CHAPTER VI

RESULTS AND DISCUSSION

The main purpose of study has been to evaluate the varied forms in which the personality inventory is studied.

As noted in the preceding chapter, data scores were obtained on six personality traits or factors included in the personality inventory administered in a counter-balanced design to the groups under two different conditions, i.e. in two different forms described earlier. The pairs of test forms studied were,

1) 'Honest response form v/s the 'Socially desirable' response form (as implied in the instructions given to subjects before their responding to test-items in the inventory).

2) The question form v/s the statement form (as observed in the test item), and

3) The two catagory response form v/s the three catagory response form (as seen in the test response)

The data were analysed with respect to the following six personality traits:

(1)	Neurotic tendency	(B1-N)
(2)	Self sufficiency	(B2-S)
(3)	Introversion-Extraversion	(B3-I)
(4)	Dominance - Submission	(B4-D)
(5)	Confidence	(F1-C)
(6)	Sociability	(F2-S)

In order to find out the significance of difference between the means of scores in any pair of forms, these scores were subjected to adequate statistical analysis, viz. 't' - test for correlated groups, and results have been discussed in the following lines. The inclusion of both boys and girls in the sample enabled the investigator to study also the sex differences.

I. 'Honest response form v/s 'Socially desirable' response form

Data on all six personality traits obtained from the inventory set, scored as per standard procedure given by test author, were statistically analysed separately for each form viz. 'Honest' response form and 'Socially desirable' response form (as implied in test instructions), their means and standard deviations were computed for each form with respect to each trait separately, and finally 't' test was applied to study the significance of difference between the two means of two forms with respect to each trait or factor. The total sample that was administered in test consisted of 60 subjects including 32 boys and 28 girls. The details of calculations are given in the appendix at the end in Appendix 1 (a), (b), (c), (d), and (e), for each trait separately. The following tables, 1-(a), 1-(b), 1-(c), 1-(d) and 1-(e) present the summery of necessary Statistics on each trait for two types of test instructions given before eliciting the responses. The table 1-(a) summarizes results of 'Honest' - 'Socially desirable form for the total sample (N 60), table 1-(b) for boys (N 32), table 1-(c) for girls (N 28), table 1-(d) shows results on sex differences on 'Honest' response form and 1-(e) shows results on sex differences on Socially desirable responses form.

Table 1 (a) showing results of H-S form for total sample (N 60)

Factors	Honest response form		Socially desirable response form		r	t	Level of significance for 't'
	M_1	SD_1	M_2	SD_2			
B1-N	2.21	66.96	-35.53	87.15	0.166	2.903	Significant at .01 level
B2-S	- 1.76	36.23	21.47	39.21	0.0647	3.485	Significant at .01 level
B3-I	- 3.10	40.17	-28.48	39.18	0.0295	4.736	Significant at .01 level
B4-D	16.28	52.69	56.51	55.75	0.436	5.272	Significant at .01 level
F1-C	29.76	62.32	-28.23	82.29	0.132	4.658	Significant at .01 level
F2-S	1.71	63.73	-34.30	70.84	0.028	3.37	Significant at .01 level

Table 1 (b) showing results of H v/s S form for boys (N 32)

Factors	Honest response form		Socially desirable response form		r	t	Level of significance for 't'
	M1	SD1	M2	SD2			
B1-N	-5.03	66.25	-26.78	95.84	.19	1.16	Not significant
B2-S	2.43	36.61	18.06	39.97	.15	1.77	Not significant
B3-I	-8.93	36.37	-33.09	41.13	.10	2.62	Significant at .05 level
B4-D	32.71	50.93	64.62	68.58	.50	2.83	Significant at .01 level
F1-C	17.56	67.06	-22.50	89.35	.35	2.51	Significant at .05 level
F2-S	4.93	42.70	-26.28	39.97	.014	3.04	Significant at .01 level

Table 1 (c) showing results of H v/s S form for Girls (N 28)

Factors	Honest response form		Socially desirable response form		r	t	Level of significance for 't'
	M1	SD1	M2	SD2			
B1-N	10.50	67.10	-45.53	74.79	.12	3.14	Significant at .01 level
B2-S	-6.57	35.14	25.35	37.96	.059	3.17	Significant at .01 level
B3-I	3.57	44.22	-23.22	40.76	.19	2.68	Significant at .05 level
B4-S	18.90	53.69	47.25	58.57	.37	2.38	Significant at .05 level
F1-C	43.71	69.82	-34.68	74.50	.17	4.46	Significant at .01 level
F2-S	-1.96	58.10	-43.46	40.27	.32	4.06	Significant at .01 level

Table 1 (d) showing sex differences on 'Honest' form

Factors	Boys		Girls		t	Level of significance
	M	SD	M	SD		
B1-N	-5.03	66.25	10.50	67.10	0.899	Not significant
B2-S	2.43	36.61	-6.57	35.14	0.970	Not significant
B3-I	-8.83	36.37	3.57	44.22	1.220	Not significant
B4-D	32.71	50.93	18.90	53.69	1.017	Not significant
F1-C	17.56	67.06	43.71	69.82	1.475	Not significant
F2-S	4.93	42.70	-1.96	58.10	0.517	Not significant

Table 1 (e) showing sex differences on 'Socially desirable' form

Factors	Boys		Girls		t	Level of significance
	M	SD	M	SD		
B1-N	-26.78	95.84	-45.53	74.79	0.849	Not significant
B2-S	18.06	89.97	25.35	37.96	0.723	Not significant
B3-I	-33.09	41.13	-23.22	40.76	0.936	Not significant
B4-S	64.62	68.58	47.25	58.57	1.058	Not significant
F1-C	-22.50	89.35	-34.68	74.00	0.579	Not significant
F2-S	-26.18	39.97	-43.48	40.27	1.654	Not significant

The mean and Standard deviation in each case were computed. While applying the 't' test to these results, one has to take into consideration the formula meant to test related groups, since subjects in both the forms were the same. Hence, correlation coefficient (r) between the two was also computed and then 't' ratio was obtained. At the same time, data were so arranged that differences were also studied. All these values have been summarized in table 1 (a), (b), (c), (d), and (e). We are here not much concerned with the evaluation of groups of subjects but with the examination of tools used, and hence instead of discussing the performance of subjects, the discussion is restricted to study the influence of tools on the performance.

Thus as revealed from the results summarized in table No. 1(a), the two forms of the inventory, i.e. two types of instructions viz. 'Honest' response oriented and 'Socially desirable' response oriented instructions differed from eachother very significantly as far as the responses of the total groups of subjects

were concerned. These two forms were significantly different in case of each of the six personality factors. In other words, it can be inferred from the results that, whenever any test is administered, the type of test instructions given influences considerably or makes a lot of difference in the performance scores. The socially desirable response set tends the subject to raise the score. This was observed consistently not only with respects to results in each of six personality factors, in case of total sample, but also mostly in case of boys (table 1-(b))and girls (table-1 :c:). When the similar computations were done for analysing the data of boys and girls separately, except that the two types of instructions did not differ significantly in case of the performance of boys on B1 (neurotic tendency) and B2 (Self-sufficiency) traits. It is strange and unaccounted for that these two forms of instructions did not influence the scores on these B1-N and B2-S traits in case of boys only, when all other scores were influenced, may it be by chance, the subjects were not attentive then. Or, it may be that boys might be viewing both forms

equally without bias in case of these two traits. Anyway, it can be said in general that subjects are carried away by response bias or instruction-set, that the type of instructions given while administering a test or the set produced by the instructions is usually an important factor determining the test performance. In all cases 'Socially desirable' response orientation tends the subjects to show oneself. When the subject receives 'Socially desirable' response oriented instructions, he or she naturally has a tendency to tick-mark more such responses and raise score in order to be more acceptable and less deviant. This implies that the tester should use objective, not leading nor suggestive instructions in order to gain a truely reliable picture of an individual testee.

Further, the comparision of results of boys and girls as given in table 1-(b) and 1-(c) and rearranged in table 1-(d) and 1-(e) would point out to some of the sex differences observed. A casual observation of these comparative results would show that girls tended to show off more than

boys under 'Socially desirable' response form in most traits, and particularly in first two traits, (B1-N and B2-S) in which respect the two forms did not differ in case of boys, as observed earlier. However, the results of statistical analysis given in table No. 1-(d) and 1-(e) reveal that there were no Statistically significant difference between boys and girls in the extent of their being influenced by the 'Honest' and 'Socially desirable' response oriented instructions. There was no doubt that there was the influence of instructions as discussed in the earlier section, but on each of six traits, both boys and girls were influenced almost equally under both types of instructions, though the girls apparently tended to be influenced somewhat more by 'Socially desirable' response oriented instructions, On not a single traits, there was significant sex difference influence from any of the two types of instructions.

From the above results, it can be concluded that different instructions given to the subjects while responding to any test bring about significant differences in their responses whether they be boys or girls, this is as if the instructions create a

sort of response set or bias that prepares the subjects to respond to the test situation in accordance with the way in which they perceive the situation which is now changed psychologically, but which is literally the same. Under Socially desirable response - oriented instructions, it is natural that subjects give more socially desirable responses in order to make good impressions on the investigator or administrator of the test, consciously or unconsciously avoiding to give simply honest or frank response to the tester inspite of established rapport.

Similar studies have been undertaken by different investigators in the similar type of research situation, and results have been confirming the similar findings. In one study by Rosen (1956) the subjects were given a shortened form of MMPI under similar two conditions, i.e. under standard instructions to provide self-description and under instructions to give what he has called personally desirable responses. His results confirm the findings of the present research.

In a similar investigation by Kaoru Yamamote and Henry F. Dizney, the Kuhlmana-Anderson Test was administered to a total of 557 subjects of the fourth, seventh, tenth and twelfth grades under three different

instructional sets, viz. as an intelligence test, as a test of achievement and as a routine test. Because of the different social emphases upon intelligence and achievement when the results were converted into deviation IQs and analysed by the Statistifal technique of analysis of variance, it was found that the mean IQ obtained by the intelligence group was significantly higher than that obtained by the 'achievement' group and the routin group.

Similar attempt to study the instructional set has been made by Sticker. 'Test wiseness on self-report personality scales was explored, using measures of accuracy in estimating the frequency of endorsement of personality items, estimating their social desirability and identifying and 'Keying items that measured the same factor as well as indexes of ability to change scores on standard personality scales when they were administered with fake-good and fake-bad instructions. These variables generally did not correlate with each other and they had only moderate and scarred correlation with personality scales administered with standard instructions. All these point: out to the role of instructional set in influencing the response.

II. 'Question' form v/s 'Statement' form:

Next, the scores on two types of forms of the personality inventory administered to groups of subjects at suffcient interval in a counter-balanced design were statistically analysed separately for each of two forms, viz. Question form and Statement form of the test items. As shown in the earlier section, the means and Standard deviations with respect to each of six traits or factors were computed separately and the 't' test (formula for related groups) was applied to study differences in two forms in case of each factor. The total samples consisted of 100 subjects including 53 boys and 47 girls. The following tables 2-(a), 2-(b), 2-(c), 2-(d) and 2-(e) summarize the results arrived at from this Statistical analysis of data on each trait for two forms of test items, viz. Question form and Statement forms. Table 2-(a), reveals results for total sample (N 100), table 2-(b) for boys (N 53), table 2-(c) for girls (N 47), table 2-(d) and table 2-(e) show results on sex difference on Question form and on Statement form respectively.

Table 2 (a) showing results of Q v/s S form for total sample (N 100)

Factors	Question form M1	Question form SD1	Statement form M2	Statement form SD2	r	t	Level of significance for 't'
B1-N	-9.05	61.92	-1.07	78.40	.061	.786	Not significant
B2-S	2.15	40.83	7.47	41.95	.067	.94	Not significant
B3-I	-1.65	39.75	-7.08	45.01	.455	1.221	Not significant
B4-D	28.49	52.61	27.80	57.03	.617	.143	Not significant
F1-C	27.00	73.92	25.49	78.62	.6337	.231	Not significant
F2-S	9.29	60.03	-2.60	65.47	.2269	1.521	Not significant

Table 2 (b) showing results of Q v/s S form for boys (N 53)

Factors	Question form		Statement form		r	t	level of significance for 't'
	M1	SD1	M2	SD2			
B1-N	-27.07	69.00	-35.94	76.07	.26	0.75	Not significant
B2-S	8.20	39.39	21.18	40.56	.69	3.02	Not significant at .01 level for 't'
B3-I	-8.35	37.40	-22.09	39.88	.37	2.31	Significant at .01 level
B4-D	40.77	50.80	47.79	53.69	.52	.997	Not significant
F1-C	11.60	66.11	-1.45	79.73	.62	1.44	Not significant
F2-S	-1.80	50.85	-12.33	62.46	.10	1.002	Not significant

Table 2 (c) showing results of Q v/s S form for girls (N 47)

Factors	Question form M1	Question form SD1	Statement form M2	Statement form SD2	r	t	Level of significance for 't'
B1-N	11.28	69.17	17.65	70.95	0.76	0.90	Not significant
B2-S	-4.68	41.66	-7.52	41.51	0.62	0.56	Not significant
B3-I	5.90	41.11	9.85	44.44	0.48	.78	Not significant
B4-D	14.63	51.15	5.25	52.07	0.65	1.49	Not significant
F1-C	44.36	73.87	55.87	66.26	.59	1.24	Not significant
F2-S	21,82	66.74	8.39	67.04	.33	1.19	Not significant

Table 2 (d) showing results of sex differences on 'Question'form

Factors	Boys		Girls		t	Level of significance for 't'
	M1	SD1	M2	SD2		
B1-N	-27.07	69.0	11.28	69.17	2.853	Significant at .01 level
B2-S	8.20	39.39	-4.68	41.66	1.582	Not significant
B3-I	-8.35	37.40	5.90	41.11	1.80	Not significant
B4-D	40.77	50.80	14.63	51.15	2.558	Significant at .05 level
F1-C	11.60	66.11	44.36	73.87	2.267	Significant at .05 level
F2-S	-1.80	50.85	21.82	66.74	1.971	Not significant

Table 2 (e) showing sex differences on 'Statement' form

Factors	Boys		Girls		t	Level of significance for 't'
	M1	SD1	M1	SD2		
B1-N	-35.94	76.07	17.65	70.95	3.643	Significant at .01 level
B2-S	21.18	40.56	-7.52	41.51	3.65	Significant at .01 level
B3-I	-22.9	39.88	9.85	44.44	3.76	Significant at .01 level
B4-D	47.79	53.69	16.25	52.07	4.02	Significant at .01 level
F1-C	-1.45	79.73	55.87	66.26	4.92	Significant at .01 level
F2-S	-12.33	62.46	8.39	67.04	1.59	Not significant

The results in tables 2-(a),(b) and (c) show that in case of total sample as well as in case of boys and girls separately, the two forms did not differ significantly on any of the traits, except in case of boys on B2-S (Self-sufficiency) and B3-I (Introversion-extraversion) traits. This means that the subjects responded equally to both question form and Statement form. Whether you ask to respond to a question form or ask to tickmark the response to a statement, it makes no difference for the subjects. This is usually expected, since subjects are almost equally or similarly involved in both forms, the response to a question in a first person statement and the statement form to be responded is also of the same type. This perhaps accounts for lack of significant difference in this case. The obtained significant difference between Q-S form only on B2-S and B3-I traits in case of boys seems unexpected.

Further, responses on question form and statement form were examined and analysed to find out whether boys differed from girls in their responses to any of the form. The results are summarized in table 2-(d) and 2-(e). It is observed that on question

form boys did differ from girls with respect to responses to B1-N, B4-D, and F1-C, but not to B2-S, B3-I, and F2-S. On Statement form there were significant sex differences with respect to responses on almost all traits excepting F2. On some traits boys scoring more, on others girls scoring higher.

Anyway, the test form, whether a question or a Stetement, did not generally seem to affect the responses to a significant extent.

Studies by Stricker and Darrel D. Dawson as well as by Kapoor referred to earlier, deserve mention at this stage for comparative findings. The scientific focus of study by Stricker and Darrell D. Dawson was the differential effects of employing the first person and the third person instructions on the responses of males and females psychiatric in-patients to varied test forms as scored by an objective scoring system.

T The results showed no consistent differences in efficacy among various forms employed. The study by Kapoor also confirm mostly the findings of the present research. The purpose of Kapoor's

study was to compare responses to personality Questionnaire items on cattell's 16 P.F. test, when they were presented to the college students in the second person and also in the first person statement. He is found that changes from 'you' to 'I' in the item form made a significant difference in scores of only six out of sixteen factors, assessed through the questionnaire.

III. 'Two catagory' v/s 'Three catagory' response form:

Finally the personality inventory in the question form followed by two alternative responses viz. 'yes' or 'no' and the same inventory followed by the alternative responses, viz. 'yes' or 'no' or '?' (doubtful) to be tick-marked by subjects was administered to the group of subjects with a sufficient interval of about 20 days. The subjects were devided into two groups and two forms were administered in a counter-balanced design, as in earlier cases. The scores were again satisfactorily analysed separately for two types of forms, their means and Standard Deviations were computed and these were tested by 't' test to study the significance of the difference between the two means. All these results are presented in the tables 3(a),3(b),3(c), 3(d) and 3(e) respectively showing results for the total sample (N 100) for the boys (N 50) for the girls (N 50) and the results of sex differences on two catagory response form and three catagory response form.

Table 3 (a) showing results of 2cata. and 3 cata.response forms for total sample (N 100)

Factors	Two catagory response M1	SD1	Three cata. response M2	SD2	r	t	Level of significance for 't'
B1-N	-12.29	72.49	-26.12	68.65	0.3594	1.73	Not significant
B2-S	7.32	37.33	-8.00	30044	0.3676	1.848	Not significant
B3-I	.62	42.76	-2,29	38.46	0.5624	.676	Not significant
B4-D	41.43	43.00	11.37	43.09	0.5538	8.05	Significant at .01 level
F1-C	16.46	33.72	32.90	92011	0.67	1.58	Not significant
F2-S	-2.76m	75.77	-18.42	65.42	0.016	1.699	Not significant

Table 3 (b) showing results of 2-cata. and 3-cata. forms for boys (N 50)

Factors	Two catagory response		Three cata. response		r	t	Level of significance for 't '
	M1	SD1	M2	SD2			
B1-N	-38.66	66.87	-41.04	65.28	.51	.27m	Not significant
B2-S	14.86	31.37	-1,58	26.79	.70	5.07	Significant at .01 level
B3-I	-17.56	38.48	-8.60	41.70	.43	1.48	Not significant
B4-D	58.32	37.21	25.22	41.21	.48	5.83	Significant at .01 level
F1-C	-17.22	65.35	3.80	61.56	.51	2.36	Significant at .05 level
F2-S	-2.68	37.82	-26.82	82.02	.05	1.94	Not significant

Table 3 (c) showing results of 2-cata. and 3-cata. response forms for girls (N 50)

Factors	Two catagory response		Three catagory response		r	t	Level of significance for 't'
	M1	SD1	M2	SD2			
B1-N	12.08	67.88	-11.20	66.06	.80	0.694	Not significant
B2-S	-0.22	41.17	-14.22	32.45	.29	2.23	Significant at .05 level
B3-I	18.80	38.93	-4.02	33.73	.70	3.67	Significant at .01 level
B4-D	24.54	41.32	-2.48	40.39	.64	5.48	Significant at .01 level
F1-C	50.14	70.31	62.00	55.47	.06	0.96	Not significant
F2-S	-2.84	37.07	-10.02	10.04	.016	0.48	Not significant

Table 13(d) showing sex differences on two catagory responses

Factors	Boys		Girls		t	Level of significance
	M1	SD1	M2	SD2		
B1-N	-38.66	66.87	12.08	67.88	3.73	Significant at .01 level
B2-S	14.86	31.37	-0.22	41.17	2.06	Not significant
B3-I	-17.56	38.48	18.80	38.93	4.697	Significant at -01 level
B4-D	58.32	37.21	24.54	41.32	4.273	Significant at .01 level
F1-C	-17.22	65.35	50.14	70.31	4.961	Significant at -01 level
F2.-S	-2.68	37.82	-2.84	37.07	0.086	Not significant

Table 3 (e) showing sex differences on three-catagory responses.

Factors	Boys		Girls		t	Level of segnificance
	M1	SD1	M2	SD2		
B1-N	-41.04	65.28	-11.20	66.06	2.36	Significant at .05 level
B2-S	-1;58	26.79	-14.22	32.45	2.12	Significant at .05 level
B3-I	-8.60	41.70m	4.02	33.73	1.06	Not significant
B4-D	25.22	41.21	-2.48	40.39	3.394	Significant at .01 level
F1-C	3.80	61.56	62.00	55.47	4.966	Significant at .01 level
F2-S	-26.82	82.02	-10.22	10.04	1.092	Not significant

The results in tables 3(a), 3(b), and 3(c) reveal that these two forms viz. two catagory response form and three catagory response form differed significantly in the case of B4-D (Dominance-submission) as far as total sample is concerned. When analysed separately for boys and girls, these two forms differed significantly in case of B2-S (Self-sufficiency), B4-D (Dominance-submission and F1-C (confidence) for boys and B2-S (Self-sufficiency), B3-I (Introversion-extraversion) and B4-D (Dominance-submission) for girls. In other words, in some cases the responses on these two forms differed and in other cases they did not. It is diffic lt to explain such inconsistent results, unless it is in the nature of some traits only to elicit different responses when presented under different number of catagories. Anyway, such difference in the forms did not much influence the responses.

When same data were analysed to study sex differences, the results as presented in table 3(d) and 3(e) show that in case of two catagory response form, there were mostly significant sex differences, except on B2-S and F2-S traits, and in

case of three catagory response form boys differed significantly from girls in their responses on B1-N, B2-S, B4-D, and F1-C and not on others.

It should be noted that in the foregoing discussion, the attempt is made to point out mainly the differences, if any, between the two types of test items presented, differing only in form though same in content. Care is taken not to make out a case in favour of one form or the other since it is not the purpose of the study, and hence the greater or less amount of any mean has not been pointed out. It has been only said that the forms differed or not differed, and that the type of the form is the important or less important influencing factor as the case may be, when subjects are prepared to respond to the test item.

Out of all three pairs of forms studied, the 'Honest' v/s 'Socially desirable' response form showed definitely the significant differences, and the 'Socially desirable' response form or set was perhaps the most influencing factor.

Though it has not been included in the main work, it was casually revealed during the closer

scorings analysis of some items on the tests that the scores on some of the positively worded and negatively worded forms on the same items made a difference. It was felt that the subjects understood better positively-worded items being clearer while they seemed sometimes confused to respond the negatively worded items. In view of this a small separate sample of subjects was selected and three such forms viz. positive, negative and mixed test items of the same Personality Assessment Scale (PAS) of Dr. A.S. Patel were administered to these same subjects, devided into three sub-groups, in a counter-balanced design at different intervals. The analysis of results on this pilot study were encouraging to support the hunch about this form, but are not here presented, since the attempt was not planned earlier and it was not much adequate sample being too small. It is suggested that this inquiry should be followed up in a more systematic way for further research.