C H A P T E R - V

INTERPRETATION OF RESULTS

This chapter is divided into three parts. The first part deals with the comparison between treatment and non-treatment groups in respect of Self-esteem ( on the over all basis ), depressive affect and nine components of Dutt Personality Inventory measuring neurotic anxiety. The experimental and control group members are also compared on the overall measure of anxiety based on all the nine components of Dutt Personality Inventory. The data in this part have been analysed using co-variance analysis. The adjusted mean scores for the two groups have been computed separately for all the variables.

In the second section the analysis of the effects of the duration of treatment and the techniques employed on eighteen components of self-esteem is presented. For this purpose a 3 x 2 factorial design was used. As discussed earlier 18 different components of self-esteem were identified

by surveying the literature and relevant researches in the field. These 18 components relate meaningfully to the seven major components of self-esteem. The tool based on major seven components was used to assess self-esteem before and after the administration of treatments. Since, the interest was also in knowing the effects of treatment duration, the 18 component tool was used for assessing self-esteem at the end of 8th, 16th and 24th training sess- ions. A group of senior social work post-graduate students was thoroughly trained to look for an evidence for the existence of a component. The group of students observed the participants who were divided into small groups, and rated them on 18 components using a seven point scale ranging from most ( 7) to least ( 1 ), at end of each treatment session. The assessment of participants was on the basis of consensus among the observers at the end of each of the three levels of treatment duration viz. 8th 16th and 24th.

As discussed earlier two techniques were employed one of which was made up of role play/drama and the other was case presentation and discussion. The three levels of treat- ment duration and the two variations of techniques formed a 3 x 2 factorial design, which was used for analysis of each of the 18 components of self-esteem. This type of analysis was performed separately for the three levels of self-esteem

which was based on the seven major components. Self-esteem
as a variable in factorial design was not considered because
the dependent variables were the components of self-esteem.

In the third section the main and interaction effects
of self-esteem and techniques on nine anxiety dimensions
by Dutt's Personality Inventory and on measure
measure of depression are considered for analysis. It should
be recalled here that self-esteem was measured by having the
respondents sort the set of 49 statements belonging to seven
major areas twice following Stephenson's Q technique into seven
categories under two different instructions-one for self
sort and second for ideal self-sort. The two sets of scores
thus obtained for 49 statements were correlated for each
respondent. The magnitude of this correlation was considered
for the formation of high, moderate and low self-esteem
groups. The self-esteem groups were then subjected to the
treatment conditions for the three levels of treatment
duration. This resulted in a 3 x 2 factorial design. The
dependent variables were nine dimensions of Dutt Personality
and one measure of depression. The nine personality measu-
res together with the measure of depression were obtained
before giving treatment and also after giving treatment. It
was observed that all the scores showed marked shift in the
positive direction following treatment administration. For
this reason only the final scores, i.e. scores obtained
after treatment administration were considered for analysis.

Dutt Personality as has been reported in the test manual is a measure of general anxiety. Not only it gives the overall measure, it also gives separate scores on various components of anxiety. Moreover, it has been found that it can be used as a diahostic tool. It has been used as a base for counselling and also for therapeutic purpose. Although the test is named as Dutt Personality Inventory, it is used as a measure of general anxiety. In the present investigation it is used to know to what extent overall anxiety or various components measures of anxiety could be reduced due to treatment administration at each of the three levels of self-esteem. Secondly, it is used to know whether the two treatment techniques have any differential impact on anxiety reduction in general. Lastly, it is also intended to know whether the differential impact of the two treatment techniques, if any, is uniform or not across the three levels of self-esteem.

# P A R T - I

## TABLE - 1(A)

Comparison of Experimental and Control Groups
in respect of "Insecurity-Loneliness" Component
of Personality

| Source | df | Ss | MSs | F |
|--------|-----|-------|-------|---------|
| Between groups | 1 | 149.5 | 149.5 | |
| | | | | 27.18 * |
| Within groups | 98 | 539.0 | 5.5 | |

\* $p < .01$

## TABLE - 1(B)

### Adjusted Mean Scores

| Group | N | MX | My | My.X |
|-------|-----|------|------|--------|
| Experimental | 50 | 10.8 | 7.6 | 6.946 |
| Control | 50 | 8.94 | 11.4 | 12.054 |

GMX = 9.87

As can be seen from table-1 that the F ratio of
27.18 is significant beyond .01 level of confidence. Thus
the experimental group differs significantly from the control
group. Looking to the table of mean scores, the adjusted
mean of experimental group is 6.946 which is significantly
different from the mean score of 12.054 in case of control
group. As per the scoring procedure of Dutt Personality,
the higher score indicates the presence of the factor.
Accordingly, control group members appear to be more
insecured and alineated than the experimental group members.
The exposure to the treatment has resulted in decreasing
insecurity and loneliness to a significant extent.

## TABLE - 2 (A)

Comparison of Experimental and Control Groups
in respect of "Hopelessness" Component of Personality.

| Source | df | Ss | MSs | F |
|---|---|---|---|---|
| Between groups | 1 | 45.3 | 45.3 | |
| | | | | 22.69 * |
| Within groups | 98 | 200.8 | 2.04 | |

* $p < .01$

TABLE - 2(B)

Adjusted Mean Scores

| Group | N | MX | My | My.X |
|-------|---|-----|------|-------|
| Experimental | 50 | 11.4 | 7.52 | 7.57 |
| Control | 50 | 11.74 | 12.00 | 11.95 |

GMX =
11.57

Institutionalized juvenile delinquents are reported by social case workers of the agency to be suffering from feelings of 'hopelessness'. The results clearly indicate that the treatment given to them has resulted in reducing the degree of the symptoms. The adjusted mean score of 7.57 for the experimental group is significantly different than the adjusted mean score of 11.95 of the control group members.

TABLE - 3(A)

Comparison of Experimental and Control Groups in respect of "Inferiority Complex and Self Consciousness" Component of Personality.

| Source | df | Ss | MSs | F |
|---|---|---|---|---|
| Between groups | 1 | 901.1 | 901.1 | |
| | | | | 45.2 * |
| Within groups | 98 | 1952.1 | 19.9 | |

* $p < .01$

TABLE - 3(B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|---|---|---|---|---|
| Experimental | 50 | 14.54 | 9.14 | 9.005 |
| Control | 50 | 13.92 | 15.42 | 15.535 |

GMX = 14.23

As can be seen from table three, the experimental group which was exposed to the treatment, was more strongly and positively affected by the treatment in reducing the symptoms underlying the 'Inferiority complex and Self-consciousness' factor of personality. The F ratio of

45.2 is highly significant. The adjusted mean score of 9.005 for experimental group is significantly different from the mean score of 15.535 for the control group.

TABLE - 4(A)

Comparison of Experimental and Control Groups in respect of "Guilt-Proneness" Component of Personality.

| Source | df | Ss | MSs | F |
|---|---|---|---|---|
| Between groups | 1 | 383.1 | 383.1 | |
| | | | | 52.0 |
| Within groups | 98 | 721.9 | 7.36 | |

* $p < .01$

TABLE - 4(B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|---|---|---|---|---|
| Experimental | 50 | 7.1 | 5.08 | 5.557 |
| Control | 50 | 8.78 | 10.00 | 9.523 |

GMX = 7.94

As can be seen from table 4, the F ratio of 52.0 is significant beyond .01 level of confidence. Thus, the experimental group differs significantly from the control group. Looking to the table of mean scores the adjusted mean of the experimental group is 5.557 which is significantly different from the mean score of 9.523 in case of control group. As per the scoring procedure of Dutt Personality Test, the higher score indicates the presence of the factor to a greater extent. Accordingly, the control group members have greater degree of "Guilt-Proneness" compared to the experimental group members. The treatment administration has thus resulted in decreasing the "Guilt-Proneness" to a significant extent.

TABLE - 5(A)

Comparison of Experimental and Control Groups in respect of "Ergic Tension" Component of Personality

| Source | df | Ss | MSs | F |
|---|---|---|---|---|
| Between groups | 1 | 772.3 | 772.3 | 19.36 * |
| Within groups | 98 | 3908.8 | 39.88 | |

* p < .01

TABLE - 5(B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|-------|-----|-------|------|------|
| Experimental | 50 | 11.62 | 6.4 | 6.8 |
| Control | 50 | 13.34 | 12.8 | 12.4 |

GMX =
12.48

'Ergic Tension' has been the common problem among juvenile delinquents as observed by the probation officers of the institutions working for the juvenile delinquents. Experimental group which was given group counselling treatment could respond the treatment positively. The Mean scores of 6.8 of the experimental group differs significantly from the mean scores of 12.4 of the control group which was not exposed to the treatment.

TABLE - 6(A)

Comparison of Experimental and Control Groups in respect of "Paranoid suspiciousness" Component of Personality

| Source | df | Ss | MSs | F |
|--------|-----|--------|--------|-------|
| Between groups | 1 | 658.2 | 658.2 | 34.84 * |
| Within groups | 98 | 1951.7 | 18.89 | |

* $p < .01$

TABLE - 6(B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|---|---|---|---|---|
| Experimental | 50 | 11.94 | 7.56 | 7.483 |
| Control | 50 | 11.60 | 12.84 | 12.91 |

GMX =
11.77

As can be seen from table 6, the F ratio of 34.84 is significant beyond .01 level of confidence. Thus, the experimental group differs significantly from the control group. Looking to the mean scores, in table 6 the adjusted mean for the experimental group is 7.483 which is significantly different from the mean scores of 12.91 in case of the control group. Accordingly, the control group members' suffer more from "Paranoid suspiciousness" component of personality compared to the experimental group members. The treatment to which the experimental group members were exposed has thus resulted in decreasing the symptoms underlying the "Paranoid suspiciousness" component of personality to a significant extent.

## TABLE - 7 (A)

Comparison of Experimental and Control Groups in respect of "Emotional Instability" Component of Personality

| Source | Df | Ss | MSs | F |
|--------|----|-----|------|-----|
| Between groups | 1 | 613.7 | 613.7 | 27.48 * |
| Within groups | 98 | 2188.7 | 22.33 | |

* $p < .01$

## TABLE - 7 (B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|-------|---|------|-------|-------|
| Experimental | 50 | 8.08 | 5.52 | 6.556 |
| Control | 50 | 14.14 | 12.78 | 11.74 |

GMX =
11.11

Institutionalized juvenile delinquents have to remain away from their families for longer periods of time. They are denied parental love and affection. The life in the institution has been quite mechanical and monotonus. Hence they suffer from 'Emotional instability'. The treatment given to the experimental group could result in reducing this problem they suffer from. The adjusted mean scores of 6.556 and of 11.74 for the experimental

and control group members respectively revel that the
impact of treatment is very positive in reducing emotional
instability.

TABLE - 8 (A)

Comparison of Experimental and Control Groups in respect
of "Hypochondrial Tendencies" Component of Personality

| Source | df | Ss | MSs | F |
|--------|-----|--------|-------|------|
| Between groups | 1 | 607.4 | 607.4 | |
| | | | | 49.1  * |
| Within groups | 98 | 1211.1 | 12.35 | |

* p < .01

TABLE - 8 (B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|-------|-----|------|------|-------|
| Experimental | 50 | 6.76 | 4.68 | 4.922 |
| Control | 50 | 8.48 | 9.82 | 9.578 |

GMX =
7.62

As can be seen from table 8, the F ratio of 49.1
is significant beyond .01 level of confidence. Thus, the
experimental group differs significantly from the control

group. Looking to the table of mean scores, the adjusted mean of experimental group is 4.922 which is significantly different from the mean score of 9.578 of the control group. Accordingly, the control group members have more "Hypochondrial tendencies" than the experimental group members. The treatment thus has resulted in decreasing "Hypochondrial tendencies" to a significant extent among members of the experimental group.

TABLE - 9(A)

Comparison of Experimental and Control Groups in respect of "Somatic Reactions" Component of Personality

| Source | df | Ss | MSs | F |
|---|---|---|---|---|
| Between groups | 1 | 840.2 | 840.2 | 37.64 * |
| Within groups | 98 | 2187.4 | 22.32 | |

* $p < .01$

TABLE - 9(B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|---|---|---|---|---|
| Experimental | 50 | 8.16 | 4.56 | 4.85 |
| Control | 50 | 9.60 | 10.96 | 10.67 |
| | | GMX = 8.88 | | |

The very process of institutionalization is 'Stress and Tension' producing for the inmates. They are governed by very strict and rigid rules and regulations and often punished in a brutal way. Such a climate may cause psycho-somatic problems. The group counselling treatment was given to the experimental group members; and results clearly indicate that the treatment could bring desired results.

TABLE - 10 (A)

Comparison of Experimental and Control Groups in respect of "Dutt Personality Total" Components of Personality

| Source | df | Ss | MSs | F |
|---|---|---|---|---|
| Between groups | 1 | 61923.9 | 61923.9 | 30.07 * |
| Within groups | 98 | 201812.20 | 2059.3 | |

* p < .01

TABLE - 10 (B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|---|---|---|---|---|
| Experimental | 50 | 89.18 | 59.26 | 68.24 |
| Control | 50 | 100.92 | 111.72 | 102.74 |

GMX =
95.05

As can be seen from table 10, the F ratio of 30.07 is significant beyond .01 level of confidence. Thus, the experimental group differs significantly from the control group. The adjusted mean of the experimental group is 68.24 which is significantly different from the mean score of 102.74 of the control group. Accordingly, the control group members show a much anxiety than the experimental group members. On the whole it could be said that the experimental group members have responded positively to the treatment and that the reduction in various anxiety related symptoms in the experimental group is quite considerable.

TABLE - 11(A)

Comparison of Experimental and Control Groups in respect of "Self-esteem" Component of Personality

| Source | df | Ss | MSs | F |
|--------|-----|------|-----|------|
| Between groups | 1 | 0.04 | .04 | 4.00 ** |
| Within groups | 98 | 0.99 | .01 | |

** $p < .05$

TABLE - 11(B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|-------|-----|-----|-----|------|
| Experimental | 50 | .52 | .56 | .568 |
| Control | 50 | .54 | .52 | .512 |

GMX =
0.53

Butler and Haigh (1982) in one of the researches concluded that normal individuals have higher level of self-esteem than those who face some psycho-social problems. In case of the problem group the range of self-ideal congruence was from 0.47 to 0.59 while in case of normal group the range was from 0.01 to 0.86.

The results from the above mentioned table 11 clearly indicate that juvenile delinquents who were given counselling treatment raise their level of self-esteem than the control group which was not exposed the treatment.

TABLE - 12(A)

Comparison of Experimental and Control Groups in respect of "Depressive Affect" Component of Personality

| Source | df | Ss | MSs | F | |
|--------|-----|---------|---------|-------|---|
| Between groups | 1 | 4515.3 | 4515.3 | 40.09 | * |
| Within groups | 98 | 11037.4 | 112.62 | | |

* $p < .01$

TABLE - 12(B)

Showing Adjusted Mean Scores

| Group | N | MX | My | My.X |
|-------|---|-----|-------|--------|
| Experimental | 50 | 63.4 | 49.76 | 49.769 |
| Control | 50 | 63.7 | 63.38 | 63.37 |

GMX =
63.55

The institution where this experiment was conducted had a notorious history of three inmates who committed suicide and others who made unsuccessful attempts of suicide. This indicates that 'Depression' has been a common problem. The two initial mean scores of the experimental (63.4) and the control group (63.7) show that in the absence of the treatment the two groups had the same higher level depression. The depressive effect was considerably reduced (Mean score 49.769) following the treatment in the treatment group and it remained at the higher level (Mean score 63.37) in the non-treatment group. The results, thus indicate that the treatment is very effective in bringing about a change in behaviour.

P A R T - II

In this part the main as well as interaction effects of techniques and the duration of treatment on the 18 components of self-esteem are studied using a 3 x 2 factorial design with 3 representing the levels of treatment duration and 2 representing two techniques. The dependent variables were 18 different components of self-esteem. The scores on these components were ratings assigned to them by a group of trained observers on the consensus basis. Each of the 18 component was thus rated at the end of 8, 16 and 24 training sessions. This type of analysis was made separately for the three levels of self-esteem. The table below shows the 'F' ratios.

TABLE - 1

Main and Interaction Effects of Treatment duration and techniques on Family Relations

| | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment phases | 37.1 | * | 273.3 | * | 32.4 | * |
| Treatment techniques | 58.8 | * | 70.1 | * | 0.93 | |
| Treatment phases X Treatment techniques | 3.29 | | 41.8 | * | 9.18 | * |

* p < .01
** p < .05

## TABLE - 1(A)

### HIGH SELF-ESTEEM
Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 3.3 |
| Treatment Phase II | 4.6 |
| Treatment Phase III | 5.14 |

### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 5.04 |
| Treatment Technique - 2 | 3.71 |

### Mean Scores for Interaction

| Treatment Techniques | Treatment phases | | |
|---|---|---|---|
| | I | II | III |
| Treatment technique - 1 | 4.14 | 5.00 | 6.00 |
| Treatment technique - 2 | 2.57 | 4.28 | 4.28 |

## TABLE - 1(B)

### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.92 |
| Treatment Phase II | 4.50 |
| Treatment Phase III | 5.85 |

### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.85 |
| Treatment Technique - 2 | 4.00 |

### Mean Scores for Interaction

| Treatment Techniques | Treatment Phases | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 3.85 | 5.00 | 5.71 |
| Treatment Technique - 2 | 2.00 | 4.00 | 6.00 |

## TABLE - 1(C)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.71 |
| Treatment Phase II | 4.07 |
| Treatment Phase III | 5.14 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.09 |
| Treatment Technique - 2 | 3.85 |

Mean Scores for Interaction

| Treatment Techniques | Treatment Phases | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 3.42 | 4.28 | 4.57 |
| Treatment Technique - 2 | 2.00 | 3.85 | 5.71 |

Family relations component focuses on the group members' concern about family welfare, their identification with family and faith in their abilities to contribute towards family's development. Referring to table 1, it can be seen that the F ratios for the training duration effects are all significant beyond .01 level of confidence at all the three levels of self-esteem. The mean scores of 3.3, 4.6 and 5.14 in case of family relations at the high self-esteem level show an increasing trend. This can be interpreted to mean that as the duration of treatment increases, the family relations tends to show a pregressive improvement. Similarly, mean scores of 2.92, 4.5 and 5.85 at the moderate self-esteem level also show a progressive improvement in family relations with the increase in training duration. So far as the low self-esteem is concerned mean scores for first, second and third level of training duration are 2.71, 4.07 and 5.14 respectively. Here also as in case of moderate self-esteem, the mean scores show improvement with the increase in the duration of treatment.

So far as the rate of improvement is concerned, there is a gradual improvement at the high self-esteem level, but in case of moderate and low-levels of self-esteem, family relations show a faster rate of improvement in the initial phase of training, than in the later phase. In general, it is observed that family relations show improve-

ment with changes in the duration of treatment at all the three levels of self-esteem.

So far as the impact of technique is concerned, the F ratios of 58.8 and 70.1 in case of high and moderate self-esteem are significant beyond .01 level of confidence. The F ratio is not significant at the low self-esteem level. Considering the mean scores of 5.04 in case of role play/ drama (T1) and 3.71 in case of discussion (T2), it appears that technique T1 produces a significantly greater change in family relations than technique T2 at the high self-esteem level. Similarly at the moderate self-esteem level the technique T1 shows greater improvement (mean score 4.85) than technique T2 (mean score, 4.00). At the low self-esteem level, the two mean scores of T1 and T2 are 4.09 and 3.85 respectively, which do not differ significantly. There is thus no differential impact of the two techniques at the low self-esteem level.

The training duration X techniques interaction at the high self-esteem level is not significant, whereas it is significant at moderate and low self-esteem levels. The insignificant interaction effect between training duration and techniques means that the effect of techniques is independent of treatment duration. In case of moderate self-esteem level, the effect of training duration does not seem

to be independent of the effect of techniques. At the
end of first and second duration levels T1 produces greater
change in family relations than does technique T2, whereas
at the third duration level although T2 appears slightly
better than T1, the overall difference between the two is
very small. Thus, it may be said that the two techniques
operate in the same way at the third level of training
duration, but T1 does better than T2, at the end of first
and second duration levels of treatment. In case of low
self-esteem level T1 does better than T2 during the first
and second duration levels. Technique T2 brings about a
greater change than technique T1 at the last phase of train-
ing.

In general significant interaction effects between
techniques and training duration are observed in case of
moderate and low self-esteem levels and not in case of high
self-esteem level. Secondly, T1 seems to be better than T2
for the first two duration levels of the treatment and in
the last phase of the training T2 does slightly better
than T1.

## TABLE - 2

### Main and Interaction Effects of Treatment Duration and Techniques on Emotional Stability

| | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment phases | 31.7 | * | 55.9 | * | 6.96 | * |
| Treatment Techniques | 2.41 | | 8.3 | * | 1.58 | |
| Treatment phases X Treatment techniques | 0.08 | | 7.5 | * | 1.93 | |

* $p < .01$

## TABLE - 2 (A)

### HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment phase I | 3.42 |
| Treatment phase II | 4.14 |
| Treatment phase III | 4.92 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.23 |
| Treatment Technique - 2 | 4.09 |

### TABLE – 2(B)
### MODERATE SELF-ESTEEM
#### Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment phase   I | 2.5 |
| Treatment phase  II | 3.64 |
| Treatment phase III | 4.64 |

#### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique – 1 | 3.95 |
| Treatment Technique – 2 | 3.23 |

#### Mean Scores for Interaction Effects

| Treatment Techniques | Treatment Phases | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique – 1 | 3.14 | 4.28 | 4.42 |
| Treatment Technique – 2 | 1.85 | 3.00 | 4.85 |

## TABLE - 2(c)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phase

| | |
|---|---|
| Treatment Phase    I | 2.78 |
| Treatment Phase   II | 4.07 |
| Treatment Phase III | 4.64 |

### MEAN SCORES FOR TREATMENT TECHNIQUES

| | |
|---|---|
| Treatment Technique - 1 | 3.57 |
| Treatment Technique - 2 | 4.09 |

Juvenile delinquents often find it difficult to voice their feelings. Social Case Workers have frequently observed that they suppress their emotions of love, fear, anger, sadness, disappointments, and disgust. Table 2 shows F ratios for the main and interaction effects. The main effects for the treatment duration are significant beyond .01 level of confidence at all the three levels of self-esteem. The mean scores of 3.42, 4.14 and 4.92 at the high self-esteem level show progressive trend. This can be interpreted to mean that as the duration of treatment increases, the 'Emotional Stability' also increases

progressively.

Similarly, mean scores of 2.5, 3.64 and 4.64 at the
moderate self-esteem level also show a progressive impro-
vement in emotional stability component of self-esteem.
In case of low self-esteem the three mean scores for I,
II and III phases of treatment duration are 2.78, 4.07
and 4.64 respectively. Here also the mean scores show
progressive improvement with the increase in duration of
treatment. It is observed that the initial improvement
from Ist to IInd phase of duration level is higher than
that at the later phase of training.

Thus, it may said that 'Emotional Stability' as
one of the components of self-esteem tends to show impro-
vement with changes in training duration at all the three
levels of self-esteem. So far as the impact of techniques
is concerned the F ratios of 2.41, 80.3 and 1.58 in case
of High self-esteem, Moderate self-esteem and Low-self-esteem
respectively indicate that the treatment technique produces
a significant impact only in case of moderate self-esteem
level. The mean scores of 3.95 and 3.23 for treatment
technique-1 and treatment technique-2 respectively indicate
that Technique-1 has a greater impact in producing emotional
stability than Technique-2 at the moderate self-esteem
level. At the high and low self-esteem levels the techniques
have no differential impact.

The treatment duration X treatment technique interaction at high and low self-esteem levels is not significant whereas it is significant at the moderate self-esteem level. Observation of table 2(B) indicates that T1 produces a greater change than T2 during the first two phases of training but both produce more or less the same effect at the last phase of training, at the moderate self-esteem level.

In general, the interaction effect between treatment techniques and training duration is observed in case of moderate self-esteem level and not in case of high and low self-esteem levels. Secondly, treatment technique-1 seems to have a greater impact in producing emotional stability than treatment technique-2 during the two phases of training duration, then after there is no differential impact.

TABLE - 3

Main and Interaction Effects of Treatment Duration and Techniques on Social Relations

|  | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment phases | 30.1 | * | 146.2 | * | 7.91 | * |
| Treatment techniques | 11.1 | * | 1.8 | | 0.02 | |
| Treatment Phases X Treatment techniques | 15.1 | * | 25.4 | * | 0.82 | |

* p $<$ .01

## TABLE - 3 (A)
### HIGH SELF-ESTEEM
Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase    I | 3.00 |
| Treatment Phase   II | 4.28 |
| Treatment Phase III | 4.85 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment technique - 1 | 3.71 |
| Treatment Technique - 2 | 4.38 |

## TABLE - 3 (B)
### MODERATE SELF-ESTEEM
Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase    I | 3.07 |
| Treatment Phase   II | 3.50 |
| Treatment Phase III | 4.50 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.47 |
| Treatment Technique - 2 | 3.42 |

## TABLE - 3(c)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase    I | 2.92 |
| Treatment Phase   II | 4.00 |
| Treatment Phase III | 4.57 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.85 |
| Treatment Technique - 2 | 3.33 |

Social relationship component focuses on two aspects of institutionalized life of juvenile delinquents viz. Ability to form, sustain, maintain and stabilize relationship with co-inmates, staff, friends, relatives etc. and stable set of social expectations from others viz. relatives, friends, institutions and society in general.

As can be seen from table 3, the F ratios for the training treatment effects are all significant beyond 0.01 level of confidence at all the three levels of self-esteem. The mean scores of 3.00, 4.28 and 4.85 at the high self-esteem level show an increasing trend. Similarly, the

mean scores 3.07, 3.5 and 4.5 at the moderate self-esteem
level also show progressive improvement as the amount of
treatment increases. So far as the low self-esteem is
concerned, the three mean scores for the three degrees of
training sessions are 2.92, 4.00 and 4.57 respectively.
Here also the three mean scores show a progressive impro-
vement in social relations with the increase in the duration
of training. It is observed that the improvement in the
initial phase is more than the improvement in the later phase
of the training duration.

On the whole social relations show marked improvement
with the increase in the amount of training at all the three
levels of self-esteem. So far as the impact of technique is
concerned, the F ratios of 11.1 in case of high self-esteem
is significant beyond .01 level of confidence. It is not
significant at moderate and low self-esteem level.

Considering the mean scores of 3.71 and 4.38 in case
of treatment technique-1 and treatment technique-2 respecti-
vely, it appears that treatment technique-2 produces greater
change at high self-esteem level of social relations compo-
nent compared to the change produced by the treatment
technique-1. In case of moderate and low self-esteem levels
there is no differential impact of treatment techniques.

The treatment phase X treatment technique interaction at the high and moderate self-esteem levels, is significant whereas it is not significant at low self-esteem level. During the first level of training duration treatment technique-1 seems to produce greater change in social relations than technique-2 in case of high self-esteem level whereas during the second and third phases of training duration treatment technique-2 seems to produce greater change in social relations than treatment technique-1. At the moderate level of self-esteem treatment technique-1 is slightly better than treatment technique-2 during the initial and middle phases of training but treatment technique-2 does better than treatment technique-1 in the last phase of training. Thus the effects of treatment techniques depend upon the amount of training given to the subjects with high and moderate levels of self-esteem.

TABLE - 4

Main and Interaction Effects of Treatment Duration and Techniques on Ability to Stand Criticisms

|  | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment phase | 42.4 | * | 86.00 | * | 10.00 | * |
| Treatment techniques | 0.37 | | 47.9 | * | 0.003 | |
| Treatment phase X Treatment techniques | 4.6 | ** | 4.3 | ** | 7.00 | * |

* p < .01
** p < .05

## TABLE - 4 (A)

### HIGH SELF- ESTEEM

Mean Scores for Treatment Phase

| | | |
|---|---|---|
| Treatment Phase | I | 3.64 |
| Treatment Phase | II | 5.00 |
| Treatment Phase | III | 5.35 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique-1 | 4.71 |
| Treatment Technique-2 | 4.61 |

Mean Scores for Interaction

| Treatment Techniques | Treatment Phases | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 4.00 | 5.00 | 5.14 |
| Treatment Technique - 2 | 3.28 | 5.00 | 5.57 |

## TABLE — 4(B)

### MODERATE SELF-ESTEEM
Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.71 |
| Treatment Phase II | 3.92 |
| Treatment Phase III | 4.92 |

### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.33 |
| Treatment Technique - 2 | 3.38 |

### Mean Scores for Interaction

| Treatment Techniques | Treatment Phases | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 3.42 | 4.42 | 5.14 |
| Treatment Technique - 2 | 2.00 | 3.42 | 4.71 |

TABLE - 4(C)

LOW SELF-ESTEEM

Mean Scores for Treatment
Phase

| Treatment Phase I | 2.85 |
|---|---|
| Treatment Phase II | 3.92 |
| Treatment Phase III | 4.64 |

Mean Scores for Treatment Techniques

| Treatment Technique - 1 | 3.90 |
|---|---|
| Treatment Technique - 2 | 3.80 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 3.57 | 4.00 | 3.85 |
| Treatment Technique - 2 | 2.14 | 3.85 | 5.42 |

It has been observed by the institution's staff
members that most of the inmates are anti-authority and
they do not appreciate the negative evaluation of their
behaviour and actions. Treatment given on this area
in Table 4 shows that the F ratios for the main effect of
training duration are all significant at the three levels
of self-esteem considered separately. There seems to be
a marked improvement in the ability to stand criticism with
the increase in the amount of training among subjects with
high, moderate and low levels of self-esteem. The two
techniques T1 and T2 have a differential impact in bringing
about a desirable change in the ability to stand criticism
at the moderate level of self-esteem only, treatment
technique-1 doing better than treatment technique-2.
However, the effects of training duration are not independent
of treatment techniques, both the variables interact signi-
ficantly in case of all the three levels of self-esteem.
At the high self-esteem level, treatment technique-1 seems
to be doing quite well during the first training phase,
during the middle training phase the two treatment techniques
seem to be doing quite as well and during the last training
phase, treatment technique-2 seems to be doing slightly
better than treatment technique-1.

At the moderate self-esteem level, treatment technique-1
seems to be better than treatment technique-2 during the

initial and middle phases of training. In the last phase of training the two treatment techniques seem to be doing more or less equally well in producing desirable change in the ability to stand criticism.

At the low self-esteem level, treatment technique-1 seems to be better than treatment technique-2 during the initial and middle phases of training, while treatment technique-2 does better than treatment technique-1 in the last phase of training.

TABLE - 5

Main and Interaction Effects of Treatment Duration and Techniques on Self Determination

| | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment phases | 15.27 | * | 21.15 | * | 9.13 | * |
| Treatment Techniques | 6.76 | ** | 32.6 | * | 3.22 | |
| Treatment phase X Treatment techniques | 2.6 | | 3.5 | ** | 1.33 | |

$* \quad p < .01$

$** \quad p < .05$

### TABLE - 5(A)

#### HIGH SELF-ESTEEM

Mean Scores for Treatment Phase

| | |
|---|---|
| Treatment Phase    I | 3.57 |
| Treatment Phase   II | 5.00 |
| Treatment Phase III | 5.14 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.90 |
| Treatment Technique - 2 | 4.23 |

### TABLE - 5(B)
#### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phase

| | |
|---|---|
| Treatment Phase    I | 2.85 |
| Treatment Phase   II | 3.85 |
| Treatment Phase III | 4.64 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.42 |
| Treatment Technique - 2 | 3.14 |

Mean Scores for Interaction

| Treatment Techniques | Treatment Phases | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 3.71 | 4.71 | 4.85 |
| Treatment Technique-2 | 2.00 | 3.00 | 4.42 |

## TABLE - 5(c)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| Treatment Phase I | 2.64 |
|---|---|
| Treatment Phase II | 3.85 |
| Treatment Phase III | 4.71 |

Mean Scores for Treatment Techniques

| Treatment Technique - 1 | 4.09 |
|---|---|
| Treatment Technique - 2 | 3.38 |

Institutionalization injects obedience by rigidly enforcing rules and regulations. Inmates are governed by

lot of rules and regulations, many decisions are made
by institutional heads or guardians. Thus, inmates'
ability to take decisions about their day to day life
issues, needs and career planning get affected adversally.

Referring to table 5, the F ratios for the training
effects are all significant for all the three levels of
self-esteem. The mean scores of 3.57, 5.0 and 5.14 at the
high self-esteem level show an increasing trend, the ini-
tial change being greater than the change in the later
phase of training. Similarly, the mean scores of 2.85,
3.85, 4.64 and of 2.64, 3.85, 4.71 at moderate and low
self-esteem levels respectively also show an increasing
trend. Thus, with the increase in the duration of training
the subjects show progressive improvement in their capacity
for self-determination.

Considering the results of the treatment technique
effect, it appears that the two treatment techniques do
not operate in the same way at the high and moderate
levels of self-esteem. The treatment technique-1 seems
to produce a greater change in self-determination than
treatment technique-2. No significant difference is obser-
ved at the low self-esteem level. The interaction between
treatment technique and session duration is significant
at .05 level in case of moderate self-esteem level which

means the effect of technique is not independent of
training duration. No significant interaction effect is
found at the high and low self-esteem levels.

### TABLE - 6

Main and Interaction Effects of Treatment Duration
and Techniques on Ability to Cope up with Problem
Situation

|  | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phases | 12.4 | * | 65.52 | * | 9.35 | * |
| Treatment Techniques | 21.0 | * | 37.34 | * | 6.0 | ** |
| Treatment Phase X Treatment Techniques | 4.8 | ** | 9.43 | * | 0.15 | |

$*$ $p < .01$

$**$ $p < .05$

TABLE – 6(A)

HIGH SELF – ESTEEM
Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 4.07 |
| Treatment Phase II | 4.57 |
| Treatment Phase III | 5.21 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique – 1 | 5.04 |
| Treatment Technique – 2 | 4.19 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phases | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 4.85 | 5.00 | 5.28 |
| Treatment Technique-2 | 3.28 | 4.14 | 5.14 |

## TABLE - 6(B)

### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase I | | 3.35 |
| Treatment Phase II | | 3.57 |
| Treatment Phase III | | 4.71 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.08 |
| Treatment Technique - 2 | 3.19 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 3.28 | 4.28 | 4.71 |
| Treatment Technique-2 | 2.00 | 2.85 | 4.71 |

## TABLE - 6(C)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 3.14 |
| Treatment Phase II | 3.92 |
| Treatment Phase III | 4.78 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| TREATMENT Technique - 1 | 3.57 |
| Treatment Technique - 2 | 4.33 |

Table 6 shows the main and interaction effects for coping behaviour in a problem situation. The ability to cope up shows significant change for all the three levels of self-esteem. The mean scores for the three levels of training duration show that the subjects become increasingly more capable to cope with problem situation with the increase in the duration of training.

The F ratios for the main effects of treatment techni-
ques are all significant, indicating that the change in coping
ability is differentially affected by the type of treatment
technique. Treatment technique-1 seems to be better than
technique T2, for the high and moderate self-esteem levels.
Treatment Technique-2 seems to produce better result than
treatment technique-1 for low self-esteem subjects. However,
the treatment technique effect does not seem to be indepen-
dent of the training effect for the high and moderate self-
esteem levels. In this case treatment technique-1 does
better than treatment technique-2. No significant intera-
ction is obtained for the low self-esteem subjects. In
this case both the treatment techniques seem to be equally
effective in rpoducing a change in group members' personal
strength in coping up with problem situations.

TABLE - 7

Main and Interaction Effects of Treatment Duration and
Techniques on Sense of Belonging

|  | High Self-esteem |  | Moderate Self-esteem |  | Low Self-esteem |  |
|---|---|---|---|---|---|---|
| Treatment Phases | 18.5 | * | 10.2 | * | 11.28 | * |
| Treatment phase X Treatment tech. | 7.3 | * | 0.47 |  | 0.31 |  |
| Treatment Techniques | 12.6 | * | 70.13 | * | 0.26 |  |

* p < .01
** p < .05

TABLE - 7(A)

HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 3.92 |
| Treatment Phase II | 4.64 |
| Treatment Phase III | 5.71 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 5.19 |
| Treatment Technique - 2 | 4.33 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 5.00 | 4.85 | 5.71 |
| Treatment Technique-2 | 2.85 | 4.42 | 5.71 |

## TABLE-7 (B)

### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase   I | 1.92 | |
| Treatment Phase  II | 2.78 | |
| Treatment Phase III | 3.00 | |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.42 |
| Treatment Technique - 2 | 1.71 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 2.71 | 3.57 | 4.00 |
| Treatment Technique-2 | 1.14 | 2.00 | 2.00 |

## TABLE - 7(c)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase I | 2.21 |
| Treatment Phase II | 3.78 |
| Treatment Phase III | 4.28 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.52 |
| Treatment Technique - 2 | 3.33 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 2.28 | 3.71 | 4.57 |
| Treatment Technique-2 | 2.14 | 3.85 | 4.00 |

Sense of belongingness is associated with the perception of self as being included within a field of significant other persons, such as parents, teachers, friends, relatives etc. etc. Juvenile delinquents do have problems of relating themselves with others and can not confide in others or consider others who can do 'Good' to them and hence have poor sense of belonging to others.

Table 7 shows the effects of training duration and technique on sense of belongingness. The main effect of training duration as can be seen from table 7 is significant for the three levels of self-esteem. From the mean scores it can be inferred that as the training duration increases the subjects develop a greater sense of belongingness.

The two techniques do not seem to be equally effective in producing this change in the sense of belongingness at the high and moderate levels of self-esteem. However, at the low self-esteem level no differential effect due to techniques is observed. Of the two treatment techniques, treatment technique-1 seems to be better than treatment technique-2 in producing a change in the sense of belongingness at the high and moderate levels of self-esteem.

The training X treatment technique effect is significant only at the high self-esteem level. In this case at the end of first level of training duration treatment technique-1

seems to be much more effective (mean score 5.0) than
treatment technique-2 (mean score 2.85). At the second
level of treatment duration treatment technique-1 does
slightly better than treatment technique-2, and in the
last phase of training duration both the treatment tech-
niques produce more or less the same effect. It thus seems
that treatment technique-1 loses its effectiveness in
comparison to treatment technique-2, with the increase in
the duration of training.

TABLE - 8

Main and Interaction Effects of Treatment Duration
and Techniques on Acceptance of Others

|  | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phases | 8.26 | * | 7.06 | * | 8.02 | * |
| Treatment Techniques | 35.80 | * | 0.06 | | 8.93 | * |
| Treatment Phases X Treatment Techniques | 4.02 | ** | 2.45 | | 1.53 | |

* $p < .01$

** $p < .05$

## TABLE - 8(A)

### HIGH SELF - ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase    I | 4.00 |
| Treatment Phase   II | 4.42 |
| Treatment Phase  III | 5.50 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 5.57 |
| Treatment Technique - 2 | 3.71 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 5.42 | 5.42 | 5.85 |
| Treatment Technique-2 | 2.57 | 3.42 | 5.14 |

## TABLE - 8(B)

### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.92 |
| Treatment Phase | II | 4.28 |
| Treatment Phase | III | 4.50 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.95 |
| Treatment Technique - 2 | 3.85 |

## TABLE - 8(C)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.28 |
| Treatment Phase | II | 3.00 |
| Treatment Phase | III | 4.07 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.66 |
| Treatment Technique - 2 | 2.57 |

Institutionalized juvenile delinquents are reported by social case workers of various institutes to suffer from being nervous, timid, shy, disinterested and have difficulties in being friendly, cooperative, tolerant and sociable.

As can be seen from table 8, the amount of training duration seems to be quite effective in producing a change in the subjects' ability to accept others for all the three levels of self-esteem. The mean scores of 4.00, 4.42 and 5.50 at the first, second and third level of training duration show a progressive change in the ability to accept others at the high self-esteem level. The mean scores for the three levels of training durations at the moderate and low self-esteem levels also show a similar progressive change. On the whole within certain limits greater amount of training produces greater change in accepting others. Also, as can be seen from table 8, treatment technique-1 differs significantly from treatment technique-2 at the high and low levels of self-esteem. The two treatment techniques do not differ at the moderate self-esteem level. Also where the treatment technique effect is significant, treatment technique-1 seems to be better than treatment technique-2 in bringing about a change in the ability to accept others. The effect of treatment technique is, however, not independent of session duration at the high self-esteem

level. At the other two levels of self-esteem both the training duration and treatment techniques have their independent effects.

TABLE - 9

Main and Interaction Effects of Treatment Duration and Techniques on Concentration

| | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phases | 4.5 | ** | 80.0 | * | 15.5 | * |
| Treatment Techniques | 31.3 | * | 78.68 | * | 13.84 | * |
| Treatment Phase X Treatment Techniques | 0.15 | | 2.4 | | 3.7 | ** |

* $p < .01$

** $p < .05$

TABLE - 9(A)

HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 3.42 |
| Treatment Phase II | 3.85 |
| Treatment Phase III | 4.50 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.80 |
| Treatment Technique - 2 | 3.04 |

· TABLE - 9(B)

MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.64 |
| Treatment Phase II | 4.07 |
| Treatment Phase III | 4.35 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.23 |
| Treatment Technique - 2 | 3.14 |

## TABLE - 9 (c)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.14 |
| Treatment Phase | II | 3.50 |
| Treatment Phase III | | 4.21 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 2.71 |
| Treatment Technique - 2 | 3.85 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 2.00 | 3.00 | 3.14 |
| Treatment Technique-2 | 2.28 | 4.00 | 5.28 |

'Ability to concentrate' component includes inmates' Participation and involvement in various developmental activities in the institutions. This also includes their ability to grasp various issues, ability to express their needs, problems, and ability to probe solutions of their psycho-social welbeing.

The main effect of treatment duration as can be seen from table 9 is significant for all the three levels of self-esteem, indicating that the duration of the treatment has a significant impact in producing change in the ability to concentrate or pay attention to the important things. The change in this ability seems to be progressive at the high self-esteem level but at the moderate and low self-esteem levels the last phase of training shows a greater change than the second phase.

Considering the effect of techniques, it appears that treatment technique-1 does better than treatment technique-2 at the high and moderate self-esteem levels but treatment technique-2 seems to produce a greater change than treatment technique-1 at the low self-esteem level.

The effect of training duration is not independent of the treatment technique effect in case of low self-esteem level. Treatment technique-2 seems to be better

than treatment technique-1 at the second and third phases of training. Both the treatment techniques seem to be producing more or less the same effect at the first level of training duration.

TABLE - 10

Main and Interaction Effects of Treatment Duration and Techniques on Creative Differences

| | High Self-esteem | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|
| Treatment Phase | 3.78 | 13.69 | * | 10.01 | * |
| Treatment Techniques | 0.122 | 1.99 | | 2.12 | |
| Treatment Phase X Treatment Techniques | 1.83 | 2.40 | | 1.13 | |

* p < .01

** p < .05

## TABLE - 10 (A)
### HIGH SELF-ESTEEM
Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.35 |
| Treatment Phase | II | 2.71 |
| Treatment Phase | III | 2.85 |

### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 2.61 |
| Treatment Technique - 2 | 2.66 |

### Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 2.14 | 2.71 | 3.00 |
| Treatment Technique-2 | 2.57 | 2.71 | 2.71 |

## TABLE - 10 (B)

### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.07 |
| Treatment Phase II | 2.92 |
| Treatment Phase III | 3.64 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 2.71 |
| Treatment Technique - 2 | 3.04 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 2.28 | 2.57 | 3.28 |
| Treatment Technique-2 | 1.85 | 3.28 | 4.00 |

## TABLE – 10 (c)

### LOW SELF-ESTEEM

#### Mean Scores for Treatment Phase

| | | |
|---|---|---|
| Treatment Phase I | | 1.71 |
| Treatment Phase II | | 1.92 |
| Treatment Phase III | | 2.57 |

#### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique – 1 | 1.95 |
| Treatment Technique – 2 | 2.19 |

#### Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique-1 | 1.71 | 1.85 | 2.28 |
| Treatment Technique-2 | 1.71 | 2.00 | 2.85 |

Creative differences include 'Ability to respect others' views' 'Ability differ logically form others', valueing others' view points and ability to correct one's views with positive bent of mind.

Table 10 shows main and interaction effects of train-ing and techniques for the variable creative differences. Creative differences relate to differences of opinions with positive perspective, ability to change ones' opinion towards more positive direction, ability to differ from others and to express the same. Valuing others' opinion and ability to authenticate ones' opinion. As can be seen from Table 10 the main effect of training is signi-ficant for the subjects with moderate and low self-esteem, indicating that the ability for creative differen-ces changes according to changes in the amount of training for these subjects. No significant differences among the mean scores of the high self-esteem subjects are obtained. Where the effect of training is significant, it shows that the ability for creative differences increase with the change in the amount of training. Neither the effects of treatment techniques nor the interaction effects of training and treatment techniques are significant at any of the three levels of self-esteem.

Thus, it is the amount of training that determines the improvement effect among subjects with moderate and low level, self-esteem.

TABLE - 11

Main and Interaction Effects of Treatment Phase and Techniques on Sense of Responsibility

|  | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phase | 15.15 | * | 31.7 | * | 13.68 | * |
| Treatment Techniques | 8.05 | * | 78.07 | * | 3.89 | |
| Treatment Phase X Treatment Techniques | 9.86 | * | 2.39 | | 2.48 | |

* p < .01

## TABLE - 11 (A)

### HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 3.28 |
| Treatment Phase | II | 4.28 |
| Treatment Phase | III | 4.85 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.47 |
| Treatment Technique - 2 | 3.80 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 4.28 | 4.57 | 4.57 |
| Treatment Technique - 2 | 2.28 | 4.00 | 5.14 |

## TABLE - 11(B)

### MODERATE SELF-ESTEEM

#### Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.5 |
| Treatment Phase | II | 3.78 |
| Treatment Phase | III | 4.64 |

#### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.66 |
| Treatment Technique - 2 | 2.66 |

#### Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 3.71 | 4.85 | 5.28 |
| Treatment Technique - 2 | 1.28 | 2.71 | 4.00 |

TABLE - 11(c)

LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.71 |
| Treatment Phase II | 3.92 |
| Treatment Phase III | 4.71 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.09 |
| Treatment Technique - 2 | 3.47 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 3.42 | 4.28 | 4.57 |
| Treatment Technique - 2 | 2.00 | 3.57 | 4.85 |

'Sense of Responsibility' has been a cardinal component of self-esteem for juvenile delinquents which facilitates final rehabilitation. Table 11 shows the main and interaction effects of training duration and treatment techniques on sense of responsibility component. As can be seen from Table 11 the main effect of training duration is significant beyond 0.01 level of confidence for all the three levels of self-esteem, , indicating that training duration has a significant impact on sense of responsibility variable. The mean scores of 3.28, 4.28 and 4.85 in case of high self-esteem, those of 2.5, 3.75 and 4.64 in case of moderate self-esteem and those of 2.71, 3.92 and 4.71 in case of low self-esteem all indicate that there is a progressive improvement in the sense of responsibility measure with the increase in training duration.

Considering the main effect of treatment techniques, it can be seen that the two treatment techniques have a differential impact on sense of responsibility at the high and moderate levels of self-esteem. The two treatment techniques seem to have the same impact at the low self-esteem level, where the treatment techniques have differential impact, treatment technique - 1 is better than treatment technique-2 in producing a change in

sense of responsibility variable. However, the treatment technique effect is not independent of the amount of training given to the subjects with high self-esteem level. As can be seen from the table of mean scores for the interaction effect, treatment technique-1 produces a much greater change in sense of responsibility than treatment technique-2 at the end of first phase of treining duration, the difference between the two is narrowed down at the end of second phase of training duration, and at the end of the third phase of training treatment technique-2 does better than treatment technique-1.

TABLE - 12

Main and Interaction Effects of Treatment Duration and Techniques on Trusting People

|  | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phase | 23.0 | * | 5.7 | * | 15.8 | * |
| Treatment Techniques | 4.6 | | 16.9 | * | 79.25 | * |
| Treatment Phase X Treatment Techniques | 3.14 | | 0.17 | | 2.29 | |

* p < .01

## TABLE - 12 (A)

### HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 3.57 |
| Treatment Phase | II | 4.78 |
| Treatment Phase | III | 5.14 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.71 |
| Treatment Technique - 2 | 4.28 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 4.14 | 4.85 | 5.14 |
| Treatment Technique - 2 | 3.0 | 4.71 | 5.14 |

## TABLE - 12 (B)

### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.35 |
| Treatment Phase II | 3.28 |
| Treatment Phase III | 3.71 |

### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.80 |
| Treatment Technique - 2 | 2.42 |

### Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 3.14 | 4.00 | 4.28 |
| Treatment Technique - 2 | 1.57 | 2.57 | 3.14 |

## TABLE - 12(c)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase    I | 2.85 |
| Treatment Phase   II | 3.92 |
| Treatment Phase  III | 4.78 |

### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.14 |
| Treatment Technique - 2 | 4.57 |

### Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 2.57 | 3.00 | 3.85 |
| Treatment Technique - 2 | 3.14 | 4.85 | 5.71 |

Trusting people is one of the important dimensions of development. Subjects of the present investigation, being all deliquents had a low level of trust in relation to others. This was subjected to change under the influence of training duration and treatment techniques. As can be seen in table-12 the main effect of training duration is significant for all the three levels of self-esteem indicating that the amount of training is effective in producing a change in the level of trust. Considering the three mean scores for the three degrees of training separately for the three levels of self-esteem, it can be seen that the level of trust has been shifted in the desired direction with the increase in the amount of training. The level of trust at the end of first phase of training has been shifted to appreciably higher level at the end of the third phase of training. This is true for all the three levels of self-esteem.

The treatment technique-1 and treatment technique-2 seem to have a differential impact only at the moderate and low levels of self-esteem. At the high level of self-esteem both treatment technique-1 and treatment technique-2 produce a fairly high level of trust in others. At the moderate level of self-esteem treatment technique-1 plays a more significant role in producing a change in the level

of trust than does treatment technique-2. In case of low level self-esteem treatment technique-2 seems to have a greater impact than treatment technique-1.

Also as can be seen from table-12, the interaction effects are not significant at any of the three levels of self-esteem. On the whole there is an improvement in the level of trust in others with the increase in training duration at all the levels of self-esteem. Secondly, the two treatment techniques have a differential impact at the moderate and low levels of self-esteem. Treatment technique-1 is better than treatment technique-2 at the moderate self-esteem level and treatment technique-2 is better than treatment technique-1 at the low self-esteem level.

TABLE - 13

Main and Interaction Effects of Treatment Duration and Techniques on Ability to Share Experiences

| | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phase | 7.15 | * | 103.3 | * | 16.91 | * |
| Treatment Techniques | 4.2 | ** | 51.3 | * | 0.00 | |
| Treatment Phases X Treatment Techniques | 0.6 | | 20.4 | * | 3.48 | ** |

* p < .01     ** p < .05

## TABLE - 13(A)

### HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 3.0 |
| Treatment Phase | II | 4.0 |
| Treatment Phase | III | 4.71 |

Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 4.28 |
| Treatment Technique - 2 | 3.52 |

## TABLE - 13(B)

### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.14 |
| Treatment Phase | II | 2.78 |
| Treatment Phase | III | 4.21 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.71 |
| Treatment Technique - 2 | 2.85 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase I | II | III |
|---|---|---|---|
| Treatment Technique - 1 | 3.00 | 4.00 | 4.14 |
| Treatment Technique - 2 | 1.28 | 3.00 | 4.28 |

TABLE - 13 (c)

LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.35 |
| Treatment Phase | II | 2.78 |
| Treatment Phase | III | 4.42 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.19 |
| Treatment Technique - 2 | 3.19 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 2.57 | 3.14 | 3.85 |
| Treatment Technique - 2 | 2.14 | 2.42 | 5.00 |

Table 13 shows the main and interaction effects
of the amount of training and treatment techniques on
ability to share experiences. Since the level of trust
is quite low in the group of juvenile delinquents, the
ability to share experiences with others is also quite
low. It was hoped in this research that a change in the
desirable direction could be brought about by subjecting
the respondents to treatment conditions. With increase
in the amount of training there seems to be an increase

in the ability to share experiences across all the three levels of self-esteem. At the end of the thrid phase of training, substantial change is noticed in all the self-esteem groups.

So far as the effect of treatment techniques is concerned treatment technique-1 seems to produce a greater change than treatment technique-2 at both the high and moderate self-esteem levels. The two treatment techniques do not have any differential impact at the low self-esteem level.

While the effect of the amount of training is independent of the effect of treatment techniques, at the high self-esteem level, it is not independent at the moderate and low self-esteem levels. The treatment technique-1 does better than treatment technique-2 for the first two phases of training at the moderate self-esteem level. In case of low self-esteem subjects, treatment technique-1 is better than treatment technique-2 in the second phase of training while treatment technique-2 is better than treatment technique-1 in the last phase of training. The two techniques have more or less the self impact in the initial phase of training.

TABLE - 14

Main and Interaction Effects of Treatment
Phase and Techniques on Ability to Receive
and Give Help.

| | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phase | 7.06 | * | 32.2 | * | 9.26 | * |
| Treatment Techniques | 23.77 | * | 0.03 | | 0.34 | |
| Treatment Phases X Treatment Techniques | 0.96 | | 4.48 | ** | 0.82 | |

&ast; p < .01

&ast;&ast; p < .05

## TABLE - 14 (A)

### HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.71 |
| Treatment Phase II | 2.64 |
| Treatment Phase III | 3.07 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.09 |
| Treatment Technique - 2 | 2.19 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 2.57 | 3.28 | 3.42 |
| Treatment Technique - 2 | 1.85 | 2.00 | 2.71 |

TABLE - 14(B)

MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 1.5 |
| Treatment Phase II | 2.35 |
| Treatment Phase III | 3.92 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 2.61 |
| Treatment Technique - 2 | 2.57 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 1.71 | 2.71 | 3.42 |
| Treatment Technique - 2 | 1.28 | 2.00 | 4.42 |

## TABLE – 14(c)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.00 |
| Treatment Phase II | 3.21 |
| Treatment Phase III | 3.64 |

### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique – 1 | 2.85 |
| Treatment Technique – 2 | 3.04 |

### Mean Scores for Interaction

| Treatment Technique | Treatment Phase I | II | III |
|---|---|---|---|
| Treatment Technique – 1 | 2.14 | 3.14 | 3.28 |
| Treatment Technique – 2 | 1.85 | 3.28 | 4.00 |

Juvenile delinquents are reported by the agency personnel to be anti-authority who nurse grudge on society with the feeling that society has done nothing for them. Hence in the treatment this component was included.

Referring to table 14 it can be observed that the main effect of training duration is significant at all the three levels of self-esteem beyond .01 level of confidence, indicating that the training duration has a significant impact on ability to give and receive help. The mean scores for all the three levels of training show that as the training duration increases the ability to give and receive help also increases. This is true for all the three levels of self-esteem. The treatment technique has a differential impact at the high self-esteem level, treatment technique-1 producing a greater change than treatment technique-2. At the other two levels of self-esteem the difference between the two treatment techniques is very small and insignificant. The effect of treatment technique, however, does not seem to be independent of training duration at the moderate self-esteem level. At the first level of training the two treatment techniques differ very slightly, at the

second and third levels of training, treatment techni-
que-1 does better than treatment technique-2.


TABLE - 15


Main and Interaction Effects of Treatment
Phase and Techniques on Imagination
dynamism.

| | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phase | 23.01 | * | 6.30 | * | 13.01 | * |
| Treatment Techniques | 1.92 | | 0.06 | | 2.26 | |
| Treatment Phases X Treatment Techniques | 3.84 | ** | 2.73 | • | 6.85 | * |

\* p $<$ .01

\*\* p $<$ .05

## TABLE - 15 (A)

### HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.85 |
| Treatment Phase | II | 3.78 |
| Treatment Phase | III | 4.85 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.90 |
| Treatment Technique - 2 | 3.66 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 3.14 | 4.28 | 4.57 |
| Treatment Technique - 2 | 2.57 | 3.28 | 5.14 |

TABLE - 15 (B)

MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.64 |
| Treatment Phase | II | 3.71 |
| Treatment Phase | III | 4.35 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.61 |
| Treatment Technique - 2 | 3.52 |

TABLE - 15 (c)

LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.35 |
| Treatment Phase | II | 3.00 |
| Treatment Phase | III | 3.92 |

Mean Scores for Treatment
Techniques

| Treatment Technique - 1 | 2.90 |
|---|---|
| Treatment Technique - 2 | 3.28 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 2.71 | 2.85 | 3.14 |
| Treatment Technique - 2 | 2.00 | 3.71 | 4.71 |

Juvenile delinquents, as reported by various agency personnel and as observed from case files, act dull and lead very monotonous life in the agency. Therefore, this component was considered for treatment.

As can be seen from table 15 the effect of train-ing is significant for all the three levels of self-esteem. There is no differential impact of treatment technique at any of the three levels of self-esteem. The treatment technique effect, however, interacts signi-ficantly with training at the high and low self-esteem levels. The significant main effect of training indi-cates that it is effective in producing change in imagination dynamism. The amount of change varies dire-ctly with the increase in training duration at all the three levels of self-esteem. The subjects become in-creasingly more imaginative as they receive more train-ing. So far as the significant interaction effect is concerned, treatment technique-1 does better than treat-ment technique-2 during the first two levels of training whereas treatment technique-2 does better than treatment technique-1 in the last phase of training, in case of subjects with high self-esteem. In case of low self-esteem subjects treatment technique-1 seems to be better than treatment technique-2 at the first level of train-ing, treatment technique-2 does slightly better than treatment technique-1 at the second level of training

and at the third level treatment technique-2 does better than treatment technique- in producing imaginative change.

TABLE - 16

Main and Interaction Effect of Treatment
Duration and Techniques on Courage

| | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phase | 14.02 | * | 32.7 | * | 16.36 | * |
| Treatment Techniques | 4.96 | ** | 33.09 | * | 2.32 | |
| Treatment Phases X Treatment Techniques | 8.07 | * | 4.72 | ** | 0.25 | |

* p $<$ .01

** p $<$ .05

TABLE - 16 (A)

HIGH SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 4.28 |
| Treatment Phase | II | 5.14 |
| Treatment Phase | III | 5.5 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 5.19 |
| Treatment Technique - 2 | 4.76 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 5.00 | 5.28 | 5.28 |
| Treatment Technique - 2 | 3.57 | 5.00 | 5.71 |

## TABLE – 16 (B)

### MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.85 |
| Treatment Phase | II | 4.14 |
| Treatment Phase | III | 4.5 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique – 1 | 4.33 |
| Treatment Technique – 2 | 2.85 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique – 1 | 3.71 | 4.57 | 4.71 |
| Treatment Technique – 2 | 2.00 | 3.71 | 4.28 |

TABLE – 16 (c)

LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | |
|---|---|
| Treatment Phase I | 2.78 |
| Treatment Phase II | 3.71 |
| Treatment Phase III | 5.14 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique – 1 | 3.61 |
| Treatment Technique – 2 | 4.14 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase I | II | III |
|---|---|---|---|
| Treatment Technique – 1 | 2.57 | 3.57 | 4.71 |
| Treatment Technique – 2 | 3.00 | 3.85 | 5.57 |

Institutional life produces a good deal of suppre-
ssion through a long list of do's and don'ts, where
'doing' is emphasized and not 'being'. Their feelings
and ideas are supressed and hardly any freedom is grant-
ed for their expression. Therefore most of the inmates
lacked courage in expressing, or voicing themselves.

Table 16 shows the main and interaction effects
of training duration and treatment techniques for the
three levels of self-esteem considered separately. As
can be seen from the table all the main as well as
interaction effects are significant at the high and
moderate levels of self-esteem. In case of low self-
esteem subjects only the main effect of training is
significant.

Considering the mean scores for the main effect
of training, it can be observed that, high, moderate
or low self-esteem subjects increasingly become more
courageous as the amount of training increases. In
case of high and moderate self-esteem subjects treat-
ment technique-1 seems to be more effective than treat-
ment technique-2 in bringing about a change in courage.
However, the effect of treatment technique is not

independent of training among subjects with high and moderate levels, of self-esteem. In this case treatment technique-1 does better than treatment technique-2 during the first two levels of training whereas in the last phase of training both the treatment techniques seem to be equally effective. In case of low self-esteem subjects neither the main effect of treatment technique nor the interaction effect of treatment technique and training is significant.

TABLE - 17

Main and Interaction Effects of Treatment
Duration and Techniques on Ability to
learn through mistakes.

|  | High Self-esteem | | Moderate Self-esteem | | Low Self-esteem | |
|---|---|---|---|---|---|---|
| Treatment Phase | 17.59 | * | 23.6 | *. | 42.12 | * |
| Treatment Techniques | 3.45 | ** | 20.00 | * | 2.78 | |
| Treatment Phases X Treatment Techniques | 3.29 | ** | 6.02 | * | 0.29 | |

* p < .01

** p < .05

## TABLE - 17(A)

### HIGH SELF-ESTEEM

#### Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 4.21 |
| Treatment Phase | II | 5.28 |
| Treatment Phase | III | 5.64 |

#### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 5.23 |
| Treatment Technique - 2 | 4.85 |

#### Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 4.71 | 5.14 | 5.85 |
| Treatment Technique - 2 | 3.71 | 5.42 | 5.42 |

## TABLE – 17 (B)

### MODERATE SELF–ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.85 |
| Treatment Phase | II | 4.21 |
| Treatment Phase | III | 4.42 |

### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique – 1 | 4.28 |
| Treatment Technique – 2 | 3.38 |

### Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique – 1 | 3.71 | 4.71 | 4.42 |
| Treatment Technique – 2 | 2.00 | 3.71 | 4.42 |

## TABLE - 17(c)

### LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| | | |
|---|---|---|
| Treatment Phase | I | 2.07 |
| Treatment Phase | II | 3.28 |
| Treatment Phase | III | 4.64 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 3.52 |
| Treatment Technique - 2 | 3.14 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 2.14 | 3.57 | 4.85 |
| Treatment Technique - 2 | 2.00 | 3.00 | 4.42 |

Behaviour modification techniques emphasize aware-
ness of one's mistakes, consequences of such behaviour,
motivation to correct oneself and ability to sustain
socially approved behaviour. This component was focus-
ed during training sessions. Results in Table 17 show
the main and interaction effects of training and treat-
ment techniques on ability to learn through mistakes.
As can be seen from table 17 the training seems to be
effective in producing change in the ability to correct
one's mistakes and to learn. The three mean scores of
the three levels of training show an increasing trend
for the high, moderate and low self-esteem subjects.
So far as the main effect of treatment technique is
concerned, treatment technique-1 produces a greater
change than treatment technique-2 among high and mode-
rate self-esteem subjects. No such differential effect
is observed among low self-esteem subjects. Also the
interaction effect of training and treatment technique
is significant in case of high and moderate self-esteem
subjects but it is not significant in case of low self-
esteem subjects. In case of high self-esteem subjects,
treatment technique-1 produces a much greater change
than treatment technique-2 whereas in case of moderate

level self-esteem treatment technique-2 does slightly
better than treatment technique-1. In case of low self-
esteem subjects treatment technique-1 does slightly
better than treatment technique-2 in producing a change
in the ability to correct one's own mistakes.

TABLE - 18

Main and Interaction Effects of Treatment
Duration and Techniques on Inquisitiveness.

|  | High<br>Self-esteem |  | Moderate<br>Self-esteem |  | Low<br>Self-esteem |  |
| --- | --- | --- | --- | --- | --- | --- |
| Treatment<br>Phase | 13.82 | * | 0.34 |  | 11.22 | * |
| Treatment<br>Techniques | 51.11 | * | 5.88 | ** | 0.02 |  |
| Treatment<br>Phases X<br>Treatment<br>Techniques | 4.29 | ** | 00.16 |  | 1.30 |  |

\* $p < .01$

\*\* $p < .05$

## TABLE - 18 (A)

### HIGH SELF-ESTEEM

#### Mean Scores for Treatment, Phases

| | |
|---|---|
| Treatment Phase    I | 3.71 |
| Treatment Phase   II | 4.42 |
| Treatment Phase   III | 5.21 |

#### Mean Scores for Treatment Techniques

| | |
|---|---|
| Treatment Technique - 1 | 5.28 |
| Treatment Technique - 2 | 3.61 |

#### Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 4.85 | 5.42 | 5.57 |
| Treatment Technique - 2 | 2.57 | 3.42 | 4.85 |

TABLE - 18(B)

MODERATE SELF-ESTEEM

Mean Scores for Treatment Phases

| Treatment Phase I | 2.35 |
|---|---|
| Treatment Phase II | 2.50 |
| Treatment Phase III | 2.71 |

Mean Scores for Treatment
Techniques

| Treatment Technique - 1 | 2.95 |
|---|---|
| Treatment Technique - 2 | 2.09 |

TABLE - 18(c)

LOW SELF-ESTEEM

Mean Scores for Treatment Phases

| Treatment Phase I | 1.64 |
|---|---|
| Treatment Phase II | 2.21 |
| Treatment Phase III | 3.35 |

Mean Scores for Treatment
Techniques

| | |
|---|---|
| Treatment Technique - 1 | 2.42 |
| Treatment Technique - 2 | 2.38 |

Mean Scores for Interaction

| Treatment Technique | Treatment Phase | | |
|---|---|---|---|
| | I | II | III |
| Treatment Technique - 1 | 2.00 | 2.14 | 3.14 |
| Treatment Technique - 2 | 1.28 | 2.28 | 3.57 |

For the sound development inmates are expected to
know the work with reference to their psycho-social needs
and their functioning. The ethos in the institution does
not facilitate this component.

Table 18 shows the effects of training and treatment
techniques and their interaction effect on inquisitiveness.
Among high self-esteem subjects both, the main effects and
the interaction effect are significant. The significant
main effect of training shows that inquisitiveness changes

progressively with the increase in training duration.
The change occurs from the mean score of 3.71, at the
first phase of training to the mean score of 5.21 at the
last phase of training. The mean scores for treatment
techniques differ significantly, treatment technique-1
doing better than treatment technique-2. Considering the
interaction effect, treatment technique-1 does better
than treatment technique-2, during the first two phases
of training where as the two treatment techniques differ
very slightly during the last phase of training.

At the moderate level of self-esteem, the training
duration does not have any differential impact on inqui-
sitiveness. So far as the effect of treatment technique
is concerned treatment technique-1 seems to be better than
treatment technique-2. The interaction effect, however,
is not significant.

In case of low self-esteem subjects only the main
effect of training is significant. There seems to be a
progressive change in inquisitiveness with the increase
in training duration. There is no differential impact
of training techniques among these subjects. Also the
interaction effect is not significant.

PART - III

In this part main and interaction effects of self-esteem and treatment techniques on nine Dutt Personality components and depressive affect are analyzed using a 3 x 2 factorial design.

TABLE - 1(A)

Main and Interaction Effects of Self-esteem and Techniques on 'Insecurity-loneliness' dimension of Personality.

| Source | Df | SS | MSS | F | |
|---|---|---|---|---|---|
| Self-esteem | 2 | 174.3 | 87.1 | 5.31 | * |
| Treatment Techniques | 1 | 7.7 | 7.7 | 0.4 | |
| Self-esteem X Treatment Technique | 2 | 103.00 | 51.5 | 3.14 | |
| Within | 36 | 589.5 | 16.37 | | |
| | 41 | | | | |

* $p < .01$

TABLE - 1(B)

Mean Scores

| High Self-esteem | 4.64 |
|---|---|
| Moderate Self-esteem | 9.00 |
| Low Self-esteem | 8.92 |

TABLE - 1(C)

Mean Scores

| Treatment Technique - 1 | 7.09 |
|---|---|
| Treatment Technique - 2 | 7.95 |

The first factor of anxiety in Dutt Personality inventory is Insecurity-loneliness. There are eight items for this component of anxiety, giving a range of possible scores from 0 to 16. The three levels of self-esteem and two levels of treatment techniques were studied in a 3 x 2 factorial design for their influence on this insecurity-loneliness component. Table 1 shows the result of analysis.

Referring to Table No.1 it is observed that the main effect of self-esteem is significant. Neither the effect of treatment techniques nor the effect of interaction between self-esteem and treatment technique is significant. Thus self-esteem alone is a determining factor. Referring to the mean scores of 4.64, 9.00 and 8.92, it is observed that anxiety generated by insecurity-loneliness is extremely low at the high self-esteem level. The level of insecurity-loneliness may be considered as moderate at the moderate and low self-esteem levels in view of the maximum possible score of 16. Thus the reduction in anxiety reflected in the insecurity-loneliness component is quite considerable at the high self-esteem level compared to the reduction at the moderate and low self-esteem levels.

TABLE - 2 (A)

Main and Interaction Effects of Self-esteem and Techniques on 'Hopelessness' dimension of Personality.

P. J. O.

TABLE - 2(A)

| Source | DF | SS | MSS | F | |
|---|---|---|---|---|---|
| Self-esteem | 2 | 48.9 | 24.4 | 3.98 | ** |
| Treatment Techniques | 1 | 0.16 | 0.16 | 0.02 | |
| Self-esteem X Treatment Technique | 2 | 51.00 | 25.5 | 4.16 | ** |
| Within | 36 | 220.5 | 6.12 | | |
| | 41 | | | | |

** p < .05

TABLE - 2(B)

Mean Scores

| | |
|---|---|
| High Self-esteem | 6.14 |
| Moderate Self-esteem | 8.35 |
| Low Self-esteem | 8.50 |

TABLE - 2(C)

Mean Scores.

| | |
|---|---|
| Treatment Technique - 1 | 6.6 |
| Treatment Technique - 2 | 7.00 |

TABLE - 2(D)

Mean Scores

| Treatment Technique | High Self-esteem | Moderate Self-esteem | Low Self-esteem |
|---|---|---|---|
| Treatment Technique-1 | 6.00 | 7.00 | 9.85 |
| Treatment Technique-2 | 6.28 | 9.71 | 7.14 |

Table No.2 indicates that the main effect of self-esteem is significant beyond .05 level of confidence, and the effect of treatment technique is not significant, the interaction between self-esteem and treatment technique is also signifi-cant beyond .05 level of confidence. Referring to the mean scores of 6.14, 8.35 and 8.50, it is observed that 'Hopeless-ness' component of personality is comparatively low at the high self-esteem level where as it is fairly high at the moderate

and low self-esteem levels. The mean scores of 6.6 and 7.00 for treatment technique-1 and treatment technique-2 respectively indicate that they operate more or less in a similar way. The mean scores of 6.0, 7.0 and 9.85 of treatment technique are at high, moderate and low self-esteem levels respectively and the similar mean scores of 6.28, 9.71 and 7.14 of treatment technique-2 indicate that treatment technique-1 produces better results at high and moderate self-esteem levels where as at low self-esteem level treatment technique-2 does better than treatment technique-1 in reducing anxiety associated with feelings of hopelessness.

TABLE - 3(A)

Main and Interaction Effects of Self-esteem and Techniques on 'Inferiority Complex' dimension of Personality.

| Source | DF | SS | MSS | F | |
|---|---|---|---|---|---|
| Self-esteem | 2 | 174.2 | 87.1 | 5.32 | * |
| Treatment Techniques | 1 | 14.9 | 14.9 | 0.9 | |
| Self-esteem X Treatment Technique | 2 | 103.00 | 51.5 | 3.14 | |
| Within | 36 | 589.5 | 16.37 | | |
| | 41 | | | | |

* p < .01

TABLE - 3(B)

Mean Scores

| | |
|---|---|
| High Self-esteem | 7.71 |
| Moderate Self-esteem | 9.92 |
| Low Self-esteem | 11.28 |

TABLE - 3(C)

Mean Scores

| | |
|---|---|
| Treatment Technique - 1 | 8.80 |
| Treatment Technique - 2 | 10.47 |

It has been commonly observed that lower Self-esteem is associated with inferiority complex. Referring to Table No.3 it is observed that the main effect self-esteem is significant at .01 level of confidence. The main effects of treatment techniques and their interaction with self-esteem are not significant. Thus, self-esteem alone is influencial in reducing the inferiority complex. It is further observed that mean scores of this component are

comparatively higher at moderate and low self-esteem level than at high self-esteem.

TABLE - 4(A)

Main and Interaction effects of Self-esteem and Techniques on 'Guilt-Proneness' dimension of Personality.

| Source | Df | SS | MSS | F | |
|---|---|---|---|---|---|
| Self-esteem | 2 | 159.3 | 79.65 | 14.58 | * |
| Treatment Techniques | 1 | 17.38 | 17.38 | 3.18 | |
| Self-esteem X Treatment Technique | 2 | 33.5 | 16.75 | 3.06 | |
| Within | 36 | 196.8 | 5.46 | | |
| | 41 | | | | |

* $p < .01$

TABLE - 4(B)

Mean Scores

| | |
|---|---|
| High Self-esteem | 3.21 |
| Moderate Self-esteem | 6.78 |
| Low Self-esteem | 8.07 |

TABLE - 4(C)

Mean Scores

| Treatment Technique - 1 | 6.66 |
| Treatment Technique - 2 | 5.38 |

TABLE - 4(D)

Mean Scores

| Treatment Technique | High Self-esteem | Moderate Self-esteem | Low Self-esteem |
| --- | --- | --- | --- |
| Treatment Technique-1 | 3.42 | 8.28 | 8.28 |
| Treatment Technique-2 | 3.00 | 5.28 | 7.85 |

"A person with a healthy conscience will foster healthy personality and will obtain basic need gratification in a guilt free manner. Such persons will enjoy relatively high self-esteem" (Sidney, 1980).

Referring to Table No.4, it is found that the main effect of self-esteem is influencial in decreasing the 'Guilt Proneness' component of personality among institutionalized

juvenile delinquents. So far as the effect of treatment techniques is concerned, technique-1 and technique-2 have the mean scores of 6.66 and 5.38 respectively, which indicate that both the techniques are more or less equally effective in reducing the feeling of guilt proneness. The interaction effect is not significant.

## TABLE - 5(A)

Main and Interaction Effects of Self-esteem and Techniques on 'Ergic Tension' dimension of Personality.

| Source | DF | SS | MSS | F |
|---|---|---|---|---|
| Self-esteem | 2 | 160.2 | 80.1 | 5.79 * |
| Treatment Techniques | 1 | 24.1 | 24.1 | 1.74 |
| Self-esteem X Treatment Technique | 2 | 39.8 | 19.9 | 1.43 |
| Within | 36 | 498.2 | 13.83 | |
| | 41 | | | |

* $p < .01$

TABLE - 5 (B)

Mean Scores

| High Self-esteem | 5.07 |
|---|---|
| Moderate Self-esteem | 7.42 |
| Low Self-esteem | 7.71 |

TABLE - 5(C)

Mean Scores

| Treatment Technique - 1 | 5.52 |
|---|---|
| Treatment Technique - 2 | 6.00 |

Referring to Table No.5 it is observed that the main effect of self-esteem is significant at .01 level of confidence, main effect of treatment techniques and its interaction with self-esteem are not significant. The mean scores of 5.07, 7.42 and 7.71 for the high, moderate and low self-esteem groups respectively show that high esteem group has the lowest ergic tention. The moderate and low self-esteem groups have comparatively low level of ergic tension.

TABLE - 6(A)

Main and Interaction Effects of Self-esteem
and Techniques on 'Paranoid Suspiciousness'
dimension of Personality.

| Source | Df | SS | MSS | F | |
|--------|-----|--------|-------|------|---|
| Self-esteem | 2 | 413.2 | 206.6 | 5.53 | * |
| Treatment Techniques | 1 | 0.9 | 0.9 | 0.02 | |
| Self-esteem X Treatment Technique | 2 | 171.9 | 85.9 | 2.30 | |
| Within | 36 | 1343.1 | 37.30 | | |
| | 41 | | | | |

* p < .01

TABLE - 6(B)

Mean Scores

| | |
|--------|------|
| High Self-esteem | 7.14 |
| Moderate Self-esteem | 6.71 |
| Low Self-esteem | 13.57 |

TABLE - 6 (c)

Mean Scores

| | |
|---|---|
| Treatment Technique - 1 | 9.28 |
| Treatment Technique - 2 | 9.60 |

As can be seen from Table No.6, the F ratio of 5.35 for self-esteem is significant beyond .01 level of confidence. The main effect of techniques as well as interaction effect of self-esteem and techniques is not significant. 'Paranoid suspiciousness' component is quite low at the high and moderate self-esteem levels than at low self-esteem level. It should be noted here that although the atmosphere in the institution is conducive to promote paranoid suspiciousness, the level of it is reasonable low in the high and moderate self-esteem subjects but it is on the higher side in case of low self-esteem subjects.

TABLE – 7(A)

Main and Interaction Effects of Self-esteem
and Techniques on 'Emotional Instability'
dimension of Personality.

| Source | Df | SS | MSS | F | |
|---|---|---|---|---|---|
| Self-esteem | 2 | 116.1 | 58.05 | 2.29 | |
| Treatment Techniques | 1 | 12.6 | 12.6 | 0.49 | |
| Self-esteem X Treatment Technique | 2 | 201.14 | 100.57 | 3.98 | ** |
| Within | 36 | 910.00 | 25.27 | | |
| | 41 | | | | |

** p < .05

TABLE – 7(B)

Mean Scores

| | |
|---|---|
| High Self-esteem | 4.21 |
| Moderate Self-esteem | 6.28 |
| Low Self-esteem | 8.28 |

TABLE - 7(c)

Mean Scores

| Treatment Technique - 1 | 6.00 |
| Treatment Technique - 2 | 6.71 |

TABLE - 7(D)

Mean Scores

| Treatment Technique | High Self-esteem | Moderate Self-esteem | Low Self-esteem |
|---|---|---|---|
| Treatment Technique-1 | 3.42 | 5.42 | 11.57 |
| Treatment Technique-2 | 5.00 | 7.14 | 5.00 |

Emotion is a quality of experience and an expressive quality of action. "The capacity to experience a broad range of emotion is an indication of healthy personality". (Sidney 1980).

Referring to Table No.7 it is found that the main effects of self-esteem and treatment techniques do not differentially influence, 'Emotional Instability' component of inmates'

personality. The effects of interaction between self-esteem and treatment techniques is significant beyond .05 level of confidence. Treatment technique-1 seems to be more effective at high and moderate self-esteem levels while treatment technique-2 is more effective at low self-esteem level.

TABLE - 8 (A)

Main and Interaction Effects of Self-esteem and Techniques on 'Hypochondrial Tendencies' dimension of Personality.

| Source | DF | SS | MSS | F |
|---|---|---|---|---|
| Self-esteem | 2 | 63.5 | 31.75 | 1.39 |
| Treatment Techniques | 1 | 1.9 | 1.9 | 0.08 |
| Self-esteem X Treatment Technique | 2 | 49.9 | 24.95 | 1.09 |
| Within | 36 | 818.00 | 22.72 | |
| | 41 | | | |

TABLE – 8 (B)

Mean Scores

| | |
|---|---|
| High Self-esteem | 4.00 |
| Moderate Self-esteem | 3.92 |
| Low Self-esteem | 6.57 |

TABLE – 8 (C)

Mean Scores

| | |
|---|---|
| Treatment Technique – 1 | 4.61 |
| Treatment Technique – 2 | 5.04 |

Anxious overconcern with the body is called 'Hypochondriasis'. Such individuals are continually preoccupied with their health. "Self-esteem is highly correlated with a positive attitude toward one's body" (Sidney 1980). Referring to Table No.8 it is observed that the mean scores of the three esteem groups differ from one another but the overall difference is not significant. The low self-esteem group has a slightly higher mean score compared to high and moderate self-esteem groups. Neither the technique effect nor the interaction effect is significant.

TABLE - 9(A)

Main and Interaction Effects of Self-esteem
and Techniques on 'Somatic Reaction'
dimension of Personality.

| Source | Df | SS | MSS | F | |
|--------|-----|-------|-------|------|---|
| Self-esteem | 2 | 160.4 | 80.2 | 5.79 | * |
| Treatment Techniques | 1 | 24.4 | 24.4 | 1.76 | |
| Self-esteem X Treatment Technique | 2 | 40.7 | 20.35 | 1.47 | |
| Within | 36 | 498.5 | 13.84 | | |
| | 41 | | | | |

*p < .01

TABLE - 9(B)

Mean Scores

| | |
|--------------------|------|
| High Self-esteem | 5.57 |
| Moderate Self-esteem | 3.92 |
| Low Self-esteem | 8.64 |

TABLE - 9 (c)

Mean Scores

| | |
|---|---|
| Treatment Technique - 1 | 6.80 |
| Treatment Technique - 2 | 5.28 |

"Psycho-somatic sickness, often, stem from over adaptation to new environment". (Sidney 1980). Institutionalized inmates too face, this problem. Over and above this, institutionalized juvenile delinquents lead a life where are lot of hostile restrictions in their movements. This creates a feeling of 'hopelessness' and 'helplessness' and woeful frustrations. This state may be resulting in psycho-somatic reactions viz. Hysteric fits, various kinds of skin troubles, sleeplessness, etc. etc. which are quite common among inmates. Referring to Table No.9 it is observed that F ratio of 5.79 is significant beyond .01 level of confidence in case of self-esteem. In view of maximum possible score of 'somatic reaction' component of personality which could be 20.00, it is observed that at high and moderate self-esteem levels this component is comparatively lower than it is at low self-esteem level. Neither the technique effect nor the interaction of technique with self-esteem is significant.

TABLE - 10 (A)

Main and Interaction Effects of Self-esteem
and Techniques on 'Depressive Affect'
dimension of Personality.

| Source | Df | SS | MSS | F | |
|---|---|---|---|---|---|
| Self-esteem | 2 | 1059.5 | 529.75 | 13.21 | * |
| Treatment Techniques | 1 | 4.68 | 4.68 | 0.116 | |
| Self-esteem X Treatment Technique | 2 | 209.3 | 104.65 | 2.61 | |
| Within | 36 | 1443.5 | 40.09 | | |
| | 41 | | | | |

* $p < .01$

TABLE - 10 (B)

Mean Scores

| | |
|---|---|
| High Self-esteem | 43.92 |
| Moderate Self-esteem | 48.28 |
| Low Self-esteem | 56.07 |

TABLE - 10 (c)

Mean Scores

| | |
|---|---|
| Treatment Technique - 1 | 49.00 |
| Treatment Technique - 2 | 49.09 |

As institutionalized juvenile delinquents are away from their families and their future is quite uncertain, they suffer from depression. Referring to Table No. 10 it is observed that the F ratio of 13.21 is significant beyond .01 level of confidence in case of self-esteem. The mean scores of 43.92, 48.28 and 56.07 clearly show that depression is at a fairly low level among high self esteem subjects compared to the level in case of to moderate and low self-esteem subjects. There is no differential impact of techniques on Depressive Affect. The interaction effect is also not significant.