CHAPTER V

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5.1. **Correlates of Social Acceptance:**

The objective of the present study was to develop programmes along two of the models available for enhancing social skills and to evaluate their effectiveness in promoting social acceptance. The study acquires significance in the light of observations made by several authors with regard to the importance of social acceptance to one's development. A review of literature in the area, as reported in section 2.2 suggest a relationship between social acceptance and a host of other important aspects of personality. This study confirms such a relationship.

Some of the factors considered from the point of view of the validation of the study, suggest a significant positive relationship (Table 4.26) between Social Acceptance and such factors as Self-Esteem, Adjustment, Classroom trust, Initiative, scholastic mental ability (factor B of CPQ), ego strength (factor C) and socially controlled and precise behavior (factor Q3). CPQ factors N (Shrewd and Calculating) and O (apprehensive and worrying) were found to have a negative correlation with Social Acceptance. These factors were found to have
similar correlation coefficients across the two measures of social acceptance (Sm-A and SA). Further, a coefficient of negative correlation was noticed between measures of social rejection or isolation and self-esteem as well as classroom trust. A significant positive correlation between these factors and teacher of rating/aggression was also noticed. The correlation coefficients noticed in many of these factors were found to vary from \[ -0.22 \text{ to } +0.38 \]. However, all the significant correlation coefficients appear to be noteworthy in view of the size and heterogeneous nature of the sample.

Some of the earlier findings confirmed in the present study are: 1. 'Accepted' are rated as initiative and they have lesser number of adjustmental problems (Pathak, R.D., 1974; Sharma, A, 1970). 2. Anxious children are less popular (Hartup, W W, 1970) or isolates are socially anxious (Gottman, J M, 1977). 3. Less popular children experience more difficulty in initiating friendship and getting along with people (Campbell, S B, 1979). 4. There is a positive relationship between scholastic performance and high social status (Ruhland, D, et al., 1978).

General mental ability is related to peer acceptance (Anuradha, B R, 1984, Badami, H D, and Badami, C H,

5. Hostile and aggressive behaviours, withdrawal and shyness, excessive inhibition and unsocial behavior tend to make children less acceptable (Hartup, W W, 1970, 1976). These aspects of behavior were found to be negatively related to popularity in a host of Indian studies (Chanchala, 1980, Iyer, V, 1974, Sudharani, P S, 1973).

A consistent pattern of relationship between Social Acceptance and other variables was noticed in the correlation matrices of the pre and post intervention test scores (Table 4.26). Self-esteem and ego strength (factor C of CPQ) were found to be the correlates of Social Acceptance. A negative correlation coefficient was noticed between these factors and the measures of Social Rejection. These findings support the observations made by Nalini Rao (1978) and Chanchala (1980). Based on a review of studies in the area Nalini Rao (1978) concluded that a consistent positive relationship existed between self-esteem and acceptance by others. According to the study by Chanchala (1980), the 'isolates', as compared to the 'Stars' showed disturbed self-concept while the 'stars' showed better adjustment. Aggressive behavior was repeatedly found to be positively related to social rejection as noticed by Hartup (1970). The obtained
correlation between teacher rating of aggression and peer nominations of social rejection support this view. Further, the correlation between measures of Social Acceptance and the factors like \( q_3 \), \( q_4 \) and \( N \) of CPQ suggest that the social skills deficit model of social ineffectiveness proposed by Argyle (1967), Gottman and others (1975) is operative in the present sample.

A review of studies in the area of peer acceptance (Hartup, W W, 1976, 1983) and self concept (Wylie, R, 1979) suggests a complex but not a consistent pattern of relationship between peer acceptance and the variables, like self-esteem, aggression and dependency. But the pattern of relationships noticed in the present study strengthen the view held by Rosenberg (1972) that people with lower self-esteem take least initiative to establish contact with others and fail to see their relationship with others as easy, smooth and spontaneous. The dynamism involved may be one of ego defence as suggested by Sullivan (1953) or a self fulfilling prophecy (Ross, L, Leeper, M, and Hubbard, M, 1975). Those with low self-esteem anticipate some form of rejection as a result of their earlier experience of rejection in interpersonal situations. They try to thwart such rejection by minimizing contacts or by attacking others. These responses of withdrawal and
aggressive behavior appear to be readily available and are easily learnt compared to the responses leading to a satisfactory solution.

The above pattern of responses may result from a lacunae in the process of socialization (Northway, M'L, 1944). This may also be viewed as due to a regressive phase suggested by Kakar (1981). The loss of warmth and connectedness provided by the primary group of family as proposed by Kakar, may be experienced as injurious to self-esteem and may evoke a regressive employment of the full repertoire of psychological defenses acquired in a 'hindu childhood'. However, in the present study the family relations and the early environment of socialization have not been explored.

From the pattern of relationship among the variables that has emerged in the present study, a logical assumption would be that the responses of children in social situations is influenced by the earlier outcome and the perception of self in such situations. They learn to anticipate the outcome of the present social interaction from their experiential background. Under conditions of lack of alternate models and motivation for alternate behavior, they follow the principle of least effort and least resistance. Their behavior is guided by a heightened concern for self or a preoccupation
with ego-centric needs or deficiency needs. There is lack of initiative which results in investing lesser degree of effort for social adaptation and adjustment. These are the characteristics of isolates as suggested by Jennings (1960) who was of the opinion that a person overchosen is relatively free from egocentric or deficiency needs and is more open and responsive to the needs of others.

5.2. **Treatment Differences in the Outcome of Intervention Programmes**

5.2.1. Treatment Differences in Gain Scores: The main objective of the present study was to evaluate the effectiveness of two models of intervention as techniques of enhancing social acceptance. The two models adopted were transactional analysis and social skills practice. The effects of these models on social acceptance were compared with two control treatments, one, a placebo activity control, and another, a 'no-contact' control.

The gain scores on the dependent variable measures of the subjects assigned to the above mentioned four treatments were subjected to ANOVA. The results suggested significant treatment differences in gainscores on the variables: Teacher rating of Aggression (TQ-Agg), Adjustment (PAAS), Initiative (PAIQ), and CPQ factors A, C, D, H, I, O and Q as indicated in table 4.5.
One significant observation was that on all the five measures of social acceptance (i.e., Sm-A, Sm-R, SA, AM, and SI) the obtained 'F-ratios' for treatment differences were not found to be statistically significant. Similarly, the 'F-ratios' were not significant for the variables - Teacher rating of Sociability (TQ-SA), Dependence (PADS), Classroom trust (PACTS) and Self-Esteem. These observations also apply in case of CPQ factors B,E,F,G,J,N and Q3.

The treatment groups in general show an increase in score on the factors of Initiative and Self-Esteem from pre to post intervention test. No significant changes in scores were noticed between the groups in general from pre to post intervention test on CPQ factors E, F and G (Table 4.4).

5.2.2. Changes noticed with TA: From these results it may be inferred that in case of sixteen of the twenty six variables studied, the changes noticed with the psychological interventions were not greater than the changes noticed with controlled conditions. However, a closer look (Table 4.4) revealed significant gain scores with different treatments.

Transaction analysis has led to a change in scores in the desired direction on peer nominations of social
Acceptance, teacher ratings of Sociability and Self-Esteem. The technique was found to have increased the score on Adjustment significantly. TA was the only treatment where significant gain scores were noticed on factors E and H of CPQ. It has also brought down the scores on factors D, 0 and Q4 to the maximum extent.

The pattern of changes noticed with each treatment appears to be consistent over similar measures. Such behavior as are likely to cause emotional disturbances like, excitation, worry and apprehension and tension were reduced by TA. Similar observations were made by Arnold and Simpson (1975) on the basis of their study. They noticed improvement with TA in the general behavior of emotionally disturbed children. They found no significant difference with TA intervention on aggressive responses and they did notice an increase in the score on Piers-Harris self-concept scale for children as in the case of the present study.

Studies with TA intervention programme, covered variables like social isolation, self-esteem, leadership skills, interpersonal behavior and locus of control. In most of the studies, these variables were assessed during the pre and post intervention tests. Self-esteem was reported to have been enhanced in many studies

But many studies also reported no significant change in self-concept (Adams, B C, 1982; Bekaouche, A, 1974; Bloom, J W, 1974; Copeland, P S, 1976; Emmel, R J, 1977). Both these positions were retained in the present study as it suggests a change that is not distinct from the one noticed in the remaining treatments.

Sociometric measures and self-esteem improved with TA as reported by Gumael and Voorneveld (1975) and leadership skills improved as reported by Hunter and Hunter (1979). However, Krauf t (1973) and Garrison and Fisher (1978) report non-significant variations in the scores on these measures. Hannigan (1980) also did not notice significant variations with TA intervention on measures of ego strength and self-control.

The interaction effect of personality variables and TA instructions appear to be subtle. In most studies, although there was no significant difference between the pre and post test scores, subjects reported some positive changes in themselves and they liked their experiences in TA groups. They were found to use more of Adult ego state, Nurturing Parent and the Free Child (Adams, B C, 1982). These attitudes toward life situations may have long standing effects even when positive
changes are not immediately perceived.

In the present context, the influence of TA was found to be more on general rather than specific aspects of behavior and address to the 'central' rather than the 'peripheral' (Bordin, E, 1955) aspects of personality. A significant increase in score in the desirable direction was noticed on several variables including general adjustment and sociometric status. The number of variables influenced by TA was more as compared to SSP and PC. With its stress on autonomy and freedom of choice TA was better appreciated by preadolescents probably because of their movement towards autonomy and their struggle for independence from parental control.

Anxiety and emotional responses were found to have been decreased (CPQ factors D, O and Q) with TA in the present study. In contrast to these findings, Rajkumar (1980) reported significant difference in pre and post intervention test scores among the 9th standard subjects only in the case of assertive communication and not with regard to emotional maturity. In the study by Sringar (1984), however, there was significant increase in the score on emotional maturity in the group exposed to TA concepts. These changes may be attributed to the nature of TA exercises used in this study. These exercises focused on understanding why people act as they do and
also provided alternate modes of responses in a given situation. These exercises provided a framework to understand one's responses to others and an awareness of the choice of alternative responses. Perhaps, the emphasis on the feeling of 'I am O.K. and so are you' prepares one to meet interpersonal situations with a secure sense of self-acceptance and acceptance of others.

In addition to the above factors, significant gain scores were noticed only with TA on CPQ factors E (assertive and independent) and H (venturesome and socially bold). This might be an indicator of decreased inhibition resulting from self-acceptance. These changes noticed on self-report measures may be due to the generalization of role play experiences into day-to-day behavior and an attitude of seeking new experiences generated by these experiences.

5.2.3. Changes noticed with SSP: Compared to TA, the changes noticed with treatment SSP were more on self-report measures and were found to be related to more specific personality characteristics (Table 4.4). The unique changes noticed with this treatment were a decrease in teacher rating of Aggression and Dependence (PADS and CPQ factor I). This treatment was also found to have influenced Initiative (PAIQ) and outgoing
behavior (CPQ factor A) to a greater extent compared to other treatments. In addition, this treatment as compared to NC also registered a significant gain in score on Adjustment (PAAS) and Ego strength (factor C) and a decrease in score on Apprehension and worry (factor D) and Tense and driven behavior (factor Q₄). Gain scores with this treatment were found to be significant also on class room trust, Self-esteem and CPQ factors B (scholastic mental capacity), J (doubting, obstructive) and Q₃ (controlled and socially precise). Significant changes were not noticed in the scores on sociometric measures with SSP except a decrease in the peer nomination of Social Isolation. This was not in accordance with the findings of the earlier studies in which social skills training and social problem solving were involved in intervention. In most of these studies, sociometric status, prosocial behavior, adjustment, self-reliance and social problem solving were found to have increased. The report of significant improvement on these variables were more frequent in these studies compared to studies with TA as the intervention. The programmes of social skills training in these studies involved a wide range of activities varying from role play, coaching, behavioral rehearsal to role model and observational learning through videotapes.
Social Isolation and Sociometric status were found to have changed in the desirable direction through social skills training when post-treatment scores on experimental and control groups were compared in the study by Ladd (1981). Withdrawal behavior was found to have decreased significantly and self-esteem enhanced with the use of videotaped reflections of group interactions (Mallery, B, and Michael, N, 1982). Zandor (1983) found significant gain in sociometric status with social skills training as compared to the placebo activity. Peer interactions and joining and conversing skills were found to have improved with the intervention of social skills training (LaGreca, A M, and Mesibov, G.B., 1981). Social adjustment was found to have improved with social skills training in the study by Brown and Greenspan (1984).

However, in the present study the scores on Sociometric variables were found to have not changed with SSP except in the case of Social Isolation where the gain score was not significantly higher compared to the control condition despite the post intervention gain. So was the case with Self Esteem. The present study supports the findings of Weissberg et al (1981) and Spivack et al (1976), who considered in their studies the shy and anxious behavior of children. These investigators did not notice significant differences in
the gain scores of experimental and control groups of children on sociometric measures with the use of interpersonal cognitive problem solving exercises.

With intervention procedures involving social skills training improvements have been reported on self-esteem (Allen, G J, et al., 1976), adjustment (Mannarino, A P, et al., 1982; Muuss, R E, 1960) and sociometric status (Allen, G J, et al, 1976; Griggs, J W, and Bonney, M E, 1970; Mannarino, A P, 1982; and Rotheram, M J, et al., 1982). These support our findings with respect to Self-Esteem, Adjustment, Initiative, Outgoing behavior (factor A), Ego strength (factor C) and Independence (factor I).

The decrease in teacher rating of Aggression noticed with SSP was not accompanied by a significant change in peer rating of Aggressive Maladjustment. Further, the significance of F ratio (P < .05) based on one way ANOVA of gain scores on TQ-Agg ceased to be so (F with P > .05) when the scores were subjected to 2 way ANOVA, where mean scores of different sub-group were considered as cell entries.

However, the emphasis given to taking responsibility for self, participating in group activity and problem solving, communicating, asserting and showing empathetic
behavior in the SSP programmes was found to have influenced the attitude of children towards self. Most of the changes noticed with this treatment were on the scores of CPQ factors.

In general, the two experimental treatments were not successful in enhancing Social Acceptance. Although significant increase in scores was found in the post intervention test, this increase was not sufficient to affirm the strength of the programmes in contrast to the controlled conditions. The same holds good with regard to the variables, Self-Esteem, Dependency (PADS) and Classroom trust. These observations are contrary to the earlier findings. Perhaps, these aspects of personality are more basic and deep rooted in the Indian 'Psyche' with all the cultural ramifications and are not easily susceptible to change.

5.2.4. Factors Involved in the Treatment Effects:
The reasons for similarities or differences in treatment effect and the success or failure of the treatments in bringing about desirable changes may be dealt with under four major categories: the nature of the programmes, the nature of the sample, the nature of the outcome measures and others.
5.2.4.1. Nature of the Programmes: The concepts of transactional analysis were introduced for the first treatment group. This was followed by exercises to further elaborate the meaning of these concepts and to recognise these concepts within oneself and in others. These experiences were shared with others and role played. Exercises were given to express different ego states of self, stroke each other, express the need for strokes and analyse the transactions that take place in their groups. Alternate procedures were given to express oneself with different ego states and to get strokes. Collecting stamps and playing games were checked. The subjects were encouraged to express their true feelings.

These exercises involved group participation, communication, taking responsibility for self, empathy, assertive behavior and social problem solving. The same were emphasised in the second type of treatment, viz., social skills practice. Although, at one level the approach and objectives of the two treatments appeared to be different, basically the two treatments aimed at the same goal. TA provided the affective frame of reference and SSP the cognitive frame of reference.

The changes noticed in the two experimental groups may be attributed to certain characteristics of these
treatments. These programmes provided support for group members and encouraged them to try unusual or new ways of behaving with an objective of interpersonal growth. These groups focussed on acquisition of interpersonal skills. There was scope for trial and error learning followed by an analysis and feed-back from the members. The models for appropriate behavior along with direct or vicarious reinforcement helped in discriminating the more and the less appropriate behavior. There was psychological support and the feed-back given was personal, spontaneous and constructive. In the process subjects were able to analyse behavior in groups and identify, practice and integrate new skills in their repertoire. These structured exercises made provision for learning through actual experience in small group. The role play situations helped to develop empathy for others point of view.

In the present context, the two experimental groups were comparable on various aspects. The coaching and the reinforcement strategies were more general in the social skills practice group compared to the specific ones noticed in the earlier studies and may be matched with the general format of information given to the TA group. There was not much of a difference in the role of the instructor in the two experimental procedures.
The basic procedures in both the treatments involved assimilating information, working out exercises, reporting the outcome of these exercises to the larger group and evaluating the performance of group members.

In the placebo activity group, as compared to the experimental groups, the interactions were on a different plane. Cooperation and team work to carry out the assignments of the extra-curricular school activities were in the foreground. There was provision for group interactions as in the two experimental treatments. But what was learnt through the group process was not highlighted and was not psychologically interpreted. However, the subjects worked in groups. They were involved in actual problem-solving with a sense of cooperation and participation. This, in turn, created more opportunities for communication, empathy and for recognizing and rewarding the efforts of each other.

Common to the two experimental and the Placebo activity groups were the face to face interactions with peers, the scope for influencing each other and the sharing of experiences. These conditions, as noticed by Hartup (1983), provided adequate opportunities for peer interaction and practice required to develop social skills. These group experiences helped to communicate better. It provided an opportunity to
know the gap between what one intended to communicate and how it was received by others. It helped one to provide more of relevant visual cues especially, facial expression and eye contact which are highly influential in interpersonal communication. Thus, the three intervention programmes shared many common features.

The effect of these common features in the interaction procedures were reflected in the outcome common to the three treatments. The general Adjustment (score on PAAS), Initiative (PAIQ), Outgoing behavior (CPQ factor A) and Ego strength (factor C) were found to have improved. There was a reduction in Worry and apprehension (factor O) and Tense and driven behavior (factor O4). However, these effects of intervention were mainly on self report measures and were not reflected in peer acceptance or teacher rating of sociability.

Apart from the above features common to the three treatments, there were certain subtle differences in the three procedures which might have contributed towards differences in the outcome.

Although the two experimental procedures had several characteristics in common, the positive changes on measures of social acceptance were found to be more with TA than with SSP. This may be due to the novel
approach to the interpretations of behavior of self and of others provided by TA. Subjects were able to apply these procedures based on their own level of understanding. This made the procedure relevant for the interpretation of day to day affairs. As Woodward (1974) has observed, TA with its easily learnt vocabulary, its here and now approach to understand human nature and its dedication to producing positive results quickly, has turned out to be a beneficial tool. Interpretation of why children do what they do and as they do involves vocabulary and insight which most children do not possess. TA has provided a language and a method for interpretation.

As observed by Scharfman (1978) preadolescents or latency period children appear to be better candidates compared to prolactancy aged children for interpretation based insight. They are more logical and have more consolidated superego. Play or free association and other forms of significant projective disclosures are not relevant as the children of this age have outgrown the play age and they are not mature enough to comprehend the complex forms of self and cognitive approaches. Although children were not able to reveal how exactly TA helped them in precise terms, they felt it was helpful. Perhaps the experience in the role play
situations helped them to see themselves and to incorporate this insight in the day to day behavior. In the context of movement towards autonomy and struggle for independence from parental control, perhaps TA acted as the catalyst for self acceptance and acceptance of others. This being the crux of interpersonal relations and adjustment, it may have helped children to improve on the characteristics like Social acceptance, Adjustment, and factor H (Venturesome socially bold) and to show a decrease on factors D (excitation), O (worry and apprehension) and O_4 (tense and driven behavior).

As compared to TA the impact of SSP in enhancing social acceptance was found to be less. Of the studies reported in the two areas i.e., TA and SSP, ones involving social skills training have reported more often a desirable change on variables like sociometric status, self-esteem, adjustment, social problem solving and the like. An evaluation of research in the area made Ellis and Whittington (1981) to conclude that there are enough evidences in support of the effectiveness of this procedure.

One reason for the present deviation might be the factors related to rigour with which the procedure was adopted. In most of the studies involving TA as the
intervention programme, only a knowledge of TA concepts was provided. Only in some cases this was followed by exercises to explore themselves or others in the group as found in the present study. But in social skills training groups, coaching or modelling procedures were often followed in a systematic manner under strict supervision and reinforcement strategies were used. A different procedure was followed in the present study. Some of the exercises following National Training Laboratory models and some of the games used studies were with older children in the earlier/adapted for use in the present study. The coaching and reinforcement strategies were made more general than specific as compared to the earlier studies involving social skills training.

A second reason might be that in SSP opportunities were provided for group participation, for recognizing various kinds of group activities and understanding the reactions of different members in a group. This knowledge was not followed by suggestions for overcoming disruptive behavior or counter actions as in the case of TA sessions (antidotes).

A third reason might be that information with regard to skills like communication, empathy or social
problem solving, may remain as bits of information to be elicited in group situations. This need not be nurtured in the SSP sessions where the focus was on group instructions. Even when instructions were tailored to meet individual cases, the group-setting and the group-support under which the skills were practiced may prevent the generalization of these skills to other situations. Many of the exercises, including taking responsibility for self and relaxation, were rarely practiced outside the sessions. Thus, the skills need not be restored in the repertory of the subjects.

The fourth factor is the relevance of the social skills practiced in group sessions to the day to day activities of the subjects and motivation for utilizing these in their behavior. This aspect was not checked with regard to the present sample. Subjects were not able to verbalize the need for developing these skills, nor were they mature enough to understand or appreciate the feedback from the environment when these skills were tried.

The group exposed to SSP showed a decrease in teacher rating of aggressive behavior of children and on self-report measures of dependence (on both PADS and Factor I of CPQ). These children also showed an increase in score on initiative (PAIQ) and outgoing
behavior (CPQ factor A). the maximum contribution of SSP towards the above changes is worthy of notice. Perhaps one significant factor in social isolation is the anxiety connected with performance of self in group situations. Social isolation or aggressive behavior are a defense against this anxiety. Under normal conditions, the child is likely to be carried away by the immature apprehensions of the past and avoid social interactions. In the present study group interactions were forced on the participants. Children had an opportunity to know their real worth in situations of group work, group decisions, group problem solving, group discussions etc. Further, the need for relaxation was also stressed during the sessions. These conditions might have resulted in a decrease in the anxiety with regard to performance of self. This assumption of reduction in anxiety is supported by the reduction in the score of post intervention test on factor Q4 and 0 of CPQ. These group experiences might have also led to the development of sense of personal worth and enhanced self-esteem as reflected in the increase in score on self-esteem and ego strength during post intervention test.

More than the knowledge of a social skill or its coaching, perhaps, the rediscovered worth of self during the group sessions and the reduction in the
anxiety and worry were responsible for a behavior less aggressive and less dependent as noticed specifically with the SSP intervention. These experiences might be the core factors in initiative and outgoing behavior. The increase in score after intervention noticed on the self-reported measures of these factor was supported by a decrease in peer nominations of this group after intervention on items of Social Isolation.

Although the placebo activity group was formed to study the Hawthorne effect, the purpose was defeated in the present study. Involving the subjects in extracurricular activities had wider implications which were not anticipated while designing the study. Normally, the schools provide more opportunities for the talented and the accepted children to participate in its varied activities. Those who are weak or isolated are generally kept in the background. Their needs are not often recognised and they are often discriminated. This treatment further weakens them and make them resort to more maladaptive behavior. This was reflected in the significant decrease in Adjustment score of the 'no-contact' control group in the present study (Table 4.4). Involving the 'Isolates' and 'Rejectees' in the extracurricular activities reorganized the interpersonal situations of the classroom to the advantage of these less accepted children.
The gratifying experience of being recognized by the teachers, participating in group interactions and creative expressions had an effect similar to that of any group activity programme.

The outcome of these experiences was reflected in the remarkable gain of the PC group on factor C (ego strength). The enhanced ego strength which provided a sense of personal worth and emotional stability, in turn, improved their score on Adjustment, Initiative, Classroom trust and CPQ factor A (outgoing, warm hearted). This also has reduced emotional reactions found on factors D (excitation), O (apprehension and worry) and factor Q4 (tense, driven). Similar changes were noticed in earlier investigations in which children were involved in activity groups (Epstein, N, 1960; Duhaime, D E and Kuriloff, P, 1982; Scott, M H, 1976). However, one distinct feature noticed with this treatment was the non-significant decrease in score from the pre-intervention test to the post on sociometric measures (Table 4.4). The standard deviation of the gain score in this treatment was relatively high compared to other treatments. The wider range of gain scores with this treatment suggest the positive as well as the negative reactions of the peers toward the special recognition given to the
subjects of this group.

The 'no-contact' control group showed significant changes in terms of gain scores on Self-Esteem, Initiative, Adjustment and peer nominations on Social Acceptability and Aggressive Maladjustment (Table 4.4). While a positive gain was found in the first two variables, the latter three record a significant decrease in score. The decrease in score found on both SA and AM is suggestive of a loss of social impact of this group resulting in the group being pushed more towards 'invisibility'.

Although some positive changes, as mentioned above, were noticed with different treatments in the present study, these significant changes were found mainly on self-report measures. The effect of the experimental treatments were not found to differ significantly from that of the control condition on the main dependent variables i.e., the sociometric status indicators. Only on ten of the variables significant changes were noticed with treatment differences and in case of the remaining variables null-hypotheses with regard to the effect of treatment differences were retained.
The null hypotheses were set for verification in the present study for various reasons. One reason was that the programmes did not deal directly with the traits measured, but with aspects that were assumed to influence social acceptance. A second reason was that the agencies of socialization and conditions of socialization continued to influence the subjects as before and a major component of the natural environment remained the same. Further, personality traits being relatively enduring in nature, it was too ambitious to expect one to overcome the learnt and established patterns of behavior over the years in just three months. Another reason was, as Hurlock (1968) has rightly pointed out, it was difficult to make an unacceptable child more acceptable to his age mates. The reputation the child had acquired continued as these impressions existed among teachers and peers over the years. Similarly, the pattern of behavior that made a child unpopular were overlearnt and it might be difficult to delearn them within a short span of time.

Apart from these aspects, there are certain issues inherent in the assumptions underlying the intervention programmes that contribute towards the failure of these procedures in enhancing social acceptance. The goals of these programmes were to help children
recognize their positive aspects and enhance their commitment to change the attitude and behavior in them. The programmes aimed at inculcating initiative and independent thinking, self-acceptance and acceptance of others. Other objectives of these programmes were to help children develop some of the social skills like listening, communication, empathy and perceiving the viewpoints of others. These also include a reduction in anxiety and aggression, participation in the present, development of genuine interest in others and openness to the different approaches to the social problem solving.

However, the relevance of these skills to the day to day activities of the subjects was not assessed. The motivation for adapting these skills or its transfer to other situations was also not assessed. The reactions of others outside the group sessions or their feedback to the new ventures of the subjects was not monitored.

Further, the relationship between skills and characteristics emphasized in the programmes and social acceptance appears to be complex. The characteristics stressed in the programme were assumed to be helpful in building up good social relationships. The skills and modes of behavior stressed in the intervention programmes may bring about some change in the overt behavior of
children which helps them to deal with the situations more effectively. But overt behavior is more under the control of specific environmental contingencies while sociometric choices are affected more by generalized attraction to others and these choices are consistent across situations. The social relations that are gradually built through the changed overt behavior may take some time to get itself reflected in the sociometric status, or otherwise initial changes may dissipate soon.

As Cowen (1982) has pointed out, while positive findings indicate the effectiveness of the programme, the non-significant results or negative outcome may indicate a number of things. It may be a lacunae in the underlying generative base, an inadequate transformation of that base to specific programme operation, a programme that is not properly calibrated to the needs, styles, skills or life situations of children in question or the unanticipated circumstances. The new conflict resolution strategies that children adopt as a result of their training may create some disequilibrium and initial problems of adjustment in their peer interaction patterns in some cases. The attention given to children in the small peer group setting during the sessions of intervention may give rise to dependency and in turn may reduce popularity. As observed during the intervention
sessions two of the children dropped out because of the negative effect of feedback. Perhaps, in some cases the negative effect of feedback continued after the intervention period and this factor was not controlled in the design.

The mastery of skills depends on willingness to accept the feedback, acceptance of self and others in addition to motivational and personality factors. One of the contributing factor for statistically non-significant differences in gain scores of the different treatment may be the nature of the process of change. The change process may be presumed to be slow and can only be seeded within limits. Direct encounter with the situation is necessary for change. But in the present context, as in the case of many intervention programmes (Cook, T D, and Shadish, Jr, W R, 1986), the problem of each individual was not tackled, nor was it clearly defined. The emphasis was on giving the alternate solutions and not on implementing the solutions for one's problems. Even when a solution was tried, it was not evaluated properly. Perhaps, children were too young to understand and implement the long chains of communication in the programme structure. As a result, perhaps, the accurate dissemination of information is hindered,
The findings of the present study, like many of the earlier studies with multiple group designs (Ex: Engstrom, M J, and Kraft, R T, 1983; Zampel, C.E., 1983) have failed to register significant differences in gain scores on sociometric variables between different experimental and control groups. However, the gains noticed on sociometric variables were statistically significant in the experimental groups and not so in the control groups when the pre and post intervention test scores were compared.

5.2.4.2. Nature of the sample: Children perceived some change in their behavior in the present study as a result of intervention programmes. Yet, these changes were not noticed on sociometric measures or teacher ratings of sociability. These changes were not of a magnitude to indicate significant differences between the treatment groups on many of the variables. Within group variance or intra group differences were found to be more compared to the differences between groups. This is due to the heterogenous nature of the sample and the unique effects of treatment on individuals or small groups of individuals. Some of the variables on which individuals or groups of individuals differ, have been treated as independent variables and the influence of these variables on the outcome of treatment is taken
up for discussion in the foregoing pages. Apart from these factors, a number of other aspects pertaining to individuals or small groups of individuals seem to have influenced the performance in different ways, thus minimizing the effects of treatment.

For many subjects the group programme conducted in a class room may not have any impact. In the case of some of the subjects there may be a resistance for change and a resistance to experiment with new experiences. Thus in most cases a passive approach towards the programmes was nurtured. Further, the problems dealt with in the programmes were not identified as problems of significance by the subjects. The magnitude of the problems and its hierarchy of significance as assessed by the subjects with a given developmental status in the context of their social set up are bound to differ from adult assessment. Preoccupation with more significant problems are likely to interfere with treatment effect.

In the programmes offered to children, the priorities of problems of individual child and the needs of the individual child were not taken care of. As a result, the effect might be the minimum. Even when there is some effect, the change is likely to be slow and it is likely to occur within the format of programmes
which are less conceptually bold and which fits into
the accepted socio-cultural norms. Even then, children
may not be in a position to understand and implement the
message completely.

The treatment effect is likely to be unique for
each individual based on a number of factors. These
group experiences change people selectively as observed
by Schutz and Aller (1966). In their study of T-groups
they found that overtly dominant persons became less
dominant, and overtly affectionate persons became more
discriminative in expression of affection. These observ-
ations were true in the present study also. As indi-
cated in Table 4.29 the gain on a given variable was
less when the initial score was high and the gain was
more when the initial score was low. As a result, when
large heterogeneous groups are compared, the net effect
of treatment is bound to be low.

Individual differences as well as group differences
in treatment effects depend on certain aspects of small
group interaction as observed by Nixon (1979). The
effect depends on the value of the group membership to
its members, the degree of conformity or deviance in
the group, and how members get along with others. These
conditions in the present context were not uniform for
all groups and all group members. Further, although
opportunities for interaction were provided, the frequency of interaction or its intimacy were not checked. So also the factors of group cohesiveness, group support, the dynamics of group in terms of power distribution, attraction of group members, and subgroup competitions were not monitored or regulated.

The effects of group interaction depends on the motivation for participation in the group and motivation to grow with group experiences. Motivation was not assessed although it is likely to differ from individual to individual.

5.2.4.3. Nature of the Outcome Measures: The evaluation of different treatments in the present study was restricted to the gain noticed on certain variable measures. Hence, the outcome evaluation was found to have been influenced by the values and limitations of these measures and the statistical procedures applied in the analysis of scores. One limitation of evaluation in terms of psychometric measures is the tangential relationship of these measures to social acceptance and social skills as exemplified in actual-social interactions in specific settings. Although these measures seem to have convergent and discriminant validity as suggested by the inter-correlations (Table 4.26), there need not be a direct relationship between the outcome
of the programmes and the gain score on the selected variable measures. To some extent, this point is brought out in the significance of difference in gain score for the various treatment groups noticed on the 'self reported' and 'other reported' measures. Subjects have felt some change in their attitude and approach towards interpersonal situations. But this was not translated into their action so as to make it noticeable for others.

The second point of caution in the outcome evaluation pertains to the limitation caused by the degree of unreliability of the tests used. The retest reliability coefficients for social acceptance measures as assessed in the pilot study on a similar sample are as follows:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociometric Acceptance</td>
<td>0.86</td>
</tr>
<tr>
<td>Sociometric Rejection</td>
<td>0.82</td>
</tr>
<tr>
<td>Social Acceptability</td>
<td>0.96</td>
</tr>
<tr>
<td>Aggressive Maladjustment</td>
<td>0.85</td>
</tr>
<tr>
<td>Social Isolation</td>
<td>0.81</td>
</tr>
<tr>
<td>Teacher rating of Sociability</td>
<td>0.94</td>
</tr>
<tr>
<td>Teacher rating of Aggression</td>
<td>0.84</td>
</tr>
</tbody>
</table>

The coefficients are a little higher and satisfactory for positive measures of social acceptance as compared to the negative measures.
The degree of unreliability of psychological tools increases the error component of the gain score as it includes the error variance of pre and post intervention test measures. As a result, larger differences in gain scores between treatment groups are required to judge an experimental treatment as effective.

The two factors which have contributed towards unreliability of the measures of social acceptance in the present context are the age of children and the relational nature of peer nominations. Children are less likely to be consistent in their attractions and repulsions and the stability of choice increases with age (Moreno, J L, 1960). The scores on sociometric measures based on limited nominations are likely to be influenced by fluctuations that might occur during the reallocation of choices. These fluctuations influence the gain scores to a significant extent especially of those who score at the extremes - who constitute the sample of this study.

The relational nature of the sociometric measures and the problem of fitting measures based on multiple activities into an unidimensional scale characterized by equal intervals with a zero point poses certain problems. In this context, as observed by Veldman and
Sheffield (1979), the best procedure to get a normal distribution of scores is the conversion of sociometric preferences of each class into standard scores. But this artificial imposition of a normal distribution on a non-normal distribution is likely to disrupt the distribution of gain scores which otherwise may be assumed to be normal. Hence, the raw scores were retained. The gain score derived from the raw proportional scores of the pre and post intervention tests, however, does not justify the assumption of an equal interval of gain at the different points of sociometric status. These deviations from assumptions underlying the procedures of analysis, although very much in vogue, are likely to influence the measure of outcome in subtle ways and contribute towards error variance of gain scores.

5.2.4.4. Other Factors Influencing the Treatment Effects: In any small group, as viewed by Tubbs (1978), the interaction leads to different degrees of success in finding solutions to problems, interpersonal relations, information flow, risk taking, interpersonal growth and organizational change depending on background factors like personality, sex, age, health, attitudes and values of its members. In addition, interaction depends on physical environment, group size and structure, type of group, status of members and power distribution. These conditions in turn affect communication, language
behavior, self-disclosure, interaction roles, decision styles and conflicts which in turn contribute towards the outcome of group interaction. Accordingly, in Tubbs' model, the two input variables contributing towards variation in outcome are:

1. the nature and structure of the group; and
2. the personality and related variables.

With regard to the nature and structure of the group, in the present context, the guidelines given by Gazda (1978) were kept in view as far as possible in the formation of groups. The composition of different groups to the extent possible were made conducive for healthy interactions. The groups were homogeneous with regard to the factor of age, and sex. Children in a group were from the same school. In all the groups accepted peer models were present but they were not given undue importance from the point of view of maintaining 'role-balance' among members (Ginott, H G, 1968). Siblings were not involved in the same group and the groups did not consist of highly aggressive or highly deviant children as all the members were drawn from a population of normal school going children. In addition, the group activities were structured with equalised power distribution among members.
However, the nature of group interactions were not similar in all the groups and to all its members. The degree of acceptance by group members, their tolerance towards expressed behavior of others and the support given to members who tried new behavior were not uniform for all members. The success of group interaction rests mainly on these factors. One can only create an atmosphere and provide instructions to this effect. But it is difficult to control hostilities and attractions of group members towards each other. As a result, individuals are likely to be influenced differently with regard to the extent and direction of change.

Similarly, the influence of initial group cohesiveness was not ascertained in the study. In some of the groups all the subjects were enthusiastic to participate in the group sessions and did so with mutual cooperation. But it was not so in all the groups. Some of the members in these groups were often absent and they in turn influenced the attitude of other members towards the group as well as the programmes. Attitude of the class teachers towards the programme was also a distracting factor. These attitudes indicated through verbal or non-verbal cues emitted by teachers, in turn, influenced the attitude of students towards the programmes. These differences in student attitudes were not assessed in the study although these are a major source
of variance in treatment effect.

The second source of variance in interaction effect, namely, the personality, age, sex etc., is considered in the later sections of this chapter. In the present context of the effect of different treatments on dependent variable measure, the initial differences between treatment groups on personality measures seem relevant. These differences were found to be statistically significant only in case of variables PAAS (adjustment) and CPQ factors D (excitation), N (Shrewd), Q3 (socially precise) and Q4 (tense and driven). On all these variables the maximum or the minimum scores in the desired direction were found in the group exposed to social skills practice. This group as compared to other groups was better adjusted, was more forthright and natural, was more socially precise and showed less signs of tense and driven behavior and excitation (Table 4.3).

The correlations between the pre intervention test scores on the above measures and the corresponding gain scores (Table 4.29) were all negative and suggested that a high score on pre intervention test was found with a low positive or a high negative gain. Accordingly, irrespective of the treatment, the initial score of an individual determines the extent of gain. We may further infer that the maximum effect of TA with regard to factors PAAS, D and Q4 was due to the initial differ-
ience in score as the mean scores on these factors in the group exposed to TA was the minimum on PAAS and the maximum on factors D and Q\textsubscript{4}. Similarly, the initial score position was in favour of the NC group to show a higher gain on factors N and Q\textsubscript{3}. These initial group differences in scores were not significant on other variables. But this may be regarded as a factor contributing towards treatment differences in gain score.

Another source of within group variance which is not taken care of in the present study, is the interaction of various personality characteristics and the treatment procedures. As noticed by Goodenough (1977), the relationship between cognitive complexity and the social skills performed by an individual depends on personality factors like field dependency. Other contributing factors are: Anxiety and need affiliation. Flexibility to learn new roles and skill selection in varied social situations is a complex process and something difficult to achieve. Unless these underlying processes and the nature of their integration are understood, it may not be logical to assume any change in sociometric status which emerge from a wide range of factors interwoven in a highly complex fashion. The findings of this study corroborates this view as the interaction effect of different independent variables was found to be significant in the gain scores on
sociometric variables.

In the present context, it is worth considering the views held by Gelfand and others (1981). According to them, traditional group designs and single subject designs are not appropriate for children. In the case of traditional group designs, the group heterogeneity found among children experiencing problems of personality and adjustment makes the comparison of group means inappropriate. In the case of single subject designs, immediate cause and effect relationship between behavior and environment are not hypothesized with the help of multiple base line and reversal designs and hence the designs are theoretically inappropriate.

5.3. Personality Variables and Treatment Effects:

5.3.1. Sociometric Status and Treatment Effects: As noticed earlier, one major source of variance of treatment effect was the nature of the subjects involved. Subjects in the present sample were drawn from different segments of the sociometric status. One group of them (A=Accepted) were from the higher sociometric strata and these subjects enjoyed maximum social acceptance. A second group (R=Rejected) consisted of subjects who were deliberately avoided by peers and were often nominated for expressing behavior indicative of Social Isolation and Aggressive Maladjustment. The third group
(I = Isolates) scored either low on all measures or high on the factor of Social Isolation. The last group (M=Mixers) scored moderately high on all the sociometric measures. These positions were indicative of popularity and social status of the subjects.

The gain scores of the sociometric groups on the dependent variable measures have led to the following inferences:

The four sociometric groups showed significant differences (Table 4.7) in their gain scores on the following variables:

a. All Sociometric Variables
b. Teacher rating of Sociability
c. Initiative Questionnaire (PAIQ)
d. CPQ factors - A (Outgoing, warm hearted)
   B (Scholastic mental ability) and H (venturesome, socially bold).

The interaction effects of treatment and sociometric status were found to be significant on factors of Sociometric Rejection, and Aggressive Maladjustment on and on CPQ factors C (Ego strength) and D (Excitation). With regard to the gain scores on other variables, the group differences were not statistically significant as indicated by the F-ratios (Appendix H).
Although the group differences in gain scores were not statistically significant on many of the dependent variable measures, 'the Isolates' and 'the Rejected' more often reported a significant gain as compared to the 'Accepted' and the 'Mixers'. In general, the 'Accepted' showed no significant gain scores, 'the Rejected' showed the maximum gain scores, 'the Isolates' showed a positive gain in general on all types of variables and with all treatments, and 'the Mixers' showed significant gain scores on certain variables (Table 4.6).

The nature of changes noticed in the four sociometric groups may be inferred from the data presented in Table 4.6. 'Accepted' normally tend to show under retest a decrease in score on Peer Acceptance and an increase in score on Peer Rejection. The gain scores of the 'Accepted' suggest that the two psychological interventions were not very effective with them. The nonsignificant gain scores noticed in this group with PC suggest that the treatment was effective in preventing the normal decrease in score on Peer Acceptance noticed with the renominations on sociometric measures. Maintenance of the position on Peer Acceptance and Rejection noticed in this group exposed to PC may be attributed to an increase in approval and attention towards the subjects shown by their teachers.
The 'Rejected' in the 'No-contact' control group showed no significant variations in their scores under retest on sociometric measures. Further, this group showed a significant decrease in score on AM and SI with PC. Recognition of these subjects by their teachers and their participation in co-curricular activities appear to have brought down peer nominations on behavior indicative of Isolation and Aggressive mal-adjustment, although it did not give rise to an increase in Social Acceptance. Exposure of the 'Rejected' group to psychological intervention of both kinds, has led to an increase in nominations on items of Social acceptance and a decrease in nominations on items of factors SM-R, AM and SI. This trend in the results appears to contradict the findings of the Rochester projects (Zax M., and Cowen, E L, 1967) on children identified as having problems or potential problems in social adjustment. Adjusted children as compared to the target children in these programmes showed greater improvement. A similar observation was made by Waldron (1976) who concluded that results of the 'relationship based therapeutic-intervention' provided little basis for optimism with regard to the efficacy of secondary prevention approach. Perhaps, the involvement of whole class in the intervention programmes was responsible for the programmes being non-effective in these
cases. Selected membership of small groups and a change in the interpersonal situation within the larger groups were the contributing factors for the success of intervention in the present study.

However, 'isolates' appear to have not been influenced by the psychological interventions or by their involvement in co-curricular activity. The group tends to increase their score with retest on both the measures of Social Acceptance and Rejection, with the exception of score on AM and SI noticed in the SSP treatment. This may be suggestive of the increased 'social impact' of the 'isolates' after intervention.

The performance of the 'Mixer' group exposed to TA showed a statistically significant change of scores in the desired direction. Sociometric nominations increased on the positive side and decreased on the negative. A significant decrease in score on AM and SI was also noticed in this group with NC. Thus the influence of TA was restricted only to an increase on positive nominations. These changes in scores of the 'Mixers' were not noticed with treatments SSP and PC.

The four sociometric groups, viz., the 'Accepted', the 'Rejected', the 'Isolates' and the 'Mixers', were included in the present study for the following
reasons:

1. To avoid undesirable and prejudiced reactions of teachers and students that are likely to be present toward an intervention programme for the target children - the 'Rejected' and the 'Isolates'.

2. To avoid the set back in social interactions that is likely to occur in the presence of only the 'Rejected' and the 'Isolates' and to provide models for interactions.

3. To avoid a further seclusion of the 'Isolates' and the 'Rejected' that is likely to occur by their segregation for purposes of intervention programmes.

The sociometric groups responded to the intervention programmes with initial personality differences (Appendix G). Social acceptance, as indicated in table 4.26 was positively related to the variables of Adjustment (PAAS), Classroom trust (PACTS), Initiativeness (PAIQ), Self-Esteem and the CPQ factors A,B,C and Q3. A statistically significant negative correlation was noticed between Social Acceptance measures and the scores factors N and O. Further, the score on Sm-R and AM showed a positive correlation with TQ-Agg. Similar relationships were reported by investigators, working in the area of sociometry (Hartup, W.W., 1970, 1983) and
social maturity (Nalini Rao, 1978). As Jennings (1960) has noted the 'Accepted' or the individuals over chosen conduct themselves in ways which imply sensitivity and orientation to the elements of the total group situations. They contribute to enlarge the social field for participation of others and encourage development of individual members. Isolates as noticed by Northway showed withdrawal and aggressive behavior instead of finding a satisfactory solution (Northway, M L, 1944). Hartup (1970) also reported a positive relationship between social rejection and aggression. The ignored and the rejected were found to be moody, troubled, distressed and showed symptoms of insecurity and were troubled by problems in their home environment (Hartup, W W, 1970). Isolates were considered as shy and socially anxious by Gottman (1977). Similar findings were reported in several of the studies conducted in India (Chanchala, 1980; Janani, R, 1984; Pathak, R D, 1974; Sharma, A, 1970).

As noticed by Moreno (1934) there is stability in the choice pattern and in the norms for choice and rejection. In interpersonal relationships 'Accepted' tend to show adequacy, appropriateness, competence and skill in dealing with situations. The 'Rejected' on the other hand, as noticed by Jennings (1960), show marked lack of orientation to the demands of the group
situation. They hinder the activities undertaken by other members by externalizing their private feelings of hostility, irritability and the like.

The findings reported above and the findings of intervention studies on children with problems of social adjustment have led to a general notion that children who need psychological intervention avoid it most and they appear to be least benefitted by psychological intervention. The differences in the outcome of the intervention programmes for the 'Accepted' and the 'Rejected' in the above case may be attributed mainly to components of their personality like the interpersonal traits, their approach to the perception of interpersonal problems, skill and competency shown in the interpersonal situations, and motivation for conformity behavior. These components of personality of the 'Accepted' and the 'Rejected' make the interpersonal situations different for the two groups and hence the outcome of the interaction also will be different.

In the present study, as noticed during the sessions, the 'Accepted' were regular and participated with interest and enthusiasm. They also possessed favourable personality dispositions and the skills of coping with the interpersonal situations. They were quick to learn and were responsive. However, contrary to the observations made earlier, the gain of the ' Accepted' was
minimal. This may be because the 'Accepted' possessed the basic skills and an awareness of its application prior to their exposure to intervention programmes. They were well adjusted and trusted themselves and others. Perhaps, these aspects stressed in the programmes were not new to them. Further, their social cognition in the present case was limited by the factor of age to show extensive gains from the intervention programmes. And the evaluation of change was restricted to a limited number of psychometric measures. As such, the subjects of this group appear to have maintained an optimum level of performance from the beginning and retained the same level after the intervention programmes.

A change worthy of notice among the 'Accepted' was a decrease in dependency and a move towards greater self-reliance as noticed by the negative gain on factor I (Table 4.6). This change was noticed mainly among the 'Accepted' although the gain was not significantly above that of the remaining groups. Perhaps, the trend is suggestive of a changing concept of social acceptance which is in tune with their developmental status.

In contrast to the 'Accepted', the 'Rejected' may be expected to be less in favour of progress, group
loyalty, cooperation and material and social success (Bales, R F, 1969). The 'Rejected' may be expected to be obsessed by egocentric thought, which according to Inhelder and Piaget (1958) interferes with the development of cognitive functions involved in social sensitivity. Many investigators have recognized the disruptive and impulsive behavior of the 'Rejected' to be a major handicap for their participation and success in insight oriented discussion groups (Schamers, 1976) and in the activity group therapy (Dannefer, E, Brown R & Epstein, N, 1975). As these investigators have pointed out, the permissiveness of the group structure was mainly responsible for the failure of intervention in this group.

However, the group activities in the present study were structured and formal and the roles in these activities were assigned by rotation. The interaction brought to the fore the expectations and anticipations of other group members and the multiple ways in which children can react in a given situation. Perhaps, a knowledge of the expectations of others, inferences about others' behavior, role taking and communication skills, prosocial behavior and 'being needs' provided in these programmes has enabled the 'Rejected' to study their behavior in a healthy and accepted environment and acquire social maturity.
In the present study, remarkable gain was noticed among the 'Rejected' with regard to their score on sociometric variables. This is suggestive of an apparent change in the social behavior of the 'Rejected' after intervention which made them more acceptable to their peers and teachers. This may be due to a subtle behavior change caused by an increase in initiative (PAIQ), warm hearted and outgoing behavior (factor A) and an orientation towards enhancing scholastic mental ability (factor B) and ego strength (factor C). A decrease in excitation (factor D) was also noticed in this group with the involvement of the subjects in small group interactions. Other significant changes noticed in this group were an increase in Classroom trust and Socially precise and controlled behavior (factor Q3) and a decrease in Dependency (PABS), Shrewd and calculated behavior (factor N), restrained behavior (factor J), apprehension and worry (factor O) and tense and driven behavior (factor Q4).

The 'Rejected' children were found to benefit by the intervention programmes to the maximum extent. This may be because they were bold enough to venture into experimentation and to try new aspects of behavior. Perhaps, a positive attitude towards self (SE), and enhanced ego strength (factor C) combined with the experience of acceptance by others in the intervention
groups have helped them to develop a positive approach towards social situations. This change is indicative of a dyadic model of interpersonal behavior and suggest the necessity of acceptance and approval of others in learning social skills and in developing a positive attitude towards social situations. The destructive and aggressive pattern of behavior of children may thus be channelized to a more constructive pattern which promotes social adjustment and personality growth.

The 'Rejected' participated in the group interactions and showed maximum improvement in performance instead of showing an attitude of reluctance that was expected of them. This improvement may be due to an awareness of initial lack of skills and strong motivation for growth. As viewed by Reeves (1970), individual motivation in interpersonal situations depends on one's attitude towards other members. The situations provided during the intervention programmes increased the frequency of social interactions involving cooperation. These conditions were likely to increase interpersonal attraction. Further, the approach of the 'Accepted' and the 'Mixers' in the group tend to be friendly. They are likely to show initiative in cooperative task situations. This behavior in interpersonal situations as viewed by Leary (1957) tends to elicit similar responses from others. Behavior indicating cooperation and friendship,
as noticed by Shannon and Cuerney (1973), tends to elicit leadership and advice reactions. With this type of behavior empathy is bound to increase and with an increase in empathy there will be a decrease in aggression (Feshbach, N, & Feshbach, S, 1969). A decrease in verbal and physical aggression with teacher attention to verbal cooperation was also reported by Slaby and Crowley (1977).

It may be inferred on the basis of these studies that opportunities for expression of desirable behavior automatically brings down undesirable behavior. The training procedures designed to increase aspects of positive interaction alone have led to a decrease in negative or inappropriate behavior (Strain, P, Shores, R, & Kerr, M, 1976). Thus the opportunities for reciprocity and positive reinforcements in the intervention programmes of this study seem to have provided substitutes for negative behavior.

A glance at Table 4.26 indicating correlates of Social Isolation suggest that basically Isolation goes with a low score on Classroom trust, Self-esteem and Ego strength. These children with an initial disposition of being invisible were not influenced by treatment as for sociometric variables are concerned. A significant increase in mean score among the isolates was noticed in this study with all treatments during the
rotest on measures of Social Acceptance as well as Rejection. Perhaps, this increase appears during a retest situation in any group with a low initial score.

One significant change noticed among the 'Isolates' subjected to TA and SSP was an increase in score on Sociability as rated by teachers. Perhaps, in this background, the increase in score on sociometric measures of both Acceptance and Rejection noticed in this group suggests a gain in 'social impact' of its members. The invisibility of this group appears to have been decreased. The non-significant treatment differences in gain score of the 'isolates' may be due to certain characteristic modes of their behavior like fear of experimentation, fear of being assertive etc. However, the subjects tend to show an awareness of these fears and a move towards overcoming them.

This tendency of the 'Isolates' is reflected in the significant gain scores noticed among them on self report measures of Initiative (PAIQ) and CPQ factors A (warm and outgoing), C (ego strength), H (venturesome and socially bold) and G (super ego strength). Further, the group also showed a significant gain after intervention on the variables viz., Self-Esteem, Adjustment (PAAS), Classroom trust (PACTS) and socially precise behavior (factor $O_3$). A decrease in score on factors J,
0 and \( \Omega_4 \) was also noticed in this group.

With regard to the sociometric variables, the 'Mixers' were not much affected by the experimental treatments. A gain in scores in the desirable direction on sociometric variables was found in this group with TA. But a significant decrease in score was noticed on variables AM and SI in the 'no-contact' control group and this decrease suggests a general tendency in this group to reduce maladaptive behavior in the course of time. However, this tendency was not found with treatments SSP and PC. One reason for these variations noticed with different treatments in this group may be the heterogeneity of the sample. There was greater variation in gain score in this group as compared to the remaining groups. The intricate interaction of personality factors and the nature of intervention appears to have influenced the 'Mixers' to a greater extent.

Fine (1980) suggested an increase in assertion and aggression during preadolescence especially among the 'Mixers' who are referred by their peers as 'friends we hate' (Fine, G A, 1980). This increase results from an attempt to cope with the need for appropriate expression and control of aggression essential during preadolescence. In the present study also teachers have recognised an increase in aggression among
'Mixers' especially with treatment PC. There also seems to be a distinct orientation towards enhancing scholastic mental ability (factor B) in this group mainly with PC. An increase in Initiative (PAIQ) and Ego strength (factor C) and a decrease in Excitation (factor D) were also noticed after intervention. In addition, the group reported an increase in Self-Esteem, Classroom trust (PACTS) and a decrease in tense and driven behavior (factor Q₄) during the retest situation.

One observation worthy of notice is that psychological interventions have enhanced Self Esteem among 'Mixers' and 'Isolates' to a statistically significant extent. Strangely enough, the 'Rejected' showed no significant change on this factor with TA, SSP or PC. So also the 'Accepted'. But the group differences or the interaction effect of treatment and sociometric status were not found to be significant. Perhaps, the low self esteem among the 'Rejected' is rooted deep in their personality and the short intervention programmes of the present study fail to enhance the self esteem level. However, the ego strength has been enhanced in this group as noticed in the gain score on CPQ factor C.

One distinct characteristic of the changes noticed in the four sociometric groups is a striving
towards maintenance of an optimal level of characteristics suited for each group. A 'growth need model' monitored by a 'self regulation mechanism' may be recognized in these changes. Accordingly, the 'Accepted' showed a decrease in score on Acceptance and an increase on Rejection. They also develop greater self reliance (I). The 'Rejected' showed a change along the desirable direction on most of the characteristics including sociometric measures. The 'Isolated' as rated by teachers improved on Sociability and strengthened their characteristics related to Social acceptance. The experimental treatments have been found to change the subjects selectively. This trend was noticed by Schultz and Allen (1966) in the effects of T-groups where overtly dominant persons became less dominant while overtly affectionate persons became more discriminative in the expression of affection.

Another characteristic of the changes noticed was that these changes appeared to be in accordance with the predispositions of subjects. 'Accepted' seemed to adopt changes more in conformity with their setting and move slowly along that dimension. The 'Rejected' ventured to adopt what was learnt during the intervention sessions in their characteristic aggressive way and achieved significant gains. 'Isolates' showed
these changes in an invisible manner and the 'Mixers' in their own complex way.

We cannot draw any definite conclusion with regard to the type of treatment suited for each group. Interaction effect of treatment and sociometric status was significant only on four of the variables. The 'Accepted' group as noticed in Table 4.6 showed no significant gains with PC and gains in the direction not desired with NC. In this group more desirable changes were noticed with SSP. These changes appear as expected. The 'Accepted' preadolescents who enjoyed positive parental influences were at the verge of moving away from parents and towards peer groups for acceptance. At this stage of transition certain negative changes like a decrease on superego strength (G), dependency (I), and socially precise behavior (Q3) as noticed in this group with NC, were likely to occur in addition to an increase in tense and driven behavior (Q4). This condition indicated the reaction of the 'Accepted' preadolescents to the pressures of conformity. These negative changes noticed in the NC group were prevented with TA, SSP and PC. The 'Accepted', however, have not shown significant positive changes with PC as the intervention did not bring about any change in their enjoyment of the benefits of curricular activity and attention of teachers. The basics
of prosocial behavior in terms of its awareness, acceptance of self with a feeling of O.Kness, positive approach to interpersonal behavior and empathy stressed in TA were within the repertoire of these subjects even before intervention. There can only be a recognition of these aspects and this has resulted in an increase in general adjustment (PAAS), assertion (E) and a decrease in excitation (D). SSP, with its stress on knowledge of specific social skills and an opportunity to practice them, was more useful compared to other treatments in promoting the growth of social cognition and social maturity among the 'Accepted'.

For the 'Rejected', TA was more beneficial compared to other procedures as it provides a base for right type of orientation towards healthy interpersonal relationships. This group was also influenced by SSP and PC. The 'Isolates' and the 'Mixers' were found to benefit to a greater extent with TA and PC as compared to the other treatments in the study. But positive gains with psychological intervention and PC were found more often among 'Isolates' and the 'Rejected'.

However, these changes have to be interpreted with caution because of the heterogeneity of the sample. The four groups were not comparable on the sociometric variables as the mean and standard deviation of these
groups were found to differ to a significant extent (Appendix H). Analysis of gain of different socio-metric groups on the sociometric variables suggest statistically significant group differences in gain score. These differences may be considered as the main factor responsible for nullifying the effects of treatment and treatment differences as noticed in the non-significant gain scores of the total group on socio-metric variables.

5.3.2. **Self-Esteem and Treatment Effects:**

One of the goals of intervention programmes for personality growth is changing attitude towards Self. In several studies involving small group interaction as an intervention programme self-concept is viewed as a dependent variable. Self-esteem is often considered as a moderator variable which influences several aspects of one's social behavior.

In many studies subjects of high and low self-esteem were found to differ in their reactions in group situations. Subjects with low self-esteem enjoyed group discussion courses to a significantly lesser extent as compared to their high self-esteem encounter parts (Hull, J W, 1983; Ober and Jandt, 1973). Those children who communicate frequently will have a higher self-concept compared to those who communicate less
frequently (Enloe, J S, 1982). In view of these, the subjects with high and low self-esteem may be expected to produce differential impact on the group members and thus may be expected to benefit by group interactions in different ways.

Further, as indicated earlier in this section, Self-Esteem was found to have significant correlation with variables like Social Acceptance, Adjustment and Initiative (Table 4.26). In the light of these observations, children with high and low Self-esteem may be expected to show differences in the outcome of intervention in terms of their gain scores on dependent variable measures. To test this, the subjects were classified as high and low self-esteem groups on the basis of their scores being above or below the mean on the adapted form of Piers-Harris children Self-concept Scale.

The results confirm the assumption that the two groups differ in their personality make-up. The HSE group showed significantly higher scores on pre-intervention measures of Sm-A, SA, TQ-SA, SE, PAAS,
FACTS, PAIQ and on CPQ factors, A, B, C, G, H and Q3 (appendix G) and scored significantly lower on pre-intervention measures of Sm-R, AM, SI and CPQ factors D, J, N, O, and Q4 as compared to the LSE group. These observations are in conformity with the findings of a number of previous studies (Gowancy, 1974; Janani, 1984; Rao, N, 1978; Sabhapathy, S, 1976; Suvarna, B J, 1973; Thomas and Anandaraj, 1985).

The HSE group as compared to the LSE, has scored higher on variables in which positive gain is expected as a result of psychological intervention and lower on the factors in which a negative gain is expected. It was observed that high pre-intervention test scores yield a low positive gain and a high negative gain. Similarly, low pre-intervention test scores yield a high positive or a low negative gain (Table 4.29). In the context of these observations it may be hypothesised that the LSE group shows a higher positive or negative gain compared to the HSE group.

Although the HSE and the LSE groups were found to differ on twenty one of the dependent variables during the pre-intervention test, the gain score of the two groups differ only on five of these measures, i.e., SE, PAIQ and CPQ factors E, F and Q3. The LSE group showed a higher positive gain on factors of Self-Esteem and Initiative, while the HSE showed a significant
positive gain on factors E (Assertion) and Q\textsubscript{3} (controlled and socially precise behavior). The gain score of LSE on factors E and Q\textsubscript{3} was found to be not significant. In the case of factor F, the HSE showed a positive gain (happy go lucky) and LSE a negative gain (Sober and Prudent). The intervention programme was effective in helping the LSE group to improve their scores on Self-Esteem, Initiative and factor F.

The effect of interaction between treatment and Self-Esteem was significant only on CPQ factors H and Q\textsubscript{4} (Appendix I). With TA both the self-esteem groups showed a positive gain on factor H (Venturesome and socially bold) and a negative gain on factor Q\textsubscript{4} (Tense and driven). The LSE showed a negative gain on factor H (Shy, restrained) with SSP and a positive gain with PC while the HSE showed a negative gain with PC. In the case of factor Q\textsubscript{4}, HSE was found to benefit by SSP and LSE by PC.

The gain scores noticed with different treatments suggest that in an atmosphere of acceptance the LSE group tends to enhance its Self-esteem (SE), take initiative (PAIQ) show more sober and prudent behavior (factor F), become venturesome and socially bold (factor H) and relaxed (Q\textsubscript{4}). A decrease in social anxiety and initial inhibition along with an increase in self-confidence may be responsible for the changes
noticed among the LSE, specially with TA and PC. The HSE, which already enjoys this social acceptance, tends to benefit more by skills training aspects of the two psychological interventions. The subjects tend to show a change in characteristics found desirable for their personality growth. However, it is difficult to explain why a higher gain among the LSE as compared to the HSE was not noticed with intervention on the remaining variables.

The interaction effect of the three independent variables, i.e., Type of treatment, Sociometric status and Self-esteem was found to be significant on factors AM, SE, PADS and CPQ factors C and H (appendix N1). In the case of peer nominations of Aggressive Maladjustment, irrespective of their Self-esteem level the 'Accepted' and the 'Isolates' showed an increase and the 'Rejected' a decrease in score after intervention. We find a differential effect of the treatments on the two groups only among the 'Mixers'. As compared to the HSE, the LSE group was found to benefit more by SSP and less by TA. In peer interactions, understanding of social skills and opportunity to practice them help the LSE among the 'Mixers' to overcome their aggressive reactions.

This study found an increase in the score on Self-esteem of the subjects from the pre-intervention to
the post-intervention test. This was true of the 'no-contact' control group also. The LSE showed a higher gain than the HSE. The 'Accepted' and the 'Isolates' among the LSE showed a higher gain with TA and SSP and the 'Rejected' with SSP and NC, while the 'Mixers' showed a gain with TA, PC and NC. The findings also suggest a general tendency among the more aggressive and dynamic children like the 'Rejected' and the 'Mixers' to improve their Self-esteem during preadolescence. This tendency was enhanced by experiencing the acceptance of the group among the 'Mixers' and by acquiring the required social skills in the case of the 'Rejected'. The type of treatment that would benefit an individual depends on his sociometric status. Psychological treatments like TA and SSP help the LSE among the 'Accepted' and the 'Isolates' considerably in enhancing their Self-esteem compared to the LSE among the 'Mixers' and the 'Rejected'.

While some of the earlier studies reported an improvement in Self-esteem with psychological intervention (eg. Payton et al., 1979) others report no significant change in self-concept (Adams, B C, 1982; Dana, H A, 1976; and Sheridan & Becker, 1982). The present study suggests an increase in score with intervention. However, the gain noticed with psychological intervention was not significantly higher than the gain noticed in the
controlled condition. Perhaps, this was caused by the interaction effect of treatment, sociometric status and self-esteem level of the subjects.

Another factor which was influenced by the interaction effect of self-esteem level, sociometric status and the type of treatment was Dependency. Here, the 'Rejected' showed a decrease; among the 'Mixers' HSE showed an increase and LSE a decrease; among the 'Accepted' and the 'Isolates' HSE showed a decrease and LSE an increase. However, with SSP, both the groups showed a decrease. Dependency appears to be more an instrumental mode of social behavior rather than a personality trait and is used in different situations to meet one's requirements. Accordingly, the gain score appears to be different for different groups. In the case of 'Accepted' and the 'Isolates' the conformity needs of the LSE perhaps make them learn to use dependency as a means to reduce social anxiety and gain conformity. The mechanism is found to operate in the opposite direction among the 'Mixers'. For the 'Rejected', the pre-intervention score on PADS was high (appendix G) and this was considerably reduced after intervention.

With regard to CPQ factor C (ego strength), HSE among the 'Accepted' showed a positive gain and LSE a negative gain. In the case of 'Rejected', both groups
showed a positive gain. But HSE gain more with TA, PC and NC and LSE with SSP. The two groups among the 'Isolates' showed a positive gain. The 'Mixers' in general showed a positive gain except the LSE in the SSP treatment who showed a negative gain. The negative gain of the LSE group among the 'Mixers' and the 'Accepted' needs to be interpreted keeping in view the high pre-intervention score of these groups. The score on this factor is also influenced by social desirability factor. Perhaps, during the re-assessment, the LSE subjects tend to be more critical in assessing themselves and this might have resulted in a negative gain.

Among the 'Accepted' and the 'Rejected', the HSE group showed a higher gain with TA on CPQ factor H (venturesome and socially bold) as compared to the LSE. The LSE showed a higher positive gain with PC and a negative gain with SSP. The HSE among the 'Isolates' showed a higher gain with SSP, the LSE showed a higher gain with PC, the 'Mixers' showed a positive gain with TA and a negative gain with SSP. The negative gain noticed with SSP especially among the LSE may be interpreted in terms of the initial higher score of the SSP group on this factor. The negative gain shown by the
LSE with SSP is also suggestive of an increased social sensitivity leading to avoidance of undesirable social interactions which are likely to occur in the initial stages of practising new social skills.

These findings support the view that the process and pattern of change noticed among the LSE are different from the one found among the HSE on some of the dependent variable measures.

5.4. Sex differences and treatment effects:

Sex differences have been reported on varied dimensions of personal-social characteristics and are attributed to sex typing. Theories, such as, the biological, sociological cognitive developmental and social learning theories, attempt to explain these differences. From these it may be inferred that the two sexes differ in their reactions to intervention programmes.

In the present study, significant differences were noticed between the two sexes in their pre-intervention test scores on dependent variable measures Sm-A, Sm-R, AM, SI, TQ-Agg, SE and CPQ factors E, F, G, I, O and Q₃ (Appendix G). Girls tend to be more open in nominating their peers on items indicating negative behavior. Non-acceptable behavior was better identified by girls than boys. Between the two sexes, a higher score was
found among girls on super ego strength (factor G), tender and submissive behavior (factor I) and controlled and socially precise behavior (factor $Q_3$). These findings fill the typical Indian feminine stereotypes well and support the view that girls show more of social maturity compared to boys (Rao, N, 1978). On the other hand, boys tend to score more on Teacher rating of Aggression, Self-esteem and CPQ factors $E$ (Assertion), $F$ (Happy go lucky) and $O$ (Apprehensive and Worrying). These findings support the view that the socialization process encourages boys to control and suppress tender feelings and to express assertiveness and aggression (Maccoby and Jacklin, 1974; Spence, Helmerich & Stapp, 1975).

With regard to gain scores, the differences between the two sexes were significant on dependent variables - TQ-Agg, PAAS, and CPQ factors $C, E, G, J, O, Q_3$ and $Q_4$ (Appendix J and table 4.12). The interaction effect of treatment and sex were found to be significant on variables TQ-SA, and CPQ factors D and O (Tables 4.12). Girls showed no significant gain on these factors, but boys showed a decrease in score after intervention on Teacher ratings of Aggression, and a gain on behavior indicative of Adjustment (PAAS), Ego strength (factor C), Assertive and Independent reactions (factor E). Super Ego Strength (G). They were found
to be more vigorous and conforming with the group (J), Self-assured and placid (0), Controlled and socially precise (Q₃) and Relaxed and tranquil (Q₄).

Studies involving small group interactions rarely focus on sex differences in intervention programmes. According to one study (Kamalanabhan, T.J., 1986), a package of behavioral training programmes covering Relaxation, Assertion and Study Skills, was found to benefit girls to a greater extent as compared to boys on academic achievement and on CPQ factors E and Q₄. These findings contradict the findings of the present investigation where intervention programmes were found to benefit boys to a greater extent as compared to girls.

Further, our results suggest boys to be more dynamic, receptive to new ideas and oriented towards experimentation as compared to girls who tend to be more resistant to change and passive, probably as a mode of adaptation to the environment. Conformity to social, cultural and moral aspects of environment is identified as the basis of adjustment (Stapp, 1974; Hemchand, L, 1983) on the part of the girls. A certain amount of resistance to change was found among girls, which may be due to cultural influences. In our society, traditionally girls are expected to be more conforming than boys. Further, growth, as viewed by Kakar (1981), is more operative in case of boys in terms of religious practices followed in India.
The greater impact of intervention program on boys found in the present study may be explained in terms of the cognitive developmental theories of sex-typing especially with the help of the theories proposed by Kohlberg (1966) and Martin and Halverson (1981). Interaction of the Internal and the social environment is emphasised in these theories. In the type of social environment that prevails for the two sexes during pre-adolescence, we find boys being encouraged and girls discouraged to explore, experiment and experience novel situations. Girls also suffer from cultural restraints. Elders tend to keep a watch on girls and be over-protective owing to their anxiety with regard to the anticipated pubic changes in girls. In many families pre-adolescent girls are burdened with household chores and are left with little time for themselves. The cognitive organization of the social world is thus bound to be different for the two sexes.

Further, preadolescence is the stage during which gender identity and gender constancy are well established in a physical sense and children are on the look out for more social cues of gender identity and gender constancy. In India rarely androgeny is upheld. Clear cut sex role expectancies exist in spite of women taking up challenging jobs. Even the feminists follow a different logic at
home. Although children of this age recognize that sex stereotypes are flexible, non-universal and subject to change, they tend to follow a rigid model as found in the western culture (Kohlberg and Ullian, 1974) and the basic motive to acquire sex typed attributes may be effectance motive (Kohlberg, L, 1966). With this schema of sex typing which guides and organizes one's perceptions, children look for certain information or will be ready to receive information consistent with their scheme (Martin and Halverson, 1981). Children are found to resist information contrary to the established sex-role stereotypes (Cordua et al., 1979). Perceptual information that is inconsistent with the schema is ignored or transformed (Martin and Halverson, 1981). The child evaluates the incoming information as appropriate or inappropriate on the basis of his gender. Thus, changes noticed in the course of intervention cannot be divorced from the personal, social, and logical context in which it occurs.

The interaction effect of Sex and Treatment appears to be significant on the variables TQ-SA, and CPQ factors D and 0 (Table 4.12). The teacher rating of Sociability increased for boys with TA and for girls with PC. Boys showed a decrease on factor D (excitation) and 0 (apprehension and worry) with treatments TA, SSP and PC, while girls showed a decrease in score on factor D with TA and a slight increase on factor 0 with SSP and NC. As indicated by the results, girls showed an increase in
sociability as viewed by teachers when there was an increase in teacher-pupil interaction, whereas the same effect was achieved by boys with TA.

Factor (D), according to Cattell and his associates (1976), is characteristic of children. It is described as a pattern of distractability along with irresponsible and assertive over reaction and is loaded on anxiety factor. This anxiety in social interaction is reduced by TA in both sexes. Interpretation of the transactions and the stress on nurturing OK feelings through avoidance of racket feelings and collection of stamps, have helped subjects to overcome emotional distraction and show appropriate behavior during social interactions.

The effect of interaction among the variables treatment, sex and sociometric status was significant on factors PAIQ and factor C (Table 4.13). Psychological intervention has helped boys and PC has helped girls to gain on Initiative (PAIQ). These findings were in conformity with the general trend of results noticed among the two sexes. But in case of 'Mixers', girls gain over boys with SSP. While girls in general tend to look for encouragement from confirmed sources like their teachers to gain Initiative, only 'Mixers' among them ventured to show greater Initiative with their exposure to Social Skills Practice as well.
In the case of factor C which indicates dynamic integration and maturity as opposed to uncontrolled and disorganized general emotionality, girls showed a general tendency of decrease in score in the absence of experimental treatment. This suggests an increasing dissatisfaction with the surroundings and an annoyance at things and people among girls. Among the 'Accepted', these tendencies in both the sexes were checked by psychological intervention. SSP helped the 'Rejected' girls to gain score on this factor and PC the 'Rejected' boys. The 'Isolates' among boys gain over the 'Isolate' girls in all the treatment groups. Among the 'Mixers', girls showed a slight decrease with SSP and gain over boys with TA.

We find more fluctuations in the gain scores of factors with the same treatment girls with different treatments and on different especially among 'Mixers'. For example, with SSP, they showed a gain on Initiative and a loss on Ego strength. It is difficult to explain these fluctuations. Relatively consistent improvement on different factors was found in both sexes with TA. Perhaps, the heterogeneity of the group in the case of 'Mixers' was a contributing factor to the fluctuations in responses noticed among them.

The study indicates that both sexes have failed to show significant gain on Sociometric Variables. This
may be attributed to differential gain rate noticed at the different Sociometric status. Significant differences in the gain scores were not noticed between the two sexes on dependent variables SE, PADS, PACTS and on CPQ factors, A, B, F, H, I and N and in these cases null-hypothesis has been retained with regard to sex differences in the effect of treatment.

5.5. Developmental Changes and Treatment Effects:

The subjects in the present study may be classified as belonging to two age levels. One between ten years to eleven and a half years studying in the sixth standard and the other between eleven and a half years to thirteen years and studying in the seventh standard at the time of holding the intervention programmes. Although the two age levels fall within the range of preadolescent stage of development, the developmental status of children at these two age levels may not be similar. Significant changes in social (Levine, 1982; Moore and Underwood, 1981), Cognitive (Inhelder and Piaget, 1958; Kohlberg, 1966) and social cognitive (Erwin and Kuhn, 1979; Flavell, 1978) aspects of behavior have been reported at this stage of development. The expected range of developmental tasks of this stage have also been wide and varied.
Much is being said about the developmental changes that are likely to occur during preadolescence. However, the developmental capacities of children for the different types of intervention programmes analysed by Scharfman (1978) does not take into account these developmental changes. And rarely we find studies focusing on age differences in the outcome of intervention programmes. Viewed from this angle it is worth probing further into the developmental changes in the outcome of intervention programmes.

The younger age group or the sixth standard subjects showed a higher pre-intervention test score (appendix G) on dependent variable measures of Teacher rating of Sociability and CPQ factors J (doubting, Individualistic) and N (Shrewd, Calculating), whereas the seventh standard subjects showed a higher score on Self-esteem (SE), Adjustment (PAAS), Initiative (PAIQ) and on CPQ factors A (outgoing, warm hearted); B (Scholastic Mental capacity), E (Assertive), and H (Venturesome, Socially bold).

Factor J is considered as a difficult factor to interpret (Cattel, R B, et al., 1976). In the present context the difference in score is suggestive of the natural tendency of preadolescents to go readily with the group and to lean on peer groups for support as they grow.
Factor N is normally associated with the acquisition of Social skills and sophistication among adults. But among children the N+ pattern is repeatedly associated with reactions of dislike of the school classroom and accepted academic goodness and is related to rebellious and delinquent behavior (Cattel, R B, et al., 1976). A lower score on this factor found in the older group is suggestive of a more responsible behavior. In this study, the older group perceives itself as possessing more positive characteristics as compared to the younger group.

The differences in the gain scores at the two age levels were significant on peer nominations of Social Acceptance and teacher rating of Sociability (SA and TQ-SA), teacher rating of Aggression (TQ-Agg), Dependence (PADS), Initiative (PAIQ) and CPQ factors A, C, D, G and N. The effect of interaction between treatment and class is significant on CPQ factors, G, H and J.

The older group showed a greater increase in Teacher rating of Sociability, Ego-strength (factor C) and a greater decrease in Dependency (PADS). The younger group showed a greater decrease in peer nominations on Social Acceptability, teacher rating of Aggression (TQ-Agg), Excitability (factor D) and shrewd and calculative behavior (factor N). The latter also showed a greater increase in warm hearted and outgoing behavior (factor A).
Super Ego strength (factor G) and Initiative (PAIQ).
The gain score of the seventh standard subjects was indicative of the significance of Social Acceptance for that group. Of the remaining factors, Self-reliance and Ego strength were better appreciated by the older group. The younger group was more successful in control of Excitation and Aggression. They develop Conscience and Initiative, tend to become more Sociable and Natural. These factors were suggestive of the differences in the schema at the two age levels around which development takes place. Personal growth in conformity with social goals was well structured among the members of the older group and development was found along this dimension. Younger group showed changes on diverse aspects which need to be integrated.

Coming to the variables on which effect of Interaction of Age and Treatment differences was found to be significant (Table 4.15), on factor G (Super ego-strength) subjects of the seventh standard showed a gain with TA and the subjects of sixth standard with SSP and PC. On factor H (venturesome and socially bold), the gain was found only among the seventh standard subjects and with the treatment TA. On factor J (Obstructive and Individualistic), the seventh standard subjects showed a decrease with TA and PC and the sixth standard subjects with SSP and PC. While the subjects at the
seventh standard level found TA more beneficial, the subjects at the sixth standard level found SSP to be so. Both groups were influenced by PC. Only in the older group, the psychological intervention helped to bring down negative peer nominations. Statistically significant gains were found more often in the older group. These findings indicate that while interpretation oriented intervention like TA is more useful for the older group, the intervention providing practice in Social Skills helps the younger group. This observation is in accordance with the inferences that could be derived on the basis of changes in social cognition and verbal facility found during preadolescence.

The effect of interaction between treatment, sociometric status and Class in which subjects study were found to be significant on the gain score of variables Sm-R, AM and Q4 (Table 4.16). With treatments SSP and PC the 'Accepted' of the Seventh standard level showed a higher positive gain on the peer nominations of Aggressive maladjustment and Rejection, while the 'Rejected' of the same level showed a greater decrease in score as compared to the subject of the sixth standard level. On the same factors 'Mixers' of the Seventh standard level showed a higher negative gain with TA and SSP. The 'Rejected' of the sixth standard level showed a higher negative gain with TA and 'Mixers'
with PC.

The initial low score of the 'Accepted' tends to increase with the renominations by peers. The extent of increase noticed among the 'Accepted' is likely to depend on the extent of decrease noticed in the remaining sociometric groups. While the 'Rejected' and the 'Mixers' showed a decrease in score after intervention, the 'Isolates' and the 'Accepted' showed a positive gain. The sociometric scores involve a redistribution of a fixed number of nominations by a fixed number of subjects. When one group loses the number of nominations another group automatically gains it. Naturally the scores on the higher end decrease and the scores on the lower end increase.

We can attribute these variations also to the structure of the group and factors like group cohesion and the type of relationship found among members of the group. As each group included members from different sociometric status and consisted mainly classmates of a given sex, the nature of interactions differ in each group and its impact on different sociometric groups at the two age levels is also likely to differ.

With regard to factor Q4, subjects at the seventh standard level among the 'Accepted' and the 'Mixers' showed a greater decrease in score whereas the 'Isolates'
and the 'Rejected' showed a greater increase with PC. In the case of subjects of the sixth standard level, the 'Rejected' and the 'Isolates' showed a greater decrease with TA and SSP and 'Mixers' with PC. The tension and the anxiety gained by teacher attention in the case of the 'Rejected' and the 'Isolates' of the seventh standard level is, perhaps, indicative of a healthy attitude and is channelised towards their school performance.

As found from the analysis of the effect of interaction of the different Independent Variables on the gain scores, the gain on Sociometric Variables were influenced by these interactions to a greater extent as compared to the remaining personality variables (Table 4.16 and Table 4.17). The balance of Sociometric choice, as found in this study, is delicate and it is influenced by a wider range of variables.

Developmental changes in sex differences is a factor incidentally investigated in this study. Sex differences in the gain scores were found to be significant on the dependent variable measures viz., SA, TQ-SA, TQ-Agg, PAAS, PADS, PAIQ and CPQ factors, C, D, J, N, O, Q₃ and Q₄ (Table 4.17), when the two sexes were separated at the two age levels. The sex differences noticed at the two age levels were similar on dependent variable measures PAAS, and CPQ factors J, O and Q₄ and boys showed a greater change in score as compared to girls.
Differences in gain scores at the two age levels were noticed to a greater extent among girls than among boys. On peer nominations of Social Acceptance, teacher ratings of Sociability and factor Q3 girls at the seventh standard level, in contrast to the remaining groups, showed a positive gain. This may be viewed as an indication of the striving of older preadolescent girls to gain acceptance by the social groups. However, the same group has also shown a significant gain on teacher rating of aggression. While the gain on Acceptance score suggests an increase in sensitivity to individual personality differences and a preparation to be helpful to the people around (Feshback, 1979), gain on Aggression may suggest an initial conflict encountered in the process of mastery of aggression among the older preadolescent girls.

Girls at the sixth standard level showed a gain on Dependency (PADS) and no significant gain on Ego strength (factor C) in contrast to the remaining groups. They have also shown a maximum gain on Initiative (PAIQ) and a decrease in score on factors D (excitability), N (shrewdness) and Q3 (self-sentiment). The interdependence stressed in the intervention programmes has contributed towards an increase in dependency among the younger preadolescent girls as culture encourages both
instrumental and emotional dependency of girls. This is suggestive of the change being influenced by the personal, social and logical context in which it occurs. Further, a decrease in score on factors N, Q₃ and PAAS, in the absence of an increase in score on factors C, I or E which occurs along with the increase in Dependency among the young preadolescent girls may suggest an initial resistance to peer group influences. However, as a decrease in score on factor D and non-significant changes on factors 0 and Q₄ were also found in this group, we need not assume the existing changes as indicators of a social stress, intrapsychic conflict or a struggle to deal with fear of rejection as anticipated at this age by Hinde and Robson (1983).

These findings suggest a greater sensitivity of girls to growth changes as compared to boys. Girls at the two age levels react differently to the intervention programmes as a result of which the effect of intervention on this group is found to be dormant.

5.6. Socio-Economic Status and Treatment Effects:

5.6.1. SES Differences in Dependent Variable Measures: A child cannot be isolated from the social and cultural milieu in which he exists. Any variable introduced in a child's environment is likely to be perceived in the background of the cumulative effect of the earlier
environmental influences and the current environmental pressures. The ecological system of the child or the totality of his environment influences the reactions of the child to the intervention programmes. Of the numerous environmental factors the focus of this study is on the socio-economic status of the family.

The schools selected for study were differentiated as type I and type II, the two categories formed on the basis of the socio-economic status of the parents of children studying in these schools. Those schools that cater to the lower middle class is type I and those that cater to the middle and the upper middle classes is type II.

During the pre-intervention test, type II school children scored significantly higher than the type I school children on AM, SI, TQ-SA, SE, PAAS, PADS and CPQ factors B, E, F, J and Q_4. Type I school children scored higher than type II school children on TQ-Agg and factor C (Appendix G).

A higher mean score was found in the higher SES group on peer nominations of Aggressive Maladjustment and Social Isolation. The factor responsible for this difference in score may be a concentration of scores found among a few subjects due to distinctive identifiability of these characteristics in the subjects among
the higher SES and a scatter of scores in the lower SES as these characteristics were found among many subjects and nominations were not focused on a few but around many in this group. Identification of subjects as belonging to one or the other sociometric groups was relatively easier in the higher SES groups compared to the lower as few children of the former group showed these modes of behavior repeatedly. Hence, those who were identified as 'Isolates' or 'Rejected' scored much higher on these items as compared to children in general.

The differences noticed on teacher rating of Sociability and Aggression in the two types of schools may be due to the expectations of middle class oriented teachers from the two groups of children. The study also confirms the idea that children from the lower socio-economic strata tend to be more aggressive as they are more often exposed to coercive and aggressive interaction in and around the family. Children of type II schools showed better Adjustment and greater Initiative and these findings corroborate the earlier findings (Sabapathy, T & Rao, N, 1976). However, the same group also showed greater Dependency and lesser Ego strength (factor C) in contrast to the children of type I schools. These differences may be attributed to differences in the family environment. In the case of children from type I
schools, the larger family size, limited resources, and preoccupations of the parents tend to make the preadolescent children self-dependent. These children have to adjust to the difficulties thrown upon them and hence may develop Ego strength. On the other hand, children of type II schools come from families where mothers spend more time caring for their children which in turn may increase dependency and reduce ego strength. The nature of parent child interactions may also be responsible for the greater Assertion (E) and the disposition of surgency (F) found in children of type II schools.

The children from type II schools also showed a higher score on factors B (scholastic mental capacity), J (doubting, obstructive, individualistic) and O₄ (tense, driven) as compared to children from type I schools. A higher scholastic achievement is associated with higher SES (Morrison and McIntyre, 1971). This may be attributed to the family environment. Middle class parents emphasise the value of schooling and academic achievement as the stepping stone to vocational and social mobility (Kendel and Lasser, 1969). Scholastic Achievement was found to be related to factors like education of parents, their reading interests, living space, income, parental encouragement, and the like (Fraser, 1959). Score on Factor J is slightly positively related to school success (Cattell, R B, et al., 1971). A higher
score on this factor may suggest one to be uncompromising, sticking to one's reasoning and leaning more on personal views. Middle class parents support individuality, they are found to be supportive, affectionate, permissive and less rigid in adherence to rules, whereas, lower class parents place greater stress on obedience and relay more on exercise of authority through physical punishment (Bronfenbrenner, 1963; Kohn, 1968).

The children from type II schools show a higher ergic tension \((Q_4)\) suggesting this group to be little more frustrated and irritable - compared to children from type I schools. Combined with a higher score on factors E and J, Self-esteem and Initiative, the higher score of this group on \(Q_4\) may indicate the higher sensitivity and a learnt reaction of irritation to the frustrating situation.

5.6.2. SES and Outcome of Intervention Programmes:
Significant differences in gain scores were noticed between the two SES groups on dependent variable measures AM, SI, TQ-Agg and CPQ factors A, D and H. The effect of interaction between treatment and SES were found to be significant on dependent variable measures PAAS, PAIQ and CPQ factors B, C and J (Table 4.20). Children of type II schools were found to benefit more by intervention on all these factors except on factor D (Excitation) in which case children of type I school
showed a greater decrease in score after intervention.

The greater impact of intervention on children of type II schools was expected as these children appreciated and understood the implications of intervention better when compared to the children of type I schools. Family background and parental attitudes were also supportive of change and growth. The scope for independent judgement and reasoning provided in the intervention programmes was in accordance with the cultural milieu of this group and children were better prepared to accept and adopt their observations noted during the intervention.

The greater decrease noticed in peer nominations on Aggressive Maladjustment and Social Isolation among children of type II schools may be attributed to a decrease in aggressive modes of responses and an increase in social interactions learnt in the course of the intervention programmes. In support of the findings on these variables, a decrease in score was found in this group on teacher rating of Aggression also. However, the possible loss in score during the redistribution of sociometric nominations cannot be completely ruled out.

Children of type I schools showed a further gain on Aggression as rated by teachers. This group already had a higher rating of Aggression. The general
observations made in this study with regard to the outcome of intervention suggested a greater decrease whenever the initial score was higher. The result with regard to teacher rating of Aggression contradicted the expectations. Perhaps, Aggression was a more suitable and convenient media of assertion for children from type I schools. An increase in Aggression may also be an indicator of the initial adjustmental difficulties of a preadolescent who hails from a family background with lower class parents. These parents as noticed in the case of lower class parents by Kohn (1968), perhaps, were concerned more with overt actions and conformity rather than with intensions and originality. The experiences provided for the subjects in the programmes focused more on expression of one's feelings and self-direction which, according to Kohn (1968), are the concern of middle class parents.

The differences between the two SES groups in the gain scores on factors A, H and D suggest that as a result of intervention, children in type II schools showed more changes in their social behavior. These children showed more of outgoing and warm hearted responses in social interactions and turned to be venturesome and socially bold. On the other hand, excitability and distractability were found to have been reduced to a greater extent in the case of children from type I schools.
The factors on which the effect of interaction between the type of treatment and type of school was significant suggested that type I school children derived greater benefit from treatment PC and type II school children from TA and SSP. Children from both the SES groups have shown desirable changes in scores with TA on several of the dependent variable measures (Table 4.19). In addition, children of type I schools also showed these changes with PC and of type II schools with SSP. These observations suggested greater impact of psychological intervention on children of higher SES group. In the case of children of type I schools, the support and recognition given to them by their teachers in the form of involving these children in extra-curricular activities have stimulated personality growth. However, these changes were not reflected on Sociometric variables.

The two SES groups were influenced by TA in different ways. Children from lower SES showed significant increase in peer and teacher rating on positive characteristics, that is, on variables Sm-A and TQ-SA, whereas children from the higher SES have shown a significant decrease on peer rating of negative characteristics like Sm-R, AM and SI. Perhaps, the need for enhancing prosocial behavior was stronger among children of lower SES and the willingness to overcome negative behavior was stronger among children of higher SES. Role-play during the TA sessions has provided models for alternatives of
negative behavior for the upper SES group and models for enhancing positive behavior for the lower SES. Perhaps, the TA exercises lend itself to higher level of generality involving a direct effect on day to day activities of children.

The lower impact of SSP on the two groups, particularly on the lower SES suggested wide individual differences in the influence of this programme. Children appear to have failed in generalizing these skills and incorporating them in their day to day activities. However, practice in social skills has brought down teacher rating of Aggression, and has enhanced Initiative (PAIQ), Independence (factor I) and warm hearted and outgoing behavior (factor A) in case of subjects from lower SES. Perhaps role-play during the practice sessions helped children to learn these new skills and to recognise the importance of these skills in their day to day activities.

5.6.3. Developmental Changes in the Outcome of Interventions in the Two SES Groups: The developmental changes in the two SES groups were found to be different on the variables, viz., teacher rating of Sociability and Aggression and on CPQ factor A (Table 4.23). At the sixth standard level of type I schools there was no significant change in teacher rating of Aggression and there was a positive gain on factor A (warm hearted and outgoing behavior). At the seventh standard level there
was an increase in TQ-Agg and a slight decrease on factor A. The aggressive reactions are expected to increase with age as children grow from preadolescent to the adolescent phase. Perhaps, this increase in Aggression interferes with the further enhancement of prosocial behavior measured by factor A. In the case of Sociability as rated by teachers, both groups showed a significant positive gain at the seventh standard level. While the children of type II schools at the sixth standard level showed no significant gain on this factor, the children of type I schools showed a significant decrease in score (Table 4.23). The age differences noticed in gain scores on AM, and CPQ factors D and N were similar at the two-socio-economic levels. On factors D and N, the subjects at the sixth standard level showed a greater decrease compared to the subjects at seventh standard level. In addition, children of type I school showed a greater decrease on factor D compared to type II schools. On factor AM, subjects at the seventh standard level showed a greater decrease and the decrease noticed in the case of type II school children was greater at both age levels.

The gain score on the variables AM and TQ-SA suggested the greater significance of Social Acceptance for the seventh standard children. However, a corresponding increase in sociable behavior at the seventh
standard level was not found in terms of gain score on factor A. Instead, there was a slight decrease in score on factor A at the seventh standard level in type I schools. Certain amount of sociability in terms of warm hearted responses and outgoing behavior (factor A) was found to be present and was found to have increased with intervention among most of the subjects. But the skills of expressing this aspect of personality appear to have improved in the older group as suggested by their increase in score on Sociability.

5.6.4. Sex Differences in the Outcome of Intervention in the two SES Groups: Significant differences in the gain score of the two sexes at the two SES levels were noticed on variables AM, SI, TQ-Agg, PAAS, and CPQ factors B,D,E and H (Table 4.22). In the case of peer nominations of Aggressive Maladjustment and Social Isolation, children of type II schools showed a greater decrease compared to children of type I schools. Only in the higher SES group girls showed a greater decrease on these factors after intervention as compared to boys. On teacher rating of Aggression only boys of higher SES showed a significant decrease while the remaining three groups showed an increase in score after intervention. On Adjustment, the two sexes did not differ in their increase in score after intervention at the higher SES level. But significant difference in the gain score was
noticed between the two sexes at the lower SES level. Boys showed a significant increase in score and girls a decrease after intervention. On factor B also the two sexes showed no significant difference in their gain at the higher SES level. But at the lower SES level boys showed a significant increase and girls a slight decrease. On factor D (Excitability) all the groups showed a decrease in score after intervention except the girls of the higher SES. On factor E ( Assertion), no significant gain was shown by all the groups except boys of lower SES.

The gain scores of girls from higher SES suggested their greater concern for improving their Social Acceptance as compared to the remaining groups and the success of their effort was reflected in a decrease in peer nominations of Aggressive Maladjustment and Social Isolation. However, these girls in contrast to the remaining groups, have not shown a decrease in score on factor D, the source trait which suggest pattern of distractability along with irresponsible and assertive over reaction (Cattell, R B et al. 1976). Perhaps, girls from higher SES were not easily distracted and were more discriminative with regard to their expression of emotional responses and thus maintained an optimum level on factor D.
The stronger need for control and channelization of Aggression among the boys of higher SES was indicated by a decrease in peer nomination score on Aggressive Mal-adjustment. The decrease in Aggression among these boys was also recognized by teachers, Intervention Programmes have helped these boys to find alternate modes of responses. However, teacher ratings of aggression in the post intervention test indicated an increase in aggression among the remaining groups.

The stereotypes for the two sexes with regard to the educational values and personality growth have been reflected to some extent in the gain scores of boys and girls of the lower SES. While the boys showed a significant gain in Adjustment and CPQ factors B (Scholastic mental capacity) and E (Assertion), girls showed a decrease on all these variables (Table 4.22). These differences between the two sexes were not found in the higher SES group. Girls in the lower SES are found to be in a more disadvantaged position on these factors because of their age and sex as compared to the remaining groups. The initial awkward and self conscious stage identified by Bolton (1979) in adopting the now set of social skills was found in this study among the girls of lower SES and this was responsible for their reduced general Adjustment.
5.7. **Period of Intervention and Treatment Effects:**

This study was conducted successively in three batches as it was not possible to hold the intervention programmes simultaneously for all the subjects. The period of the academic year during which intervention sessions were held were different for the three batches. The sessions were held for the first batch during the summer vacation and the beginning of the academic year, for the second batch during the end of the first term and for the third batch during the second term. As a result, the work climate of the sessions were different for the three batches. This was reflected in the significant differences in gain scores noticed in the three batches.

The three batches were found to differ in their gain scores on factors Sm-R, AM, SI, TQ-Agg, PAIQ and CPQ factors A and I. The interaction effect of period of intervention and treatment were found to be significant on factors TQ-Agg and $Q_4$ (Table 4.25). On peer nominations of Rejection, Aggressive Maladjustment and Social Isolation and on Teacher rating of Aggression, a greater decrease in score was shown by subjects of the first batch. Subjects in the first two batches showed an increase in score on PAIQ (Initiative) and subjects in the first and third batches showed desirable changes on CPQ factors A (warm hearted and outgoing
behavior) and I (self-reliance). With regard to the interaction effect of period of intervention and type of treatment, the first batch showed a decrease in teacher rating of Aggression with SSP and PC and an increase with NC, while the second batch showed an increase with PC. On factor Q4 (Tense and driven behavior), the first and the third batches showed a decrease with TA and the second batch with SSP and PC (Table 4.24).

The greater impact of the treatment on the first two batches may be attributed to the amount of time available for the subjects to contemplate and experiment on the behavior stressed in the intervention programmes. The first batch was also facilitated by a break in the regular social interaction of the school because of the holidays. This in turn has brought down their scores on peer nominations of Rejection, Aggressive Maladjustment and Social Isolation.

5.8. Nature of Behavior Change:

The findings of this study reported in the preceding pages consistently suggest the following:

1. Social attractions and repulsions were complex in nature. The gain in Social Acceptance or a decrease in Social Rejection of the subjects depended on many
factors like the endeavours of the subjects, their initial sociometric status, the type of treatment to which they were exposed, their developmental status, socio-economic status and sex.

2. The developmental needs of individuals was dependent on factors of sociometric status, sex, developmental status and socioeconomic status. As a result, each group showed unique changes. The choice of the variable and the direction of changes was guided by individual needs.

3. The variables on which change was more often noticed were Adjustment (PAAS), Initiative (PAIQ), and CPQ factors A (outgoing, warm hearted), C (Ego strength), D (Excitable), O (Apprehensive, worrying) and Q4 (tense and driven). Perhaps, most of the subjects felt a need to improve on these factors as a result of their first exposure to the measures of these variables and the intervention programmes which followed.

4. The maximum beneficiaries of this programme were the 'Rejected' and the 'Isolate' boys from the higher SES at the seventh standard level. The impact of TA on this group was greater compared to the remaining intervention programmes.
5. Developmental changes in gain scores found among girls was greater as compared to boys.

6. The findings of this study were in accordance with the cognitive schema for development or the stereotypes for growth prescribed in our culture for the two sexes by the two socio-economic status.

5.9. Implications of the Study:

1. The various educational policies framed from time to time in our country have been stressing the non-cognitive aspects of growth, but mostly due to financial restraints the state has not been able to provide the necessary resources for the same. Simple programmes, as demonstrated in this study could serve as economical but more effective means of promoting non-cognitive aspects of growth.

2. That frequent teacher-student interactions and peer interactions in task oriented situations help children gain Ego-strength and Initiative is illustrated in this study in terms of the performance of children in Placebo Activity Control Group. Such interactions are useful in helping children face social encounters and problem situations with increased confidence.
3. Personality growth is beset with many 'ups and downs' causing many moments of anxiety to parents and teachers, besides robbing the pupil of normal development in terms of time and crucial stages especially when unguided. Similarly school dysfunction involving 'slow learning', 'irregularity', 'absenteeism' and such other important problems have been another source of concern. A school-based intervention programme would involve guided development and ensure appropriate school function and thus help attack the twin problems of growth and school dysfunction. The performance of the 'Rejected' children in this study illustrates this point.

4. Counselling in schools is being advocated for purposes of promoting healthy development of personality and mental hygiene of children. Teacher Counsellors and peer Counsellors trained in intervention like the TA, serving as substitutes for school counsellors, could undertake this programme. Exercises as are used in this study have been found to be quite effective in helping children gain control over Aggressive modes of reactions and in release of Ergic tension, besides promoting Sociability, Adjustment and Initiative and tackling developmental lags effectively.
5. Whether universal education and basic education meet the educational requirements of this country or not is a moot point. That there cannot be an uniform pattern of change for all children is indicated in the results of this study. The pattern was found to change with groups on the basis of factors such as Sex, Socioeconomic Status and Sociometric Status. The change depends upon growth needs of children which differ from one to another. Therefore, there is a need for need based educational programmes for children from differing sections of the society.

6. In view of the emphases laid in the New Education Policy (Ministry of Education, 1985) on development of human resources and equipping children to cope with challenges of the future and accelerating pace of change, the schools are called upon to meet these objectives through education. Small group interactions, this study suggests, may serve these objectives to a considerable extent.

5.10. Limitations of the Study and Suggestions for further Research:

Researchers in the field of social sciences face many practical difficulties in adhering strictly to a given research design - owing to typical problems such as fluctuations in experimental conditions, errors in
sampling and measurement, need for sustained cooperation from a large number of individuals and so on. As a consequence of such influences this study has many inherent limitations, although every effort has been made sincerely to minimize the effect of the various sources of errors and every attempt has been made to maintain objectivity and scientific attitude. The limitations that have occurred despite these efforts are highlighted in this section so that the findings of the study are interpreted within this frame of reference.

1. The specifications of random sampling have not been adhered in the selection of the sample and assignment of sample to treatment groups. However, according to Bock (1975) children from a school may be assumed to be a random sample representing the children of that community. Further, the bias in assigning children to treatment groups, if any, may be presumed to be independent of the treatment effect as all the four treatments were held in each school and the total number of students in these groups is fairly large.

2. The study was restricted to English medium classes out of necessity. Further, the sample was restricted to schools with at least two sections in each standard with the enrollment number beyond thirty.
3. Another limitation arises with reference to the nature of the tests used in the study. Most of them were adopted for use, although they were not standardised on a comparable sample. While adopting due care was taken to ensure that they were made suitable for the study.

4. Although a number of variables are bound to be involved in a study of this type, the scope of the study was restricted to a limited number of independent and dependent variables.

5. A pre-requisite for evaluation of an intervention programme is the follow-up. However, this study does not involve any such step in view of the time, labour and such other factors. Besides, the tests used cannot be repeated in the follow-up.

6. In this investigation only the effect of social interactions was studied but not the exact nature of the interactions as such.

The study generates a number of hypotheses which are worthy of being investigated further. These are listed below:

1. The long term effects of the intervention programmes may be studied.
2. The study may be extended to cover more independent and dependent variables.

3. The school based intervention programmes could benefit specially the deprived children. Therefore, some studies may be contemplated exclusively for such children.

4. The nature of social interactions need to be systematically investigated. For example, the nature of change in terms of TA concepts. The changes noticed may be further investigated in terms of their effect on other dependent variable measures.

   Similarly, some studies are called for to dismantle the social skills training procedures like the instructions, coaching and behavioral rehearsal with or without feedback. The functional elements may be identified and retained.

5. The Cohesion and Schism in groups during the intervention sessions may be treated as independent variables and their effects may be studied.

6. The influence of homogeneity or heterogeneity of groups in terms of socio-cultural background may be investigated.
7. The influence of such factors as expectations of the participants and their attitude towards these programmes, hostility or aggressive modes of reactions, value orientations of the participants of the participants in relation to the goals of intervention, affective predispositions of the participants like friendships etc., may be studied.

8. The influence of intervention at different age levels in the light of Piagetian and learning models of change across the psychobiological, cognitive, social and contextual domains may be assessed.

9. Although the level of self-esteem was found unrelated to the factor of change, on variables like self-concept, self-sentiment and ego-strength an improvement was found. In view of these contradictory findings, the relation between levels of self-esteem, ego enhancing programmes and their effect on general aspects of behavior may be probed further.

10. While this study stresses the importance of individual responsibility in the process of change, influence of social institutions like the family and school in terms of the attitudes of parents and teachers toward the intervention programme and the nature of encouragement given to their wards may be assessed.
The effect of these factors on the outcome of intervention may be systematically studied.

11. The Enhanced Adjustment, Initiative, Ego-Strength and the reduction in anxiety, worry and apprehension noticed in this study suggest the influence of intervention programme on academic achievement.

12. Further research is needed to identify the small group interaction exercises which are effective and the conditions which intensify the effectiveness of these programmes.