This chapter deals with the last part of the study, the relationship between the perceived college environments and the students' attitude towards their profession, work-values, aspirations and achievement. The aim was not to study what effects the college environments have on the student socialization, which would have required more controlled and longitudinal designs of following up students from the first year through the last year. The aim was only to study the interrelationship between these two sets of variables that could be found in the final medical students at a point of time. A review of research on college impact shows that climate variables have not been used always, as independent variables although there is a lot of agreement in using student output as the dependent variable. Some investigators have used the student personality and background characteristics as structural determinants of the college climate in a psychological sense, whereas some other have studied the student personality as output variables, the subjective culture of the college being viewed as input variables, or as determiners of the student output variables. The latter position has been taken here. This depends on the validity of the following assumptions: (a) Students entering the field of medicine in India do not have any pre-determined attitudes towards the profession on dimensions such as those measured by the perceptions of the profession Inventory when they enter the medical college. (b) Similarly, before joining the college they do not have any aspirations, fears, or concerns about what could happen to their professional future after seven years from their joining (as they do not have much of an
idea of what the profession is, what employment opportunities they have etc.). (c) They have not developed any preferences for their future work in terms of security, work-conditions etc. (d) All these develop during their exposure to the first few years of the college and stabilize by the time they enter the internship period. Achievement is excluded from these assumptions because of the possibility of the influence of other pre-entrance factors on this variable. In this sense, whatever few correlations were observed in this study between the college environment variables and the socialization variables could be attributable to the institutional effects. Data on age distributions of the sample, their decisions to study medicine, the reasons for their decisions etc. partly support these assumptions. However, the relationships observed between the two sets of variables in this study seem to have a high theoretical value in view of the null relationships between most of them.

In this chapter a review is presented of the researches on institutional impact followed by a statement of the purpose and the methodological details. Results observed in this study are described at the end with some relevant observations. Detailed discussion of the results is postponed to the last chapter for theory building on institutional environments.
Chapter V

INSTITUTIONAL ENVIRONMENTS AND PROFESSIONAL SOCIALIZATION

Research on Institutional Correlates of Student Development

Research aimed at identifying the institutional environments affecting the student development dates back to the 1930's when the first studies by Prentice and Kunkel (1930, 1931) appeared. These studies aimed at identifying the college environments that are effective in stimulating the achievement motivation in the students. After these studies, only a few researches have been conducted on the institutional environments till the 1960s. Whatever studies have been conducted till the 1960's usually centered round measuring the influence of college or institutional environments on the productivity of the students or the institutional members. Since the 1960s, the interest on this topic has widened and researchers got interested in seeing the influence of the institutional environments on various personality and other variables. A few of the researches conducted in the past few years on various aspects relating to the institutional environments have been described below to give an idea of the trends.

Influence of Institutional Environments on Student Achievement and Learning

Studies relating to the influence of environments on
the achievement of the students are also known as "College Productivity analysis studies". They started with a design of identifying the characteristics of institutions which have produced students who obtained scholarly recognitions later or showed some distinction or the other. Perhaps the best known study in this direction is that by Knapp and Goodrich (1952) in which colleges were compared with respect to the outputs of their alumini who later earned Ph.D. degree. Other investigators who have reported studies conforming to this strategy or with related designs include: Kunkel and Prentice (1939), Kunkel (1941), Visher (1947), Knapp and Goodrich (1952), Knapp and Greenbaum (1953), Bending (1955), Brown (1956), Michael and Perry (1956), Oppenheim (1956), Taxler (1957), Thistlethwaite (1959) (1959a), Anderson (1959), Eddy (1959), Bloom (1960), Astin (1961, 1962, 1963, 1963a, 1963c, 1964, 1965), Nichols (1965), Boyer (1965), Miller (1965), Newman (1965), Astin and Panos (1966) and Skager, Holland and Braskamp (1966). One defect that has been repeatedly pointed out in these studies is the lack of comparability of the entering abilities of the students. The observed differences among the productivity of students may not reflect the influence of the environment of the institution, but may only be reflecting the nature of students that join that particular college. Recently attempts have been made to control or
match the students on their entering abilities and see if different environments have changed their abilities to any significant level. Irrespective of some of the weaknesses involved in the recent studies the findings are often interesting.

Pace (1962) reported a predicted relationship between four university environments and student performance. McConnell and Heist (1962) documented the diversity of intellectual dispositions and social background. They hypothesized from their observations that the efficacy of the college is the product of the fortunate conjunction of student characteristics and expectations, and the demands, sanctions and opportunities of the college environment and its subcultures.

An a study of attrition rates in medical schools, Hutchins (1965) found that schools high in attrition rates did not emphasize research, and possess comparatively less stimulating environments. Schools with low attrition rates were found to have intrinsically motivating environments and had students with great scholastic aptitude, greater achievement and less need for deferent behaviour. They showed significantly greater aesthetic value. High attrition schools were found to produce significantly large proportions of students interested in general and straight specialty practice as opposed to careers having
affiliation with academic medicine. Nichols (1966) has presented convincing evidence that institutions with different CUES profiles attract applicants of different ability. For example, he found relationships between student ability and the scholarship score of CUES for the first choice college in the high .40s.

Although investigators like Nichols' (1966) argue and present evidence to the effect that colleges with different environments attract students of different abilities, the validity of such an observation appears to be limited to only those institutions having remarkably distinct environmental profiles. Statistical significance in differences can not be taken at face value to represent profiles crossing the differential thresholds of applicants. Two colleges having different profiles on an environmental scale need not be perceived by an applicant who never had a first hand experience of these colleges as different. Such conclusions of psychological differences sound statistically fine but have little meaning in reality. Andrews (1967) found that whether or not creative ability "paid off" depended upon main laboratory environment. The environments which provided good climates for creativity work are described. No simple relationship was found between creative ability and performance of scientists and engineers in laboratory.

McDill et al. (1967) have attempted to assess the influence of different pedagogical and social dimensions of school
environment on achievement of the students while controlling the relevant personal variables. The analysis revealed that the effect of the socio-economic context of the school on individual achievement tends to disappear when personal variables are controlled. However, even when both the school's socio-economic context and personal attributes were held constant, the various dimensions of school environment had significant effect on students' performance. These results indicated that when intellectualism, achievement, and competition are stressed by faculty and students it is conducive to higher achievement.

Gottheil et al. (1968) in their study of 157 medical students on Stern's CCI and ratings by their teachers on their behaviour towards the patients found that 28 of the 30 CCI scales were significantly related to the ratings of their behaviour towards patients. Students who perceived the school as encouraging understanding, reflectiveness, ambition, socio-political participation, emotional expression, spontaneity, aesthetic appreciation, risk taking, non conformity, and reliance on others were rated as having a high regard to their patients and being sensitive to their needs. Hinton (1968) in a study of the effect of environmental frustration on creative problem-solving concluded that the environmental frustration significantly reduced creative problem solving.
Walberg and Anderson's (1968) study on classroom climate considered the relationships between the individual pupil perceptions of their class and their individual learning. A series of studies on high school physics classes throughout the nation had shown that measures of student perceptions of classroom climate obtained at mid year predicted gains in cognitives, affective, and behavioural learning criteria during the year.

Astin (1968) studied the effects of certain traditional indices of institutional excellence on the intellectual achievement of 669 undergraduates. Data failed to confirm the hypothesis that subjects' achievement in social science, humanities, or natural science is facilitated by (a) the intellectual level of his classmates (b) the level of academic competitiveness, or (c) financial resources of the institution. Data also did not support the contention that bright students benefit more than the average from exposure to these indices. Additional analysis indicates that differences in student achievements during the senior year were more dependent upon variations in student characteristics than those of the college attended. Results suggested a reexamination of traditional ideas concerning institutional excellence, particularly as they relate to the intellectual development.

Panos and Astin (1968) analysed the effects of 36 college characteristics on student persistence in colleges. Results
indicated that students are more likely to complete four years if they attended colleges where student-peer relationships are characterized by friendliness, cooperativeness and independence, where the students frequently participate in the college activities, where there is a high level of personal involvement with and concern for the individual student, and where the administrative policies concerning student aggression are relatively permissive.

Bar-yam's (1969) study presented convincing evidence to the fact that environment scales moderate the relationship between personality and learning criteria. Similar hypothesis has been advocated by Walberg (1969a) from his researches.

Sharma (1969) administered Halpin & Croft's OCDQ to 626 teachers from 56 schools. Organizational climate was found to be related to the achievement of boys. The correlation coefficients of different factors of OCDQ with achievement are: Disengagement -.67, Hindrance -.33, Espirit +.59, Intimacy +.25, Aloofness -.46, Production Emphasis +.21, Thrust +.58 and consideration +.44.

Using the Learning Environment Inventory, Anderson (1970) has found that the factor 'Intimacy' is positively related to scores on "Test of understanding science" (TOUS) for girls of high ability and negatively for
for girls of low ability. Intimacy indicated normative behaviour systems developed in girls which affects their achievement. Due to the norms developed in low ability girls, they collectively do poorly on the test. Environment scale of the LEI showed a positive relationship with Physics Achievement Test (PAT) and TOUS for males. Favoritism scale showed a negative relationship with learning as measured by "Science Process Inventory". No relationship was found between satisfaction and learning, while scores on disorganization were positively related to scores on PAT for males.

Kubiniec (1969, 1970) in his study of 468 students, divided them into 4 groups on the basis of their achievement and assessed the phenomenal-self as well as phenomenal environment perceptions of these students. From his research, he concluded that academic success in college can be predicted by measures of global perceptions of one's self and one's environment. One novelty in Kubiniec's study is to treat the perception of environment as a part of self-perception. Perhaps this falls in line with the personality-environment or need-press interaction outlook started by Stern. Another suggestion made by Kubiniec is to differentiate between evaluating the environment and describing the environment.

Sharma (1971) concluded from a brief review of
research, using OCDQ and his own study that 'Open' organizational climate is conducive to the attainment of higher levels of pupil achievement and the social need-satisfaction of the staff. Very recently Creager (1971) compared two research strategies for studying the effects of college environments on student development using Astin's data on academic achievement and institutional excellence. One strategy selects variables by the two-step de regression method and interprets the prediction system by application of the uniqueness-community model. The other strategy develops a single, full-model regression system and interprets the prediction by orthogonal decomposition of the system. This second method was found to be more efficient and less biasing in the development of the predictor system. Other recent studies in this area appeared in the past 5 years include those by Kallick (1967), Myers (1967), Haefner (1968), Kramer et al. (1968), Anderson (1969, 1970), Anderson and Welberg (1968), Anderson, Welberg and Welch (1969), Andrews (1967), Myers (1967), Deiner (1970), Spuhler (1967), Voss (1967), and Walberg (1963, 1969, 1969a, 1969b, 1970), McGavin (1960), Alder (1969), Romie (1970) and Donato (1971).

These studies indicate mainly two noteworthy points in the environmental research:

1. That the institutional environment, does play a significant, role in determining the student achievement either by direct influence as an
independent variable or by indirect influence as an intervening variable.

2. And that as the research is growing on this area, the researchers are becoming more and more aware of the need for using sophisticated designs with well controlled groups in assessing the environmental influences.

Institutional impacts on career choice personality development.

Research on institutional impacts has gone beyond the attempts to study the achievement, productivity, and attrition of students. Recent researches started studying whether the different institutional climates have differential impacts on student personality, and whether the personality of students is playing any role in their perception and interpretation of the environment. Some of the dimensions touched by these studies include the aspirations and career plans of students, values they develop, attitudes they have towards their profession and so on.

Career choices and aspirations

The earlier studies on the impact of college on student career choices include those by Thistlethwaite
(1960) on the influence of college press on the study plans of talented students, Astin (1962a), a similar study extended to all types of students, by Hutchins (1962) who worked on the influence of medical college environments on the career choices of medical students. Thistlethwaite (1962)(1965), David (1964) and Astin (1965), Thistlethwaite and Wheeler (1966), Gurin and Katz (1966) on different student groups and on high aptitude students. A large scale study conducted during this time was by Davis (1965) who surveyed 33,982 students from the 1961 graduating classes of 135 colleges. From his study he summarizes that colleges have a great impact on the career choices of students. About half the students change or choose a career during the college. Davis goes on to point that a lot of dynamics underlying career decision would be missed if we assume that the decision to go to college freezes occupational choice.

The results of Thistlethwaite's (1968) study were congruent with the hypothesis that teachers and peers provide modeling stimuli, which persuade many undergraduates that advanced graduate or professional training is an appropriate goal. Hypothesis concerning impacts of college upon decisions to pursue graduate study evaluated by partial correlations which held constant initial dispositions to seek advanced training confirmed the hypotheses that desire to pursue graduate
study was strengthened by (a) achieving good rapport with college teachers during the senior years (b) exposure to peers exerting press for advanced training (c) talking with faculty members, students, and parents about plans for graduate study, (d) winning recognition for academic achievement in college, and (e) undergraduate research participation.

King et al. (1968) in a carefully designed surgical workshop programme by delegating freedom and responsibility to students with full cooperation from the faculty found that they differed with the control groups on MSRI on a few dimensions favourably. Many of them changed their career choices as a result of this programme and given up the plan of a solo practice (private) career. A significant increase in the incidence of expected commitment to surgical careers was observed. Similar influence on the career choices was observed in a study of 1771 doctors graduated from 12 medical schools by Lyden, Geiger and Peterson (1968).

Astin and Panos (1969) made an extensive study of the impact of college on the educational and vocational development of students. They studied about 36,000 students drawn from about 127,000 students attending 246 institutions. The study ranged over a few years with tests retests and follow ups. Besides the student characteristics and their vocational choices, the peer, classroom,
and administrative environments in their respective institutions were studied. The results suggested that the institution does make a difference but the major mediating condition is the nature of the students enrolled in determining the student development.

Like the earlier studies Hind and Wirth (1969) in their study of male students of graduating class of 1965 in a selective university found that occupational choices undergo considerable change during the undergraduate years. Although gross overall changes in the occupational profiles are not large, many students are discouraged from pursuing careers which require extensive academic training when they receive low grades. Many other changes were found to occur.

An interesting study by Breisch (1970) revealed that the impact of the medical school is so high that it also determines partially the location of practice of the graduating students. Two characteristics of medical schools, quality of medical school education and location of medical schools were found to account for almost 50% variation in the location of graduating physicians practice of 85 medical schools in U.S.A. In a recent study Kamens (1971) presented evidence that larger schools have greater impact on students' occupational commitments than the smaller schools and hence show lower drop out rates because of their superior status allocation capacity.
His study was based on a sample of 99 colleges.

Thus the results of the studies relating the impact of colleges on student aspirations generally agree on the conclusion that the college does have a significant effect on the career decisions of students and their future aspirations. The trend is that students from better colleges have better aspirations and professional goals. This is probably because students from high status colleges are preferred for jobs and have high demands than the students from the colleges relatively less well known. Environment of the high status colleges is usually high due to the research funds and facilities available to them. This observation may also be expected to hold good in our country as students from high status institutes like IITs, and All India Institutes are preferred for jobs. Consequently competition is high to enter these institutions and only best students are admitted and hence they have high professional aspirations.

This hypothesis was supported in a recent Doctoral study by Grewal (1971) who found that high achieving students had different views of their environment than the low achieving students. In his study vocational preferences were found to be significantly related to the vocational dimension of the environment.
personality correlates in different environments if the relationship between individual and the environment is a reciprocal one, or two aspects of a whole or Gestalt. Mitchell (1968) in his study found that the perceptions of the environment are related to personality characteristics, particularly the trait of conformity.

In Thistlethwaite's (1968) study of the influence of entering a field of study on students, college environment produced a greater increment in prosocial values in health professionals as compared to others.

Entering engineering professions had effects in increasing affluence orientations and history produced increment in individualistic orientations.

Segal (1968) in his review of researches on student development in the Annual Review of Psychology expressed his optimism that environmental studies of students development may provide deeper understanding of student dynamics.

Contrary to the argument put forth by Becker et al. (1961), Himmelweit & Swift (1969) in a longitudinal study (Himmelweit, 1954, 1964) ranging over a period of more than ten years found that the type of school attended has long lasting effects on the student at least until age 30. Analysis of the adult data confirmed the findings obtained in adolescence namely that school rather than home affected the individual's subsequent occupational history, job level and aspirations.
Schein (1969) found differences in the attitudes of students towards the colleges as a function of the college attended.

In a study by Friedlander and Margulies (1969) organizational climate was found to have greater impact upon satisfaction with interpersonal relationships. They studied 95 employees of a research organisation on OODQ. Among the 8 dimensions of organizational climate measured, espirit was highly related to job-satisfaction although this differed significantly with the three types of satisfaction climate.

Margulies (1969) found that organizational culture, defined in terms of a specific set of values, attitudes and behavioural norms can contribute to the degree to which persons can actualize themselves. He used the Personal Orientation Inventory to measure self-actualization.

Chickering (1969a) while outlining a model in terms of which research concerning student development in college may be organized proposed that certain developmental tendencies may be indigenous to the years from 18-22 which could be used by colleges to increase their impacts. He presented a sizeable amount of data from his own research to support his thesis.
Bar-Yam (1969) presented evidence that environmental scales moderate the relationship between personality and learning criteria. Duling (1969) administered CUES to 683 students of Colorado State college. Results showed that women perceived the college as more group centered, conforming, and cooperative than did the men; married students rated the college higher than single students on awareness, propriety, and scholarship; sorority and fraternity members saw their environment as more practical and group-oriented than did non-members; and transfer-students considered the college to be higher scholastically than did the native students, which is expected because the transfer students usually get transferred to what they think as better colleges.

Feldman (1969) and Feldman and Newcomb (1969) in their two volumes on the impact of colleges on students have summarized most of the studies of college impacts conducted till 1968 with a 76 page bibliography. The following generalizations are offered by Feldman and Newcomb (1969):

1. Freshman-to-senior changes in several characteristics have been occurring with considerable uniformity in most American Colleges and universities in recent decades. Declining 'authoritarianism', 'dogmatism' and 'prejudice' together with decreasingly conservative attitudes toward public issues and growing sensitivity to aesthetic experi-
ences, and particularly prominent forms of change— as inferred from freshmen-senior differences. (Such is the heavy preponderance of evidence from any institution; but each nugget of data, taken singly, represents only an average trend in a particular college or university. Some individuals our perhaps many—swam against the current while others—conceivably a majority changed little or none between entrance and graduation).

2. The degree and nature of different colleges' impacts vary with their student inputs— that is, entering students' characteristics which differ among types of colleges in patterned ways.

3. Within the same college, experiences associated with the pursuit of different academic majors typically have effects over and beyond those that can be accounted for by initial selection into those major fields.

4. The maintenance of existing values or attitudes, which apart from certain kinds of college experience, might have been weakened or reversed, is an important kind of impact.

5. Though faculty members are often individually influential, particularly in respect to career decisions, college faculties do not appear to be responsible for campus-wide impact except in settings where the influence of student peers and of faculty complement and reinforce one another.
6. The conditions for campus-wide impacts appear to have been most frequently provided in small, residential, four-year colleges. These conditions probably include relative homogeneity of both faculty and student body together with opportunity for continuing interaction, not exclusively formal, among students and between students and faculty.

7. In addition to the effects of campus-wide influences and pressures of sub-environments, college impacts are conditioned by the background and personality of the student.

8. Attitudes held by students on leaving college tend to persist thereafter, particularly as a consequence of living in post-college environments that support those attitudes. Within college changes especially if accompanied by a general stance of openness to change, may be still further extended in response to new social and technological conditions.

9. Whatever the characteristics of an individual that selectively propel him toward particular educational settings going to college, selecting a particular one, choosing a certain academic major, acquiring membership in a particular group of peers-those same characteristics are apt to be reinforced and extended by the experiences incurred in those selected settings.

Although these generalizations by Feldman and
Newcomb does provide a lot of strength to the college impacts on student development with regard to certain areas like their values and attitudes (point 4 above), their conclusion conforms to the usual conclusions reached on the nature-nurture controversy.

Stanley (1970) in an excellent review of this book indicated that another dearth in college impact literature is meant to manipulate variables to see what effects such manipulation has.

Such manipulation studies have been attempted recently by changing only a selected group of variables of the college climates in view of the impossibility involved in manipulating the total environment. One such study was attempted by Talbert (1970) with fourth grade children. Talbert exposed fourth grade children to experimental programme of studies showed better attitudes than the control group towards school and not-in self-concept. One such study was attempted recently in India by Pareek and Rao (1971) in an attempt study the impact of changing classroom climate through behaviour modifications of fifth grade teachers on the personality of the fifth grade children. However, the fifth grade children studies are far away from the total environmental manipulations envisaged by Stanley (1970) and are currently being attempted through orga-
Borland (1970) studied the changes in students' perceptions of their profession as a result of the effects of four year medical college studies. He found little change in his comparisons of the perceptions of the entering students and their perceptions after four years about general practice and specialty practice. He concluded that the primary effect of professional socialization on medical students, perception of their prospective profession was to confirm their original perceptions and to increase homogeneity in their judgements of attributes of professional role concepts.

Walberg and Ahlgren (1970) have shown that the classroom climate can be predicted from a number of antecedent and concurrent variables: student personality measures, student scores on cognitive and non-cognitive pre-tests, students' biographical characteristics, the course content, the teachers' experience with course, and the class-size. Eight canonical variables from these reveal several sets of predictors were significantly related to the environment scores; in addition, IQ and the fraction of girls in the class were found to be significant predictors of environment.

Carroll (1970, 1971) also found that the environmental
structure of the theological colleges determined the value-orientation and other socialization variables of seminarians.

Apostal (1970) used college student Questionnaire on 993 students, in a study to find out if the personality types influence the preferred subcultures in the college. With men, he found that realistic personality types tend to prefer the vocational subculture, enterprising types tend to avoid the vocational subculture, while artistic types tend to prefer academic culture. For women, he found that social types tend to avoid academic culture, enterprising types tend to avoid vocational subculture, but are attracted to academic culture.

Romine, Davis and Scott (1970) studied 250 students at a college having 98th percentile score in CUES. They administered Peterson's College Student Questionnaire, Part I (CSQ-1). They found that dependent students outperformed the independent student of the same ability, and the independent low ability students outperformed the dependent ones in the 'impersonal campus environment. Whereas in the 'Supportive' campus dependent students were found to do well than the independent ones of the same ability. This study reveals the importance of person-environment interaction in differing performance.
In a study of the organizational climate of schools and personality of teachers, McGrail (1971) used OCI and 16 P-F and found significant correlations between some factors of these two. Assertive, Happy-go-Lucky, venturesome and extraversion factors of 16 P-F correlated significantly with fantasy climate of OCI. Humble, tender-minded and tenderminded-emotionality were significantly related with both orderliness and fearful climate.

Spencer (1972) had undertaken a study to assess a wide range of attitudes and values than the surveys have done so far and to examine the correlations of these with the type of school attended, social origin and anticipated social class. His sample was 506 boys of 14 to 15 years from 11 schools. Results did not support the influence of either home or school as potential social agents. While such studies of null relationships are rather few and since a great number of them suffer from methodological defects, realizing such problems researchers on college impacts have started concentrating their efforts recently on the methodological issues and in developing proper designs for a careful study of college impacts. Some such publications on research methodology of college impacts.


A review of these studies indicates the circular nature of the Personality environment relationship. While the evidence is convincing to the point that the relationships between certain dimensions of personality and certain dimensions of environment are significant, which is determines what is something which is not clear till date in these researches except in traits like professional values, goals and aspirations which are mostly learnt in the college as Feldman and Newcomb's summary indicates.
Apart from the job-satisfaction studies in the institutions, which measure the satisfaction of employees, attempts also have been made to measure the satisfaction of the students (who are products but not employees) with the environment. Four studies worth noting in this area are by Pervin (1967), Berdie et al. (1970), Waterman and Waterman (1970) and McClung (1971) described below.

Pervin (1967) investigated the relationship between perceived self-environment similarity and satisfaction with the environment. 365 subjects responded to one version of the Transactional Analysis of Personality and Environment (TAPE) Questionnaire based on semantic differential. The concepts of self, college, and ideal self were rated on 52 polar adjectival scales, and satisfaction with the environment was indicated on 5 scales. Perceived self-college similarity was related to ratings of satisfaction with the college environment. The research also indicated the usefulness of semantic differential for environmental research.

Peyre (1967) while discussing the etiology and
development of student maladjustment to an academic environment pointed out that Social and Psychological factors are related to the problems of an academic institution in a rapidly transforming technological society. Maladjustment problems of students are associated with those of the institution itself. A reorientation programme, with cooperation of teachers, psychologists, and parents, is suggested to solve these problems.

Another investigator Minzey (1967) studied the environmental satisfaction of students as it related to teacher morale.

Vexilard (1967) proposed the terms autoplasty and alloplasty to describe the adaptation of individuals to his environment. Autoplasty-active is characteristics of the person who adapts easily to different environments and their modification in an active manner. Autoplasty-passive is one who has adapted to his in lieu with difficulty, and the adaptation is restricted to select persons and groups. The alloplasty-active person is rarely satisfied with any situation or milieu as it exists and tries to change it. The alloplasty-passive is dissatisfied with his environment and is rarely able to change it.
Faculty job-satisfactions were assessed in another study by Taylor (1968) relating them to the institutional environments.

Berdie et al. (1970) in their research on 300 students from 6 colleges found that graduating seniors on the average expressed mild satisfaction with the curriculum, instructors, social, life, cultural development, health services, living quarters and the university in general. The variations in perceptions was low on satisfaction with curriculum, instructors and college in general. The results suggested that an average student when graduated from the university is mildly satisfied with his experiences, neither wildly enthusiastic, not tremendously disappointed. A mild relationship was observed between the number of credits in the University and expressed satisfaction with the university. Expressed satisfaction with curriculum on the student's course of study was related to the number of quarters a student attended the university, the total number of credits completed, the Hy, Ma Scores of MMPI, and the family relations, social relations, reality and leadership scales of MCI.

The fewer the Quarters attended and smaller the total number of credits completed the greater the satisfaction.
The student who expressed the most satisfaction with his curriculum at the time he graduated tended to be the one who spent the least amount of time in college, was required to complete the fewer number of credits, was the most emotionally expressive, had the most satisfying relationship with other people, including family and friends and was the most "emotionally mature". The more extroverted a student appeared from his personality scores, the more satisfied he was with his social life on the campus. The better his relationships with other people and his emotional stability, and the more realistic his approach to life, the greater his expressed satisfaction with social life on the campus. The more defensive the person and the less trusting of others, the greater his satisfaction with counselling. Persons with the least satisfactions, family and home adjustments are the ones who expressed greatest satisfaction with counseling.

In total the results suggest that to a large extent satisfaction with the university is associated with certain characteristics of students at the time they enter. The multiple and canonical correlations suggest that, of the variance explaining expressed satisfaction with the university at the time of graduation, approximately 1/3rd can be attributed to personality differences observable at the time of entrance. A student's progress
in the university is related to his expression of satisfaction at the time of graduation. To a large extent satisfaction is being formed or developed while the student progresses through college and frustrations resulting from delay, poor grades or failure or inability to register for or complete courses affect satisfaction. The results of this study suggest that the extent to which a student is satisfied with college depends in part on his own history and personality, in part on the facility with which he obtains his academic objectives, and services which the university makes available to him. Perhaps the most significant determinant is the student; the next significant to the university; and the third most significant, the student's progress.

Waterman and Waterman (1970) attempted to verify those personality variables which related to student satisfaction with college across schools providing different types of educational experiences. Results revealed two dimensions regarding attitude to college: Satisfaction with faculty (academic orientation factor) and satisfaction with administration and major field (traditionalism factor).

Betz, Klingensmith and Menne (1970) assessed the relationship between sex and college satisfaction
and found no relationship.

McClung (1971) found differences in the environmental perceptions in student groups with different satisfaction levels.

Campus climates and Student Unrest

The best utility of the study of campus climates could be seen in the application and study of campus unrest and student activism.

Till about 1966 even in advanced countries like U.S.A. virtually all the articles on campus unrest were journalistic, anecdotal accounts of incidents on a single campus. It is only in the latter part of the last decade with the rise in campus unrest student protest activities has been followed by a wave of research investigators on the subject. Some of the large scale studies that were reported during this period include those by Peterson (1968), Jones (1969), Boruch (1969), Bayer and Astin (1969) who worked on the institution as a unit of analysis and Astin (1968a) and Baird (1969).

Brown (1967) analysed the student stress leading some times to campus conflicts as a result of the wide gap between student expectations and the realities he faces in the campus.

In a study by Peterson (1966) the proportion of Ph.D.'s on the faculty (considered a crude measure of
institutional quality) was related positively and significantly to protest over all-campus issues.

CUES did not predict protest concerning campus problems; it was however, a reasonably good predictor of student protest over off-campus issues in a study by Sasajima and Peterson (1968). In this study, Peterson's protest Scale and Pace's CUES were used to test relationship between students' perception of environmental characteristics and their protests. (Student protest vs. college climate).

Block, Haan and Smith (1969) found that student activism in the campuses has something to do with the childhood socialization of the activists.

Dunlap (1969) presented a bibliography of the studies on student political activism. His bibliography indicates that the overwhelming majority of these studies have focused in the social and psychological characteristics of student activists. The conclusion of a number of the studies on campus unrest (Keninston, 1967; Astin, 1968a, Murley, 1969; Murley, 1969; Boruch, 1969; Scott and El Assal, 1969, Axelord et al., 1969, Schwav, 1969; Taylor, 1969; Jones (1969); Hodgkinson, 1970; Boruch, 1970; Astin and Bayer, 1971; Bayer, 1971 etc.) is that certain institutional characteristics like the faculty, curriculum, administrative policies, peer environments etc. independent of student attributes are related consistently to campus unrest.
Bayer and Astin (1969) found that some institutional characteristics like size, type of control, intellectual level of students etc. are associated with student protest in these institutions.

Bayer, Astin and Boruch (1970), from their nationwide and longitudinal studies of student protest observed that the students now entering higher education are more concerned with effecting social change, more oriented toward activism and are more likely to exhibit characteristics which incline them to protest against the status quo.

In a study of 1075 undergraduate students Vincent (1970) found that students were more concerned with interpersonal problems than academic problems in their campus anxieties. This study reinforced a few more earlier studies on the finding that academic problems are frequently rooted in personal difficulties.

Kobes, (1970) made an extensive study of the student unrest through content analysis of reports, periodicals, newspapers and a questionnaire. He found that student discontent is present world-wide. Student activists in USA were a minority of student body and disruptive student groups were frequently led by those embracing communist ideologies. Demands relate to curriculum defence, race, faculty and influence in governance etc.
Campus maintaining high quality of communication between students, faculty and administration and having student involvement in campus governance and with students who had tendencies to be conservative, commuter or pursuing technical competencies were found to be more free from student disturbances.

In another recent study by Kriegbaum (1971) control function was found to be more crucial than curricular function in leading to student unrest. College-wise differences and sex differences were observed in the students' desire to participate in policy making and activism proneness. In a rather recent and interesting study Bayer (1972) related administrative characteristics of 301 nationally representative colleges and universities to faculty support of campus activism (in attitude and behaviour). The findings indicate that faculty may provide the link between the incidence of campus unrest and institutional characteristics independent of student body attributes.

This review of the studies on institutional impact reveals that investigators have concentrated their efforts on studying the environmental impacts on student satisfaction with the environment, student attrition, achievement, their aspirations about professional future, values, attitudes towards the profession and a few other personality characteristics. While most of these studies
treated these as dependent variables, the environmental variables being the determining variables a few of the researches reviewed under the personality studies maintained an interaction point of view. According to this view the perception of environments is a result of interaction between personality and the environment, the result of which determines the student development rather than the objective environment.

Such theoretical views expressing the importance of person-environment interactional determinants of behaviour have been presented by a number of the well-known psychologists like Lewin (1935)(1936), Murray, (1938), Fromm (1941,1955); Sullivan (1955,1956); Murray and Kluckhohn (1953) and Getzels and Thelen (1960). Gage's (1963) review of the paradigms for research on teaching indicates that several of the researches have incorporated concepts related to this kind of interaction. Stern conducted a series of researches using the need-press or person-environment interaction models some of which were described earlier in this chapter and chapter III. From his researches and a number of other researches Stern (1964) offered the following conclusions with regard to the need-press interactions in the environmental research.

1. Percepts of institutional environments are not a function of the personal characteristics of the participant. Supporting this conclusion Stern
quotes the uniformly low correlations observed between need and press variables in different studies (McFee, 1961; Stern, 1962b and Saunders, undated).

2. Percepts of the environment by experienced participants are consensual.
Supporting this Stern quotes the substantially low variances observed on the press scale than in the need scales indicating that respondents from same institutions are more alike in their perception of the institution than in their perceptions of themselves (Stern 1962a, 1963b).

3. The consensual percept of the environment reflects the objective environment.
Stern draws evidence for this conclusions from the studies showing highly significant difference between institutions on all press factors (Saunders, undated); and the studies showing parallels between profiles of press scores and the types of institutions from which they have been obtained (Stern, 1960a, 1962b, 1963a, 1963b).

Differences observed between different types of units within the same institution (Stern, 1960b, 1962b), but not between types of participants, such as students and faculty. With equal experience as the same institution (Pace and Stern, 1958).
also render support this.

4. The collective needs of selected groups of persons reflect their objective personality characteristics. Evidence here is based on the highly significant differences between student bodies on the need factor scores (Saunders undated), as well as the apparent correspondence between needs score profiles and the type of student bodies from which they were obtained (Stern, 1960a, 1962a, 1963a, 1963b).

These conclusions drawn by Stern in 1964 still seem to hold good in view of the results observed in a number of subsequent studies some of which are reported in chapter III, as well as the results observed in this very study.

Results discussed in chapter III of this study revealed no clearcut associations between the personal background factors of the respondents and their perceptions of the environment. Similar results were observed in a similar study of the organizational climate of 8 industries, by the present investigator (Rao, 1968, 1971). No relationship was found between the personal background factors like age, education, dependents, place of living, professional training, etc. and their perceptions of the organizational climate (Supports conclusions of Stern). There were no consistent diff-
rences in the perceptions of the managers, supervisors and workers and rather the differences in perceptions were found to be a function of the organization than the participant (Supports conclusion 2 and 3 of Stern). Organizations were found to differ significantly in their climates as perceived by their participants (Supports conclusion 2 and 3 of Stern).

Results reported earlier in this study also indicate that the institutions differ significantly in terms of their environments as well as in student characteristics indicating that inter-organizational differences were significant than the intra-organizational differences, rendering support to conclusions 3 and 4 of Stern. In other words perceptions of the environment seem to be more a function of the institution itself than the individuals in the organization conforming to Stern's (1964) conclusions. Feldman and Newcomb's (1969) summary of the studies upto 1968, and the later studies reviewed so far in this section indicate the influence exerted by the environment on student development, thus indirectly rendering support to the contention that organizations differ in their climates and hence have differential impacts on their students or participants. Some of the latest studies reporting less variation in the environmental perceptions of the same organization like
those by Wilson and Dollar (1970), Chrysler (1971), Donato (1970), Underwood (1971), Schnee (1971), Bechard (1971) and a number of other studies presented in chapter III render support to the fact of perceptual variations of environments in students is more a function of the environment rather than the subjective perceptions. If this is accepted, then we may expect that whatever relationship has been observed between the environments and the student variables like achievement, aspiration etc. are more due to the institution than the person, although the personality of the participant does play some role in moderating this relationship going nearer to what Yonge (1968) has argued.

Objectives

With this review in the background this part of the study is focussed on the relationship between the perceived medical college milieu and the student development or professional socialization variables, perceptions of the profession, professional aspirations and concerns, achievement and work-values of the medical college students.

First it is intended to find out whether colleges differing on the different dimensions of their environments have students differing in the professional socialization
variables, and also to find out the directions of such differences, which are likely to reveal the institutional impact, if any. Secondly, the purpose here is also to find out for the total sample of the study the interrelationships between the environmental variables and the professionalization variables. While the analysis of data for the first purpose takes the institution as an independent variable, in the second purpose the individual's scores are used. The method of analysis of the data presented below clarifies the distinction further.

Methodology

Sample

The same sample of students from the 7 medical colleges described in chapter 2 and studied for their perceptions of the environments and professional-socialization in chapters 3 and 4 were used.

Techniques

Data collected for the study of the perceptions of the environments using the Medical College Environments Inventory (reported in chapter III) and the data collected for the study of the professional socialization variables using the Perceptions of the Profession Scale, Professional aspirations and concerns questionnaire, Physicians work-
values questionnaire and examination marks (reported in Chapter IV) were used for the present purpose and data analysis of the study.

**Data Analysis**

The data analysis and procedures used in this study are based on the theoretical context provided by Stern’s studies and the conclusions presented earlier. Mean scores of each college on each MOBI variable was taken as representing objective environment of the college (following the conclusion No.3 of Stern that consensual percept of the environment reflects the objective environment). Similarly mean scores on each of the socialization variables was taken as objective characteristics of that group of students of the particular college (following conclusion No.4 of Stern that the collective needs of selected groups of persons reflect their objective environment). With these college means as representing the objective characteristics of the college (environmental and student), colleges differing extremely on the climate dimensions were compared to see if they also differed on the socialization variables and the direction of such differences. This would only relate the two sets of variables at a consensual or college level and not at the individual level, although we have a good reason to expect similar
relationship when the institution is concealed. In order to find out the relationship between the subjective perceptions of the environment and individualized socialization variables, product moment correlations were computed between the MCEI scale scores of the total sample of students from 7 colleges and the scores on different professionalization indices. High correlations here would reveal relationships of variables in individuals as contrasted to the relationships for institutions.

Presented below are a few hypotheses and which provide the contextual basis for the statistical procedures used in this study. Results to be presented later are based on the following hypotheses as well as to test other related null hypotheses between the environmental variables and the socialization variables.

In chapter 3 it was observed that students of college 6 had lowest perceptions of their college environments as compared to the students of other colleges, with students of college 5 having the best perceptions of their environment. Following the assumption that the mean scores of the students of these colleges represent the objective climate of these institutions (Stern, 1964) colleges 5 and 6 represent two extremes of the institutional climate among the sample studied. College 3 can be put with college 5, as its mean is almost equal to that of college 6, similarly college 1 can be put with college 6.
here keeping in view the pattern of a related study by Gottheil et al. (1968).

a. Students of colleges high on the MCEI scale of academic interest and enthusiasm (College 5) and (2) will tend to have high academic values than the students of colleges low on the academic scale of MCEI (College 6).

b. Students of colleges high on extrinsic motivation for academic achievement (college 5) will tend value independence less than those low on extrinsic motivation (college 6).

Results

Perceptions of the Medical College Environments and the student Perceptions of their Profession

The mean professional perception scores of the students from college 3 (53.49) and 5 (52.56) those that had the highest means on environmental scores were found to be significantly higher than the mean scores of low scoring colleges 6 (48.74) and 1 (49.51). Although these differences between these two sets of colleges are not very high they are significant. This indicates that students coming from colleges with better environments tend to have slightly better attitudes towards their profession than the students of colleges with poor climates.
Table 5.1 gives the product moment correlations obtained between the 10 scores of MCEI and the scores on Professional perceptions Inventory. There seems to be a significant but low magnitude relationship between the different dimensions of the college climates and the attitudes of students towards their profession. Academic interest and enthusiasm of the college members gives the highest of all the correlations indicating that higher the academic interest and enthusiasm reflected by the members on the campus more the likelihood of the student rating his profession positively. A high correlation is also observed with the teacher scholarship and academic atmosphere rendering further support to the relationship between academic climate of the college and the perceptions of the profession. General esteem of the college and the student achievement are the two factors that are not related to the professional perceptions. Hypothesis 1 that 'students of colleges from better environments tend to have more favourable perceptions of their profession than the students of colleges with relatively poor environments' is accepted with the modification that 'such differences in professional perception need not be very high and exceptions are always possible. Perhaps further research is required to study the patterns of such differences.'
Table 5. Coefficients of Correlation between MCEI-factors and attitude towards the medical profession (N = 299)

<table>
<thead>
<tr>
<th>MCEI General Academic Extrinsic Factor</th>
<th>Interest towards Medicine and medical profession</th>
<th>Interest towards Academic Disturbance and atmosphere</th>
<th>Faculty Academic Work and Distract</th>
<th>Student Academic Work and Tolerance for the Tension</th>
<th>School - Student Behav</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.16**</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

** Significant at .01 level
* Significant at .05 level
and a deeper analysis of the factors that influence the professional evaluations of the students.

College climates and Professional aspirations of students of those colleges

Product-moment correlations computed between the college climate scores and the professional aspiration scores are presented in Table 5.2. The table reveals that professional level of aspiration is not related to the college climate as none of the correlations are significant and are almost of the zero order. However, the ladder scores on the professional present as well as the expected future show some significant correlation with some of the environmental dimensions. These low but statistically significant correlations reveal that students seeing the institutions as low on academic interest and enthusiasm, extrinsic motivation and work facilities tend to rate their professional present as well as their expected future to be lower and the students scoring high on these tend to rate their professional present and expected future as higher. In addition general esteem of the college, breadth of interest, faculty discipline and the total environmental scores of the students also show low but significant correlations with the expected future ratings of the students.
<table>
<thead>
<tr>
<th>Coefficients of correlation between MOEI factor scores and perceived present, expected future and aspiration levels.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOEI</td>
</tr>
<tr>
<td>MCEI</td>
</tr>
<tr>
<td>0.46</td>
</tr>
</tbody>
</table>

Table 5.2

**Significant at .05 level**

**Significant at .01 level**
It is quite possible that students rating their colleges high on their climates view their future to be bright because of the esteem they have about the college they are studying and consequently their esteem others (employers or clients) will have for them when they become doctors. However, comparisons of college-wise mean scores of the low and high scoring colleges on college climates do not reveal any clearcut differences in their professional present or future. Surprisingly students of low scoring college 6 (on MCEI) rate their professional present as slightly higher than the students of high scoring colleges 3 and 5. The mean rating score of low scoring college 6 is 5.80 while that of 5 and 3 are 5.74 and 4.77 respectively. College 2 tops the list with a mean of 6.0b but it has only a moderate climate. Hence hypothesis 2 stating that students of colleges with poor climates rate their professional present also as poor in comparison to the students of colleges with better environments is rejected.

College-wise differences also does not seem to exist with regard to their ratings of the expected professional future. Students of colleges with relatively poor as well as better climates tend to rate their expected future in the profession similarly. The mean score of college 6 is 7.52 whereas that of colleges 5 and 3 are 7.52 and 7.81 respectively. The other colleges also have similar means.
Comparisons of the mean aspirations of these colleges also do not reveal any significantly different professional aspiration levels of students from colleges with better or poor environments. The third hypothesis stating that students from colleges with better environments tend to have better expectations of their future and thereby higher level of aspirations is rejected. The possibility of low scoring colleges having high aspirations due to their poor professional present is also ruled out due to their high ratings on professional present.

Observations made in the earlier two chapters revealed that students from different colleges have significantly differing perceptions of their college environments and also tend to rate their professional present and future differently and have varying levels of aspirations. Attempts to relate these reveal no such association between college environments and professional aspirations. Hence, it could be concluded that the professional aspiration levels of the students are influenced by factors other than the college atmosphere, although some dimensions of the college climates have significant relationship with the ratings of the professional present and the expected future.

Researches, in the area of the influence of institutional environments on professional aspirations and career choices have consistently shown that it is during
the college the students determine and set up their career aspirations and the colleges do influence to a great extent the students' career aspirations. (Thistlethwaite, 1960, Astin, 1962, Hutchins, 1962, Davis, 1965, Thistlethwaite, 1968; King et al. (1968, Peterson, 1968, Astin and Panos, 1969, Freisch, 1970 etc.). Although these studies consistently point out to the fact of better career aspirations made by students from reputed institutions, they did not attempt to compare the aspiration levels and rather concentrated on career types and whether they choose a better career type or not. The results of this study point out the fact that although students from different colleges may have varying career choices but will have about the same levels of aspirations. A similar study conducted by Rao (1968) and Chattopadhyay and Rao (1970) on industrial subjects revealed that the organizational climates of industries did not have any significant effect on the aspiration levels of the participants of those organizations. These results are very consistent with the results observed here on medical college students.

The following explanations seem to be relevant to this finding of null relationship between level of aspiration and the institutional environments.
1. Level of aspiration is a personality variable and determined by a number of other structural variables like intelligence (Livesay, 1941, 1942; Bradley, 1943; Carter, 1944; Stabbins, 1950; Berdie, 1953; Kahl, 1953; Porter, 1954; Rajeswari, 1967; etc.), reaction patterns to frustration (Muthayya, 1969), extraversion-introversion (Sinha, 1969), and rigidity (Rabindradas, 1969; 1971) etc.

2. Besides these structural factors, level of aspiration is also influenced by a great number of situational factors (Devi, 1970), specially those operating in the psychological field of the profession. These situational factors influencing the medical students could be thought of as immediate situational factors and the distant situational factors. While professional hopes and professional fears of the future they have expressed (Table 4.8 and 4.9) form their distant situational factors influencing them now, the immediate situational factors may be their aspirations to pass the examinations, impress their teachers, get good marks and perhaps secure a staff position in the junior staff if possible or to think of improving the self-adequacy to face the world as doctor and so on.
College environment is only one (although significant factor) of the immediate situational factors influencing the student aspirations. To this extent the significant correlations observed between a few dimensions of the college climates and the students' ratings of their professional present and future appear meaningful. But as regards the influence they exert on level of aspiration, it may be the gamut of personality and distant future environmental variables that are determiners of the level of professional aspiration than the college atmosphere. This may also be reflective of the maturity of the students to differentiate that once they pass their course the college will have relatively no influence on them because it is not going to be their employer. Rather it is the whole socio-economic and political situation of the country, and their own personal capacity to prosper as good physicians that determines whether they are going to have a bright future or not. But it is not the college which will be a past entity in the distant future and has influence only to the extent it influences their academic achievement which is again rather less because it is the personal worth
and motivation which determines academic achievement more than the college environment which has a great uniform climate for all students.

Perceptions of the college environments and the Professional work-values of Medical College Students

The coefficients of correlation computed between the 10 MCEI scores and the 10 value scores are presented in Table 5.3. The table reveals that the college climates are not related to most of the work-values. Economic values appears to be the only value that has significant negative relationship with all of the MCEI scores, with the total score of MCEI giving the highest of all the correlations. This indicates that students perceiving their college climates more positively tend to value the less financial aspects of their job while students viewing their college environments less positively tend to value financial aspects of job more. Of the rest of the correlations, the scores on social values is significantly related to three dimensions of the climate: general esteem, academic interest and breadth of interest. Social values of students is also positively related with the MCEI total score indicating that students perceiving the college environments positively tend to value their service also more.

Comparisons of the mean work-value scores of high scoring colleges 5 and 3 and the low scoring colleges 6 and 1 reveal no consistant and clearcut differences in the academic, independence, rural, social, security,
the medical students (N=309)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Work-conditions</th>
<th>Co-workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.006</td>
<td>-.020</td>
</tr>
<tr>
<td>Esteem</td>
<td>-.025</td>
<td>-.043</td>
</tr>
<tr>
<td>Academic</td>
<td>.034</td>
<td>.026</td>
</tr>
<tr>
<td>Inter.</td>
<td>.023</td>
<td>.000</td>
</tr>
<tr>
<td>Extr.</td>
<td>-.058</td>
<td>-.009</td>
</tr>
<tr>
<td>Motiv.</td>
<td>.023</td>
<td>.037</td>
</tr>
<tr>
<td>Bread</td>
<td>.112*</td>
<td>.063</td>
</tr>
<tr>
<td>Inter.</td>
<td>.085</td>
<td>.049</td>
</tr>
<tr>
<td>Scholar. and achieve</td>
<td>.028</td>
<td>.037</td>
</tr>
<tr>
<td>Clar. goals</td>
<td>-.015</td>
<td>-.019</td>
</tr>
<tr>
<td>Teach. Disc. and Th.</td>
<td>.042</td>
<td>.026</td>
</tr>
<tr>
<td>Teach. larsh.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aca. and Att.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
status, work conditions and co-workers. However, students from colleges having better climates seem to score high on creative values and low on economic values as compared to the scores of students from colleges with relatively poor climates. Status value differentiated between high scoring colleges 3 and 5 with low scoring college 1 but not with low scoring college 6. All the hypothesis formulated with regard to work-values could be rejected in view of the results.

Hutchins (1966) observed similar null relationships between the medical students' scores on MSEI and their value scores on Allport-Vernon-Lindzey scale of values. Thistlethwaite's (1968) results indicating that training of health professionals increases their pro-social values is relevant to note here in view of the positive relationship observed between a few environmental dimensions and social values. The distinctly standing result of this study is the negative relationships observed between the economic values and environmental scores, and the positive correlations with social values in some of the environmental dimensions.

Academic Achievement and college climates

Only two of MCEI scales seem to be significantly related to the academic achievement of the students as revealed by Table 5.4. Both the breadth of interest and
<table>
<thead>
<tr>
<th>MCEI Factor</th>
<th>General Esteem</th>
<th>Academic Interest</th>
<th>Extraordinary Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Discipline &amp; Tolerance</td>
<td>620°</td>
<td>60°</td>
<td>148°</td>
</tr>
<tr>
<td>Student Discipline</td>
<td>0°</td>
<td>168°</td>
<td>-0°</td>
</tr>
<tr>
<td>Total Score</td>
<td>690°</td>
<td>60°</td>
<td>148°</td>
</tr>
</tbody>
</table>

Table 5.4

Coefficients of correlation between MCEI factors and academic achievement
extrinsic motivation are negatively related to academic achievement. Although the correlation coefficients are significant they are rather low. College-wise differences in achievement scores of colleges with relatively poor climates and better climates also do not reveal any clearcut differences in the academic achievement.

Since studies on academic achievement consistently show that factors like intelligence (Kakkar, 1970, Rao, 1970), need for achievement (Mehta, 1969, 1969a, 1969b, Sinha, 1970, Dhaliwal, 1971), adjustment (Kakkar, 1970), self-concept (Bhatngar, 1969, Shivappa, 1969; Deo and Sharma, 1970), proficiency in English (Chatterji and Mukherji, 1969), reading ability (Srivastava, 1969) etc., are the determiners of academic achievement. Results observed in this study reported earlier also indicated that a great variety of background factors like age, sex, socio-economic status etc. influence the student achievement. In view of these innumerable number of variables influencing the academic achievement as well as due to the poor reliability coefficients of the present day examination systems* it appears that academic achievement is rather affected only to a very small extent by the institutional environments and that too is limited to a few dimensions of the institutional environments.

In the study by Hutchins (1966) the factor of

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*In an interesting study on the reliability of examinations Edwin Harper, provided evidence to the poor reliability in Indian examinations (NIE Journal, 1969, 3(6), 5-12).
Extrinsic motivation showed negative correlations with the medical students' scores on MCAT (medical college admissions test) which may be treated as parallel to achievement. The negative correlations observed in this study between academic achievement and breadth of interest as well as extrinsic motivation may be explained as due to the lack of attention given by students. Where students have to be motivated by external agents and where their interests are varied to a great extent, these are indicative of the possibility that students are busy otherwise and perhaps get less time to study and hence score less. However, the relationship is so low, no definite conclusions are possible. Another parallel study but conducted with industrial environments that is relevant to note here is by Rao (1968, 1971) which attempted to find out the relationship between the perceptions of organizational climate and productivity of employees. A study of 8 industries revealed that the perceptions organizational climate by the employees did not have any relationship with the productivity scores when the pooled sample was considered. However, in two of the 8 organizations, the relationships were highly significant between the two variables indicating that the influence exerted by the organization on the productivity of the employees is not a universal phenomena and is more a function of the organization itself rather than the perceptions of the participants.
Possibly the achievement of medical students is related to their perceptions of environments in certain colleges with certain distinct characteristics which have to be studied (explored) by further studies.

Summary

The results of this part of the study indicated that a great majority of the professional socialization variables are not influenced by the medical college environments. The dimensions of the medical college climates selected for this study seem to have rather little relationship with level of aspiration, professional work-values and academic achievement. However, some dimensions of the subjective perceptions of the climate were found to have some effect on the way the students perceive their prospective profession, their ratings of the professional present, expected future and economic and social values and their academic achievement. Although some of these relationships were low, they are statistically significant. Comparisons of colleges with extreme climates from the sample revealed no additional relationships than those revealed by the correlation coefficients except with regard to the creative values. The results like the results of similar studies conducted in industries and students go to prove that the perceptions of the organizational climate will have rather low or null effects.
on the professional socialization variables when both these sets of variables are measured at a particular point of time. These low order relationships of this study do not rule out the possibility of college impacts on student development as has been observed by a number of studies abroad. Since the research design employed here was not meant to find out how students get socialized to their profession during the process of exposure to their professional schools, and since it was only meant to find out the relationships existing between the institutional variables and student professionalization variables, the conclusions here have to be drawn and interpreted rather cautiously. Both being measured at a particular point of time institutional perceptions tend to reveal rather small relationship of the environment with the socialization variables.