CHAPTER VI

DISCUSSION
DISCUSSION

The present study aimed at analysis of Executive Effectiveness of the executives in the civil and Defence services -

- It further aimed at measuring or quantifying the relationship of Executive Effectiveness with Personality, Self-Perception, Values and Achievement Motivation.
- It also focussed on comparing the Personality, Self-Perception, Values and Achievement Motivation of the executives in these services.

Hence the focus of the present investigation was to study the Executive Effectiveness and its relationship with Personality, Self-Perception, Values and Achievement Motivation.

Reddin (1970) rightly opined that Executive Effectiveness is the central issue in management. Drucker (1974) regarded it as the very essence of the job of the executive. Reddin (1979) further added that effectiveness standards should form a basis for job specification. Reddin (1980) then maintained that Executive Effectiveness is not a one-sided concept. It is a value that one can embrace and expect others to do the same. It is a life-time asset.

The earlier empirical studies had variously sought to explain executive functions in a rather ambiguous manner, and had not tried to delve deep into studying the very nature
of Executive Effectiveness. The present endeavour aims at objective study of effectiveness of the executives in the government sector. The data for the present study was collected from 200 executives from 4 different services, viz., I.A.S., I.P.S., I.R.S. and Defence.

An Examination of the Mean Scores of total sample and of 4 sub-groups on 17 variables: The mean scores of different sub-groups were also compared by making use of t-test of significance, for the purpose of discussion only those t-ratios which have emerged to be significant at .05 or .01 levels of significance have been discussed. The mean scores of the total sample are shown in Table 1.

Executive Effectiveness

On Executive Effectiveness the mean score of the total sample (Table 1) was 59.61. Jahangiri (1983) in a study on educational administrators found the mean score on Executive Effectiveness to be 57.42. It was also further proved that private sector personnel are more efficient and effective than public sector personnel. Earlier Sinha (1973) too had arrived at a similar conclusion.

Srivastva and Kumar (1984) found the middle level officers of Central Government to be more effective than junior officers.

Srikantia (1985) opines that objectives of improving effectiveness in government organizations deserve a lot of attention.
A comparison of the sub-groups separately showed that the I.A.S., I.P.S., I.R.S. and officers of Defence services obtained mean scores of 61.20, 60.56, 57.12, 59.56 respectively, on Executive Effectiveness (Table 2).

The t-ratios between the I.A.S. and the I.R.S. and between the I.P.S. and the I.R.S. executives emerged to be statistically significant on this variable.

**Personality**

Eysenck and Eysenck (1978) reported the following norms for general population (both for males and females) 12.89 for Extraversion, 11.28 for Neuroticism, 3.21 for Psychoticism and 7.26 for Lie (Social Desirability) Scale. Compared to this data the executives (total sample) (Table 1) scored 11.83 on Extraversion, 8.49 on Neuroticism, 6.53 on Psychoticism and 11.41 on Lie (Social Desirability) Scale. Thus the executives scored lower on Extraversion and Neuroticism but higher on Psychoticism and Lie (Social Desirability) Scale. Executives scored lower on Extraversion, lower on Neuroticism, lower on Psychoticism but higher on Lie-Scale, when compared with means obtained by creative writers on these dimensions, in a study by Tiwana (1982). The mean scores of the creative writers on Extraversion were 12.22, on Neuroticism 14.21, on Psychoticism 7.05 and on Lie (Social Desirability) Scale 10.72. Executives scored lower on Extraversion, Psychoticism and on Neuroticism when compared with means, obtained on these dimensions.
by university students who scored 12.80, 10.28 and 6.19 on different dimensions respectively (Mohan and Malhotra, 1982).

In a study of urban, rural and tribal youth, Mohan and Sharma (1981) found them to obtain a mean score of 10.86 on Neuroticism and 3.55 on Lie (Social Desirability) Scale.

In another study of college students, Mohan and Joginder (1982) found them to obtain a mean score of 10.46 on Neuroticism and 4.14 on Lie (Social Desirability) Scale, as compared to these averages, the executives obtained lower mean score on Neuroticism but a higher one on Lie (Social Desirability) Scale.

**Sub-groups**

On Extraversion officers of the Defence services obtained the highest mean score viz., 12.42. The I.A.S. officers emerged as the next most extraverted group, having a mean score of 12.36, followed by the I.P.S. and I.H.S. executives who obtained mean scores of 11.76 and 10.80 respectively. No t-ratio was found to be significant (Table 3).

These findings are in accordance with the findings of Mohan and Thakre (1977), who reported army officers to be more extraverted as compared to the I.A.S. officers. Earlier Muthayya (1969, 1970) reported administrative officers to be introverted. Eysenck (1971), Uberai and Chakravorty (1974), found the individuals who held executive positions to be less extraverted as compared to the normal
population. Mohan (1977) in a study on M.B.A.s also found them to be introverted. However Kumar (1970), Mohan and Kapoor (1977), Dubey (1977), Hanewicz (1978), Burbeck and Furnham (1984) found executives to be high on Extraversion.

Charate (1980) found the mean score of army executives on Extraversion to be 11.59. The Defence executives in the present study were higher on Extraversion as compared to the army executives in Charate's study.

Jahangiri (1983) found the mean score of educational administrators to be 10.06 on Extraversion. It can be seen that the officers of the Defence services were found to be higher on Extraversion. Further each of the 4 sub-groups of executives in the present study had higher mean scores on Extraversion than the educational administrators.

The officers of the Defence services also obtained the highest mean score on Neuroticism ($M^* = 9.38$), followed by the I.R.S. ($M = 9.10$), I.A.S. ($M = 8.78$), and the I.P.S. ($M = 6.72$). Here t-ratios emerged significant between the I.A.S. and I.P.S. officers, between I.P.S. and I.R.S. executives and between the I.P.S. and Defence executives (Table 4). Earlier Fenster and Locke (1973) had reported that Neuroticism was not a major characteristic of the average police officer.

Charate (1980) reported the mean scores of army executives to be 8.99. It is seen that the officers of the Defence services in the present study had a higher mean score
than that of the army executives in Charate’s study.

Jahangiri (1983) reported the mean scores on Neuroticism of the educational administrators to be 7.54. As compared to the executives it was seen that with the exception of the I.P.S. officers, rest of the sub-groups (I.A.S., I.R.S., Defence) obtained higher mean scores on Neuroticism.

Earlier Eysenck (1964, 1971), reported that executives obtained normal scores on Neuroticism as compared to the general population.

Uberai and Chakravorty (1974) however found the executives to have higher scores on Neuroticism than the general population.

Ghosh and Meherikar (1978), Dalton et al. (1979), Dubey and Verma (1980), Maitra (1983), Chakrabarty and Kundu (1984) reported that the executives are less neurotic as compared to the general population.

On Psychoticism the highest mean score was obtained by the I.R.S. (M = 8.26), followed by the Defence (M = 7.18), I.A.S. (M = 5.60) and I.P.S. executives (M = 5.10). The t-ratios emerged significant between the I.A.S. and I.R.S., between the I.P.S. and I.R.S., and between the I.P.S. and Defence executives (Table 5).
Westley (1951) and Skolnick (1966) maintained that the police officers may in fact be psychotic - a finding not in accordance with the present results. The I.P.S. here, obtained the lowest score on Psychoticism as compared to other services. Burbeck and Furnham (1984) found the police officers to be low on Psychoticism.

On lie (Social Desirability) Scale the highest mean scores were obtained by the I.P.S. ($M = 12.60$), followed by the I.A.S. ($M = 11.52$) officers of Defence Services ($M = 11.08$) and the I.N.S. ($M = 10.44$). The t-ratios emerged significant between the I.P.S. and I.N.S. executives (Table 6).

The Lie Scale has often been interpreted as social desirability (Eysenck and Eysenck, 1968; Gorman, 1968). An exhaustive review of literature on lie Scale (Verma, 1977) seems to support the view that this is a powerful independent factor of Personality which needs to be studied in its own right and not as a mere response bias to be corrected.

The present results are not in accordance with the findings of Mahanta and Kathpalia (1984) who had administered the EPQ to the police officers and found that they presented themselves in a socially less desirable way. Their finding is further supported by Burbeck and Furnham (1984).

However Eysenck (1964, 1971) maintained that executives obtained normal scores on lie (Social Desirability)
Scale.

Self-Perception

Clark (1956) demonstrated that certain patterns/syndromes tend to occur which are positively related to success in particular type of work situations (Clarke 1956a,b,c; and Merenda and Clarke, 1959a,b,c,d).

AVA by Clarke (1963) yields essentially 5 vectors for each of the self-concepts of which it is capable of measuring. The 5 vectors measured by this instrument are Aggressiveness ($V_1$), Sociability ($V_2$), Emotional Stability ($V_3$), Social Adaptability ($V_4$), and Social Intelligence ($V_5$). Merenda and Migliorino (1973) described the profile of persons scoring 'high' on each of these 5 vectors - AVA yields an ipsative profile. (A respondent was considered to be higher with respect to a given factor, if his deviation score was positive).

The results as are seen from Table 1, for the total sample reveal that the executives obtained the highest mean score on Social Adaptability ($V_4$) ($M = 9.95$), followed by Emotional Control ($V_3$) ($M = 8.12$), Sociability ($V_2$) ($M = 7.28$), Social Intelligence ($M = 6.54$), and Aggressiveness ($V_1$) ($M = 3.87$). Subjects in Hasler and Clarke's sample also obtained the highest mean score on Social Adaptability ($V_4$) followed by Emotional Control ($V_3$). Their mean scores on the different
vectors were Social Adaptability ($V_4$) ($M = 11.06$), followed by Emotional Control ($V_3$) ($M = 8.97$), Sociability ($V_2$) ($M = 8.05$), Social Intelligence ($V_5$) ($M = 8.31$) and Aggressiveness ($V_1$) ($M = 4.25$). However unlike the executives, here the next highest mean scores were obtained on Sociability ($V_2$) followed by Social Intelligence ($V_5$) and finally by Aggressiveness ($V_1$). University students (Mohan and Malhotra, 1982) obtained highest mean score on Emotional Control ($V_3$), followed by Social Adaptability ($V_4$), Sociability ($V_2$), Social Intelligence ($V_5$) and Aggressiveness ($V_1$). Their mean scores were thus 7.21, 7.14, 6.70, 5.98, and 5.34 respectively on Emotional Control ($V_3$), Social Adaptability ($V_4$), Sociability ($V_2$), Social Intelligence ($V_5$) and Aggressiveness ($V_1$). Compared to the university students the executives obtained relatively higher mean scores on Emotional Control ($V_3$), Social Adaptability ($V_4$), Sociability ($V_2$), and Social Intelligence ($V_5$), but lower on Aggressiveness ($V_1$).

Mean scores obtained by creative writers (Tiwana, 1982) on the vectors of Aggressiveness ($V_1$), Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$) and Social Intelligence ($V_5$) were 4.26, 5.68, 4.72, 5.35 and 4.46, respectively. As compared to these the executives scored higher on all the vectors except on Aggressiveness ($V_1$).

On Aggressiveness ($V_1$) the l.A.S. scored the highest, followed by officers of the Defence services, I.A.S. and
lastly the I.P.S. executives (mean scores being 4.60, 3.96, 3.50 and 3.42 respectively). The t-ratios emerged significant between the I.A.S. and I.P.S. and between the I.A.S. and I.R.S. executives (Table 7).

On Sociability ($V_2$) the officers of the Defence services obtained the highest mean score of 8.40. The I.A.S. obtained a mean score of 7.62, I.R.S. had a mean score of 6.74 and I.P.S. executives had the lowest mean score on this vector viz., 6.36. The t-ratios emerged significant between the I.P.S. and Defence and between the I.R.S. and Defence executives (Table 8). Charate (1980) found the Self Perception of junior army executives (Captains) to cluster more heavily in the area of Sociability ($V_2$).

On Emotional Control ($V_3$) the officers of the Defence services obtained the highest mean score of 8.90 followed by the I.P.S. who obtained a mean score of 8.22, I.A.S. had a mean score of 7.76, and I.R.S. executives had a mean score of 7.62 respectively. No t-ratios emerged significant (Table 9).

On Social Adaptability ($V_4$) the I.A.S. obtained the highest mean score of 10.98, followed by officers of the Defence services, who obtained a mean score of 10.14, followed by the I.P.S. and I.R.S. executives. The I.P.S. executives obtained a mean score of 10.00 and I.R.S. executives obtained a mean score of 8.68. The t-ratios emerged significant here.
between the I.A.S. and I.H.S. executives (Table 10). Charate (1980) however reported that the army executives had a mean score of 11.19 on Social Adaptability \((V_{Ad})\). However, the officers of the Defence services in the present study obtained a mean score of 10.14, which was less than the mean scores obtained by the army executives in Charate's study.

On Social Intelligence \((V_{So})\) the I.A.S. scored the highest \((M = 7.26)\), followed by officers of the Defence services \((M = 6.66)\), I.F.S. \((M = 6.50)\) and I.H.S. executives \((M = 5.74)\). The t-ratios emerged significant between the I.A.S. and I.H.S. executives (Table 11). Charate (1980) found the mean scores of army executives on Social Intelligence \((V_{So})\) to be 6.85. Further it was seen that as compared to the Defence officers in the present study the army executives in Charate's study scored higher on Social Intelligence \((V_{So})\). The executives who are high on Social Intelligence \((V_{So})\) weigh the possible outcomes of a situation and the consequences of their actions. They tend to be deliberate in their actions, and take quick decisions. They exercise good moral judgement and are highly ethical individuals (Merenda, 1964).

**Values**

The study of Values (Allport, Vernon and Lindzey, 1960) was employed to study the Values of the executives. Allport et al. (1960) maintained in their manual that although basic feature of their test is that it tends to produce negative
intercorrelations among the 6 Values in general and although the 6 Values are interdependent, it is not implied that intercorrelations among these Values cannot be stated. Two reasons are given for this, firstly, correlations found were very low and no smaller number of basic types could be derived from them. Secondly, the main question is about the relative degree to which pairs of Values are associated. Their norms show that a positive association exists between Social and Religious Values, Economic and Political Values and possibly between Theoretical and Aesthetic Values.

Keeping this theoretical evidence about association between Values in view, it was seen in the present study that the executives were found to be higher on Economic, Political, and Social Values, and lower on Theoretical, Aesthetic and Religious Values (Table 1). The mean scores thus for the total sample were 37.92 on Theoretical Values, 42.37 on Economic Values, 33.94 on Aesthetic Values, 40.11 on Social Values, 42.14 on Political Values and 33.28 on Religious Values. The table of norms (Allport et al., 1960) of general population gave the averages of Theoretical, Economic, Aesthetic, Social, Political and Religious Values as 39.80, 39.45, 40.29, 39.34, 40.61 and 40.5 respectively. The comparison of the two data reveals that executives scored lower than the general population on Theoretical, Aesthetic and Religious Values, but higher on Economic, Social and Political Values.
Tiwana (1982) in a study on creative writers reported their mean scores on Theoretical, Economic, Aesthetic, Social, Political, and Religious Values as 41.89, 25.36, 45.22, 41.60, 37.38 and 32.07 respectively. As compared to the creative writers, the executives scored lower on Theoretical, Aesthetic and Social Values but higher on Economic, Political and Religious Values.

Kamlesh (1980) used the same test (Study of Values) standardized on Indian situation. The mean scores on the different Value dimensions obtained by the Indian adults were 47.38, 50.16, 42.8, 60.3, 47.22 and 43.52 on Theoretical, Economic, Aesthetic, Social, Political and Religious Values. Comparing these means with those obtained by the executives in the present study, one finds that the executives scored lower than the Indian adults on all the 6 Value dimensions.

On Theoretical Values the highest mean score was obtained by the officers of the Defence services (M = 39.70), followed by the I.A.S. (M = 38.12), I.R.S. (M = 38.10) and the I.P.S. executives (M = 35.76). The t-ratios between the I.P.S. and the officers of the Defence services were found to be significant (Table 12).

On Economic Values the I.R.S. obtained the highest mean score of 43.82, followed by the I.A.S. (M = 43.00), Defence (M = 41.50) and I.P.S. executives (M = 41.16). No t-ratio emerged significant (Table 13). Cromies and Johns (1983)
reported that executives who are high achievers are also high on Economic and Theoretical Values.

On Aesthetic Values the I.P.S. were the highest (M = 35.14), followed by I.A.S. (M = 33.74), officers of Defence services (M = 33.62) and the I.R.S. executives (M = 33.26). No t-ratio emerged significant (Table 14).

The I.R.S. scored the highest on Social Values (M = 41.20), followed by I.A.S. (M = 40.24), I.P.S. (M = 39.98) and the officers of Defence services (M = 39.02). No t-ratio emerged significant (Table 15).

Dayal (1976), Sinha (1983) reported that in India executives value strong personalized relations. Excessive dependency seems to be a dominant feature and orientation of the Indian executives (De, 1974a; Sinha, 1970; Chattopadhyay, 1975). Social relationships and organizational performance are not separated in India. Loyalty often gets priority over efficiency (Dayal, 1976).

Thus it can be seen that the executives in the present study especially the I.R.S. are high on Social Values - the reason being that in India executives value strong relationships.

However, contrary to this, Cressey and Moore (1963) in their study on managerial values and corporate codes of ethics suggested that top executives have little or no concern
for social responsibility or ethical considerations.

On Political Values the I.P.S. obtained the highest mean score of 43.36, followed by the officers of the Defence services, I.A.S. and the I.R.S. executives who obtained the mean scores of 42.72, 41.92 and 40.56 respectively. The t-ratio emerged significant between the I.P.S. and the I.R.S. executives (Table 16).

Triandis (1972) studied Values and cognitive structures of students in Illinois, Athens, Bangalore and Tokyo, as many of the students would later on work in organizations as executives. Concepts like 'Freedom', 'Power' were used. It was found that 'Power' had strong values in the two western countries but not in India and Greece.

On Religious Values the I.P.S. scored highest (M = 34.60), followed by officers of Defence services (M = 33.84), I.R.S. (M = 32.82) and the I.A.S. executives (M = 31.86). No t-ratio emerged significant (Table 17).

Dhingra (1972) in a study on public sector executives found that the largest group of executives had a morality-orientation. England, Dhingra and Agarwal (1974) found Indian executives to be more morallistically oriented. Soares, Valecha and Vankataraman (1961) reported that the Values of the Indian executives are passively moralistic. Brunson (1985) found that the two sets of Value orientations emerged in the top management personnel viz., pragmatic and moralistic-humanistic.
Pratap and Srivastva (1982) used the Hindi version of the Allport-Vernon-Lindzey, Study of Values on technical and non-technical employees and found that the former were more practical, power and prestige oriented, whereas the latter were more interested in the discovery of truth.

Adhikari and Hasnain (1982) reported that the nursing trainees were found to be higher than business training college students on Theoretical, Economic, Social, Political, and Religious Values.

**Achievement Motivation**

The mean score on Achievement Motivation of the total sample (Table 1) was 10.05. A comparison of the sub-groups reveals that the I.A.S. obtained the highest mean score on this dimension viz., 10.86, followed by the I.P.S. (\(M = 10.34\)), I.R.S. (\(M = 9.52\)) and the officers of the Defence services (\(M = 9.48\)). The t-ratios emerged significant between the I.A.S. and I.R.S. and between the I.A.S. and Defence executives (Table 18).

Charate (1980) found army executives to obtain a mean score of 5.71 on Achievement Motivation. As compared to these executives the Defence Officers in the present study had higher mean scores on Achievement Motivation.

Mohan and Kapoor (1977) found the M.B.A.s to be superior in general ability and highly motivated.

Prasad (1983) emphasized the fact that the executives value achievement and self-actualization. Further he maintained
that competent policy and administrative opportunities for growth are effective motivators.

**Personality, Self-Perception, Values and Achievement Motivation Profiles of Highly Effective and Least Effective Executives**

Further to study the Personality, Self-Perception, Values and Achievement Motivation pattern of highly effective executives and least effective executives, two groups of highly effective and least effective executives were selected, using $P_{75}$ and $P_{25}$ as the cutting points. Thus for the total sample 50 highly effective and 50 least effective executives were selected and for each sub-group 12 highly effective, and 12 least effective executives were selected. The two groups were then compared on the different dimensions of Personality, Self-Perception, Values and Achievement Motivation taking the mean scores of each of these variables. Thus, the profiles of highly effective and least effective executives were made. For this purpose their Means, SDs, t-ratios were computed both for the total as well as the sub-groups. For the purpose of discussion only those t-ratios that have emerged significant at .05 or .01 levels of significance have been discussed. The Mean scores were further represented in graphic form.

The mean scores of highly effective and least effective executives both for the total sample and the sub-groups are discussed below:
An Examination of the Mean Scores of the Highly Effective and Least Effective Executives for the Total Sample

The following information was revealed by a perusal of the mean scores (Table 19):

**Personality**

No statistically significant differences were found between highly effective and least effective executives, for the total sample on Extraversion, Neuroticism, Psychoticism and Lie (Social Desirability) Scale. However, a look at the mean scores revealed that the highly effective executives scored lower than the least effective executives on Extraversion, Psychoticism and Lie (Social Desirability) Scale. However, they scored higher on Neuroticism in comparison to the least effective executives. The mean scores of highly effective executives on Extraversion, Neuroticism, Psychoticism and Lie (Social Desirability) Scale were 8.04, 12.14, 5.62 and 11.66 respectively, whereas those of the least effective executives on these very Personality dimensions were 9.76, 11.58, 6.90 and 12.02 respectively.

**Self-Perception**

No statistically significant differences were found between the highly effective and least effective executives on Aggressiveness ($V_1$), Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$) and Social Intelligence ($V_5$). The mean scores obtained by the highly effective executives on
these five vectors of Self-Perception were 3.62, 7.22, 8.12, 10.44, and 6.88 respectively. The least effective executives obtained mean scores of 4.42, 7.54, 8.08, 9.78 and 6.58 respectively, on these vectors of Self-Perception.

Values

A look at the mean scores revealed that the highly effective executives scored higher on these Values viz., Theoretical (\(M = 38.04\)), Economic (\(M = 41.98\)), Aesthetic (\(M = 33.68\)), Social (\(M = 41.28\)) and Political (\(M = 41.74\)), in comparison to the least effective executives who obtained mean scores of 37.18, 41.36, 33.48, 40.20 and 41.48 respectively on these very Value dimensions. The t-ratio between the highly effective and least effective executives on Religious Values emerged to be statistically significant. Least effective executives emerged to be significantly higher on Religious Values (\(M = 36.16\)) in comparison to the highly effective executives (\(M = 32.08\)).

Achievement Motivation

The highly effective executives obtained a mean score of 10.36, whereas the least effective executives obtained a mean score of 9.66 on Achievement Motivation. The difference was not found to be statistically significant.
An Examination of the Mean Scores of Highly Effective and Least Effective I.A.S. Executives

No statistically significant differences emerged between the highly effective and least effective I.A.S. executives on the various dimensions of Personality, Self-Perception, Values and on Achievement Motivation. A look at the mean scores (Table 20) revealed the following information:

**Personality**

The highly effective I.A.S. executives obtained mean scores of 8.58, 12.58, 5.25 and 11.92 on Extraversion, Neuroticism, Psychoticism and Lie (Social Desirability) Scale, respectively. The least effective I.A.S. executives obtained mean scores of 10.75, 12.25, 5.00 and 12.42 respectively on these very Personality dimensions. It can be seen by a perusal of the mean scores that the highly effective I.A.S. executives were lower on Extraversion and Lie(Social Desirability) Scale, as compared to the least effective I.A.S. executives, but were higher than the latter group on Neuroticism and Psychoticism.

**Self-Perception**

The mean scores of highly effective I.A.S. executives on Aggressiveness ($V_1$), Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$) and Social Intelligence ($V_5$) were 3.50, 7.58, 7.58, 10.75 and 6.83 respectively. The mean scores obtained by least effective I.A.S. executives on these
very vectors of Self-Perception were 6.00, 9.25, 10.00, 12.75 and 8.50. It can be seen that the least effective I.A.S. executives obtained higher mean scores on all the vectors of Self-Perception as compared to the mean scores obtained by the highly effective I.A.S. executives.

**Values**

The highly effective I.A.S. executives obtained lower mean scores on Theoretical Values \((M = 37.42)\), Economic Values \((M = 41.50)\), Political Values \((M = 38.92)\) and Religious Values \((M = 32.92)\), in comparison to the least effective I.A.S. executives whose mean scores on these Value dimensions were 37.83, 43.00, 42.58, and 35.83 respectively. However, the highly effective I.A.S. executives obtained higher mean scores on Aesthetic Values \((M = 33.25)\) and on Social Values \((M = 41.75)\) in comparison to the least effective I.A.S. executives who obtained mean scores of 31.33 and 39.17 on Aesthetic and Social Values respectively.

**Achievement Motivation**

The least effective I.A.S. executives obtained a mean score of 10.67, whereas the highly effective I.A.S. executives obtained a mean score of 9.75 on Achievement Motivation.
An Examination of the Mean Scores of Highly Effective and Least Effective I.P.S. Executives.

No statistically significant differences emerged between the highly effective and least effective I.P.S. executives, on the various dimensions of Personality, Self-Perception, Values and on Achievement Motivation. However, a look at the mean scores (Table 21) revealed the following information:

Personality

The highly effective I.P.S. executives emerged to be lower on Extraversion ($M = 6.00$), Neuroticism ($M = 11.17$) and Lie (Social Desirability) Scale ($M = 11.58$) as compared to the least effective executives, who obtained mean scores of 8.25, 11.67, and 13.92 on the same Personality dimensions. The highly effective I.P.S. executives, however emerged to be higher on Psychoticism ($M = 4.75$) as compared to the least effective I.P.S. executives who had a mean score of 4.50 on Psychoticism.

Self-Perception

The highly effective I.P.S. executives emerged to be lower on Aggressiveness ($V_1$) ($M = 2.92$), Sociability ($V_2$) ($M = 5.33$) and Emotional Control ($V_3$) ($M = 7.25$) as compared to the least effective I.P.S. executives who obtained mean scores of 3.42, 6.67 and 8.25 respectively on the same vectors of Self-Perception. Both the highly effective and least effective I.P.S. executives obtained a mean score of 10.00 on Social Adaptability ($V_4$). The highly effective group
emerged to be higher on Social Intelligence ($V_5$) ($M = 6.92$) as compared to the least effective I.P.S. executives who obtained a mean score of 6.67 on Social Intelligence ($V_5$).

**Values**

The highly effective I.P.S. executives obtained mean scores of 35.50, 39.83, 34.08, 42.25, 44.92 and 33.42 on Theoretical, Economic, Aesthetic, Social, Political and Religious Values respectively. The mean scores of least effective I.P.S. executives on these Value dimensions were 35.00, 41.83, 32.67, 39.50, 44.67 and 36.33 respectively. It can be seen from the mean scores that the highly effective I.P.S. executives obtained higher means on Theoretical, Aesthetic, Social and Political Values as compared to the least effective I.P.S. executives, but lower means than the latter group, on Economic and Religious Values.

**Achievement Motivation**

On Achievement Motivation the highly effective I.P.S. executives obtained a higher mean score ($M = 11.25$) as compared to the least effective I.P.S. executives ($M = 10.33$).

An Examination of the Mean Scores of Highly Effective and Least Effective I.R.S. Executives.

No statistically significant differences emerged between the highly effective and least effective I.R.S. executives on the various dimensions of Personality, Self-Perception and Values. The following information was warranted (Table 22)
by a perusal of the mean scores:

**Personality**

The highly effective I.R.S. executives obtained lower mean scores on Extraversion ($M = 8.08$), Neuroticism ($M = 10.00$) and Psychoticism ($M = 5.83$) as compared to the least effective I.R.S. executives whose mean scores on the same Personality dimensions were 11.50, 10.25 and 9.25 respectively. The highly effective group obtained higher mean score on Lie (Social Desirability) Scale ($M = 12.42$) as compared to the least effective I.R.S. executives, whose mean score on the same dimension was 11.17.

**Self-Perception**

The highly effective I.R.S. executives obtained higher mean scores on all the vectors of Self-Perception, as compared to the least effective I.R.S. executives. The former obtained mean scores of 4.00, 7.17, 9.00, 10.08 and 6.83 on Aggressiveness ($V_1$), Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$) and Social Intelligence ($V_5$) respectively, whereas the mean scores obtained by the latter on these very vectors were 3.83, 6.42, 6.75, 7.75 and 5.00 respectively.

**Values**

The highly effective I.R.S. executives obtained mean scores of 37.17, 44.25, 33.25, 41.42, 41.25 and 32.75 on Theoretical, Economic, Aesthetic, Social, Political and
Religious Values respectively. The least effective I.R.S. executives obtained mean scores of 39.50, 41.00, 35.17, 41.33, 36.83 and 35.08 on the same Value dimensions. It can be noted from the mean scores that the highly effective I.R.S. executives scored lower than the least effective I.R.S. executives on Theoretical, Aesthetic, and Religious Values, whereas they scored higher on Economic, Social and Political Values as compared to the least effective I.R.S. executives.

Achievement Motivation

The difference between the highly effective and least effective I.R.S. executives on Achievement Motivation emerged to be statistically significant. The highly effective I.R.S. executives were found to be significantly higher \((M = 10.42)\) than the least effective I.R.S. executives \((M = 8.25)\) on Achievement Motivation.

An Examination of the Mean Scores of Highly Effective and Least Effective Defence Executives

No statistically significant differences were found between the highly effective and least effective Defence executives on the various dimensions of Personality, Self-Perception, on Theoretical, Economic, Aesthetic, Social and Political Values and on Achievement Motivation. A look at the mean scores (Table 23) however revealed the following information:
Personality
The highly effective Defence executives obtained mean scores of 9.58, 14.17, 7.08 and 10.50 on Extraversion, Neuroticism, Psychoticism and Lie (Social Desirability) Scale. The mean scores of the least effective executives on the same Personality dimensions were 9.08, 12.42, 8.00 and 11.75 respectively. The mean scores reveal that the highly effective Defence executives were higher on Extraversion, and Neuroticism as compared to their least effective counterparts, but lower than the latter on Psychoticism and Lie (Social Desirability) Scale.

Self-Perception
The highly effective and the least effective Defence executives obtained a mean score of 4.58 on Aggressiveness (V_1). On the other vectors viz., Sociability (V_2), Emotional Control (V_3), Social Adaptability (V_4) and Social Intelligence (V_5) higher mean scores were obtained by the highly effective Defence executives, their mean scores being 9.00, 9.42, 11.42 and 7.42 respectively. The mean scores obtained by the least effective Defence executives on the same vectors of Self-Perception were 8.33, 8.17, 9.58 and 6.75 respectively.

Values
The highly effective Defence executives scored higher than their least effective counterparts on Theoretical Values (M = 41.08), Economic Values (M = 41.92), Social Values (M = 40.50).
and Political Values (M = 42.50). The mean scores of least effective Defence executives on the same Value dimensions were 36.42, 39.92, 40.25 and 41.42 respectively. The least effective Defence executives scored higher on Aesthetic Values (M = 34.50), as compared to their highly effective counterparts, who obtained a mean score of 33.83. The difference between the highly effective Defence executives and their least effective counterparts on Religious Values emerged to be statistically significant. The least effective Defence executives were found to be significantly higher on Religious Values (M = 37.50) than the highly effective Defence executives (M = 30.17).

Achievement Motivation

The highly effective Defence executives obtained higher mean score on Achievement Motivation viz., 9.75, as compared to the least effective Defence executives who obtained a mean score of 9.42.
CORRELATIONAL ANALYSIS

For the purpose of discussion, only those correlations which emerged significant at .05 or .01 levels of significance have been considered.

A careful analysis of the intercorrelation matrix of executives revealed the following information:

Intercorrelational matrix for total sample (Table 24)

(a) Executive Effectiveness was found to have a negative correlation with Neuroticism and Religious Values. It was found to be positively related with Achievement Motivation. However, Jahangiri (1983) had found Executive Effectiveness to have a positive correlation with Neuroticism, though a low one.

Miles, Wilkins, Lester and Hutchins (1946); French (1955), Wendt (1955), Atkinson and Raphelson (1956), Klinger (1966), Bray and Grant (1966), Hinrichs (1967), Birney (1968), Wollowich and MacNamara (1969), Argyle (1972), Anantharaman and Deivasenapathy (1979), and Franklin (1980) had earlier found effective executives to be high on Achievement Motivation, as in the present study.

(b) Extraversion was found to have a negative correlation with Neuroticism, Psychoticism, Social Values and Religious Values. It was positively related with Aggressiveness ($V_1$), Sociability ($V_2$), Social Intelligence ($V_3$), Economic Values, Political Values and Achievement Motivation.
Eysenck and Eysenck (1978) opined that Extraversion includes traits of sociability, impulsivity, activity, liveliness and excitability. That could be the reason for the positive correlation between Extraversion and Aggressiveness ($V_1$) and Social Intelligence ($V_5$).

Tiwana (1982) also reported a positive correlation between Extraversion, Aggressiveness ($V_1$), Social Intelligence ($V_5$) and a negative correlation between Extraversion and Neuroticism. Jahangiri (1983) also found Extraversion to be negatively related with Neuroticism. Eysenck (1967) explained it as - those who were high on Neuroticism also tend to be introverted, it is so because of high levels of arousal of the visceral brain system, should lead to arousal of the reticular activating system. This accounts for the negative correlation between Extraversion and Neuroticism. Dolke and Sutaria (1978) reported that Personality dimension of E/I was not strongly related to motivation. On the other hand, Mohan and Kapoor (1977), viewing M.B.A.s as potential managers found them to be high on Extraversion and also to be highly motivated. Their findings are in line with the present results.

(c) Neuroticism was found to have a negative correlation with Lie (Social Desirability) Scale, Social Adaptability ($V_4$), Social Intelligence ($V_5$), and Achievement Motivation. It
was found to be positively related with Psychoticism and Religious Values. Mohan and Narinder (1981) also found a negative correlation between Neuroticism and Social Desirability. Tiwana (1982), also found Neuroticism to have a positive correlation with Psychoticism and a negative correlation with Lie (Social Desirability) Scale.

(d) Psychoticism was found to have a negative correlation with Lie (Social Desirability) Scale, Emotional Control ($V_3$), Social Adaptability ($V_4$), Social Intelligence ($V_5$) and Achievement Motivation. However, Tiwana (1982) found Psychoticism to have very low but positive correlations with Emotional Control ($V_3$) and Social Adaptability ($V_4$).

(e) Lie (Social Desirability) Scale was found to have a positive correlation with Emotional Control ($V_3$), Social Adaptability ($V_4$), Social Intelligence ($V_5$) and Achievement Motivation.

It was seen that Achievement Motivation scores and scores on Social Desirability Scale (Crown and Marlowe, 1960) were related with the need for approval. This could be a possible explanation for the positive correlation between Lie (Social Desirability) Scale and Achievement Motivation, in the present study.

(f) Aggressiveness ($V_4$) was found to have positive correlation with Sociability ($V_2$), Emotional Control ($V_3$),
Social Adaptability ($V_4$) and Social Intelligence ($V_5$) and with Political Values. Tiwana (1982) also reported high positive correlation of Aggressiveness ($V_4$), with Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$) and Social Intelligence ($V_5$), and a low positive correlation with Political Values.

(g) Sociability ($V_2$) was found to be positively correlated with Emotional Control ($V_3$), Social Adaptability ($V_4$) and Social Intelligence ($V_5$), Economic Values, Political Values and Achievement Motivation. It was found to be negatively related with Social Values. Tiwana (1982) reported high positive correlation of Sociability ($V_2$) with Emotional Control ($V_3$), Social Adaptability ($V_4$) and Social Intelligence ($V_5$), and positive though low correlation with Political Values. These findings are in consonance with the present results. However, unlike the present findings Tiwana (1982) reported a negative correlation between Sociability ($V_2$) and Economic Values, though a low one.

(h) Emotional Control ($V_3$) was found to have positive correlation with Social Adaptability ($V_4$), and Social Intelligence ($V_5$). Similar results are reported by Tiwana (1982).

(i) Social Adaptability ($V_4$) was found to have a positive correlation with Social Intelligence ($V_5$) and Achievement Motivation. Positive correlation of Social Adaptability ($V_4$) with Social Intelligence ($V_5$) was also reported by Tiwana (1982).
(j) Social Intelligence \( (V_s) \) was found to be positively related with Economic Values, Political Values, and Achievement Motivation. It was found to be negatively related with Aesthetic Values.

It was thus seen that high positive correlations existed among the different vectors of Self-Perception. Though Clarke and associates (1963) had expected these vectors to be independent, yet low negative, correlations were reported among these vectors, even in their manual, thereby proving that although they are said to be independent hypothetically, in reality some correlation does exist among these vectors. Mohan and Malhotra (1982) also found highly positive significant correlations among these vectors of Self-Perception, in Indian university students. Hussaini (1974) in a cross-cultural study found that need for achievement is positively related with self-esteem though marginally in Indian students.

(k) Theoretical Values were found to be negatively related with Economic, Aesthetic, Social, Political and Religious Values. Tiwana (1982) however reported a positive correlation between Theoretical Values and Economic Values, and a negative correlation between Theoretical Values and Aesthetic Values, and between Theoretical and Religious Values.

(l) Economic Values were found to have a negative correlation with Aesthetic Values, Social Values, Religious Values and a positive correlation with Political Values, and Achievement
Motivation. Tiwana (1982) also reported a negative correlation between Economic Values and Aesthetic Values and between Economic Values and Religious Values.

(m) Aesthetic Values, were found to be negatively related with Social Values and Political Values and Achievement Motivation.

(n) Social Values were found to have a negative correlation with Political Values.

(o) Political Values were found to be negatively related with Religious Values, and positively related with Achievement Motivation. Tiwana (1982) in a study on creative writers also reported significant negative correlation between Political and Religious Values.

Allport et al. (1960) quote in their manual that though scores on the six Values are interdependent (high scores on one offsets low scores on others), yet the degree of correlation is not high enough to indicate derivation of smaller number of basic types - main thing, is the relative degree to which the pairs of Values are associated in spite of the basic feature of the test, which tends to produce negative intercorrelations in general. Their norms showed a positive association between Social and Religious Values, Economic and Political and possibly between Theoretical and Aesthetic Values. In the present study, it was seen that there was a negative correlation between Theoretical and
Aesthetic Values, between Theoretical and Economic Values, between Economic and Aesthetic Values, between Economic and Social Values, between Economic and Religious Values, between Aesthetic and Social Values, between Aesthetic and Political Values between Social and Political Values and between Political and Religious Values. Thus the basic feature of the test that it tends to produce negative inter-correlations in general was retained.

Intercorrelation matrix on 17 variables for the I.A.S. Executives (Table 25)

(a) Executive Effectiveness was found to have a negative correlation with Aggressiveness (V_1), and with Emotional Control (V_3).

(b) Extraversion was found to have a negative correlation with Neuroticism and a positive correlation with Sociability (V_2) and Achievement Motivation.

(c) Neuroticism was found to have a negative correlation with Sociability (V_2).

(d) Psychoticism was found to be negatively related with Theoretical Values, Achievement Motivation and positively related with Aesthetic Values.

(e) Lie (Social Desirability) Scale was found to be positively related with Emotional Control (V_3), Social Adaptability (V_4).

(f) Aggressiveness (V_1) was found to be positively related with Sociability (V_2), Emotional Control (V_3) and Social Intelligence (V_5). It was found to be negatively related
with Social Values.

(g) Sociability ($V_2$) was found to have a positive correlation with Emotional Control ($V_3$), Social Adaptability ($V_4$), Social Intelligence ($V_5$) and Political Values.

(h) Emotional Control ($V_3$) was found to have a positive correlation with Social Adaptability ($V_4$) and Social Intelligence ($V_5$).

(i) Social Adaptability ($V_4$) was found to have a positive correlation with Social Intelligence ($V_5$) and Economic Values.

(j) Social Intelligence ($V_5$) was found to be positively related to Economic and Political Values and negatively with Religious Values.

(k) Theoretical Values were found to have a negative correlation with Religious Values.

(l) Economic Values were found to be positively related with Political Values and Achievement Motivation and negatively related with Religious Values.

(m) Social Values were found to be negatively related with Political Values.

(n) Political Values were found to be negatively related with Religious Values and positively related with Achievement Motivation.
Intercorrelation matrix on 17 variables for the I.P.S. Executives (Table 26)

(a) Executive Effectiveness was found to have no significant correlation with any other variable.

(b) Extraversion was found to be negatively related with Neuroticism, Social Values, and Religious Values. It was found to have a positive correlation with Aggressiveness ($V_1$), Sociability ($V_2$) and Economic Values.

(c) Neuroticism was found to have a positive correlation with Emotional Control ($V_3$) and Aesthetic Values.

(d) Psychoticism was found to have a negative correlation with Social Intelligence ($V_5$) and Achievement Motivation.

(e) Lie (Social Desirability) Scale was found to be positively related with Social Adaptability ($V_4$), Social Intelligence ($V_5$) and Religious Values.

(f) Aggressiveness ($V_1$) was found to have a positive correlation with Sociability ($V_2$) and Social Intelligence ($V_5$).

(g) Sociability ($V_2$) was found to be positively related with Social Adaptability ($V_4$), Social Intelligence ($V_5$), Economic Values, Achievement Motivation, and it was found to be negatively related with Social Values.

(h) Emotional Control ($V_3$) was found to have a positive correlation with Social Adaptability ($V_4$), Social Intelligence ($V_5$) and Religious Values.
Social Adaptability \((V_i)\) was found to be positively related with Social Intelligence \((V_j)\) and Religious Values. It was found to be negatively related with Theoretical Values.

Social Intelligence \((V_j)\) was found to have a negative correlation with Theoretical Values.

Theoretical Values were found to be negatively related to Economic Values.

Economic Values were found to have a negative correlation with Social and Religious Values and a positive correlation with Political Values.

Aesthetic Values were found to be negatively related with Social and Political Values.

Political Values were found to be negatively related with Religious Values.

Intercorrelation matrix on 17 variables for the I.R.S. Executives (Table 27)

(a) Executive Effectiveness was found to have no significant correlation with any other variable.

(b) Extraversion was found to be negatively related with Neuroticism, and positively related with Sociability \((V_p)\).

(c) Neuroticism was found to have a positive correlation with Psychoticism and Religious Values and negatively related with Lie (Social Desirability) Scale, Economic Values, Political Values and Achievement Motivation.
(d) Psychoticism was found to be negatively related with Lie (Social Desirability) Scale, Emotional Control (V_3), Social Adaptability (V_4), Social Intelligence (V_5) and Achievement Motivation.

(e) Aggressiveness (V_1) was found to be positively related with Sociability (V_2), Emotional Control (V_3), Social Adaptability (V_4), Social Intelligence (V_5) and negatively related with Social Values.

(f) Sociability (V_2) was found to have a positive correlation with Emotional Control (V_3), Social Adaptability (V_4), Social Intelligence (V_5) and Achievement Motivation. It was found to be negatively related with Social Values.

(g) Emotional Control (V_3) was found to be positively related with Social Adaptability (V_4), Social Intelligence (V_5), Economic Values and Achievement Motivation.

(h) Social Adaptability (V_4) was found to have a positive correlation with Social Intelligence (V_5) and Achievement Motivation.

(i) Social Intelligence (V_5) was found to be positively related with Economic Values and Achievement Motivation.

(j) Theoretical Values were found to be negatively related with Social and Political Values.

(k) Economic Values were found to be positively related
with Political Values and Achievement Motivation and negatively related with Religious Values.

(l) Aesthetic Values were found to be negatively related with Social Values.

(m) Social Values were found to have a negative correlation with Achievement Motivation.

(n) Political Values were found to be negatively related with Religious Values.

Intercorrelation Matrix on 17 Variables of Defence Executives (Table 28)

(a) Executive Effectiveness was found to have a negative correlation with Religious Values.

(b) Extraversion was found to be negatively related with Psychoticism, Religious Values and positively related with Aesthetic Values.

(c) Neuroticism was found to have a positive correlation with Psychoticism and a negative correlation with Lie (Social Desirability) Scale and Achievement Motivation.

(d) Psychoticism was found to have a negative correlation with Lie (Social Desirability) Scale, Social Adaptability ($V_4$), Social Intelligence ($V_5$) and Achievement Motivation.

(e) Lie (Social Desirability) Scale was found to be positively related with Social Adaptability ($V_4$) and Achievement Motivation.
(f) Aggressiveness ($V_1$) was found to have a positive correlation with Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$) and Social Intelligence ($V_5$).

(g) Sociability ($V_2$) was found to be positively related with Emotional Control ($V_3$), Social Adaptability ($V_4$), Social Intelligence ($V_5$) and Achievement Motivation.

(h) Emotional Control ($V_3$) was found to be positively related with Social Adaptability ($V_4$), Social Intelligence ($V_5$), and Social Values, and negatively related with Aesthetic Values.

(i) Social Adaptability ($V_4$) was found to have a positive correlation with Social Intelligence ($V_5$) and with Achievement Motivation.

(j) Social Intelligence ($V_5$) was found to be positively related with Achievement Motivation.

(k) Theoretical Values were found to be negatively related with Political Values.

(l) Economic Values were found to be negatively related with Religious Values.

(m) Aesthetic Values were found to be negatively related with Social Values and Achievement Motivation.
FACTOR ANALYSIS

The (17 x 17) inter-correlation matrix was factor analysed by principal axis method and seven factors were extracted. These factors were then rotated by the Varimax Method. The next step was to identify the content and nature of the factor. In general, only variables that have a loading of .30 or above have been considered in interpreting a factor.

The interpretation of significant factor loadings on different factors yielded the following information:

Factor Analysis (Rotated) on 17 Variables for the Total Sample

The following seven factors were extracted in this case which accounted for 71.89% of variance. The result of this factor analysis (unrotated) are shown in Table 29, and the rotated factor analysis shown in Table 30.

Factor I

The significant factor loadings are on the following variables:

(i) Aggressiveness ($V_1$) + .56
(ii) Sociability ($V_2$) + .55
(iii) Emotional Control ($V_3$) + .86
(iv) Social Adaptability ($V_4$) + .87
(v) Social Intelligence ($V_5$) + .90

All the vectors measuring Self-Perception have obtained significant loadings on this factor. Those
who were high on Aggressiveness, were also high on Sociability, Emotional Control, Social Adaptability and Social Intelligence. This is a very peculiar feature - which can be explained only by the specialized nature of the group because otherwise these vectors are independent (Clarke, 1963). Surprisingly enough, Mohan and Malhotra (1982) also found these vectors to be positively correlated and loaded on the same factor in a factor analytic study of Indian students. Tiwana (1982) also found these vectors to be positively correlated in a study of creative writers.

**Factor II**

The significant factor loadings on this factor are:

1. **Neuroticism** + .63
2. **Psychoticism** + .74
3. **Lie (Social Desirability)** - .65
4. **Achievement Motivation** - .62

This factor has shown significant factor loadings on 3 personality dimensions, viz., Neuroticism, Psychoticism, and Lie (Social Desirability) Scale and on Achievement Motivation. The nature of the factor loadings reveals that Neuroticism and Psychoticism are positively related with each other and both Neuroticism and Psychoticism are negatively related to Lie (Social Desirability) Scale and Achievement Motivation. It can also be noted that the measure of Executive Effectiveness failed to show significant loadings on this factor, as such this factor
is not relevant so far as Executive Effectiveness is concerned.

According to Eysenck and Eysenck (1978), a psychotic personality is solitary, cruel, lacking in feeling, hostile and aggressive even to loved ones. Singh and Sehgal (1978) also found overt covert hostility to be a positive correlate of Psychoticism.

**Factor III**

The significant loadings on this factor are:

1. Extraversion  
2. Lie (Social Desirability) Scale + .32
3. Aggressiveness ($V_1$) - .39
4. Sociability ($V_2$) - .58
5. Social Values + .44
6. Political Values - .42
7. Achievement Motivation - .32

The nature of factor loadings on this factor reveals that Extraversion, Aggressiveness ($V_1$), Sociability ($V_2$), Political Values and Achievement Motivation are negatively related with each other. Lie (Social Desirability) Scale and Social Values are positively related with each other. Thus, it can be seen that Lie (Social Desirability) Scale and Social Values are negatively related to Extraversion, Aggressiveness ($V_1$), Sociability ($V_2$), Political Values and Achievement Motivation. This further can be explained thus that persons who are high on Lie (Social Desirability) Scale
and Social Values will tend to be low on Extraversion, Aggressiveness ($V_1$), Sociability ($V_2$), Political Values, and Achievement Motivation. Tiwana (1982), in a factor analytic study also reported that those who scored high on Social Values were lower on Political Values.

It can be seen that the measure of Executive Effectiveness failed to show significant loadings on this factor, as such this factor is not relevant, so far as Executive Effectiveness is concerned.

**Factor IV**

The significant loadings on this factor are:

(i) Economic Values $+$ .85  
(ii) Religious Values $-$ .86

The nature of the factor loadings here reveals that Economic Values are negatively related with Religious Values. Thus the persons high on Economic Values tend to be low on Religious Values. The loading pattern agrees with the findings of Allport et al. (1960). They did not expect a positive association between Economic Values and Religious Values.

**Factor V**

The significant loadings on this factor are:

(i) Aesthetic Values $+$ .91  
(ii) Social Values $-$ .64

The loading pattern on this factor reveals that
Aesthetic Values are negatively related with Social Values. The persons scoring high on Aesthetic Values will tend to be low on Social Values. Tiwana (1982) also reported that those persons who were aesthetic minded were lower on Social Values.

**Factor VI**

The significant loadings on this factor are:

(i) Theoretical Values  
+ .91

(ii) Political Values  
- .62

The loading pattern here reveals that Theoretical Values are negatively related with Political Values. Those persons who were high on Theoretical Values tended to be low on Political Values.

**Factor VII**

The significant factor loadings on this factor are:

(i) Executive Effectiveness  
+ .87

(ii) Lie (Social Desirability) Scale  
- .31

(iii) Religious Values  
- .31

This factor has grouped together 3 variables, i.e., Executive Effectiveness, Lie (Social Desirability) Scale, and Religious Values. Out of these 3 variables the criterion variable (Executive Effectiveness) has shown high and significant factor loading (+.87) on this factor. The nature of the factor loadings reveals that Executive Effectiveness is negatively
related with Social Desirability and Religious Values. The negative correlations suggest that a person low on Social Desirability and Religious Values tends to be high on Executive Effectiveness.

**Factor Analysis (Rotated) on 17 Variables for the I.A.S. Executives**

The following seven factors were extracted in this case which accounted for 77.47% of variance. The result of this factor analysis (unrotated) are shown in Table 31, and the (rotated) factor analysis shown in Table 32.

**Factor I**

The significant loadings on this factor are:

1. Executive Effectiveness $-0.30$
2. Lie (Social Desirability) Scale $+0.40$
3. Sociability ($V_2$) $+0.64$
4. Emotional Control ($V_3$) $+0.89$
5. Social Adaptability ($V_4$) $+0.92$
6. Social Intelligence ($V_5$) $+0.85$

The loading pattern on this factor suggests that executives who are high on Lie (Social Desirability) Scale are also high on Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$), Social Intelligence ($V_5$), but low on Executive Effectiveness (the criterion variable). The nature of the factor loadings thus reveals that Executive Effectiveness is negatively related with Social
Desirability, Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$), Social Intelligence ($V_5$). Thus the person high on lie (Social Desirability) Scale, Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$); and Social Intelligence ($V_5$) tends to be low on Executive Effectiveness.

Factor II

The significant factor loadings on this factor are:

(i) Extraversion  - .78
(ii) Neuroticism  + .57
(iii) Psychoticism  + .30
(iv) Lie (Social Desirability) Scale  + .33
(v) Sociability ($V_2$)  - .56
(vi) Achievement Motivation  - .72

The pattern of loadings indicates that persons low on Extraversion also tend to be low on Sociability ($V_2$) and Achievement Motivation, but they tend to be high on Neuroticism, Psychoticism and lie (Social Desirability) Scale.

Factor III

The significant loadings on this factor are:

(i) Neuroticism  - .52
(ii) Economic Values  - .36
(iii) Social Values  + .80
(iv) Political Values  - .72
The pattern indicates that those who scored low on Neuroticism, would also score low on Economic Values, Political Values, but high on Social Values.

**Factor IV**

The significant loadings on this factor are:

1. Psychoticism $-0.45$
2. Lie (Social Desirability) Scale $+0.44$
3. Economic Values $+0.49$
4. Aesthetic Values $-0.81$
5. Achievement Motivation $+0.37$

The pattern indicates that persons who scored low on Psychoticism, also scored low on Aesthetic Values, but high on Lie (Social Desirability) Scale, Economic Values, and Achievement Motivation.

**Factor V**

The significant loadings on this factor are:

1. Executive Effectiveness $-0.62$
2. Economic Values $-0.52$
3. Religious Values $+0.84$

This factor has grouped together, 3 variables i.e., the criterion variable Executive Effectiveness, Economic Values and Religious Values. Out of these 3 variables the criterion variable (Executive Effectiveness) has shown a significant and negative factor loading ($-0.62$) on this factor. The nature of the factor loadings reveals that a person low on Executive
Effectiveness is also low on Economic Values, but high on Religious Values.

**Factor VI**

The significant loadings on this factor are:

1. Psychoticism $+0.46$
2. Theoretical Values $-0.94$
3. Economic Values $+0.33$
4. Religious Values $+0.33$

The pattern of loadings on this factor suggests that persons scoring high on Psychoticism also score high on Economic and Religious Values but low on Theoretical Values.

**Factor VII**

The significant loadings on this factor are:

1. Psychoticism $+0.48$
2. Aggressiveness $+0.88$

The pattern of loadings on this factor suggests that persons scoring high on Psychoticism tend to score high on Aggressiveness $V_1$.

**Factor Analysis (rotated) on 17 Variables for I.P.S. Executives**

The following six factors were extracted in this case, which accounted for 73.35% of variance. The result of this factor analysis (unrotated) are shown in Table 33, and the (rotated) factor analysis shown in Table 34.
Factor I

The significant loadings on this factor are on:

(i) Aggressiveness ($V_1$) + .50  
(ii) Sociability ($V_2$) + .56  
(iii) Emotional Control ($V_3$) + .79  
(iv) Social Adaptability ($V_4$) + .87  
(v) Social Intelligence ($V_5$) + .88

It is seen that all the vectors measuring Self-Perception have obtained significant factor loadings on this factor. Those who were high on Aggressiveness ($V_1$) were also high on Sociability ($V_2$), Emotional Control ($V_3$), Social Adaptability ($V_4$), and Social Intelligence ($V_5$). This can be explained only by the specialized nature of the group, because otherwise these vectors are independent (Clarke, 1963).

Factor II

The significant loadings on this factor are:

(i) Extraversion - .53  
(ii) Aggressiveness ($V_1$) - .39  
(iii) Theoretical Values + .33  
(iv) Economic Values - .79  
(v) Political Values - .73  
(vi) Religious Values + .78

The pattern indicates that those who are low on Extraversion will also be low on Aggressiveness ($V_1$), as well as low on Economic Values and Political Values. However, these persons will be high on Theoretical and Religious Values.
Factor III

The significant loadings on this factor are:

(i) Extraversion - .31
(ii) Neuroticism - .37
(iii) Sociability (V₂) - .32
(iv) Aesthetic Values - .78
(v) Social Values + .85
(vi) Political Values + .46

It is seen here that the persons low on Extraversion are also low on Neuroticism, Sociability (V₂), and Aesthetic Values. It is seen that such persons who are low on Extraversion, Neuroticism, Sociability (V₂) and Aesthetic Values are high on Social and Political Values.

Factor IV

The significant factor loadings on this factor are on:

(i) Psychoticism - .80
(ii) Sociability (V₂) + .38
(iii) Achievement Motivation + .88

The pattern indicates that persons who are low on Psychoticism, are higher on Sociability (V₂) and Achievement Motivation.

Factor V

The significant loadings on this factor are:

(i) Executive Effectiveness + .81
(ii) Lie (Social Desirability) - .66
(iii) Religious Values - .33
This factor has grouped together 3 variables i.e., the criterion variable Executive Effectiveness, Lie (Social Desirability) Scale and Religious Values. Out of these 3 variables, the criterion variable (Executive Effectiveness) has shown a high significant factor loading on this factor (+ .81).

The nature of the factor loadings reveals that persons high on Executive Effectiveness are low on Lie (Social Desirability) Scale and Religious Values.

**Factor VI**

The significant factor loadings on this factor are:

(i) Extraversion + .57
(ii) Neuroticism - .71
(iii) Theoretical Values + .64

This factor has grouped together 3 variables; namely Extraversion, Neuroticism, and Theoretical Values. A person high on Extraversion and Theoretical Values, will be low on Neuroticism.

**Factor Loadings (Rotated) on 12 Variables For I.R.S. Executives**

The following six factors were extracted in this case, which accounted for 73.63 % of variance. The results of this factor (unrotated) are shown in Table 35 and of the (rotated) factor analysis shown in Table 36.
Factor I

The significant factor loadings on this factor are:

(i) Psychoticism \(-.44\)
(ii) Aggressiveness \((V_1) +.63\)
(iii) Sociability \((V_2) +.56\)
(iv) Emotional Control \((V_3) +.84\)
(v) Social Adaptability \((V_4) +.92\)
(vi) Social Intelligence \((V_5) +.94\)
(vii) Achievement Motivation \(+.49\)

The pattern indicates that the person low on Psychoticism will be high on all the five vectors of Self-Perception viz., Aggressiveness, Sociability, Emotional Control, Social Adaptability and Social Intelligence, as well as on Achievement Motivation.

Factor II

The significant loadings on this factor are:

(i) Executive Effectiveness \(+.30\)
(ii) Neuroticism \(-.36\)
(iii) Economic Values \(+.82\)
(iv) Political Values \(+.43\)
(v) Religious Values \(-.89\)
(vi) Achievement Motivation \(+.35\)

This factor has grouped together 6 variables, i.e., the criterion variable Executive Effectiveness, Neuroticism, Economic Values, Political Values, Religious Values, and
Achievement Motivation. It is seen clearly that persons high on Executive Effectiveness are also high on Economic Values, Political Values and Achievement Motivation, but they are low on Neuroticism and Religious Values.

Factor III

The significant loadings on this factor are:

(i) Neuroticism + .64
(ii) Psychoticism + .74
(iii) Lie (Social Desirability) Scale -.72
(iv) Aggressiveness (V1) + .32

The pattern indicates that the persons high on Neuroticism also tend to be high on Psychoticism and Aggressiveness (V1) but low on Lie (Social Desirability) Scale.

Factor IV

The significant loadings on this factor are:

(i) Extraversion - .88
(ii) Neuroticism + .43
(iii) Sociability (V2) - .49
(iv) Social Values + .33
(v) Political Values - .32

The pattern indicates that persons low on Extraversion, Sociability (V2) and Political Values, will tend to be high on Neuroticism and on Social Values.
Factor V

The significant loadings on this factor are:

(i) Aggressiveness (V₁) + .35
(ii) Aesthetic Values + .82
(iii) Social Values - .71
(iv) Achievement Motivation + .36

This factor has grouped together 4 variables. They are Aggressiveness (V₁), Aesthetic Values, Social Values and Achievement Motivation. It is thus seen that persons who are high on Aggressiveness (V₁) also tend to be high on Aesthetic Values, as well as on Achievement Motivation. However they tend to be low on Social Values.

Factor VI

The significant factor loadings are:

(i) Theoretical Values + .86
(ii) Political Values - .69

The pattern here indicates that persons who are high on Theoretical Values are low on Political Values.

Factor Analysis (Rotated) on 17 Variables For Defence Executives

The following six factors were extracted in this case, which accounted for 72.75% of variance. The results of this factor analysis (unrotated) are presented in Table 37 and of (rotated) factor analysis shown in Table 38.
Factor I

The significant loadings on this factor are:

(i) Aggressiveness ($V_1$) - .81
(ii) Sociability ($V_2$) - .76
(iii) Emotional Control ($V_3$) - .70
(iv) Social Adaptability ($V_4$) - .72
(v) Social Intelligence ($V_5$) - .88
(vi) Achievement Motivation - .35

The pattern indicates that the persons who are low on all the five vectors of Self-Perception (viz., Aggressiveness, Sociability, Emotional Control, Social Adaptability and Social Intelligence) are also low on Achievement Motivation.

Factor II

The significant loadings on this factor are:

(i) Neuroticism + .79
(ii) Psychoticism + .79
(iii) Lie (Social Desirability) Scale - .69
(iv) Social Adaptability ($V_4$) - .35
(v) Achievement Motivation - .79

The pattern indicates that the persons who are high on Neuroticism tend to be high on Psychoticism, but low on Lie (Social Desirability) Scale, Social Adaptability ($V_4$) and Achievement Motivation.
**Factor III**

The significant loadings on this factor are:

(i) Extraversion + .67  
(ii) Emotional Control ($V_3$) - .30  
(iii) Aesthetic Values + .83  
(iv) Social Values - .61

The pattern indicates that persons high on Extraversion will also be high on Aesthetic Values, but low on Emotional Control ($V_3$) and Social Values.

**Factor IV**

The significant loadings on this factor are:

(i) Executive Effectiveness + .81  
(ii) Theoretical Values + .64  
(iii) Religious Values - .70

This factor has grouped together 3 variables - the criterion variable (Executive Effectiveness), Theoretical Values and Religious Values. The criterion variable - Executive Effectiveness has high significant loading on this factor (+ .81). The pattern indicates that persons high on Executive Effectiveness will also be high on Theoretical Values but low on Religious Values.
**Factor V**

The significant loadings on this factor are:

1. Theoretical Values - .50
2. Economic Values + .81
3. Social Values + .31
4. Religious Values - .49

The pattern here indicates that persons who are low on Theoretical Values, also tend to be so on Religious Values, but high on Economic Values and Social Values.

**Factor VI**

The significant loadings on this factor are:

1. Social Values - .39
2. Political Values + .93

This factor has grouped together 2 Values - Social Values and Political Values. On this factor Political Values have shown high significant loading of + .93. The pattern indicates that persons high on Political Values will however be low on Social Values.

**Regression Equation**

The present study was designed with 17 variables. Out of these 17 variables, 16 were predictors and one was the criterion variable. Out of the 16 predictor variables, 6 predictor variables were retained for the purpose of deriving regression equations. This was done by selecting only those
predictors which showed significant correlations with the criterion variable. In addition attempt was also made to select suppression variables for the purpose of computing regression equations.

Thus regression equation for the total sample (Table 39) (comprising of officers of four different services viz., I.A.S., I.P.S., I.R.S. and Defence) was computed. It was:

\[ Y = 61.81 - .19X_1 - .19X_2 + .05X_3 + .12X_4 - .21X_5 + .31X_6 \]

Y stands for the criterion variable, i.e., Executive Effectiveness.

It can be noted from the regression equation that some regression coefficients are positive, while others are negative. Keeping in view the direction and magnitude of regression coefficients it can be suggested that executives low on Neuroticism, Lie (Social Desirability) Scale and Religious Values tend to be high on Executive Effectiveness. On the other hand, Social Adaptability (V_a) and Social Values do contribute positively to Executive Effectiveness but not so strongly as does Achievement Motivation. Thus it can be seen that if an executive is higher on Achievement Motivation, he will also be higher on Executive Effectiveness.

In the case of the I.A.S. executives, the Regression Equation (Table 40) was:

\[ Y = 81.31 - .27X_1 - .28X_2 - .62X_3 + .13X_4 - .31X_5 - .28X_6 \]
Thus it can be suggested that the I.A.S. executives low on Neuroticism, Lie (Social Desirability) Scale, Social Adaptability ($V_A$), Religious Values and Achievement Motivation tended to be high on Executive Effectiveness. In the present case Social Values contributed positively to Executive Effectiveness.

For the I.F.S. executives, the Regression Equation (Table 41) was:

$$Y = 59.46 - 0.32X_1 - 0.59X_2 + 0.04X_3 + 0.24X_4 - 0.08X_5 + 0.40X_6$$

The predictor variables viz., Neuroticism, Lie (Social Desirability) Scale, Social Adaptability ($V_A$) and Religious Values contributed negatively to Executive Effectiveness. In other words police officers low on these variables were high on Executive Effectiveness. In addition, high scores on Social Values and Achievement Motivation will further lead to higher Executive Effectiveness.

For the I.R.S. executives, the Regression Equation (Table 42) was:

$$Y = 50.01 - 0.12X_1 - 0.11X_2 + 0.25X_3 + 0.14X_4 - 0.08X_5 + 0.43X_6$$

The equation suggests that low scores on Neuroticism, Lie (Social Desirability) Scale, and Religious Values will lead to higher Executive Effectiveness. On the other hand high scores on Social Adaptability ($V_A$), Social Values, and Achievement Motivation will further lead to higher Executive Effectiveness.

The Regression Equation for the executives of Defence
services was computed (Table 43). It was:

\[ Y = 69.25 - .06X_1 + .03X_2 + .40X_3 - .03X_4 - .41X_5 + .14X_6 \]

It is indicated thus that low scores on Neuroticism, Social Values, and Religious Values will lead to higher Executive Effectiveness. On the other hand, high scores on Social Adaptability \( (V_4) \) and Achievement Motivation will lead to higher Executive Effectiveness. Social Desirability has also been found to contribute to higher Executive Effectiveness.
CONCLUSIONS

On the basis of various analyses of data (t-test of significance, correlational analysis, factor analysis and regression equation) carried out in the present study, the following conclusions are warranted:

(1) The I.A.S. and I.P.S. executives emerged to be significantly more effective in comparison to the I.K.S. executives. There was no statistically significant difference between the I.A.S., and I.P.S., between I.A.S. and Defence executives, between I.P.S. and Defence and between I.K.S. and Defence executives on Executive Effectiveness.

(2) There was no statistically significant difference between the I.A.S., I.P.S., I.K.S. and Defence executives on Extraversion.

(3) The I.A.S. executives emerged to be significantly higher on Neuroticism in comparison to the I.P.S. executives. The I.A.S. and Defence executives were found to be significantly higher than the I.P.S. executives on Neuroticism. There was no statistically significant difference between the I.A.S. and I.K.S., I.A.S. and Defence, and between I.K.S. and Defence executives on this Personality dimension.

(4) The I.A.S. executives emerged to be significantly lower on Psychoticism in comparison to the I.K.S. executives. The I.P.S. executives emerged to be significantly lower on Psychoticism in comparison to I.K.S. and Defence executives.
Though there was no statistically significant difference between the I.A.S. and I.P.S. executives on Psychoticism, both the I.A.S. and I.P.S. executives scored significantly lower on Psychoticism in comparison to I.R.S. executives. No statistically significant differences on Psychoticism were found between the I.A.S. and I.P.S. executives, between the I.A.S. and Defence executives, and between the I.R.S. and Defence executives.

The I.P.S. executives emerged to be significantly higher on Lie (Social Desirability) Scale, in comparison to I.R.S. executives. Though no statistically significant differences emerged between the other sub-groups, the trend revealed by the mean scores suggests that the I.A.S., I.R.S. and Defence executives were lower on Lie(Social Desirability) Scale in comparison to the I.P.S. executives.

The I.A.S. executives emerged to be significantly higher on Aggressiveness ($V_1$), in comparison to the I.P.S. and I.R.S. executives. No statistically significant differences emerged on this dimension between the other groups.

The I.P.S. and I.R.S. executives emerged to be significantly lower on Sociability ($V_2$) in comparison to the Defence executives. There was no statistically significant difference between the other groups on Sociability ($V_2$).

There was no statistically significant difference between the I.A.S., I.P.S., I.R.S. and Defence executives on Emotional Control ($V_3$).
The I.A.S. executives, emerged to be significantly higher on Social Adaptability \( (V_4) \) in comparison to the I.K.S. executives. Though no statistically significant differences emerged between the other groups, yet a perusal of the mean scores revealed that the I.A.S. executives also scored higher in comparison to the executives of other two services, viz., the I.P.S. and Defence on Social Adaptability \( (V_4) \).

The I.K.S. executives scored significantly lower in comparison to the I.A.S. executives on Social Intelligence \( (V_5) \). Though no statistically significant differences emerged between the various groups, the trend revealed by the mean scores suggests that the I.A.S. executives scored the highest as compared to other services on Social Intelligence \( (V_5) \).

The I.P.S. executives emerged to be significantly lower on Theoretical Values in comparison to the Defence executives. There was no statistically significant differences between the I.A.S. executives in comparison to the I.P.S. executives, between the I.A.S. and I.K.S. executives, between I.A.S. executives and Defence executives and between the I.P.S. executives and the I.K.S. executives and between the I.K.S. and Defence executives, on this Value dimension.

There was no statistically significant difference between the I.A.S., I.P.S., I.K.S. and Defence executives on Economic, Aesthetic, Social and Religious Values.

The I.P.S. executives emerged to be significantly higher on Political Values in comparison to the I.A.S. executives.
There was no statistically significant difference between the I.A.S. executives in comparison to the I.P.S. executives, between the I.A.S. and I.R.S. executives, between the I.A.S. and Defence executives, between the I.P.S. and Defence executives, and between the I.R.S. and Defence executives on this Value dimension.

(14) The I.A.S. executives emerged to be significantly higher on Achievement Motivation in comparison to the I.R.S. and Defence executives. There was no statistically significant difference between the other groups on Achievement Motivation.

(15) Least effective executives were significantly higher on Religious Values than the highly effective executives.

(16) Highly effective I.R.S. executives scored significantly higher than the least effective I.R.S. executives on Achievement Motivation.

(17) Least effective Defence executives scored significantly higher on Religious Values in comparison to highly effective Defence executives.

(i) Executive effectiveness has been found to be negatively and significantly related with Neuroticism, Religious Values, whereas its correlation with Achievement Motivation has been found to be positive and significant, for the total sample.

Executive effectiveness has been found to be differentially related with Personality, Self-Perception
Values and Achievement Motivation, in the case of the four sub-groups viz., I.A.S., I.P.S., I.R.S. and Defence.

(ii) More specifically in the case of the I.A.S. officers Executive Effectiveness has been found to be negatively related with Aggressiveness ($V_1$) and Emotional Control ($V_3$).

(iii) In the case of the I.P.S. officers and I.R.S. officers Executive Effectiveness has been found to have no significant correlation with any other variable.

(iv) In the case of Defence executives, Executive Effectiveness has been found to be negatively related with Religious Values.

Keeping in view the above mentioned conclusions, it can be noted that the following hypotheses have been partially proved:

(i) The executives belonging to different services will differ on different dimensions of Personality.

(ii) The executives belonging to different services will differ on different dimensions of Self-Perception.

(iii) The executives belonging to different services will differ on Achievement Motivation.

The following hypothesis stands rejected:

(i) The executives belonging to different services will differ on different Values.
For the total sample the following hypotheses have been found to be rejected:

(i) Executive Effectiveness will be negatively related with Extraversion.

(ii) Executive Effectiveness will be negatively related with Psychoticism.

(iii) Executive Effectiveness will be negatively related with Social Desirability.

However, for the total sample the following hypothesis has been proved:

(i) Executive Effectiveness will be negatively related with Neuroticism.

For the sub-groups (viz. I.A.S., I.P.S., I.R.S. and Defence) the following hypotheses have been found to be rejected.

(i) Executive Effectiveness will be negatively related with Extraversion.

(ii) Executive Effectiveness will be negatively related with Neuroticism.

(iii) Executive Effectiveness will be negatively related with Psychoticism.

(iv) Executive Effectiveness will be positively related with Social Desirability.

For the total sample and the four sub-groups viz., I.A.S., I.P.S., I.R.S. and Defence the following hypotheses
stand rejected:

(i) Executive Effectiveness will be positively related with Aggressiveness ($V_1$).

(ii) Executive Effectiveness will be positively related with Sociability ($V_2$).

(iii) Executive Effectiveness will be positively related with Emotional Control ($V_3$).

(iv) Executive Effectiveness will be positively related with Social Adaptability ($V_4$).

(v) Executive Effectiveness will be positively related with Social Intelligence ($V_5$).

More specifically in case of the I.A.S. executives the following hypotheses stand clearly rejected:

(i) Executive Effectiveness will be positively related with Aggressiveness ($V_1$).

(ii) Executive Effectiveness will be positively related with Emotional Control ($V_3$).

For the total sample, I.A.S., I.P.S., I.K.S. and Defence executives the following hypotheses stand rejected:

(i) Executive Effectiveness will be negatively related with Theoretical Values.

(ii) Executive Effectiveness will be positively related with Economic Values.
(iii) Executive Effectiveness will be positively related with Aesthetic Values.

(iv) Executive Effectiveness will be positively related with Social Values.

(v) Executive Effectiveness will be positively related with Political Values.

However for the total sample and the Defence executives the following hypothesis has been proved:

(i) Executive Effectiveness will be negatively related with Religious Values.

For the I.A.S., I.P.S., and I.R.S. executives the following hypothesis stands rejected:

(i) Executive Effectiveness will be negatively related with Religious Values.

For the I.A.S., I.P.S., I.R.S., and Defence executives, the following hypothesis stands rejected:

(i) Executive Effectiveness will be positively related with Achievement Motivation.

However, for the total sample, the following hypothesis has been proved:

(i) Executive effectiveness will be positively related with Achievement Motivation.