CHAPTER 5

DISCUSSION
A number of hypotheses were tested in this research, of which some have found strong support in the empirical data. Some hypotheses were not confirmed. Hence, the discussion of the data is organized around the hypotheses tested.

Hypothesis 1: There are no significant gender differences among students on socio-economic status, need-system, perception of college environment, family-peer interactions, group atmosphere, teaching styles, intellectual commitment and college adjustment.

The obtained results do not support the null hypothesis. The significant differences were observed by sex on socio-economic status, family-peer interactions, perceptions of college environment, teacher styles, intellectual commitment and college adjustment (Table 10). These differences were there even when comparisons were made between the two sex as members of the same college type (Table 7, 8 and 9).

The findings indicated that the female students belonged to a significantly higher socio-economic group than the male students (t = 11.22, P < .01). This reflects to a good extent the socio-cultural priorities in India and is supported by some other researchers. Karlelkar (1983) reported that particularly among the lower placed socio-economic groups, even though mothers are aware of the relationship between mobility and education, economic pressures, a fear of discrimination and basic conservativeness
towards female education results in more sons than daughters going to the schools.

In the present sample, the enrolment of females from the lower socio-economic group was found to be almost nonexistent. An obvious question is: What are the underlying factors that bring about such blatant discrimination? Secondly, what steps can be taken to counteract the ill effects of these discriminations?

Numerous arguments have been forwarded by researchers. Tinker and Bramsen (1975) have identified three classes of "obstacles to women's education": the cultural attitudes which mediate against women's full participation in educational institutions, the lack of relevance of girl's education to the local or national economy and the teaching methods utilized within schools.

Maccoby and Jacklin (1979) observed that female students come from a more affluent background, where the parents are relatively more permissive than in the lower socio-economic class. A detailed analysis of the present data showed that female students had educated and/or working mothers in more than sixty per cent of the cases, while males had such educated and/or working mothers in slightly above forty per cent of the sample. Singhal (1984) also found sex role socialization to be a predominant force in the Indian culture. Sex stereotypes in curriculum choice has been observed in other countries also (Weinreicb-Haste, 1981; Smithers and Collings, 1981; Kelley and Smail, 1986). A change in the
social and cultural values is, therefore, required to change the attitude of parents toward female education.

The females reported having different college experiences than males \( (t = 4.03, P < .01) \). They seem to be associated with more intellectual, expressive and protective aspects of the college. The male students, on the other hand, were found associated more with vocational and organizational aspects of the college environment.

In a study on college students, Stern (1970) had reported significant gender differences on need-characteristics but not on college experiences. However, in the present study the females were not found to differ from males in their need-characteristics \( (t = 1.00, ns) \). An obvious and relevant explanation seems to be implicit in the different social and cultural backgrounds of the student population studied by Stern and those included in the present study. Using only the high achieving students as subjects, Singhal (1977), also did not find significant difference in the need-achievement values of male and female students \( (t = 1.08, ns) \).

Conflicting results on academic experiences of males and females have been reported in some other studies. In a study on Australian school students, Marjoribanks (1978) found that when boys perceived their school environments as intellectually oriented and non-punitive, they showed high enthusiasm and commitment for their school. The females who perceived their schools in a similar
manner were found to have high academic self-concept, a dislike for disruptive behaviour in school and a high commitment for school.

Gender differences were also found important in the family-peer interactions of students (Table 26). Females interacted more with their parents while boys displayed high tendencies of peer-oriented behaviour. Most of the females included in the sample reported that they felt happy when they could meet the expectations of their parents. They felt relaxed in parents' company. Males, on the other hand, showed definite preference for peer-group company. Similar tendencies were identified by Gunnarsson (1978) in his study on a group of boys and girls. The girls showed more interactional tendencies with adults, while boys were found to interact more with their peer-groups. Gunnarsson attributed this to the significant differences in the personality development of the two gender.

While in the present study it is preferred not to make any guess about the reasons underlying the choice of parent/peer company, yet the author feels that the significant differences in family-peer interactions may be traced to students' early sex-role socialization. Young boys are often encouraged by parents to go out and mix with the peer group, but the girls are confined to the house. The more time spent with the peers and less time spent with the parents by males may result in greater attraction towards the peer-group (Furstenberg, 1971). The females spent more hours at home and hence tend to develop attraction towards
the parents (Cartwright, 1965).

It is obvious from Table 10 that the three teacher styles (authoritarian, nurturant task and participative) were perceived differently by the male and female students. It is further interesting to note here that in 'High' colleges having 'good' intellectual climate, the two sex differed only in the perception of the authoritarian (t = 10.04, P < .01) and participative styles (t = 2.69, P < .01), but did not differ in the perception of the nurturant task styles (t = 0.63, ns). In 'Low' colleges, which provided 'poor' intellectual climate, the two sex differed in the perception of teachers showing authoritarian (t = 2.58, P < .05) and nurturant task styles, (t = 2.29, P < .05) but did not differ in the perception of the participative style (t = 0.89, ns). It was only in the colleges having 'Medium' academic climate that the two sex were different in the perception of all the three teacher styles (Table 8).

The male students of 'High' colleges perceived their teachers as less authoritarian and more participative, while females rated them as displaying both authoritarian and participative interaction styles (Table 7). Similarly in 'Medium' (Table 8) and 'Low' (Table 9) colleges, females seemed to perceive their teachers higher on each style as compared to the males. In this case, differences in the socio-economic background did not offer a satisfactory causal explanation.

Becker (1964) argued that instead of looking at a persons'
past, one should look at his present social circumstances when seeking explanations for his values and attitudes. Such a 'structural explanation' would directly focus on the influence of the college climate and the interaction between teachers and students. It is true that the teachers in women colleges are all females while in the male colleges there are mostly male teachers, with only a few female teachers. The different personality characteristics and interaction patterns of the male and female teachers may have differential effects on the two groups of students. For example, Walker and Heyns (1962) and Schopler (1967) have found that females get influenced more easily than males by requests from subordinates. Males have also been found to use a more authoritarian style of supervision than females (Fogarty, Rapoport and Rapoport, 1971). Regardless of who the females were supervising (male or female subordinates) they were found to exercise significantly lesser control than males over their groups (Ruch and Newton, 1977). Male supervisors have been found to be more compassionate with their female subordinates than with the male subordinates.

Significant differences were also found in the intellectual commitment of males and females ($t = 2.58, P < .05$). Females displayed higher commitment than males. This finding was somewhat different from other researches. Gender was not found to be an important determining variable of intellectual commitment by Hummel-Rossi (1976). Singhal (1977) also did not find significant
differences in the commitment of male and female students to education ($t = 0.77$, ns).

A collegewise comparison revealed that the obtained differences were significant only in one type of college ('Medium'). This seems to be due to some differences implicit in the teacher-student interaction processes and college environment which may have resulted in a more satisfying and encouraging experience for the female students of 'Medium' college - a condition necessary for the manifestation of involvement.

College adjustment of female students was found to vary significantly from males ($F = 11.60$, $P < .01$). A collegewise comparison revealed that the mean differences were significant only in 'Low' colleges, male students showing significantly better college adjustment than female students. The differences in the adjustment patterns of the two sex may be traced to the differences in their need patterns. A detailed analysis of the data indicated that females had higher achievement motivation, spent more time in the intellectual activities and often considered academic pursuits as end in themselves. The males, on the other hand, were found to spend only as much time on intellectual activities as was essentially required, considered academic achievement as a means to an end (for getting a job) and were more involved in social and extra-curricular activities. As a result, the academic performance of females was generally found to be better than males (Rudd, 1984; Kornbrot, 1987). However, the high n-achievement seems to make
females more anxious than the male students, resulting in poor college adjustment.

The null hypothesis of gender differences thus seems to be refuted by the findings in the present study.

Hypothesis 2: There are no significant differences by level of education of students in their socio-economic status, need-systems, perception of college environment, family-peer interactions, group atmosphere, teaching styles, intellectual commitment and college adjustments.

The results obtained in this study support the null hypothesis of differences by educational level. Significant differences were found only on two variables, namely, the perception of the authoritarian style of teachers by the students of the two levels and their college adjustment (Table 11).

The differences between the college experiences of students at the two levels being of one year, the normal expectation is that there would also be some difference in the perceptions of faculty and college by the two groups. Singhal (1984, 1988) has reported differences between second and third year students, as well as between undergraduate and post graduate students on the perception of teacher effectiveness variables. However, except on the perceptions of the authoritarian style and college adjustment, no significant differences were observed between the two groups on other variables.
A partial explanation of no differences between the two groups may be found in the theory of 'first impression' offered by Kohlan (1973) and Granzin and Painter (1973). The proponents of this theory argued that students' early evaluations are quite stable. Chermesh (1977) also obtained supportive results on undergraduate students. However, the 'first impression' theory does not find full support in the present study, since significant differences are obtained on the perceptions of authoritarian teachers and college adjustment (Table 11).

Miron and Segal (1978) seem to offer an apt explanation for such situations. According to them, in the first and second years of the college, students are preoccupied mostly with the acquisition of knowledge about the general course, while in the third year the emphasis is more on specific field of study with students interacting more intensively with the faculty. This closer contact might bring about a change in their perceptions. An application of this theory to the present finding requires detailed analysis of the type of course materials prescribed at the two educational levels and the amount of student-teacher interacations involved in it.

Among the six adjustment areas focused in the present study, namely, curricular adjustment; maturity of goals and levels of aspirations; personal efficiency, planning and use of time; study skills and practice; mental health; and personal relations (with faculty and associates), the students of the third year were found
to have more adjustment problems in such areas as maturity of goals, curriculum adjustment and personal relations. Since there are no significant differences in the need-systems of the two groups of students, some changes in the cognitive correlates of the senior students might be responsible for this difference. Banreti-Fuchs (1975) found differences in the cognitive as well as behavioural measures of students of high school and graduate level. Singhal (1984) also observed significant difference in the perceptions of teacher affectiveness characteristics by the students of BA second year and third year.

The null hypothesis of difference by levels of education is, thus, supported in the present study, except in the case of two variables, namely perception of authoritarian teacher styles and college adjustment of students.

Hypothesis 3: There are no significant differences among students by college type in their socio-economic status, need-systems, perception of college environment, family-peer interactions, group atmosphere, teaching styles, intellectual commitment and college adjustment.

This null hypothesis stands refuted in the present study. Significant F ratios show that the college types vary in terms of socio-economic status, need-systems, college experiences, group atmosphere, perceptions of authoritarian style of teachers, intellectual commitment and college adjustment of students (Tables
The classification of colleges into three different categories was based on academic ranking of factors such as, academic results, teacher-student ratios, laboratory and library facilities, per capita expenditure, type of stimulants provided to the students in the class etc. These are related to structural aspects of colleges as perceived by students and teachers. As obvious from the ranking, 'High' colleges are those which provide maximum of these facilities to the students. 'Medium' colleges offer fewer of these facilities and 'Low' colleges offer the least. The most glaring differences were seen in terms of academic results and per capita expenditure. The 'Low' colleges were also found to have higher teacher-student ratio than the other two types. Stern has labelled these factors as 'Control press'.

A student's choice of a college is based upon the relative cost and quality of all of the institutions in his/her choice set (Manski and Wise, 1983; Ehrenberg and Sherman, 1984). In a general conceptual model of student college choice, Chapman (1981) and Litten (1982) proposed that the choice is affected by the individual students' characteristics such as socio-economic status and high school performance as well as by external influences. Included in the latter category are significant others, such as parents, friends, high school personnel, and information about the college quality obtained through direct student contact with faculty and alumni. This was supported in a recent study by Kealy and
Rockel (1987). The findings of significant differences in the present study on student characteristics like, socio-economic status, need systems and family-peer interactions are also supportive of the above findings.

The enrolment of a student in any college is not only determined by his/her choice, but also by the selective procedure of admissions dominant in that college. This has been very well summarized by Heist et al. (1961), indeed - "Particular colleges and groups or types of institutions are differentially selective, not only with respect to scholastic aptitude but also with respect to attitudes, values and intellectual dispositions".

The enrolment of students into various college types, thus, seems to be determined by two forces, namely, student choice and college or institution choice. An interaction of student and college characteristics at the physical, cognitive and affective levels, tend to determine later the student outcomes (Williams, 1986). In the present study, the significant differences on intellectual commitment and college adjustment of students by college type are illustrative of the influences of multiple-college interactions.

Significant differences by college type have also been observed in the perceptions of group atmosphere, college environment and authoritarian teachers. A number of studies have reported significant relationship between school type and class-room perceptions. In this connection, Haertel et al.'s (1981) study is quite
illustrative. In a meta-analysis involving 734 correlations obtained from 12 studies of 10 data sets in 8 subject areas encompassing 17,805 students in 823 classes in 4 nations, Haertel et al. found positive correlations between learning outcomes and certain classroom environment dimensions (e.g. cohesiveness, satisfaction, material environment), and, negative correlations between learning outcomes and certain other classroom dimensions (e.g. friction, apathy, disorganisation). However, a high positive relationship was found for students who had higher preferences for such classroom dimensions than for students who had a lower preference (Fraser and Fisher, 1983).

The students of the three college types differ in their perception of the authoritarian teachers, but they do not seem to perceive the participative and nurturant task styles of teachers differently. One reason might be that differences in the structural aspects of colleges do not directly influence the nurturant and participative styles of teachers whose behaviour is directed basically towards the growth of the students. On the other hand, the authoritarian teacher who is self-oriented, may have to be more authoritative in driving the low motivated students of the 'Low' type colleges towards completion of any task. However, in a comparative study on students of an open enquiry-based physics curriculum and a conventional curriculum, Kuhlemeier (1983) found that though the students of the enquiry-based curriculum were more satisfied with their learning environments, there was no difference in the
perception of the teachers by the students of the two groups.

The findings in the present study, thus do not support the null hypothesis of college type differences.

**Hypothesis 4:** The socio-economic status of students is not significantly related to their intellectual commitment and college adjustment.

Results in the present study do not support the null hypothesis of the relationship between socio-economic status and intellectual commitment of students. However, the null hypothesis of the relationship between socio-economic status and college adjustment is confirmed (Table 31).

A number of studies conducted to investigate the relationship between socio-economic status of students and their academic achievement have obtained significant relationship between the two (Wright and Bean, 1974; Sherman and Hofmann, 1980; Meade, 1981; Owen, 1981; Van Doorminck et al., 1981; Quraishi and Bhat, 1986). The reasons may be many, though. A higher level of achievement motivation has been observed among students who are reared in an upper and/or middle class home environment (Lavin, 1965). Socio-economic status, independent of race, has been found to be primarily responsible for the attitudes and values held toward higher education (Cramer and Stevie, 1972). Apart from the cognitive measures, on the behavioural measures also it is seen that students from upper socio-economic group do not need to spend as much effort
and time in supporting themselves through part time employment as do students from lower socio-economic background. Such factors tend to affect the psychological and behavioural correlates of commitment directly as well as indirectly.

Support for the above contention is found in a series of studies conducted by Marjoribanks on Australian school children (1979, 1980, 1982, 1986). Children's commitment to school was found to increase with increase in the parental press for achievement (a characteristic of higher socio-economic families) even when the intellectual orientation of the school was held constant. Such a press tend to encourage these students to work closer to their true academic potential.

Another factor which may help to determine the intellectual commitment of students is the peer influence. Students coming from middle and upper class neighbourhood are likely to be exposed to an academically competitive environment which may be more like the college experience. The family pressure together with peer influence might make these students more intellectually inclined and committed than others.

O'Reilly and Chatman (1986), who talked of organizational commitment argue that, commitment necessarily presumes a psychological attachment to the organization. The basis for this psychological attachment may be predicted on three independent foundations: (1) compliance or instrumental involvement for specific extrinsic reward; (2) identification or psychological involvement
for getting general satisfaction, and; (3) internalization or ideological involvement for feeling of oneness with the group or organization (Kelman, 1958). These differences represent separate dimensions of commitment, yet psychological attachment is necessary for commitment at the individual level. It is in this context that the ideological model provided by the parents/or peers in the higher socio-economic group might help in understanding the processes of the internalization of academic values so much needed for intellectual commitment.

High socio-economic status does not always result in high achievement or better performance by the students. A meta-analysis of studies on socio-economic status and student academic achievement, conducted by White (1982) has made it clear that the relationship between the two is much weaker than has frequently been presumed. In the present study also, a weak relationship is obtained between socio-economic status and college adjustment. The concept of situational adjustment, as put forward by Becker et al. (1968) might provide an apt explanation at this point. Though the family press for achievement and the facilities offered at home might differ from one group of students to the other, they tend to see the academic and other demands of a particular college in a more or less similar manner. The attempt to manipulate and gain mastery over the situation and become successful is then a universal phenomena among the students. Because the colleges and teachers do not differentiate among admitted students on the basis
of socio-economic background, hence the feeling of competency over
the environment does not vary by socio-economic status of the
students. Hence, the null hypothesis of no differences in intellec-
tual commitment and college adjustment of students by socio-economic
status is partly confirmed in the present study.

Hypothesis 5: There are no significant relationships of need-
systems, perception of college environment and group atmosphere
with intellectual commitment and college adjustment of students.

The results in the present study do not confirm the null
hypothesis. The need-systems of students are significantly related
to their intellectual commitment and college adjustment (Table
21). Results of the multiple regression analyses also show that
need-systems contribute to both these student outcomes (Tables
34 and 37). Similar relationships are visible in the case of
college environment and group atmosphere with intellectual commit-
ment and college adjustment (Tables 21, 33 and 37).

Using Stern's (1970) need-press model, need-systems of
students are classified into development needs and control needs.
Development needs include such factors as achievement motivation,
adaptability, task orientation, sociability and personal dignity,
while control needs include factors such as orderliness and prac-
ticalness. These are quite identical to intrinsic and extrinsic
needs being variously termed as growth needs and pain avoidance
needs (Maslow, 1954), or motivator factors and hygiene factors
(Herzberg, 1959).
A complimentary set of environment press, with a combination of development press and control press were also assumed by Stern. For example, if the need for achievement in a student is expressed by the maximization of striving for success through personal effort, an environmental press for achievement is expressed by opportunities for such behaviours. This has been described as a congruent relationship which produces satisfaction and fulfilment for the participants. A significant correlation between need-system and perception of college atmosphere in the present study \( r = .47, P < .01 \) suggests that such a congruent relationship leads to high satisfaction among students.

Growth needs, intrinsic motivation or involvement have been most often used synonymously, because both psychologists and sociologists assure that a person's involvement in work is a function of intrinsic work factors rather than extrinsic environmental factors (Weissenberg and Gruenfeld, 1968). Kanungo (1979), though, maintained a different stand, which was also implicit in the work of Lawler and Hall (1970). According to this view, individuals with salient extrinsic needs will be as strongly involved in their work as individuals with salient intrinsic needs, provided they perceive their work to have a potential for satisfying their salient needs. A number of studies resulted in supportive findings (Kansz, 1974; Gorn and Kanungo, 1980). In the present study also it seems that students scoring high on need satisfaction have high intellectual commitment, irrespective of whether the needs are
intrinsic (development) or extrinsic (control).

There are three basic factors often found related to the development of commitment in an organization (Porter and Smith, 1970) namely: (1) a strong belief in and acceptance of the organization's goals and values; (2) a willingness to exert considerable effort on behalf of the organization, and; (3) a strong desire to maintain membership in the organization. In relation to intellectual commitment, it may likewise be assumed that the student has faith in the goal of intellectual and mental growth, is willing to devote time and effort for the same and has strong desire for such self-actualization. Such internalization of goals and values which manifest itself not only at the mental level, but also at the behavioural level, does presume congruent needs (e.g. need for achievement, need for self-actualization) on the part of the individual. It also presumes a parallel environment press which offers opportunities for the satisfaction of these needs and a consequent increase in commitment.

The finding about the college adjustment of students is also supported by the above explanation. A student whose needs are congruent with the environmental press of the college will feel competent in manipulating and influencing the external situation to his/her advantage - in the present case, through academic excellence. Even if he/she is not able to achieve it in terms of college ranks, the psychological feeling of competence may be there - a condition necessary for adjustment (White, 1963).
The student-institution fit, as the congruence between students' needs and college environment is known, has been emphasized by different researchers. Pace (1980) has based his generalizations on the assumption that students' adjustment is dependent upon how they perceive their colleges. He has made a number of observations, namely: (1) students entering college with highly unrealistic expectations about the environment are more likely to have problems of adjustment than students who enter with realistic goals and expectations; (2) students who perceive their campus environment to be friendly, congenial and supportive are more likely to be satisfied with the college; (3) student interaction with the scholastic press of the institution is directly related to goals for the graduate study, and; (4) when congruency or fit exists between student personality characteristics and institutional characteristics student objectives are more likely to be achieved.

Pace's observations thus highlight the importance of perception of college environment in determining students' college adjustment, with due consideration given to students' expectations. Assuming that students and campus both shape each other, Williams (1986) observed that when students' needs, goals, values, interests and expectations are adequately met by various physical, academic, social and psychological conditions of the campus, then a high degree of fit exists from the students' perspective. Likewise, when students' academic and social abilities mesh well with institutional requirements then a fit between the two exists from
the institutional perspective also. A match is then perfect when it helps in the growth and goal realization of both the parties.

Sometimes there may be a discrepancy in the formal requirements of the academic environment and the actual requirements as perceived by the students. This may cause different students to employ different strategies of adaptation to the environment, depending upon their individual assessments of it (Miller and Parlett, 1974). Adjustability may vary from more competent persons to less competent ones. Competent individuals would be able to meet the demands that arise in a wide range of situations. In contrast, less competent individuals are more likely to be shaped by environmental factors (Lawton, 1982). Thus Moos (1979) found more academically mature students to adjust and perform better in less structured learning environments than academically less mature students. Wright and Cowen (1982) also observed that variations in classroom environments are strongly associated with differences in adaptation among problem students than among non-problem students.

College environment at a smaller scale is termed as group atmosphere. It mainly refers to the group or class environment. Students' intellectual commitment and college adjustment is found significantly related to their perceptions of group atmosphere also (Table 21). Studies conducted by other researchers also support the present findings. A study conducted by Fraser (1986) on junior high and high school students showed that supportive
relationships with teachers and peers and an emphasis on student participation in well-organized classroom promote student morale, interest in the subject matter and a sense of academic self-efficacy.

These associations between environmental factors and outcome criteria may be moderated by personal orientations and preferences. Harpin and Sandler (1979) examined the match between students' locus of control and the level of classroom control. Junior high school boys who needed more external structure adjusted better in high-control than in low-control classrooms. Boys who had less need for external structure performed better in low-control than in high-control classes. Moos (1987) also observed that externally oriented students adjusted better in well structured classes, whereas internally oriented students performed better in more flexibly organized settings. These studies point to the fact that student characteristics are important in determining the type and extent of influence of group as well as college environment.

Schneider (1987) has moved a step further when he argues that attribute of since there is no La human setting (environment) that is caused by other than human behaviour and since humans in different settings literally create different kinds of settings by their behaviour, therefore, environments are a function of the people behaving in them, i.e., E = f (P, B). Since person characteristics define what happens in a setting, it becomes clear that they also determine to a good extent the physical setting, the organizational structures
and policies and the social climate. However, this not being the immediate concern of the present study it is postponed to a later analysis.

The null hypothesis of no relationship among need-systems, perceptions of college environment, group atmosphere, intellectual commitment and college adjustment is not supported by the findings of this study.

Hypothesis 6: Family-peer interactions of students do not significantly affect their intellectual commitment and college adjustment.

The findings of correlational analysis confirm the null hypothesis of no relationship among family-peer interactions, intellectual commitment and college adjustment of students (Table 21).

The intellectual commitment of students is understood as an internalization of values and goals related to intellectual activity. College adjustment, on the other hand, is related to the students' perception of competence in the academic situation. As such, both present a wide scope for influences from parents as well as peer group. However, the results are to the contrary needing an in-depth probe.

The social learning theorists have offered varied theoretical explanations for the orientation of adolescents toward their parents and peers. The 'selective attachment' explanation holds that
adolescents are oriented mainly toward their parents in some areas and mainly toward peers in other areas (Curtis, 1974). It has been observed that warm and nurturant parent is accepted as a model more often as against a cold and punitive parent (Bandura, 1969; Walters and Stinnett, 1971). The values, ideologies, interests and attitudes of such models are accepted and internalized by the adolescents. These might be related to more personal issues. As the interaction among adolescents increases, attitudes and values regarding certain social and political issues get influenced by the peer group.

At times a question posed is - is the attraction toward peer-group at the cost of parental attraction? The 'push' and 'pull' explanations give arguments in favour of such propositions (Curtis, 1974). According to the 'push' theory, the parental failure to meet the needs of the adolescents and to establish a satisfactory parent-adolescent relationship causes an adolescent to be less favourably oriented towards the parent and more favourably oriented toward peers who display values different from those of parents (Condry and Siman, 1974). By contrast, the 'pull' theory contends that an adolescent is induced by the attractions of the peers and peer-group activities to become less favourably oriented towards parents (Edwards and Brauberger, 1973). Smith (1976) obtained evidence in favour of 'push' rather than 'pull' explanation. In some other studies it has been found that strict parents not only alienate adolescents from home, but also initiate aggression
outside the family (Thomas, 1987).

A number of studies conducted by Marioribanks (1979, 1980, 1982, 1986) have established significant relationship between parental interactions and students' commitment at school. Also the influence of peer-group on adolescents' academic achievement, satisfaction and adjustment has been documented (Carew, 1957; Newcomb, 1962; McCandles, 1969). In the school and college setting, peer-group has been observed as the most powerful socializing agent. Previous research on commitment has also suggested that internalization may occur as a result of a combination of clear role models, self-selective processes, social pressures, justification and restrospective rationalization (Salancik, 1977; Pfeffer and Lawler, 1980; O'Reilly and Caldwell, 1981; O'Reilly, 1983). The findings of the present study are against the earlier observations.

Some researchers have argued that events and trends in the society or in the developing self of the student itself may determine his/her behaviour in the college (Solomon, 1961; Larson, 1972; Jennings and Niemi, 1974). The model characteristics of Indian students, as emphasized by Sinha (1980) might provide the much sought cues. The need for nurturance and dependency together with the Indian concept of accepting 'Guru' as the 'know all' might turn the teacher into the 'best significant other' having greatest influence on the students' intellectual commitment and college adjustment, thus explaining to some extent, the finding of no relationship among family-peer interactions, intellectual
commitment and college adjustment. A detailed analysis in this direction will be taken up in the discussion of the next hypothesis.

Hypothesis 7: Students' preferences for specific teacher styles have no significant predictive value for their intellectual commitment.

The above null hypothesis makes an assumption against the cause-effect relationship of specific teacher style with the intellectual commitment of students. The results obtained in the study do not support such an assumption. The correlational analysis showed that the authoritarian style is negatively correlated to intellectual commitment of students ($r = -.09, P < .01$). The participative style showed positive but weak relationship with intellectual commitment ($r = .03), P > .05$). The nurturant task style, however, showed a positive relationship with intellectual commitment of students significant at the five per cent level ($r = .07, P < .05$). This indicates that students' preferences for a specific faculty style (i.e. nurturant task style) do have a predictive value for their intellectual commitment.

The effectiveness of nurturant-task style is supported by a number of studies reported by Sinha (1977) and his colleagues. Emphasizing the socio-cultural values in the Indian context, Sinha (1980) had conceptualized the nurturant task leaders to match the needs of dependency, personalized relations and acceptance of leader's superior position in the Indian youth. Such a leader
with his nurturance, as well as committed task orientation may help the subordinates to be work conscious, to become responsible and committed to their work. He may also help them in becoming more independent and assuming fuller participation in the group decisions and goal setting.

In a study on three person groups, Sinha and Sinha (1977) found nurturant task and participative leaders to be equally effective in generating new and appropriate ideas in the group and getting it accepted by the group members. The authoritarian leaders were found to be generally ineffective. In a study on college students, however, the perceived effectiveness of nurturant task teachers alone was established. The students rated the authoritarian teachers as autocratic, influential and brave, but at the same time insecure, impractical, unsuccessful, unskilful, dissatisfying, disrespected and unpleasant. The participative leaders were rated as democratic, respected, satisfying and successful, but at the same time weak, coward, slack and uninfluential. The nurturant task teachers were perceived as active, strong, dominant, firm, alert encouraging, extrovert and on the whole good. Sinha and Choudhary (1978) obtained evidence to show that subordinates working under a nurturant task leader gradually acquire self-confidence and competence and become ready for a more participative interaction with the leader. At such a stage, the nurturant task style was found to become dysfunctional and participative style acquired effectiveness. Thus, the nurturant task leader may not
be a universally effective style in all situations and for all kinds of subordinates. But its effectiveness in the Indian situation is significant.

Researchers have also identified some other effective leadership styles which draw a parallel to nurturant task leader. Consideration factor of OSU model (Halpin and Winer, 1952) and participative leadership of Likert (1967) reflect the people orientation of nurturant task style. Similarly, 9-9 style of Blake and Mouton (1964); reactive instrumental teacher behaviour of O'Hagan and Edmunds (1982); and Performance-Maintenance style of Misumi (1972) have a blend of nurturance and task-orientation very similar to nurturant-task style. The discretionary leader of Hunt and Obsorn (1980), transformational leader of Bass (1985) and Life's (1986) model of leadership strategies all exhibit flexibility in adjusting to the needs of the subordinates, which brings them close to nurturant-task style. All this tends to highlight the effectiveness of nurturant task style.

The results of the regression analysis showed that both participative and nurturant task styles contributed about two per cent in the prediction of intellectual commitment. The authoritarian style was found to contribute about one per cent. The favourable perception of both participative and nurturant task styles, as already elaborated, seems to be responsible for this contribution. However, assessing the possibility of interaction between such teachers and students, the resultant influence seems
to be very little. In a recent study, Sinha, Pandey, Pandey and Pande (1988) have reported significant influence of the level of preparedness for participation of the subordinates on the effectiveness of nurturant-task style. The style was found more effective in situations where the subordinates were less prepared for participation with the leader, as compared to situations where they were more prepared for such participation. In the present study, the low contribution of nurturant task style is indicative of such characteristic in the students. However, in the absence of empirical data the relationship cannot be established.

Hypothesis 8: Students' preferences for specific teacher style have no significant relationship with college adjustment.

Results obtained in the study do not support the null hypothesis fully. The authoritarian style showed significant negative correlation with college adjustment meaning that lower authoritarianism of the teacher is found to promote better college adjustment among students ($r = -.14$, $P < .01$). Conversely, the higher authoritarianism may lead to poorer college adjustment. Earlier studies have also shown that the authoritarian leader does not promote subordinate growth, is only concerned with his self-management and therefore creates a climate of distrust and resistance (Sinha, 1980). In such a situation, the students may find themselves incapable of adjusting to the general college situation.

The nurturant task and participative styles showed insignificant relationship with the college adjustment (Table 21). The
effects of nurturant task and participative styles were not strongly marked. These were, however, indicative of the direction that a caring and participative style can enhance college adjustment. Faculty styles closely identical to nurturant task style have been found effective in promoting mental health and personal adjustment by a number of earlier researchers (Kounin, 1970; Rosenshine and Berliner, 1978; Emmer, Evertson and Anderson, 1980; Evertson and Emmer, 1982; Blair, 1984). Such teachers are found to be alert to the needs of the students. They help them as and when required and also apply appropriate means to check misbehaviour. These techniques of supervision, known as classroom management techniques are also found effective by Brophy and Good (1985) and Brophy (1986).

Significant positive correlations between nurturant task style and college adjustment and participative style and college adjustment were found only in one college type, the 'Medium' male college (Table 16). The academic climate of the college is neither very superior nor inferior. The academic facilities provided to students are average and the academic results are also average. Such a moderate college 'press' may be congruent with the needs of students in these colleges. Since enrolment in a college depends both on student characteristics (particularly the school level performance) and the selection procedures of college, it is expected that such a congruent relationship might lead to high correlations between the nurturant task and college adjustment.
as well as participative style and college adjustment of students. However, lack of significant relationships in other college types as well as in 'Medium' female college makes, such an explanation incomplete. Further probes are needed to examine this question.

The hypothesis of no predictive value of faculty styles for college adjustment of students is thus only partially supported.

**Hypothesis 9:** Individual and group characteristics interact with the perceptions of teacher styles, but do not necessarily mediate their influence on students' intellectual commitment and college adjustment.

Results obtained in the present study refute the null hypothesis that individual and group characteristics do not mediate the influence of teacher styles on intellectual commitment and college adjustment (Tables 32, 33, 34, 35, 36, 37, 38, 39). Among the individual and group factors, college type and college environment emerge as significant intervening variables in the relationship of teacher styles to intellectual commitment and college adjustment of students.

As the results indicate, the three teacher styles do not explain more than two per cent variance each in the domains of intellectual commitment and college adjustment of students. The entry of college type along with the three faculty styles increases the explained variance to 31 per cent in the domain of intellectual commitment of students and to 36 per cent in the domain of college
adjustment. Group atmosphere and college environment further enhance it by 2 per cent. The need-systems and background variables of students do not seem to have much influence.

College type variable refers to the facilities offered to students in terms of structural and functional aspects of the college such as, laboratory and library facilities, teacher student ratio, types of stimulants provided to the students in the class, per capita expenditure, adherence to rules and regulations both by students and faculty etc. College types offering these facilities to students use certain measures of selecting faculty members and students that will further maintain and advance the college quality. This may tend to create a college environment which is perceived both by faculty and students as academically and emotionally satisfying and oriented towards the growth of both its members as well as the institution as a whole. Data in the present study confirmed the close association between college type and college environment (Table 23).

Results also showed that students, who rated their college environments high in terms of opportunities for intellectual and emotional expressions, courses offered and administration, were found to display a higher degree of intellectual commitment and college adjustment than those who rated their college environment low on the above characteristics (Table 21).

In literatures, the organizational climate is most adequately conceptualized as a summary perception which people have of an
organization. The climate may be perceived as work-oriented, innovation-oriented or supportive, which is descriptive of conditions that exist in the work environment and may influence the performance of the individuals. Organizational climate has been found to mediate between task requirements of the organization and the needs of the individual. According to Litwin and Stringer (1968) - "Because climates can affect the motivation of organizational members, change in certain climate properties could have immediate and profound effects on the motivational performance of all employees". Campbell, Dunnette, Lawler and Weick (1970) also obtained results which showed that organizational climate is a direct cause of behaviour and also a moderator of relationship of other variables to performance and between individual and outcome variables. In the present study the college type was found promoting similar student outcomes.

College type seems to interact with the teacher styles. The two per cent variance explained by the teacher style in the prediction of both intellectual commitment and college adjustment in interaction with college type increases to 31 per cent in the case of intellectual commitment and 36 per cent in the case of college adjustment. It appears that teachers' style of functioning is of little importance by itself. Teachers, however, good or poor they are, seem to adjust to the college type in which they are placed. A college, with its superior climate, demanding students and vigilant head, may turn even a poorly accomplished
teacher into a hard working member, adopting a style conducive to the growth of the students. A 'poor' college, on the other hand, may induce even the best of teachers to slacken down in their efforts and adjust to the very little demands of the students and institution. Similar arguments were advanced by Fiedler (1967) in support of his contingency model. He maintained that it is the group situation which determines which type of leader will be effective in the group. The task-oriented leaders were found effective in very favourable or very unfavourable group situations. The relationship-oriented leaders were found to be effective in situations which were intermediate in favourableness.

The above contention finds support in a number of studies. Sinha (1980) found that leadership styles did not affect member efficiency directly, instead worked through the organizational climate. In another study, Peters, O'Conner and Rudolf (1980) found that facilitation of the environmental conditions by the leader actually improved the follower performance. In his Leader-Environment-Follower interaction theory, Wofford (1981) also came forth with the proposal that the leader facilitates the follower behaviour within a particular environment context. Supportive finding was reported by Wofford and Srinivasan (1983).

In a recent study, however, Life (1986) emphasized that effective leaders influence situational variables, both external and internal to the organization and thereby bring a change in the organizational culture to affect member behaviour. He calls
it leadership strategy and maintains that different leadership strategies are required for different group and member requirements. Life's contention might be useful in cases where leaders occupy an influential position in the group, such as that of a principal in an educational organisation, a manager in an industrial complex or a director in a bureaucratic set up. In the present study, the teacher's influence in the class might provide a somewhat small scale comparison. However, this is deferred to a later study.

It can be concluded from the above discussion that an improvement in student outcomes is contingent on an improvement in the overall academic climate. The selection of teachers who are high on academic orientation and who can interact effectively with students can be meaningful only in such a context.

Hypothesis 10: The relationship of authoritarian, nurturant task and participative teacher styles with intellectual commitment of students is not stable over time.

The analysis of data obtained at two time periods in one college, refuted the null hypothesis of instability of the relationship between faculty styles and intellectual commitment over time. The correlations between the three faculty styles and intellectual commitment were found to remain quite consistent over one year period (Table 40). The stronger correlations between nurturant task style at time 1 and intellectual commitment at time 2 as compared to the correlation between intellectual commitment at
time 1 and nurturant task style at time 2 confirmed the predictive nature of this particular style further.

It appears that college students do recognise and accept the need of a nurturant task style in teachers. This seems to result from a congruence between the role of college, students' personality, need dispositions, values, etc. while preserving a continuity with their cultural ethos, mores and norms (cultural-normative-ideographic competencies). To the extent that teachers act as a parent surrogate responsible to nurture the younger ones and to the extent that Indian culture places some emphasis on respect and obedience towards elders, students would continue to concede to their task orientation (Kakar, 1971; Chattopadhyaya, 1975).

The present findings differ from an earlier study of Sinha and Sinha (1978). They had assumed that nurturant task style can be effective only in the earlier phase of interaction. Studies conducted to this effect also showed that prolonged use of this style affected members' satisfaction adversely. Sinha and Chowdhary (1981) reported personal preparedness of subordinates as an important factor in determining the effectiveness of nurturant task style. In the earlier phase of group membership, when the subordinates are not prepared to work on their own, the nurturant task style was found to be effective. However, this style was found to become dysfunctional soon after the subordinates showed willingness to act on their own — a situation in which the participative style was rated as effective. The present finding of
stability of relationship between nurturant task style and intellectual commitment over one year period indicated that the students of this female college were not yet prepared for the participative style of faculty. One possible explanation may be that student sample had moved from second to third year degree course. Changes in the course work at the final year stage, as earlier assumed (Miron and Segal, 1978), could still make the students heavily dependent on teachers and not wholly prepared to work on their own.

Another fact that one should bear in mind is that the gap of one year between the two data is not adequate to expect a change in socio-organisational situations. Further, data collected on a small sample of hundred students coming only from one college also restricts generalizations from the obtained findings. The college showed significant positive correlation between nurturant task style and intellectual commitment at the initial stage which got further strengthened after a year. One wonders, how this time period would affect a weak relationship between nurturant task style and intellectual commitment of students. The present study fails to throw light on this. Nevertheless, the causal link between faculty styles and intellectual commitment of students over time illustrates that leadership involves dynamic transactions. Teachers and students interact and influence each other over time. The interactions are ongoing and dynamic in nature which accommodate situational variability to a significant extent.