution of factors of sex, education or habitation in case of length discrimination task, it can be said that the result on performance of total combined sample can be treated with confidence, and thus the only significant result with confidence would be that the less illusioned or better discriminators are less suggestible. Anyway, the Table No.11 reveals what is actually obtained in this case any unexpectedness may be perhaps due to the likely

inadequacy of measurement or measuring tools or specific nature of group of subjects.

5.10. Size Constancy Test and Different Personality Traits

Similarly, the subjects were tested on the size constancy test (comparing a triangle with the standard triangle) and their discrepancy scores (judgments in inches) were recorded. Higher discrepancy score indicated poorer size constancy and lower discrepancy score meant more of constancy effect. These scores were then related with their scores on different personality traits assessed by PAS. The summary of coefficients of correlations between this size constancy effect and various personality traits has been presented in Table 12, arranged in the same way as the earlier Table 11.

The results in Table 12 reveal that as far as the total sample is concerned, the size constancy effect had a positive correlation with the personality trait of dominance (.11) significant at .05 level, and negative correlation with self-sufficiency (-.13) at .01 level of significance. This means that those showing more of constancy effect (lower discrepancy score on constancy test) were less dominant type (positive correlation) and more self-sufficient (negative correlation). Thus, those showing more constancy effect i.e. more illusioned with constancy phenomenon emerged to be less dominant or more submissive in nature, as expected; but it is strange that the

Table 12 : Showing the Correlation between Perceptual Task : Size Constancy Test and Different Personality Traits of Total Sample as well as Sub-groups

Personality Traits	Total Sample N = 400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Happy-go-lucky / Seriousness	-.03	-.24	.06	.11	.15	-.14	-.20	.11	-.02
Self-sufficiency/Dependency	-.13**	-.29 *	-.07	-.15	-.20	-.17	-.21	-.07	-.01
Dominance-Submission	.11*	.12	-.01	.08	.09	-.01	.07	.29*	.02
Leadership	-.03	-.12	.14	.04	-.02	-.14	-.28*	.22	.21
Introversion-Extraversion	.07	.16	-.12	.11	.11	.07	.10	-.05	.12
Radicalism - conservatism	-.00	-.32*	-.05	.11	-.03	.28*	.01	.05	-.08
Neuroticism	.03	.19	-.07	-.11	-.07	.13	.21	.04	-.15
Hostility or aggressiveness (Self criticism or lack of confidence - SC.)	-.04	.01	-.19	-.19	-.21	.14	.10	.16	-.25
Hostility or aggressiveness (Self abasement or self humiliation or lowering of self general guilt feeling-self-fault finding - SA.)	-.06	.03	-.20	-.01	-.23	-.04	.22	-.05	.00
Hostility or aggressiveness (Self-reproachment or self-remorse - Severe guilt feeling-SR.)	-.01	.05	-.25	-.08	-.10	.03	-.02	-.23	.24
Hostility or aggressiveness (Impunitive hostility - passive, condoned type of hostility directed to others - IH.)	.02	.01	.09	.05	-.07	.06	-.09	.15	.09

(continued)

(Table 12 continued)

Personality Traits	Total Sample N=40)	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Hostility or aggressiveness (Acute and active hostility directed to others - AH.)	-.00	-.06	-.21	-.11	.11	.06	.03	.02	.11
Hostility or aggressiveness (Paranoid hostility - delusional hostility directed to others - he feels that others attack or after him. - PH.)	.01	.07	-.24	.14	-.09	.04	.09	-.42**	.17
Emotional stability	-.00	.25	.05	-.10	.01	.04	-.03	.22	-.13
Honesty	-.03	.05	-.10	.03	-.06	-.10	.13	-.03	-.04
Masculinity-Feminity	.01	.04	-.10	-.05	.15	.01	-.12	-.08	.20
Sex interest	-.02	.14	-.05	-.05	-.02	-.05	.05	-.27*	-.11
Rigidity-flexibility	.00	-.14	-.09	-.02	.09	.18	-.14	-.09	-.02
Suggestibility	- .01	-.01	-.40**	.18	.12	.19	-.06	-.11	-.03

* Significant at .05 level and ** Significant at .01 level

U = Urban R = Rural M = Male F = Female

S = School going C = College going

same more illusioned or those led away by constancy effect of the field were more self-sufficient. In this connection, results of Witkin[158] on embedded figure test can be compared with the present results. Witkin has shown that the field-dependent (based on constancy phenomenon) were strangely found to be more self-sufficient, while the field-dependent (based on embedded figure test) as revealed on in Table 18 were neither significantly self-sufficient (-.30) correlation nor dominant (-.06 correlations), though one group (UMS) showed strongly significantly negative correlation with dominance (-.27) meaning that the field independent (with lower score) were more dominant (with higher score), i.e. the field dependent to be less dominant, confirming the present finding in Table 12.

This is the picture on the whole.

Let us now examine the results of correlation between size constancy effect and various personality traits for each of sub-groups. It would be further observed from the table that the size constancy effect had significantly negative correlation with personality traits of self-sufficiency (-.29) in case of urban school going boys (UMS) as is also the case with the total sample (-.13); again negative correlation with radicalism (-.32) in case of urban school-going boys (UMS); with suggestibility (-.40) significant at .01 level) in case of

urban school-going girls (UFS); with leadership (-.28) in case of urban college-going girls (UFC); with outward paronoid hostility (PH) to the extent of -.42 correlation significant at .01 level,in case of rural college-going boys (RMC) and also with sex interest (-.27) in case of rural college-going boys (RMC); while it had significantly positive correlation with radicalism (+.28) in case of urban college-going boys (UMC) in contrast to above•negative correlation (-.38) in case of urban school-going boys (UMS); and also positive correlation with dominance (+.29) in case of rural college-going boys (RMC), as in case of total sample (.11). In simpler words, those showing more of constancy illusion effect (with lower discrepancy score) were more self sufficient (negative correlation -.29) in case of UMS group, more radical (-.32) in case of UMS group, more suggestible (-.40) in case of UFS group, more of a leader (-.38) in case of UFC group, more paranoid hostility (-.42) in case of RMC group, more of sex interests (-.27) in case of RMC group; while less radical (positive correlation(+.28) in case of UMC group and less dominant (+.29) in case of RMC group. That the more illusioned is more suggestible, more paranoid hostile, less radical and less dominant may be expected; other relations may be termed less expected.

Anyway, this is what is obtained here; any discrepancy may be perhaps due to the likely inadequacy of measurement or specific tools or specific group of subjects.

Some of the differences with respect to size constancy effects in various subgroups can also be attributed to the significant Sex x Education as well as Sex x Education x Habitation interaction as observed significant in the first part of the study.

In this connection of relation between constancy effect and some personality traits, it should be here noted that Vernon, M.D. (147) has observed the following :

1. Synthetic type individual observe the perceptual fields as an intigrated whole. While analytic observe the perceptual field into its parts and study each separately.
2. Synthetic type observers shows high size, colour and shape constancy than analytic observers. Analytic observers show low constancy.
3. Extraverted individuals tended to show a higher degree of size constancy than did introverts.

Ardis and Elizabeth(6) found that introvert shows lower shape constancy than extroverts. Female showing lower shape constancy than the male.

One study by Weber(159) needs mention here: it was found therein that extraverts showed greater size constancy.

In the present case, not the whole sample nor any sub-group showed any significant relation between size constancy and extraversion or introversion, though there was a trend that the extrovert (lower scores) showed more size constancy (lower score), in view of somewhat positive correlation mostly.

5.11. Reversible Figure Test and Different Personality Traits

Next, the scores of the subjects on the Reversible Figure Test were correlated with scores on varied personality traits. The higher score i.e. greater number of fluctuations (fluctuations under positive instructions to shift as many times as possible minus fluctuations under neutral condition) indicated the positive attitude to make shifts; the lower score (fluctuations under neutral condition minus fluctuations under negative instructions not to shift) showed the negative attitude or the resistance of subjects to shifts. All these scores more related to personality traits. The summary of all the coefficients of correlations are presented in Tables 12 13 - 14 for positive and negative attitudes respectively.

The examination of results in Table 13 reveals that this perceptual task had a significantly positive correlation (.3 significant at .01 level), with suggestibility trait, with dominance (.09) and with rigidity (.10), as far as the total

Table 13 : Showing the Correlation between Perceptual Task : Reversible Figure Test (Positive Attitude) and Different Personality Traits of Total Sample as well as Sub-groups

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Happy-go-lucky/seriousness	-.07	-.14	.03	-.03	-.24	-.04	-.22	.08	-.13
Self-sufficiency/Dependency	-.05	-.13	.00	-.21	-.22	.07	-.18	.06	.05
Dominance-Submission	.09*	-.06	-.07	.29*	-.11	.07	.16	.37**	.12
Leadership	-.02	.34*	-.17	-.08	.10	.04	-.04	.00	-.18
Introversion-Extraversion	.08	-.09	.08	.02	.13	-.14	.17	.28*	.30*
Radicalism-conservatism	-.02	.39**	.03	-.25	.06	-.27*	-.14	.24	-.11
Neuroticism	-.03	-.06	.09	.19	-.03	-.13	-.07	-.20	-.14
Hostility or Aggressiveness (Self criticism or lack of confidence-SC.)	-.06	-.04	.01	-.02	.12	-.23	-.18	-.03	.08
Hostility or Aggressiveness (Self abasement or self-humiliation or lowering of self - General guilt feeling - self - fault finding-SA.)	.04	.15	.23	.12	-.10	-.09	.03	-.11	-.01
Hostility or Aggressiveness (Self-reproachment or self-resource - Severe guilt feeling - SR.)	-.01	.00	.01	.15	.18	-.20	-.12	.02	.03
Hostility or aggressiveness (Impunitive hostility - passive, condoned type of hostility directed to others - IH.)	.02	.30*	.08	-.01	-.00	.11	-.19	.03	.06

(continued)

(Table 13 continued

Personality Traits	Total Sample N =400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Hostility or aggressiveness (Acute and active hostility directed to others - AH.)	-.02	.09	.12	-.04	-.22	-.01	-.03	-.09	-.10
Hostility or aggressiveness (Paranoid hostility - delusional hostility directed to others - he feels that others attack or after him. ⇢ PH.)	-.01	.12	-.09	.05	-.03	.05	.14	-.18	.00
Emotional stability	-.03	.15	-.02	-.06	-.01	-.02	-.05	-.01	.04
Honesty	-.00	-.16	-.10	.06	.11	-.04	.22	.22	-.22
Masculinity-Feminity	.06	.11	.06	-.15	.01	-.06	.27*	.03	.06
Sex interest	.00	.20	.33*	-.22	-.14	-.14	.11	-.13*	-.09
Rigidity-flexibility	.10*	.12	.13	.06	.12	.03	.11	.03	.47**
Suggestibility	.30**	-.09	.03	-.18	-.01	.36**	-.04	.09	.01

For 400 .09 significant ** at 01 level : .012 at* .05 level
For 50 .35 significant ** at 01 level : and .27 at* 05 level

U = Urban R = Rural M = Male F = Female

S = School going C = College going

sample was concerned, i.e. on the whole the subjects with positive attitude. (who scored higher) to shifts were more suggestible, was dominent and more rigid. That the suggestible persons are more fluctuating or flexible is upto expectation, while that the dominant and the rigid are more fluctuating is less expected. No other relation was significant on the whole.

However, when the results of sub-groups are considered, it is found that the positive attitude to make shifts from figure to figure was positively and significantly correlated with leadership (.34) in case of urban school going boys group (UMS); with radicalism (.39) at .01 in case of urban school-going boys group (UMS); with outward impunitive hostility IH (.30) in case of urban school-going boys group (UMS); with sex interest (.33) in case of urban school-going girls (UFS); with dominance (.29) and (.37) in case of both rural school-going and college going boys groups (RMS and RMC); with suggestibility (.36) significant at .01 level in case of urban college-going boys group (UMC); with masculinity (.27) in case of urban college-going girls (UFC); with introversion (.28) and (.30) in case of both rural college-going boys and girls groups (RMC and RFC); and with rigidity (.47) at .01

level in case of rural college-going girls group (RFC); while it was negatively and significantly correlated with radicalism (-.27) in case of urban college-going boys (UMC) (in contrast to positive correlation for UMS group); and with sex interests (-.30) in case of rural college-going boys group (RMC) (again in contrast to positive correlation for UFS group). No other relations were significant in sub-groups.

In other words, in some cases those with positive attitude towards shifting were more dominant, more of a leader, more introvert, more hostile (condoning type), more masculine, more rigid and more suggestible; while they were exhibiting more radicalism as well as less radicalism and more sex interests as well as less sex interests in some having or the other group. That such people are more introvert of more hostile or more suggestible is understandable, but other findings cannot be easily explained, except on the ground of justifying the results with respect to specific tools and specific sample used.

Similarly, the inspection of results in Table 14 reveals that the negative attitude to resist shifts from figure to figure (i.e. maintaining steadiness) had significantly positive correlation with 'happy-go-lucky' nature of subjects

Table 14 : Showing the Correlation between Perceptual Task : Reversible Figure Test (Negative attitude) and Different Personality Traits of Total Sample as well as Sub-groups

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Happy-go-lucky/seriousness	.09*	-.03	-.02	-.19	.15	.01	.30*	.19	.12
Self-sufficiency/Dependency	-.01	.20	.00	.05	-.31*	-.31*	.18	.14	-.02
Dominance-Submission	.08	-.16	.25	-.18	.28*	-.16	.16	.09	.41**
Leadership	-.05	-.02	.11	-.20	.05	-.08	.40**	-.26	-.03
Introversion-Extraversion	-.01	-.08	-.17	.16	-.11	-.02	-.03	.06	.03
Radicalism-conservatism	-.04	-.01	.15	.06	-.09	-.04	-.04	.08	-.28*
Neuroticism	-.06	-.20	.07	-.18	.03	.04	-.10	-.02	-.13
Hostility or Aggressiveness (Self criticism or lack of confidence-SC.)	.03	-.27*	.25	-.07	-.12	.33*	.18	.04	-.09
Hostility or Aggressiveness (Self abasement or self-humiliation or lowering of self-General guilt feeling-self-fault finding - SA.)	.05	.09	.13	-.26	-.01	.18	-.05	.06	.21
Hostility or Aggressiveness (Self-reproachment or self-remorse - Severe guilt feeling) SR.)	.02	.01	.15	-.26	-.01	.18	-.05	.06	.21
Hostility or aggressiveness (Impunitive hostility - passive, condoned type of hostility directed to others - IH.)	.10*	-.04	-.06	.11	.22	.11	.19	.15	.02

(continued)

(Table 14 continued)

Personality Traits	Total Sample N=400	UMS	UPS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Hostility or aggressiveness (Acute and active hostility directed to others - AH.)	.04	-.22	.08	-.15	.02	.17	.08	.06	.26
Hostility or aggressiveness (Paranoid hostility - delusional hostility directed to others - he feels that others attack or after him. - PH.)	.04	-.09	.16	-.15	.12	.12	-.09	- .17	.36*
Emotional stability	.04	.01	.06	-.08	.28*	-.02	.08	-.01*	-.03
Honesty	-.10*	.30*	-.23	-.14	-.00	.22	-.29*	.03	-.09
Masculinity-Feminity	.01	- .12	.35**	.04	.00	-.07	-.20	.29*	-.19
Sex Interest	.01	-.21	-.18	.21	.02	.19	-.05	.10	-.13
Rigidity - Flexibility	-.03	.19	.11	-.01	-.39**	-.18	-.14	-.07	.18
Suggestibility	.03	-.21	-.06	.09	.12	.09	.01	.21	.19

* Significant at .05 level ** Significant at .01 level.

U = Urban R = Rural M = Male

F = Female S = School going C = College going

(.09) and with impunitive hostility (.10), while negative correlation with honesty (-.10) as far as the whole sample was concerned, i.e. on the whole, those having negative or resisting attitude (lower score) were having lower scores on happy-go-lucky test and hostility (IH) test, or were less happy-go-lucky (more serious type) and less hostile (IH type); and higher scores on honesty, i.e. more honest.

The results in sub-groups reveal that the negative attitude (lower score) was positively related to happy-go-lucky nature (.30) in case of UFC group; to dominance (.28) significant at .05 level and(.41)at .01 level respectively in case of RFS and RFC groups; to leadership (.40) significant at .01 level in case of UFC group; to inward hostility - SC type (.33) in case of UMC group; to outward paronoid - PH hostility (.36) significant at .01 level in case of RFC group; to emotional stability (.28) in case of RFS group; to masculinity (.35) significant at .01 level and (.29) significant at .05 level respectively in case of UFS and RMC groups: (i.e. all these having also low scores against low scores on negative attitude); while it had significantly negative correlation with self-sufficiency (-.31) and (-.31) respectively in case of RFS and UMC groups; with radicalism

(-.28) in case of RFC group; with inward hostility - SC type (-.27) in case of UMS group; with honesty (-.30) and (-.29) respectively in case of UMS groups; and with rigidity (-.39) significant at .01 level in case of RFS group (i.e. all having higher scores against lower scores on negative attitude). In other words, in some cases, those with negative or resisting attitude were less happy-go-lucky (more serious), less dominant, less of a leader, less hostile (PH type), less stable emotionally, less masculine; while they are more self-sufficient, more radical, more honest, and more rigid; but showing both more and less on being inward hostile (SC type). Here also some results are expected, some less expected.

5.12. Emotionally-Toned Words Test and Different Personality Traits

Again, the percentage scores of emotionally-toned words recalled by the subjects were correlated with scores on different personality traits. The lower score on recall of emotionally toned words indicated more of emotional stability, and more score meant emotional upsurge. The summary of correlation is presented in Table 15, first two row showing the correlations on total sample of 400 subjects, and next eight rows showing correlations in case of eight sub-groups of subjects.

Table 15 : Showing the Correlation between Perceptual Task : Emotionally Toned Words Test and Different Personality Traits of Total sample as well as Sub-groups.

Personality Traits	Total Sample N = 400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Happy-go-lucky/seriousness	.00	.33*	-.18	-.20	.16	.06	-.17	-.14	.13
Self-sufficiency/Dependency	-.01	.06	-.00	-.12	-.04	.10	.09	-.16	-.09
Dominance-Submission	-.03	-.08	-.02	-.10	-.00	.03	-.16	.02	-.00
Leadership	-.03	.19	-.01	-.09	-.04	-.18	-.01	.13	-.17
Introversion-Extraversion	.02	-.11	-.01	.02	-.14	.16	-.02	-.03	.27*
Radicalism-Conservatism	.01	.23	-.15	-.21	.06	-.18	.07	.05	.15
Neuroticism	.00	-.40**	.05	.13	.01	.05	-.13	.29*	.15
Hostility or Aggressiveness (Self criticism or lack of confidence-SC.)	.07	-.04	.15	.20	.12	-.08	.09	.04	.09
Hostility or Aggressiveness (Self abasement or self-humiliation or lowering of self-fault finding - SA.)	-.05	-.17	-.08	-.06	.16	-.17	.11	-.03	-.13
Hostility or Aggressiveness (Self-reproachment or self-remorse - Severe guilt feeling - SR.)	-.04	-.22	-.18	-.16	-.04	.23	.28*	-.15	-.23
Hostility or Aggressiveness (Impunitive hostility - passive, condoned type of hostility directed to others - IH.)	-.01	.13	-.12	-.01	-.03	-.12	.16	.03	-.23

(continued)

(Table 15 continued)

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Hostility or Aggressiveness (Acute and active hostility directed to others - AH.)	-.02	-.01	-.23	.16	.15	-.02	.13	-.33*	-.05
Hostility or Aggressiveness (Paranoid hostility - delusional hostility directed to others - he feels that others attack or after him. - PH.)	-.07	.01	-.26	-.16	.31*	.07	-.24	-.37**	-.12
Emotional stability	.06	.20	.11	.09	-.19	-.05	-.05	.12	.19
Honesty	.02	-.13	.04	-.12	.22	-.08	.04	.13	.06
Masculinity-Feminity	-.06	.17	-.15	-.00	-.24	-.22	-.01	.12	-.14
Sex interest	-.02	.01	-.01	.03	.04	.02	-.13	-.07	.03
Rigidity-Flexibility	-.05	-.09	-.13	-.05	.11	-.00	-.20	.06	-.01
Suggestibility	-.05	.09	-.12	-.19	-.43**	.27*	-.02	.01	-.06

* Significant at .05 level ** Significant at .01 level.

U = Urban R = Rural M = Male F = Female

S = School going C = College going

The examination of results in Table 15 reveals that not a single correlation was significant as far as the total sample was concerned. Generally, there is trend of little negative correlation with most of the personality traits, i.e. the more emotionally stable persons (lower score) tended to be higher on most of the personality traits studied, except that this perceptual task naturally correlated positively with the personality test of emotional stability (.06), though not significant, as expected, and completely zero correlation with the traits of happy-go-lucky nature and 'neuroticism'.

Inspection of results in sub-groups reveals that emotional recall (lower score, i.e. emotional stability) correlated significantly and positively (.33 significant at .05 level) with happy-go-lucky nature, i.e. being more serious (lower score) in case of UMS group; also with introversion (.27) i.e. being more extravert (lower score) in case of RFC group; again with neurotism (.29), i.e. being less neurotic (lower score) in case of RMC group; with inward hostility - SR (self-reproachment) type (.28) i.e. being less self-reproaching (lower score); with paranoid hostility (.31), i.e. being less hostile (PH type) in case of RFS group; and with suggestibility (.27) i.e. being less suggestible in case of UMC group. It had significantly negative correlation with neuroticism (- 40

significant at .01 level) i.e. being more neurotic in case of UMS group (in contrast to obtained and expected positive relation as for RMC group ; again negative relation with outward acute hostility - AH type (-.33); i.e. being more hostile; also with paranoid hostility (-.37) significant at .01 level), i.e. being more hostile - PH type in case of RMC group, in contrast to obtained and expected, positive correlation as for RFS group; and also with suggestibility (-.43) significant at .01 level, i.e. being more suggestible, in case of RFS group, in contrast to expected and obtained positive correlation as in case of UMC group. Some discripancies in results expected may be attributed to specific tools and sample.

In short, the emotionally stable on perceptual task was found in some cases to be more serious, more extravert and less self- and more hostile (AH type); remorseful; while he exhibited both ways on being more or less neurotic, hostile (PH type) and suggestible.

5.13. Form-Colour Dominance Test and Different Personality Traits

Next the scores on the Form-Colour Dominance Test (No. of form or colour responses in recall of figures) were correlated with the scores on various personality traits. Higher score on Form indicates form dominance, and higher score on colour is an index of a colour dominance. The summary of coefficients of correlations is presented in Tables 16 and 17 for form dominance and colour dominance respectively.

Table 16 : Showing the Correlation between Perceptual Task : Form Colour Dominance Test (Form-Dominant) and Different Personality Traits of Total Sample as well as Sub-groups

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Happy-go-lucky/seriousness	-.00	.25	-.10	.02	.02	-.10	.09	-.32*	.12
Self-sufficiency/Dependency	-.00	.21	.34*	.03	-.16	.09	-.05	-.32*	-.13
Dominance-Submission	-.10*	-.44**	.24	-.08	-.11	.10	-.31*	-.05	-.06
Leadership	-.03	-.33*	.02	-.11	.20	.10	-.01	.14	-.22
Introversion-Extraversion	-.03	-.23	.11	-.07	.07	.07	-.14	-.27*	.24
Radicalism-conservatism	-.05	-.26	.21	-.25	-.08	-.12	-.10	-.10	.26
Neuroticism	.02	-.09	-.03	.08	.14	.11	-.07	.09	-.07
Hostility or Aggressiveness (Self criticism or lack of confidence -SC.)	.05	.07	.25	.02	.06	-.18	.27*	-.22	.24
Hostility or Aggressiveness (Self abasement or self-humiliation or lowering of self-General guilt feeling-self-fault finding - SA.)	-.02	-.17	.13	-.00	-.05	.14	-.18	-.17	.04
Hostility or Aggressiveness (Self-reproachment or self-remorse - Severe guilt feeling - SR.)	-.03	.02	-.02	-.30*	-.17	-.03	.13	-.08	.22
Hostility or Aggressivenss (Impunitive hostility - passive,condoned type of hostility directed to others - IH.)	-.06	-.04	-.04	-.03	-.04	.06	-.09	-.07	.19

(continued)

(Table 16 continued)

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Hostility or Aggressiveness (Acute and active hostility directed to others - AH.)	-.00	-.07	.14	.05	.09	-.20	-.08	-.02	.20
Hostility or Aggressiveness (Paranoid hostility - delusional hostility directed to others - he feels that others attack or after him. - PH.)	.04	-.02	.09	.18	.06	.05	-.03	-.07	-.04
Emotional stability	.07	-.19	.06	.14	.04	.21	.25	-.05	.27*
Honesty	.01	.23	.03	-.10	.16	.12	-.20	-.07	-.05
Masculinity-Feminity	.01	.01	.25	-.15	.27*	-.06	-.01	.07	.28*
Sex interest	-.08	.36**	-.07	-.08	.21	.11	-.28*	-.04	-.23
Rigidity-flexibility	.04	.14	-.15	.11	.15	-.00	-.13	.05	.10
Suggestibility	-.04	.12	.15	.07	-.03	-.05	-.07	-.00	.11

* Significant at .05 level ** Significant at .01 level.

U = Urban R = Rural M = Male F = Female

S = School going C = College going

(a) Form Dominance :

It would be revealed from the results in Table 16 that form dominance (higher score on form recall) had a significantly negative correlation (-.10) with dominant nature of an individual, i.e. a form-dominant person was less dominant in nature. There was no other correlation significant on the whole.

As far as the results of subgroups were concerned, form dominance showed significantly a positive relation with self-sufficiency (.34) i.e. being more self-sufficient in case of UFS group; again with inward hostility - SC type (lack of self-confidence (.27) i.e. being more lacking in self-confidence and more self-critical in case of UFC group; also with emotional stability (.27) i.e. being more emotionally stable in case of RFC group; also with masculinity (.27 and .28 respectively), i.e. being more masculine in case of RFS and RFC groups; and also with sex interests (.36 significant at .01 level), i.e. having more sex interests in case of UMS group.

Further, form dominance had significantly negative correlation with 'happy-go-lucky' nature (-.32), i.e. being more serious in case of RMC group; also negative correlation

with self-sufficiency (-.32) i.e. being less self-sufficient in case of RMC group (in contrast to obtained positive correlation for UPS group); also with dominance (-.44 significant at .01 level and -.31 significant at .05 level respectively) in case of UMS and UFC groups, i.e. being less dominant and obtained also in case of the total sample; also negatively related with leadership (-.33) i.e.being less of a leader, in case of UMS group; with introversion (-.27) i.e. being more extravert in case of RMC group; with inward hostility self-reproachment type (-.30) i.e. being less self-remorseful in case of RMS group; and also with sex interests (-.28) i.e. having less sex interests in case of UFC group, (in contrast to highly positive correlation for UMS group.)

In short, form dominant individual was on the whole less dominant, and in some cases was more serious, less of a leader, more extravert, more lacking in self-confidence or more self-critical, less self-remorseful, more emotionally stable, and more masculine; while the form dominant person in some cases manifested both tendencies to be more and less self-sufficient and to have more as well as less sex interests.

(b) Colour Dominance :

Next, the results on colour dominance in Table 17 reveal that not a single correlation between colour dominance and

Table 17 : Showing the Correlation between Perceptual Task : Form-Colour Dominance Test (Colour Dominant) at Different Personality Traits of Total Sample as well as Sub-groups

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Happy-go-lucky / seriousness	-.05	-.07	.13	-.03	.13	.15	-.09	.26	-.18
Self-sufficiency/Dependency	-.01	-.15	-.09	-.03	-.05	.10	-.12	.27*	.04
Dominance-Submission	.00	.34*	-.29*	.11	.08	-.03	.12	-.07	-.19
Leadership	.04	.09	.12	.06	-.07	-.03	.02	.15	-.01
Introversion-Extraversion	.05	.08	.12	.05	-.16	-.07	.04	-.22	.06
Radicalism-conservatism	.00	.01	-.12	.14	-.12	.16	-.25	-.12**	-.35**
Neuroticism	.01	.13	.09	.25	-.24	-.19	-.08	-.19	.12
Hostility or Aggressiveness (Self criticism or lack of confidence - SC.)	.00	.01	- .20	.24	- .10	.13	-.05	.38**	-.26
Hostility or Aggressiveness (Self abasement or self-humiliation or lowering of self-fault finding - SA.)	.06	.26	-.12	.25	.06	-.15	.28*	.20	-.17
Hostility or Aggressiveness (Self-reproachment or self-remorse - Severe guilt feeling - SR.)	.04	.21	.13	.28*	.11	.04	-.23	-.07	-.07
Hostility or Aggressiveness (Impunitive type or hostility directed to others - IH.)	-.05	.13	-.08	-.09	.03	.07	.05	-.13	-.24

(continued)

(Table 17 continued)

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Hostility or aggressiveness (Acute and active hostility directed to others-) AH.)	.08	.42**	.10	.21	.05	.13	-.01	-.01	-.31*
Hostility or aggressiveness (Paranoid hostility - delusional hostility directed to others - he feels that others attack or after him. - PH.	-.06	-.02	-.03	-.13	.04	-.04	-.23	-.02	-.02
Emotional stability	.03	.21	-.08	.14	.15	-.14	-.01	.21	-.23
Honesty	.03	-.04	.10	.16	-.34*	-.06	.30*	-.01	.02
Masculinity-Feminity	- .06	-.04	-.32*	.10	.26	.04	-.03	.03	-.46**
Sex interest	.05	.16	.24	.00	-.00	-.20	.20	-.14	-.09
Rigidity-flexibility	-.07	-.14	.19	-.05	-.45**	.21	-.03	- .06	-.19
Suggestibility	-.06	-.25	-.12	-.15	.18	.01	-.12	.33*	-.14

* Significant at .05 level ** Significant at .01 level.

U = Urban R = Rural M = Male

F = Female S = School going C = College going

any one personality trait when data of the total sample were analysed. However, the examination of results of sub-groups shows significant relations in some cases. Thus, the colour-dominance was found to be significantly and positively correlated with self-sufficiency (.27), i.e. being more self-sufficient in case of RMC group (to be compared with preceding finding regarding the form-dominant being more self-sufficient in case of UFS group and less sufficient in case of RMC group); similarly positive correlation was obtained with dominance in nature (.34), i.e. being more dominant in case of UMS group, but at the same time it showed negative correlation with dominance (-.29), i.e. being less dominant in case of UFS group. This can be contrasted with earlier finding that form dominant was always less dominance in nature. Further, colour dominance was positively correlated with inward hostility - SC type (.38 significant at .01 level), i.e. being more lacking in self-confidence or being more self-critical, in case of RMC group; it should be noted that the form dominant also was more self-critical.

Further, the colour dominance showed positive relation with inward hostility - self-abasement type (.28), i.e. being more self-humiliating in case of UFC group; it had also

positive correlation with inward hostility - self-reproachment type (.28), i.e. being more self-remorseful in case of RMS group; this finding can be contrasted with earlier finding that the form dominant was less self-remorseful in case of RMS group. Next, the colour dominance was positively correlated with paranoid hostility (.42 significant at .01 level) in case of UMS group, but at the same time negatively correlated with it (-.31) in case of RFC group, thus sometimes showing more and sometimes less paranoid hostility; the form dominant showed no such trend. Similarly it showed both positive correlation (.30) and negative correlation (-.34) with honesty in case of UFC and RFS groups respectively, i.e. sometimes being more honest and sometimes less honest. There was no such trend with the form dominant. And again the colour dominance had positive relation with suggestibility (.33), i.e. being more suggestible in case of RMC group.

Next, the colour dominance had significantly negative correlation with radicalism (-.35 significant at .01 level), i.e. colour dominant being less radical in case of RFC group; it has also negative correlation with masculinity (-.32 significant at .05 level and -.46 significant at .01 level), i.e. being less masculine, in case of respectively UFS and RFC groups. It should be noted here that the form dominant was found

earlier to be more masculine in RFS and RFC groups. And it had also negative correlation with rigidity (-.45 significant at .01 level), i.e. being less rigid in case of RFS group.

In other words, the colour dominant individual was in some cases more self-sufficient, more self-critical or more lacking in self-confidence, more self-humiliating, more self-remorseful, (in all cases more inwardly hostile), more suggestible, less masculine and less rigid, while in some cases the colour dominant showed both tendencies to be more as well as less dominant, acutely hostile (AH type), and honest.

Subjects showed individual differences in colour or form dominance, and the same finding is confirmed by Granger(66).

5.14. Embedded Figure Test and Different Personality Traits

Finally, the scores on the embedded figure test were correlated with scores on various personality traits. Lower score in terms of time taken on the embedded figure test reflected quickness or speed of ability to sort out specific figures from a complex of embedded figures, i.e. less of field dependence and more of field independence. The summary of all these coefficients of correlations is presented in Table 18.

An inspection of the results in Table 18 reveals that when data of the total sample of 400 subjects were analysed to

Table 18 : Showing the Correlation between Perceptual Task : Embedded Figure Test and Different Personality Traits of Total Sample as well as Sub-groups

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Happy-go-lucky / seriousness	.04	.22	-.08	-.11	-.00	.02	.13	-.04	.08
Self-sufficiency / Dependency	-.03	.08	-.05	-.06	-.13	.05	-.06	.04	-.24
Dominance-Submission	-.06	-.27*	.32*	.14	-.02	-.05	.01	-.00	-.15
Leadership	.07	-.05	.19	.34*	.03	.13	.20	-.07	-.21
Introversion-Extraversion	.01	.04	.02	-.01	-.23	.08	.05	.07	.06
Radicalism-conservatism	.05	.05	.12	.19	-.16	.33*	-.09	.15	-.11
Neuroticism	.01	.26	.02	-.22	.19	-.22	-.18	-.02	-.03
Hostility or Aggressiveness (Self criticism or lack of confidence-SC.)	.06	.05	.00	.02	.28*	-.03	.02	.16	.01
Hostility or Aggressiveness (Self abasement or self-humiliation or lowering of self-fault finding - SA.)	-.02	-.11	-.27*	.01	-.06	.07	.29*	-.14	.00
Hostility or Aggressiveness (Self-reproachment or self-remorse - Severe guilt feeling - SR.)	-.03	.14	-.10	.05	-.17	.14	-.02	-.18	-.07
Hostility or Aggressiveness (Impunitive type or hostility directed to others - IH.)	.05	.22	.01	.09	-.08	.03	.16	-.10	.06

(Continued)

(Table 18 continued)

Personality Traits	Total Sample N=400	UMS	UFS	RMS	RFS	UMC	UFC	RMC	RFC
		n = 50							
Hostility or aggressiveness (Acute and active hostility directed to others- AH.)	-.01	.01	-.01	.03	.13	.02	-.06	-.12	-.13
Hostility or Aggressiveness (Paranoid hostility - delusional hostility directed to others - he feels that others attack or after him. - PH.	-.01	.02	-.13	-.10	.30*	-.07	-.19	.01	-.05
Emotional stability	-.02	-.31*	-.18	-.10	.15	.07	-.08	-.18	.39**
Honesty	.08	.12	.08	.05	.30*	.09	.34*	-.01	-.44**
Masculinity-Feminity	-.02	-.18	-.11	.09	.05	.13	-.34*	.00	.28*
Sex interest	.03	-.08	-.04	-.31*	.13	.31*	.18	-.08	.05
Rigidity-flexibility	-.01	.03	-.09	.01	-.09	.18	-.08	.13	-.16
Suggestibility	-.06	.01	-.41**	-.22	-.18	.08	.06	-.09	.42**

* Significant at .05 level ** Significant at .01 level

U = Urban R = Rural M = Male F = Female S = School going

C = College going

compute correlations, not a single significant correlation was found between this perceptual ability or field-dependence-indepndence and any of personality traits studied. However, the closer examination of the results in subgroups showed significant relations in some cases. Thus, this perceptual task or ability to search for figures was significantly and positively related to personality trait of dominance (.32) in case of UFS group, but also negatively to it (-.27) in case of UMS group; i.e. the field independent (with lower score) were less dominant (lower score showing positive relation) in UFS group and more dominant in UMS group. Next, field independence (lower score) was positively related to leadership (.34), i.e. the field independent were less of leader (lower score showing positive relation) in case of RMS group. Again, the field-independence (with lower score) was positively related to radicalism (.33), i.e. the field independent were less radical (lower score showing positive relation) in case of UMC group. The field-independence (lower score) had again positive correlation with inward hostility - self - criticism or lack of self-confidence - SC type (.28) in case of RFS group, i.e. the field independent were less self-critical or less lacking in self-confidence

(lower score showing positive relation). Again the field independence (lower score) had positive correlation with inward hostility-self-abasement type (.29) in case of UFC group, but negative correlation with it (-.27) in case of UFS group, i.e. the field-independent were less self-humiliating in case of UFC group and more self-humiliating in case of UFS group (lower score showing positive relation and higher score showing negative relation). Again, the field-independence (lower score)was positively related to paranoid hostility (.30) in case of RFS group, i.e. the field independent were having less paranoid hostility (lower score showing positive correlation). Next, it had positive significant relation with emotional stability (.39 significant at .01 level) in case of RFC group, but negative relation with it (-.31) in case of UMS group, i.e. the field-independent (with lower score) were less emotionally stable (lower score showing positive relation) in case of RFC group and were more emotionally stable (higher score showing negative correlation) in case of UMS group. Further, it had positive correlation with honesty (.30 and .34 respectively) in case of RFS and UFC groups while negative relation with honesty (-.45 significant at .01 level) in case of RFC group,

i.e. the field-independent (with lower score) were less honest in case of RFS and UFC groups and more honest in case of RFC group (lower score showing positive relation and higher score showing negative correlation). Similarly, it has positive correlation with masculinity (.28) in case of RFC group and negative correlation with it (-.34) in case of UFC group, i.e. the field independent (with lower score) were less masculine in case of RFC group and more masculine in case of UFC group. Again, the field independence showed positive relation with sex interests (.31) in case of UMC group and negative relation with sex interests (-.31) in case of RMS group, i.e. the field independent (with lower score) were having less sex interests in case of UMC group and more sex interests in case of RMS group (lower score showing positive relation and higher score negative relation). Finally, the field independence had significantly positive relation with suggestibility (.42 significant and .01 level) in case of UFS group, i.e. the field-independent (with lower score) were less suggestible in case of RFC group and more suggestible in case of UFS group (lower score showing positive relation and higher score showing negative relation). It appears that the field-independence had mostly both positive

as well as negative relations with the same personality traits in some cases.

In short, the field-independent were in some cases being less of a leader, less radical, less self-critical (more self-confident) and having less paranoid hostility; while in most cases they were exhibiting the personality traits in both directions, i.e. more as well as less of traits, viz. dominance, self-abasement, emotional stability, honesty, masculinity, sex interests and suggestibility.

These findings on the relation between field-independence and personality traits in the present study can be compared with the findings in studies by Nunally[112], Blumberg Morton[13] and Witkin[158], though undertaken no doubt, in different contexts (as quoted in earlier chapter). For example, Nunally found that the field dependent individuals were dependent in social behaviour. Blumberg Morton using embedded figure test observed that the creative persons showed field independence, and females were dependent, while males were not to the same extent. Witkin relating the scores on embedded figure test with various personality traits (from clinical interview) noted that the field dependent individuals showed lack of insight, repress their

impulses, tend to be passive, tense and have inferiority feeling; the field-independent individuals exhibited self-awareness, expressed impulses directly, tended to be active and were self-assured. On the basis of results from the figure drawing test, Witkin further observed that the field-dependent showed defence against anxiety, lack of self-assurance, uncontrolled hostility and experienced difficulty to act as adult; the field independent showed sophisticated defence against anxiety, self-assurance, identification with desire characteristic and strong drive to control drives. On the basis of T.A.T. results, Witkin marked that the field-dependent individuals were unassertive in dealing with the problem; their stories ended with the unfavourable to the central character; the field-independent created stories with self-assertiveness. All these findings were noted in contexts and tests different from those in the present study, yet they are relevant to the present study as all these cast light on the same problem from different angles.

This brings an end to the discussion on the main study of relation between perception and personality, both assessed with some tools. It is felt that the present undertaking has made some independent and original contribution to the existing

literature on this much studied problem. Much yet remains to be investigated to shed sufficient light on some controversial issues. The present study has its limitations too and yet in a different context it has attempted to add some new material to the stock of knowledge available. For ready reference, the next and final chapter is devoted to the summary of the work done, along with some suggestions for continuing the work to fill up gaps in the present undertaking.