Technical Report

PERCEPTION OF COLLEGE ENVIRONMENT,
WORK-VALUES AND PROFESSIONAL ASPI-
RATIONS OF STUDENTS OF A MEDICAL
COLLEGE

by

T. V. Rao
Sarupriya

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Technical Report

Title of the report Perception of college environment work-values and
professional aspirations of students of a medical college

Name of the Author . T.V.Rao & D.S. Sarupriya ....

Under which area do you like to be classified? ..*Educational Systems*

ABSTRACT (within 250 words) Sponsored by ICSSR,

.... This Study attempted to assess the
perceptions of campus climate by the
first, second and third year medical
students. Differences in the work-value patterns
and Professional aspirations were also
studied. The results revealed that
students of final years view their medical
college environment less favorably than
those in the early years. Such As Students
in the final years had work-values empha-
sizing the economic and status aspects more
than those in the early years and academic
aspects less than those in the early years. Creati-
vity and independence were valued the most.
The results of this study indicate the need for value-
education in the medical college,

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— Nil —

Date .11.10.1975....

Signature of the Author

T. V. Rao

ACKNOWLEDGEMENTS

hardly have any instruments on which he is trained. Medical colleges
prepares them to be good medical students or doctors in a medical
college but not to be doctors in a primary health centre. In order
to examine this hypothesis of the socializing effects of medical
college the present study was undertaken.

Design of the Present Study

Ideally, socializing effects of an institution on its students
can be studied by assessing the member student on several dimensions
like his attitudes to the profession, to the institution, his values
related to the profession, skills, his knowledge, his aspirations
etc. at the point of entry, at the point of his graduation and at
periodic intervals in between. Assessment could be made on the same
dimensions using similar (preferably same) instruments at various
points of time. Changes occuring in the student as he passes through
the initial experiences, mid years, and final years would be indica-
tive of the college effects assuming that a major portion of the
time is spent by him in the institution and there are no significant
external variables working on him except those working through the
institution or institution related agents. In such a design sources
of socialization could also be studied. However, such a longitu-
dinal study is time consuming and involves for a medical college
set up at least 5 to 6 years. An alternative approach of studying
the students in a college in different phases of their studies and
comparing the changes would provide indirect evidence to the socia-
lizing effects of a college. For example, students in the first,
second, third, fourth and fifth years of a medical college could be
compared to see if any differences exist in their value patterns etc.
and such differences could be attributed to college effects -
different effects at different years even! However, such an

indirect evidence is based on the assumption that students in these different years of their study come from the same population and had similar value patterns aspirations, attitudes etc. irrespective of their year of joining the college. While this assumption has certain limitations, it appears to be by and large true with many professional colleges. This is so, specially in view of the fact that professional institutions like the medical college have attracted in the past students from strikingly similar family, socio-economic etc. background irrespective of the geographic differences. In fact in the earlier study by the author the class, family etc. background as well as the career choice patterns of Indian medical students were found to be extremely similar to those of medical students in USA. In view of this and in order to make a quick study, the second design was used in this study.

Sample:

In this cross sectional study 539 MBBS students of different semesters in B.J.Medical College, Ahmedabad were studied. Of these 192 were drawn from the first year MBBS batches (Semesters I & II), 193 from second year MBBS (Semesters I & III) and 154 from the final year MBBS (Semesters I & II). The study attempted to compare the students of these three different years in relation to their work-value patterns, professional aspirations and apprehensions and their perceptions of their campus climate. The differences observed were hypothesized to be attributable to institutional impacts similar to those that would have been revealed through a longitudinal study. The age levels of the respondents, educational level and occupations of the respondents are given in Tables 1,2 and 3 respectively.

The final year students of this study have about the same age group as those final years studied by the author earlier (1972). The parental occupation of this group is also similar to those of the earlier study. Only in relation to education the present sample seem to have parents with relatively less formal education than the earlier sample. In the sample collected from different parts of the country only 3% had no education, 6.4% only primary education, and 37% were post-graduates.

Variables and Methodology

Work-values and the professional aspirations and apprehensions were the socialization variables included in this study. Ten work-values were studied using the Physician's work-value scale developed and standardised by Rao and Pareek (1973). This scale is based on a paired-comparison method of indicating preferences through distribution of 3-points to each paid of work-related statements. The following 10 work-values are assessed by this instrument.

1. Economic: Where the doctor values or gives importance to the financial or money aspects of the job or the work.

2. Security: Where the doctor values or prefers the security or permanency of his job and being protected from uncertain future.

3. Work conditions: Where the doctor values or prefers pleasant work surroundings and good physical facilities.

4. Status: Where the doctor values status and prestige and a need to be respected by others.

5. Humanistic co-workers: Where the doctor values friendship with co-workers, superiors, and subordinates.

6. Independence: Where the doctor values freedom in working the way he likes without interference and without having to depend on others for work.

7. Creativity: Where the doctor values or prefers the work
   in which he can be creative and use his original ideas.

8. Social: Where the doctor values his being useful to
   others and doing service to suffering people and the
   needy.

9. Rural: Where the doctor given a choice between a rural
   area and urban, other things being equal, chooses a rural
   area.

10. Academic: Where the doctor values teaching, research, and
    experimentation, and has academic pursuits.

The scale has been validated and the details of the standardi-
sation of this scale were reported elsewhere (Rao and Pareek,
1973; Rao, 1975). This instrument with some modifications is
currently being used/to measure the value patterns of management
students and students of other professions. This instrument
is reproduced in appendix 1.

Professional aspirations and apprehensions were measured
through a modified version of Cantril and Free's (1963) self-
anchoring technique of measuring hopes and fears and level of
aspiration. This instrument requires the respondent to des-
cribe his dreams, hopes and wishes regarding his professional
future. Taking the dark side of the picture, in an answer
to the next question he also describes his professional fears
and worries. His answers to both these questions provide two
anchoring points to a 10-stepped ladder on which he rates
his professional present, professional future, wanted and
expected (achievable) future in the next five years. He
gives his ratings in terms of the steps of the ladder.

The content analysis of his responses to the first two questions give the nature of his professional aspirations and apprehensions, while the differences in his ladder ratings between the desired future and rated present give his level of aspiration scores. The instrument used in this study is presented in appendix 2. This technique has been used earlier with industrial samples (Chattopadhyay and Rao, 1970; Singh, 1967; Rao, 1968) with medical students (Rao, 1972, 1974), (Ramalingaswamy et al, 1972) and with other college students (Mathur and Rao, 1974). The categories of content analysis developed by the present author in the earlier study of medical students was used for this study with certain modifications. These categories are presented in appendix 3.

Besides these two sets of socialization variables, student perceptions of the medical college environment were also studied. A Medical College Environment Inventory (MCEI) developed and standardized by the author (Rao, 1972) for this purpose was used in this study. This is a 100 item inventory giving scores on 9 different scales dealing with different dimensions of the medical college environment. A brief description of these scales is presented below: A few of these are taken from Hutchins (1962)

1. General Esteem : The first scale under this name consists of 22 items. These items have in common only the fact that they are stating something clearly good or bad about the environment. This dimension measured by this factor is something analogous to Osgood's evaluative dimension.

2. Academic Interest and Enthusiasm: There are 10 items under this scale. The high end of this scale describes an environment where the students are concerned about academic success and the faculty is enthusiastic about subject matters. High value is placed on scholarship by faculty and students alike. The students

participates actively in academically oriented extracurricular activities.

3. **Extrinsic** Motivation for Academic Achievement: There are 8 items in this scale. The high end of this scale describes an environment where there is high academic discipline, and there is faculty pressure on students to achieve. The students are closely supervised by the faculty and are encouraged to work together, apparently for the purpose of guarding them against clinical mistakes.

4. **Breadth of Interest:** There are 7 items in this scale. The high end of this scale describes an environment where the students have broad interests, stipulated in part by the faculty. These interests include, interests in outside subjects like behavioural sciences, social sciences philosophy.

5. Student Scholarship: Originally labelled by Hutchins as 'Intrinsic Motivation for Academic Achievement', this scale has to be renamed as five of the original 9 items had to be dropped and the content of the new group warranted a new name. The high end of this scale describes an environment where the student scholarship is high, there is an opportunity to do individual creative work and there is no wastage of energies with elections, hazing, teasing and joking.

6. Instructional Clarity: Originally labelled as 'clear, concise encapsulated instruction', this scale has 7 items. The new name has been suggested for brevity. The high end of this scale describes an environment where the instruction is well organized, where there is little divergence by the teachers from a high delineated course content, and the courses deal with factual material rather than with generalizations and abstractions leading to

logically conducted examinations.

7. <u>Faculty Discipline and Tolerance</u>: There are 15 items in this scale. A high score on this scale describes an environment where the faculty behave in a highly disciplined way with the students and their tolerance capacity is high in dealing with the helping them. Faculty encourages open-mindedness in students, take individual interest in students, do not show favouritism, do not form impressions without verification, enjoy respect from outsiders, do not play politics and tolerate differences of opinion with students.

8. <u>Teacher Scholarship and Academic Attitude</u>: There are 16 items in this scale. A high score on this scale describes an environment where the teacher scholarship is high as reflected through their academic reputation and classroom behaviour. Teachers are dedicated scholars, hard working, sincere, prepare well for teaching and encourage experimentation in students.

9. <u>Work Facilities and Student Discipline</u>: There are 11 items included in this scale. High end of this scale describes an environment with good work facilities, Library, laboratory and others. Students are disciplined attend classes punctually, helpful to each other and like the college.

10. <u>Organizational Climate</u>: The total score obtainable by adding the scale scores is an index of the total environment. A high end of the scale indicates institutional excellence and lower end poor environment.

The items of this scale are presented in appendix 4. These three
instruments have also been used in an earlier study by the author
on final year medical students. Results of the present study thus
could be compared with those obtained earlier.

Results and Observations

Value Orientations

The mean scores of the students of each of the three batches
on the different work-value dimensions are given in table 4. The
't' ratios for differences between the three groups are presented
in table 5. The mean scores of the final year medical students
obtained in earlier study (Rao, 1972) are also presented in the
last two columns of table 4. These may be used for comparisons.
However, the discussion here is focussed only on the results on this
study. The value patterns of the first two batches appear to be
very similar. In other words the work-values appear to remain rela-
tively unchanged in the two years of their study. The rankings of
the 10 values are more or less the same. A job that gives them an
opportunity to serve others is the most preferred by students in
these beginning and mid-years of their course, followed by a job
where they can be creative and where they can work on their own
independently. Similarly students do not seem to show concern in
these years about good facilities for work, security of job and the
economic benefits. However, by the time they are nearing graduation
some significant shifts seem to be taking place. One such shift
is in the direction of giving less emphasis to the service aspects
of the job. They do not seem to strive any more for a job where
they can be of service to others. Probably they start feeling that
wherever they are, the nature of their profession requires them to
be of use to others. However, such shifts in perception are more

of rationalizations than realities and probably very deceptive.
Another significant difference is in relation to the economic
values. Students seem to start valueing the financial aspects
of their job much more by the time they come to the final years.
They might have started seeing opportunities for earning or may
be that they are aspiring to be rewarded for the hard-work and
other investments they made in their education. Preference to
work in rural areas seem to remain low from the beginning with
tendencies to decrease by the time they reach the final year.
Academic values have considerably gone down by the time they reach
the final stages. They might have realized that it is no use
teaching, there are limited opportunities and must practise on
his own. It is interesting that academic jobs become the least
preferred. Stress for independence seem to be increasing. They
also seem to be in search for secure job a little more than what
they thought of in the beginning years. While they are not so
keen about having good colleagues (probably because they aspire
to work independently) they seem to feel the need for better work
conditions as they are nearing graduation.

These differences are interesting. One has to keep guessing
to some extent about the sources of these change or difference.
Is it their increased awareness of their environment, about oppor-
tunities etc? Is it what is being communicated to them by their
seniors? or teachers? or what else? Whatever may be the source,
it is most likely to be in the institutional milieu or through
the institutional milieu. Probably there are no conscious attempts
being made in the medical college to inculcate these value systems.
These are occuring in an unplanned way and unless these are checked
it is unrealistic to expect our young doctors to give up their

aspirations and start working in rural areas where they earn little, where the opportunities for their professional growth are few and work conditions poor.

Professional Aspirations and Apprehensions

The results of the content analysis of the answers to the questions on professional aspirations and apprehensions are presented in Tables 6 and 7. Percentage of students from each group mentioning their hope or fear are presented. The criteria used for coding into each category are presented in Appendix 3.

The results given in the Tables 6 and 7 are self-explanatory. A great percentage of the students (48%-58%) have the aspiration to serve others although in the final years/(about 10% it is less. difference between the second and the final years). This is/congruence with in the results from the work-value patterns. The next in the order is the desire to specialize or to do post graduation which was mentioned by 28%-34% of the students. The following observations may be made from Table 6.

1. Percentage of students desiring to go abroad has increased by about 3-4% from first MBBS to the final MBBS.

2. The desire to specialize is present is more of the second years as compared to the first and third years.

3. The desire to be known in the field is in more of first and second year students than in the final years.

4. The desire to set up private practice has increased from first year to final year.

5. The desire to teach has declined a little and so is the desire to do research.

6. The status drive has also increased from the early years to the later years. Similar trends could be observed in relation to the desire to have a stable job, money and comforts, working in urban settings, and to work for other doctors and for facilities in the profession.

7. Their achievement orientation in terms of accomplishing something high or remarkable has decreased over the years and so is their desire to work in rural areas.

8. Comparing the final year students of this sample with those of the 1970-71 (Rao, 1972) sample, it appears that the desire to specialise, to be known in the field, and to earn money and comforts are more in the other sample than the present group.

9. As far as the apprehensions are concerned in general apprehensions appear to be increasing from the first year to the later years. However, very few respondents could think of apprehensions as compared to their aspirations.

10. As compared with earlier study, final years of the present study indicate more apprehensions of political interference. Otherwise in general the percentage of students with apprehensions are more in the earlier groups (national groups) than the present one. Part of the reason could be that the students have become more realistic in aspiring for higher things and hence are less careful.

Ladder Ratings

As stated earlier, after answering the open ended questions on professional hopes and fears, the students were required to rate their professional present and future on a 10-stepped ladder. They rated their professional future on two-dimensions, expected and wanted. The mean ratings of the three groups of students are presented in Table 8.

The first three rows in this table present the mean rating scores
the last three rows present the mean scores of the differences bet-
ween expected future and the present, between the wanted future and
the present and between wanted and expected future.

Table 8 reveals that the mean rating was higher as in rela-
tion to the present and future as we move from first year MBBS
to the final year. The differences are more in relation to their
rating of their present, and expected future and not as much in
the wanted future. The differences between the first years' and
the final years' ratings are statistically significant as indi-
cated in Table 9.

The students of all the three groups seem to have similar
levels of aspiration as indicated by the mean level of aspiration
scores (expected future-estimated present, columns 4 in Table 8 and
9). However, the desire to achieve (as different from expecta-
tion) indicated by the difference between the wanted future and
estimated present are much higher with the first years, followed
by the second and the final year in order. Students of all the
years show a general tendency of expecting better future than what
they desire. This is indicated by the negative means of the difference
between desired future and expected future. Such a tendency appears
to be significantly more in the final years than in the first years.
In order to provide more information about the aspiration patterns of
these students percentages of respondents indicating different
aspiration/apprehension patterns were calculated. The same are
presented in Table 10. This table gives details such as the
percentage of students from each group who expect a better future
than their present, who are apprehensive of having a poor future
than the present etc. Such details are presented in terms of the
different magnitude of the aspiration indicated on their ladder
ratings.

There are very few (about 4-5%) in each of the three batches
who estimate their present to be about the same as their expected
future. About 75 to 85% estimate that they would go up on the
ladder in the coming five years. For about 8 to 14% of them the
movement is as high as by seven steps (or more). A few of them
(about 18.5% in first year, 10.8 % in second year and 13.3% in
third year) expect that they are much better off now than what they
expect to be in the next five years.

What is intriguing is that as many as 33.4% of them stated
that they want their future to be worse than their present. It
indicates the magnitude of their apprehension. Probably they
expected their future to be so worse off that they want it to be
a little less worse though in any case the present is better.
Other observations may be made from the table itself by an interest-
ed reader.

Perceptions of the campus environment

As stated earlier the medical college environment inventory
was administered to the students of the three different groups.
The mean scores of the students from each group on different MCEI
scales and 't' ratios for the differences between the means are
presented in Tables 11 and 12. Table 11 gives the means and stand-
ard deviations for the three groups of students. Table 12 gives
the 't' ratios and the significance of the differences between
the means for the three groups. A study of the results given
in this table reveals that three is a general trend in the
students to view the campus climate less favourably as they
move from the first year to the final years of their study. Most
of these 't' ratios are significant indicating that the differences
in the perceptions of these students are considerably high.

For example, there is atleast 10 points difference between the
perceptions of the first year group and third year group in the
scale 'general esteem'. This factor is a general evaluative
factor about the environment. These differences in perceptions
are indicative of the possibility that medical students have a
tendency to see their campus climate as somewhat different in
the negative direction than what they have viewed in the begining.
We find that in general, students appear to perceive the environ-
ment as having less extrinsic motivation for academic achievement
as they move from the early years to the later years. This indi-
cates that the external factors driving the students for achieve-
ment become less towards the end of their studies. The same trend
is reflected when the first year students state that the breadth
of interest is more as compared to the final year group of students.
Could this be due to the fact that by the time the students come
to the final year they have experienced most of what is present
in the environment and they do not get any more variety in the
environment. This might mean that when the students join the
medical college, in their early years they have not yet been
exposed to the various aspects of medicine such as the patients,
laboratory, etc. They have not been exposed to clinical studies
and they have not seen the desection of a human body. They are
eagerly waiting in the beginning years for having such experiences.
They have heard about quite a few of these from their seniors.
Their seniors keep on narrating their experiences. This makes
them probably feel that there are a variety of interests repre-
sented by the medical college where as by the time they come to
the final year they would have experienced all these interests
and they do not find anything more exciting than what they have
experienced. This disappointment is what is probably being

reflected in the low scores of the breadth of interest of the final group of students. A similar trend is apparent in relation to student scholarship. Many of the final year students seem to view the campus to be less student scholarship oriented than what the first year students feel. Somewhat a similar trend is apparent in relation to "clear and concise encapsulated instruction". Students of the beginning classes seem to feel that there is more clear and concise instruction as compared to the final year batches. There a significant decline in the student perceptions of faculty discipline and tolerance. The students of earlier batches seem to perceive the faculty to be more disciplined and tolerant than the students of the final year batches. A similar trend is also observable in relation to teachers scholarship and academic attitudes. Final year students do not seem to have as much of a favourable opinion about the teachers' scholarship and the academic attitude as the first year batches of students have. By and large the students have a high or atleast a better opinion of their campus environment in the early years than in the later years. A similar trend has been observed in an earlier study of the perceptions of campus climate by the management students at the Indian Institute of Management, Ahmedabad (Rao, 1975). In this study, stuents of the first year had somewhat better perceptions of the campus on similar dimensions as above than the second year MBA stydents who were about to leave the campus. What could these differences be due to? Are they because of some kind of a disillusionment on the part of the students as they get increasingly exposed to the campus environment? Or is it due to the genuine changes that are occuring in their environment which are associated somewhat with the courses of their study? These questions need to be investigated. It is very clear from these studies that the student

estimates of their campus culture lowers down as they pass through
the different years of their courses. The question is whether this
change is inevitable? is desirable? or if it is not desirable, is
this avoidable? and if it is avoidable, what kind of changes in the
environment (structural changes from the college side, or functional
changes from any of the campus groups) are desirable? Is it possible
to change the trend of these results in the opposite direction?
That means if, by some method we can increase the student esteem of
their campus culture in positive directions as they pass from the
first year to the final years of graduation it may have desirable
consequences. Such increases in positive attitudes of the students
to their campus culture would have impact in terms of making them
acquire more and more from the campus culture in the later stages
when they are more mature in their profession, then acquiring such
values in the earlier stages where there are relatively less mature.
In other words in order to ensure acquisition of proper value system
from the campus climate and also to ensure such acquisition occuring
at stages of maturity rather than at stages of anxiety and enthu-
siasm might go a long way in changing the students and preparing
them in desirable directions.

The details of the response by the students to each of the
100 items of the medical college environment inventory are present-
ed in appendix 2. An interested reader may go through the various
items and locate some significant perceptual differences in the
various dimensions of college environment. The appendix gives
percentage of students from each group responding to each item
as more often true than not or more false than not. Their responses
to five categories are compressed to three categories for conve-
nience. In general the responses are supportive of the obser-
vations made so far and provide further insights into the issues.

Implications

The present study aimed at comparing the perceptions of
campus climate, work-values and professional aspiration patterns
of medical students of a college. Results of this study indi-
cated that final year students of the medical college had rela-
tively less positive perceptions of their campus climate as com-
pared to the first years. This indicates the possibility that
students are likely to start off with a high esteem of the
college where they study and by the time they come to the final
stages tend to view the campus as rather ordinary and less
positive than/the beginning. This occurred uniformly in all
                    in
the dimensions of campus climate. The differences in their
work-value patterns are also not in the desired directions.
For example final years were less oriented to prefer academic
and service aspects of their job but more oriented to prefer
jobs on the basis of economic and status dimensions. From
the beginning a general tendency is to keep away from rural
jobs. Their aspirations also revealed similar orientations.
While these differences were observed the magnitude of these
differences on these dimensions are not high and even on the
above mentioned dimensions these are not very high. Two types
of inferences could be made: (i) the medical college does not
make much impact on the student in changing his value patterns
and (ii) whatever impact is made is made in directions that
may not be corgruent with the needs of the society. Such
impact seems to be rather informal than formal. Probably
because the medical college curriculum does not have any
structural inputs to influence the value patterns of medical

students and they are left to develop on their own. Partly they bring with them some values when they join the college and since they are left uninfluenced they develop in directions like those observed in this study. By the time they come to final years their values (acquired through informal socialization) strengthen and as the credibility of formal channels comes down any influence attempts become less effective. Hence, medical colleges should start thinking about socializing medical students from the time they join the college specially in relation to their professional values and attitudes. The existing curricula do not cater to this need and it is high time to do something about it. Probably laboratory training in value system should be tried out. Unless conscious efforts are make through social sciences inputs, and other behavioural training programmes. We might end up giving one-sided training to our young doctors.

Appendix 1

PHYSICIAN'S WORK VALUES SCALE
(Test Booklet)

Instructions

     After you complete your studies you are likely to take up a job or work somewhere or other. In this questionnaire you will find pairs of items related to WORK. Read each pair carefully and indicate your preference by writing the appropriate figures in the space provided as explained below:

     Some alternatives may seem equally attractive or unattractive to you. Nevertheless, please attempt to choose between alternatives. For each pair you have <u>three</u> points to distribute in any of the following combinations:

For example, in the pair of items given below:

     If you prefer (a) and do not prefer (b), in your answer sheet write 3 next to (a) and 0 next to (b) against item No.1

(3) (a) Work in which you devellop new ideas.

(0) (b) Work in which you get good pay.

     If you prefer (b) and do not prefer (a), in your answer sheet write:

(0) (a) Work in which you develop new ideas.

(3) (b) Work in which you get good pay.

     If you have slight preference for (a) over (b), write:

(2) (a) Work in which you develop new ideas.

(1) (b) Work in which you get good pay.

     If you have a slight preference for (b) over (a) write:

(1) (a) Work in which you develop new ideas.

(2) (b) Work in which you get good pay.

Even though you see the same item more than once, please proceed through the questionnaire and treat each pair independently. Do not limit any pair and be sure to use only those combinations of numbers as shown above. Remember, first impressions are important. Record your answers in the separate answer sheet provided to you. Please do not write anything on this booklet.

1. (a) Work in which you develop new ideas.
     (b) Work in which you get good pay.

2. (a) Work in which you do not need to depend on others for help.
     (b) Work in a job with a good designation.

3. (a) Work in which you solve others' problems.
     (b) Work which gives you an opportunity to teach others what you know.

4. (a) Work that pays you enough so that you can have all the things you want.
     (b) Work in a job which you are sure to have at all times.

5. (a) Work in which people respect you.
     (b) Work in which you teach and do research.

6. (a) Work which gives you a sense of achievement.
     (b) Work in which you and your fellow workers get along well together.

7. (a) Work in which you have enough freedom and independence.
     (b) Work in which you solve other peoples' problems.

8. (a) Work which you gives you an opportunity to invent new things.
     (b) Work in a job where you do not have the fear of loosing your job.

9. (a) Work in which you do things the way you like.
     (b) Work in which you do research.

10. (a) Work which makes others happy.

    (b) Work in which you have all the physical facilities
    you like.

11. (a) Work which provides you a high financial reward.

    (b) Work in which you teach.

12. (a) Work which gives you a high status.

    (b) Work in which the physical surroundings are good.

13. (a) Work in which you help other people.

    (b) Work in a regular job.

14. (a) Work in a job with a high salary.

    (b) Work in a job of which you are respected by people.

15. (a) Work in which you will be an influential person.

    (b) Work where nothing can threaten your job.

16. (a) Work in which you do unique things.

    (b) Work in which you do not need to depend on others
    for help.

17. (a) Work in which you do things almost entirely by yourself.

    (b) Work in which you do not fear that you will loose your
    job.

18. (a) Work which provides you an adequate income.

    (b) Work in pleasant surroundings.

19. (a) Work in which you solve the health problems of others.

    (b) Work in which you have good associates to work with.

20. (a) Work in which you are respected by many.

    (b) Work in which your fellow workers are the people you
    like.

21. (a) Work in which you invent new things and find out now
    ways of doing things.

    (b) Work where the surroundings are pleasant.

22. (a) Work in which you have the freedom to do things the
    way you want.

    (b) Work which pays you enough money.

23. (a) Work in which you will have the satisfaction of helping a number of people.
    (b) Work where there is a good opportunity for salary increases.

24. (a) Work in which you will have good company of your colleagues.
    (b) Work in which you save enough money.

25. (a) Work which makes you important.
    (b) Work in a village where you are treated as a big man.

26. (a) Work that requires the use of yourgreat potential.
    (b) Work in which you a influential position.

27. (a) Work in which you do things independently.
    (b) Work in which your fellow workers are your friends.

28. (a) Work in which others have the benefit of your services.
    (b) Work in a village where you can serve a number of people.

29. (a) Work which gives you adequately high income.
    (b) Work in a village where you can earn lot of money.

30. (a) Work in which you can be creative and use your brains.
    (b) Work in which you have an opportunity to teach.

31. (a) Work in which you have the freedom to do things the way you want to.
    (b) Work in which physical surroundings are likeable.

32. (a) Work in which you do service to others.
    (b) Work in a job that gives you good status.

33. (a) Work in a job which you are sure to have at all times.
    (b) Work where superiors and subordinates get along well with each other.

34. (a) Work where you teach and do research.
    (b) Work where you have enough facilities.

35. (a) Work that gives you the feeling of a job well done.
    (b) Work in which you satisfy a number of patients.

36. (a) Work in which you do things independently.
    (b) Work in a village where you are the master of your own.
37. (a) Work where your job is secure.
    (b) Work in which you have adequate physical facilities.
38. (a) Work where people with whom you work are good to you.
    (b) Work in a village you have good team of friends to work with.
39. (a) Work where you can be a good teacher and researcher.
    (b) Work in a village where you can do lot of research and contribute to theory of medicine.
40. (a) Work which you feel is challenging.
    (b) Work in a village where you can do remarkable things.
41. (a) Work which provides you a regular job.
    (b) Work in which you can be an academician.
42. (a) Work in which you get along well with others without any problems.
    (b) Work in which you can explore the theory of medical sciences further.
43. (a) Work in which you will not be forced to search for a new job.
    (b) Work in a village where you can be sure of your job any time.
44. (a) Work in which your superiors and subordinates are people you like.
    (b) Work in which you have all the facilities you like.
45. (a) Work where the work facilities are good.
    (b) Work in a village which has all good work facilities.

Appendix 2

PROFESSIONAL HOPES AND FEARS QUESTIONNAIRE

1. All of us want to achieve certain things in our professional
    life. When you think of what is important in your professional
    life, what are the things you want to achieve? In other words,
    if you imagine your professional future as that you have achieved
    everything you wanted, what things would you be having then which
    make you happy? (What would your professional life have to be
    like for you to be completely happy? What dreams and desires
    do you have about your professional future.) Take your own time
    in answering. Such things are not easy to answer.

    Please write your answer here.

2. Now, taking the other side of the picture, what are your fears
    and worries about your professional future? In other words, if
    you image your professional future as that the worst possible
    has happened, what would your life look like then?

    Please think and write your answer here.

Here is a picture of a ladder. Suppose we say that the top
of the ladder represents the best possible professional life
for you and the bottom represents the worst possible professional
life for you.

10
9
8
7
6
5
4
3
2
1
0

3. Where on the ladder do you feel you
   personally stand at the present time
   in your profession?

   Step Number:_____

4. Where do you want to be on the ladder
   five years from now professionally?

   Step Number:_____

5. Where do you think you will be on the
   ladder five years from now if the
   general life situation in the country
   and the world continues to be the same
   as you are experiencing now.

   Step Number:_____

Your name: College:

Sex: Father's education:

Age: Father's occupation:

Class:

Appendix 3

Coding criteria for the different categories of professional aspirations and apprehensions.

Aspirations

1. **To go to USA or abroad**

   All the responses indicating that the subject is interested in visiting other countries after his graduation or post graduation.

2. **To specialize or to do P.G.**

   All responses indicating that the subject would be continuing his studies after MBBS by pursuing post-graduate courses or any other diploma courses anywhere. Responses stating that the subject is interested in pursuing his studies abroad are coded in both categories 1 and 2.

3. **To be known in the field**

   Responses indicating that the subject would be maintaining professional standards, becoming a successful or popular doctor and will make a name in the field etc. are coded under this.

4. **To set up one's own practice**

   Responses indicating that the subject would be opening a polyclinic private clinic or putting up any other form of private practice are coded here.

5. **To teach**

   Responses indicating that the subject would be engaged in a teaching job are coded here.

6. **To do research**

   Responses indicating that the subject would be engaged in research are coded here. The term 'research' or its equivalents should be used by the subject in his responses to be coded here.

7. <u>To be respected by people</u>

Responses indicating that the subject would be enjoying respect
from people are coded ere. The terms 'respect', 'regard' or their
equivalents should be used. Being demanded by people or having
many patients etc. are coded in category 3 and not here.

8. <u>To do service to others</u>

Responses indicating that the subject would be engaged in serving
others, helping the poor, curing the sick and comforting them, help-
ing others etc. are coded here. All service oriented statements are
coded here. A concept for the happiness of others is also coded here.

9. <u>To earn money and have comforts.</u>

All responses indicating that the respondent will be earning money,
have all physical facilities and comforts like car, house or a bun-
galow are coded here. Mentioning any physical comforts or luxuries
as future hopes are coded here. Similarly statements indicating
that the respondent would be earning money are coded here. (Re-
sponses indicating that the subject would be earning money suffi-
cient to maintaining himself are not coded in this category of
economic aspirations. Such responses were found often to occur
in combination with statements of categories 8 and 15)

10. <u>To have a good or stable job</u>

All responses indicating that the respondent would be having a
good job, or a stable job, or would be employed etc. are coded here.
It is sufficient if he mentions that he would be employed somewhere
in order to be coded in this category. All related wishes fall in
this category.

11. <u>To be stable in the profession</u>

This category differs from category 10 in its breadth of cover-
age. While stability of job is coded in category 10, all expli-
cit statements indicating that the respondent will continue to
be in the profession (not having to leave it), would be coded
in this category. Use of the word 'job' shifts this to cate-
gory 10.

12. <u>To do independent work</u>

Responses indicating that the subject would be engaged in independent work are coded here. An explicit statement with the meaning that subject would be working independently or would not have to depend on others or will be away from interferences of any kind are coded. Putting up private practice will not be coded in this category unless statements like 'without having to depend on any one','without any interference' etc. are used. The statement should indicate that the respondent values independence.

13. <u>To be working with good colleagues</u>

Responses indicating that the subject would be working in the company of good colleagues (who are helpful to him, or who are well known in the field, or who form a good team with him etc.) are coded here.

14. <u>To work in an urban area</u>

Explicit statement by the subject that he wouldbe working in a city, town, or any urban area are coded here.

15. <u>To work in a rural area</u>

Responses indicating that the subject would be working in a rural area are coded here.

16. <u>Achievement concerns</u>

Responses indicating that the respondent wouldbe achieving some thing great or difficult like discovering an effective medicine, becoming a famous surgeon etc. are coded here. Mere mention of a hope to become a good doctor is not coded here. The subject should reflect a drive to achive some thing great like he does in <u>n</u> achievement stories.

17. <u>To leave college or pass MBBS</u>

Responses indicating that the subject aspires to pass MBBS or would have left the college after passing, would get the MBBS degree etc. are coded here.

18. <u>Philosophical aspirations</u>

To attain salvation etc. philosophical aspirations, inclu-
ding religious, faith, social leadership, reforming society,
etc. related aspirations are coded here.

19. <u>To reduce politics in medical education</u>

To see the political problems in medical education reduced
like ensuring that no new medical colleges are started, no
seats are added, standards increased etc. are coded here.

20. <u>Working for providing facilities to other doctors</u>

A general concern about other doctors and providing faci-
lities for them are coded here. These may include a con-
cern for more facilities for doctors, providing good ser-
vice conditions, improved facilities etc.

21. <u>To have competent doctors in the profession</u>

A general aspiration about the profession indicating that
the respondent is interested in seeing that competent doctors
are produced is scored here.

Fears

1. <u>Can not go to USA or abroad</u>

All the responses indicating the fear or apprehension in
the subject that he will not be able to go abroad for what-
ever reason.

2. <u>Can not specialize</u>

Fears expressed by the subject that he may not be able to
pursue his further studies, whatever may be the reason.
Not being able to pursue studies abroad is coded in both
categories 1 and 2.

3. <u>May not be popular in the field</u>

Responses indicating that the subject may not be able to
make a name in the field or may not become popular etc.
are coded here.

4. <u>May not be able to put up practice</u>

    Responses indicating that the subject may not be able to put
    up private practice of any form, irrespective of the reasons
    are coded here.

5. <u>May not be teaching</u>

    Fears expressed by the respondent that he will not be able to
    secure a teaching position or will not be able to teach are
    coded here.

6. <u>May not be able to do research</u>

    Explicit statements of the subject that he may not be getting
    an opportunity to do research, or may not be able to do research
    (for whatever reason) are coded here.

7. <u>May not be enjoying respect from people</u>

    Apprehensions expressed by the subject that he may not be
    enjoying the respect of people are coded here. Enjoying
    respect is differentiated from popularity and popularity
    related apprehensions are coded in category 3.

8. <u>May not be able to serve others</u>

    Fears expressed by the respondent that he may not be in a
    position to serve others or be helpful to others etc. are
    coded here. Not being able to cure the sick are not coded
    here as it is not a service oriented apprehension. The
    statement should reflect service oriented theme.

9. <u>May not be able to earn money and have comforts</u>

    Apprehensions indicating that the subject will not be getting
    enough money, or may not be in a position to have material
    comforts etc. are coded here. Any kind of statement express-
    ing the money or comforts related apprehension is coded here.

10. <u>May not have a good or stable job</u>

    Apprehensions indicating that he may not be employed any-
    where, may not have a stable job or a job of his liking etc.
    are coded here. Concern about job should be reflected.

11. **May have to leave the profession**

Apprehensions indicating that the subject may have to leave the medical profession or change to another profession are coded here.

12. **May not be working independently or have interference in work**

Responses indicating that the subject will be having interferences in work, may have to depend on others, or may not be doing independent work etc. are coded here. Response should reflect apprehension of interference in or barriers to independence.

13. **May not have good colleagues**

Apprehensions indicating that he may not be having good colleagues or may have problems with the colleagues etc. are coded here.

14. **May not be working in a city**

Fear expressed by the respondent that he may not be working in a city/town/or an urban area. To work in a rural area if expressed as an apprehension is coded here.

15. **May not be working in a rural area**

Fears expressed as that the subject may not be able to work in a rural area are coded here irrespective of the reasons.

16. **May fail in profession/poor professional future**

Statements indicating that the subject may be a failure in the profession are coded here. If a mention is made to leave the profession, shift to category 11. If he merely states that he may not come out to be a good doctor or popular doctor, shift to category 3. Use of the words 'failure' and 'not successful' get the responses coded in this category.

17. **Poor professional future**

General statements by the subject that he will have poor pro-
fessional future are coded here.

18. **May fail MBBS**

Fear of failure in examinations, may not get the degree etc.
are coded here.

19. **Curreption in the environment**

All statements describing the concern about corruption in society
not being able to do anything in such a corrupt society, not
achieving salvation etc. general statements of philosophy are
all coded here.

20. **Political interference**

Responses expressing the fear of interference of polititicians
in professional work, employment, academic work etc. are coded
in this category.

21. **Poor work-condition**

Not having good work-conditions for the profession and other
doctors, facilities etc. are coded here. If such a concern is
the for the respondent himself shift to category 9.

22. **Other incompetent doctors**

Apprehensions expressed about the other incompetent doctors
or quacks interfering in the professional work are coded here.

23. **Fear of lack of empathy and understanding**

All fears indicating that the respondent may not be able to
understand his patient, his circumstances, may find it diffi-
cult to treat him etc. are coded here.

24. **Financial problems to become good doctors**

All responses indicating that the respondent is concerned
that he may not be able to get good education and become
a competent doctor because he may not be able to afford
it are scored here.

25. <u>Do not have faith in medicine</u>

Code here if the respondent states that he does not have
faith in medicine.

26. <u>Self confidence and mastery of subject</u>

If the subject indicates that he has no fear and confident
of himself by explicitly stating this, it is coded here.

Appenxid 4

Percentages of students falling uuder different
response categories of MCEI items

Item No.	Item content	Group	Percentage of statments responding to this item as		
			true	in bet-ween	false
1	2	3	4	5	6
1	The faculty here seems more interested in scientific aspects of a case than in the welfare of the patient.	I	37.5	33.3	30.2
		II	44.3	34.5	21.14
		III	47.4	22.7	29.87
2	Very few teachers try to give the student the kind of practical training he will need for the practice of medicine	I	56.77	16.65	26.58
		II	68.04	10.31	21.65
		III	85.72	8.44	5.84
3	The academic atmosphere here is not very helpful to the student who wants to get down to the business of practicing mediche	I	32.81	24.48	42.71
		II	44.84	20.11	35.05
		III	63.64	18.83	17.53
4	Departmental heads seem unaware that a well-rounded program of study includes courses in the behavioural sciences like psychology	I	37.50	23.44	39.07
		II	37.63	28.87	33.50
		III	47.40	19.53	35.06
5	Many of the faculty seem bored with their teaching assighment	I	29.69	26.56	43.75
		II	45.87	22.17	31.96
		III	68.19	14.93	16.88

1	2	3	4	5	6
6	In many courses, the broad social and historical setting of the material is not discussed.	I	47.39	19.79	32.81
		II	58.76	16.50	24.74
		III	62.34	19.48	18.10
7	The faculty rarely encourages a student to read in areas of the students's own interest	I	46.36	16.64	36.98
		II	59.28	17.01	23.72
		III	68.83	11.69	19.48
8	Very little of the instruction here will be useful to students who go into practice	I	24.68	15.22	60.10
		II	41.44	16.10	42.46
		III	54.54	14.94	30.52
9	It is hard to find any students in the library on weekends	I	14.78	7.41	77.80
		II	21.02	12.09	66.89
		III	24.93	10.52	64.55
10	The problem of comprehensive patient care is given little attention here by the students	I	28.00	29.41	42.59
		II	41.95	28.99	29.06
		III	50.26	15.06	34.68
11	Students are concerned only with the physical and not the psychological and social aspects of medicine	I	33.02	13.66	53.32
		II	31.65	18.15	50.20
		III	39.62	16.23	44.15
12	Most students are concerned with diagnosing the rare and exotic diseases rather than eliciting factual data relevant to the diagnosis and treatment of the patient	I	29.40	37.40	33.20
		II	40.60	27.60	31.80
		III	37.66	20.13	42.21
13	Courses which deal with psychological problems or personal values are resented	I	36.20	29.30	34.60
		II	37.90	33.70	28.40
		III	47.60	22.80	19.60

1	2	3	4	5	6
14	Students who work hard for grades are likely to be regarded as odd	I	46.56	19.38	34.06
		II	66.10	13.00	20.90
		III	60.65	10.52	28.83
15	Many students here are content just to get by	I	38.30	35.64	26.06
		II	48.91	27.17	23.92
		III	53.25	20.13	26.62
16	Faculty members frequently go out of their way to establish friendly relations with students	I	47.49	19.39	32.02
		II	41.26	20.63	38.11
		III	29.88	18.18	51.94
17	Teachers really get students interested in their subjects	I	50.00	27.08	22.92
		II	35.25	27.44	37.31
		III	31.17	22.08	46.75
18	Teachers are always available to help the student with the planning of his medical career	I	50.72	16.27	33.01
		II	32.99	16.49	50.51
		III	29.12	9.22	60.65
19	The faculty here stresses the study of the patient as a whole person	I	44.20	35.26	20.46
		II	41.45	25.91	32.64
		III	35.95	26.14	37.91
20	The college authorities are keen to take really personal, considerate and extensive care of the students by providing facilities like student health care, student counselling, tutorials etc.	I	48.43	12.11	39.47
		II	37.50	13.02	49.48
		III	24.50	9.27	66.22
21	Most students here have strong intellectual commitments.	I	46.84	33.16	20.00
		II	53.65	27.61	19.27
		III	62.33	20.78	16.89

1	2	3	4	5	6
22	Students who are not ordinarily neat will take extra pains to have a professional bearing when in the presense of patients	I	42.02	32.98	24.90
		II	46.35	35.42	18.23
		III	42.38	35.10	22.52
23	Students compete actively among themselves	I	71.21	17.80	10.99
		II	69.07	17.01	13.92
		III	79.21	12.34	8.45
24	The competition for first classes and distinctions is very rough	I	41.36	17.28	41.36
		II	55.67	10.82	33.50
		III	53.59	15.69	20.72
25	Faculty members typically exhibit great interest in and enthusiasm for their special fields of interest	I	44.21	34.74	21.05
		II	43.98	26.18	29.84
		III	38.31	30.52	31.17
26	House staff and registrars participate enthusiastically in clinical conferences	I	36.31	36.84	26.85
		II	45.36	30.93	23.71
		III	46.05	25.00	28.95
27	Faculty members here really push the students to work to the maximum of their capacities.	I	67.21	14.28	18.51
		II	41.58	23.69	34.73
		III	27.81	17.22	54.96
28	Student competition facilitates the acquisition of knowledge here	I	54.50	28.04	17.46
		II	51.56	23.96	24.48
		III	49.34	21.05	19.60
29	Most of the courses stress basic science or scholarship and really probe into the fundamentals of their subjects	I	44.50	27.73	28.27
		II	48.70	22.28	29.01
		III	48.05	20.78	31.17
30	Students attendance at specially organized extracurricular programs related to medicine is good.	I	64.21	20.00	15.79
		II	52.85	23.83	23.31
		III	40.26	29.22	30.52

1	2	3	4	5	6
31	Students with superior academic ability are admired by other students	I	58.85	20.82	20.33
		II	57.81	20.31	21.87
		III	55.20	19.48	25.33
32	Students discuss well on the controversial issues in the subject whenever they come up	I	60.21	23.04	16.75
		II	58.55	18.13	23.32
		III	55.26	22.37	22.37
33	The faculty is very dissatisfied with students who are content just to pass the examination.	I	38.02	29.69	32.29
		II	45.59	20.72	33.68
		III	42.86	16.23	40.91
34	The faculty here lays great stress on moral behaviour	I	64.06	19.79	16.15
		II	51.81	23.31	24.87
		III	42.85	16.88	40.26
35	In many courses there are projects and assignments which encourage students to work in small groups	I	52.63	16.31	31.05
		II	40.32	22.51	37.17
		III	30.06	15.69	54.25
36	Patient responsibility on the part of the student is closely supervised to guard against mistakes	I	49.99	36.41	13.58
		II	41.97	27.98	30.05
		III	35.33	27.33	37.34
37	The students try to help each other	I	63.54	19.79	16.66
		II	61.65	23.31	15.02
		III	50.00	21.05	28.95
38	The clinical faculty generally expects the student to know a great deal about his patients.	I	69.68	18.62	11.70
		II	72.01	16.06	11.92
		III	59.48	15.68	24.83

1	2	3	4	5	6
39	Personal hostilities are usually concealed or resolved as quickly as possible	I	36.70	38.83	24.46
		II	32.29	33.85	33.84
		III	38.56	25.49	35.94
40	The student government is active and outspoken	I	37.18	21.47	41.37
		II	33.23	23.83	43.01
		III	25.97	18.18	55.84
41	Very few of the professors here try to get students interested in humanities or in the broad social context of medicine	I	42.93	25.13	37.94
		II	61.26	14.14	24.60
		III	66.23	12.99	20.78
42	Students are concerned only with the work at hand and have few interests beyond this area	I	43.99	21.99	34.02
		II	53.36	19.17	27.46
		III	60.39	20.13	19.48
43	A lecture by an outstanding hebavioural scientists would be poorly attended by the students here	I	28.95	17.37	53.68
		II	33.33	20.31	46.36
		III	38.96	17.53	43.51
44	Faculty members rarely have parties (tea and dinner) with students	I	72.77	5.24	21.99
		II	69.80	5.21	24.99
		III	68.18	11.69	20.13
45	There is very little group spirit here in the students	I	35.60	21.47	42.93
		II	42.93	17.28	39.79
		III	53.25	15.58	31.17
46	The environment of the medical college stimulates interest in things other than pure medicine	I	39.51	25.35	34.84
		II	40.94	18.13	40.93
		III	50.32	22.88	26.80
47	There is a lot of interest in the philosophy and methods of science	I	39.58	23.44	36.98
		II	48.71	22.28	29.01
		III	54.97	12.58	32.35

1	2	3	4	5	6
48	Student elections generate a lot of intense compaining and strong feeling	I	49.48	24.48	26.04
		II	58.76	19.59	21.65
		III	50.00	18.42	31.58
49	Hazing, teasing and practical joking are fairly common	I	53.13	21.35	25.52
		II	53.86	17.62	28.50
		III	57.14	20.13	22.73
50	This medical college is outstanding for the emphasis it places on student scholarship and research	I	40.84	20.13	23.56
		II	43.82	25.26	30.92
		III	34.63	21.57	44.80
51	There are many facilities and opportunities for creative activity by students	I	42.41	24.60	32.99
		II	37.82	22.28	39.90
		II	24.51	25.16	50.33
52	It is hard to prepare for examinations because students seldom know what will be expected of them	I	52.35	19.90	27.75
		II	55.20	14.06	30.74
		III	55.63	15.23	29.14
53	Many courses stress the speculative or abstract rather than the concrete and tangible	I	27.17	45.11	27.72
		II	37.89	35.79	26.32
		III	38.01	20.01	42.02
54	Faculty members frequently discuss topics which have no apparent relation to the total course	I	41.58	22.63	35.79
		II	37.50	23.44	39.06
		III	37.75	20.53	41.72
55	Assignments are usually clear and specific, making it easy for students to plan their studies effectively	I	52.41	21.93	25.66
		II	40.62	26.56	32.82
		III	37.33	24.00	38.67
56	The goals and purposes of the work are clearly defined for the student	I	59.33	23.53	17.14
		II	55.95	20.21	23.84
		III	41.06	19.87	19.07

1	2	3	4	5	6
57	Faculty members are very orient ed toward practical application in their approach	I	45.99	32.62	21.39
		II	55.67	19.59	24.74
		III	35.29	22.88	41.83
58	Examinations here generally pro- vide a good opportunity for the student to display his knoeledge and understanding of the course material	I	62.96	16.40	20.64
		II	43.00	19.63	37.31
		III	44.36	15.89	39.74
59	Teachers encourage students to express their likes and dislikes	I	43.46	17.80	38.74
		II	33.51	23.71	42.78
		III	22.67	16.67	60.66
60	Teachers take individual interest in students	I	27.23	24.09	48.78
		II	21.88	22.92	55.20
		III	19.43	12.75	71.82
61	Teachers encourage open- mindedness in students	I	38.23	27.74	37.03
		II	39.97	22.30	38.33
		III	26.17	17.46	56.37
62	There is no favouritism shown by the teachers	I	39.47	23.69	36.84
		II	30.73	24.48	44.79
		III	36.91	25.50	37.59
63	Teachers enjoy good respect from outsiders	I	55.50	24.61	19.89
		II	57.29	21.36	21.35
		III	61.44	21.57	16.99
64	Teachers do not take part in college politics	I	45.03	20.41	34.56
		II	43.00	19.18	37.82
		III	35.33	17.33	47.34
65	Teachers patiently listen to students' problems	I	47.89	23.69	28.42
		II	32.48	23.71	43.81
		III	30.46	16.57	52.97

1	2	3	4	5	6
66	Teachers acknowledge the contribution by the students	I	41.05	37.37	21.58
		II	31.41	40.31	28.28
		III	33.33	34.67	32.00
67	Teachers tolderate and encourage the difference of opinion between them and the students	I	30.68	29.64	39.68
		II	29.69	25.01	45.30
		III	25.33	24.67	50.00
68	Teachers do not express their likes and dislikes about others openly	I	55.03	22.75	22.22
		II	60.10	15.55	24.35
		III	53.70	21.47	24.83
69	Teachers are highly disciplined	I	67.77	19.58	22.75
		II	50.52	23.40	27.08
		III	43.70	24.51	31.79
70	Teachers encourage competition among students	I	46.57	26.45	26.98
		II	38.34	20.22	41.44
		III	35.57	23.49	40.94
71	Teachers form impression about students without verification	I	35.60	35.60	28.80
		II	47.90	26.31	25.79
		III	49.35	25.00	25.65
72	Teachers are mostly concerned with their own advancement	I	36.13	29.32	34.55
		II	60.74	20.41	18.85
		III	59.21	21.71	19.08
73	There is group politics among the teachers	I	33.69	24.07	42.24
		II	53.68	21.06	25.26
		III	62.91	15.91	21.18
74	Teachers react to questions in the class as question meant for criticising them	I	35.51	40.84	25.65
		II	43.16	26.84	30.00
		III	45.27	28.38	26.35

1	2	3	4	5	6
75	Teachers take trouble in preparing the students to learn than to pass through examinations	I	51.05	23.16	25.79
		II	39.58	27.61	32.81
		III	38.00	21.33	40.67
76	Teachers are dedicated scholars in the field	I	46.03	31.22	22.75
		II	42.63	31.58	25.79
		III	47.30	27.70	25.00
77	Teachers are hard working	I	41.88	25.13	32.99
		II	47.31	29.02	33.67
		III	30.46	27.16	42.38
78	Teachers are busy most of the time	I	37.70	30.89	31.41
		II	44.04	25.39	30.57
		III	42.77	21.05	36.18
79	Teachers are highly competent in teaching	I	39.79	30.37	29.84
		II	35.41	29.72	34.87
		III	32.00	24.00	44.00
80	Teachers have a sympathetic outlook towards the patients	I	44.44	30.69	24.87
		II	52.88	22.51	24.61
		III	26.62	32.08	51.30
81	Teachers conduct the classes regularly	I	68.25	15.35	16.40
		II	43.01	22.80	34.19
		III	26.62	22.08	51.30
82	Teachers emphasize specialization	I	38.84	43.61	17.55
		II	44.51	35.60	19.89
		III	38.92	32.88	28.20
83	Teachers given enough attention to the teaching of preventive aspects of medicine	I	43.92	39.15	16.93
		II	48.18	30.07	21.75
		III	39.99	30.67	29.34

1	2	3	4	5	6
84	Teachers prepare well before they teach	I	75.39	12.05	12.56
		II	58.12	21.46	20.42
		III	39.21	23.54	37.25
85	Teachers given sufficient number of illustrations while teaching	I	61.05	26.32	12.63
		II	45.08	31.61	23.31
		III	30.26	24.35	45.39
86	Teachers stress the importance of practical experiences	I	63.16	22.10	14.74
		II	56.08	27.52	16.40
		III	54.36	25.51	20.13
87	Teachers demonstrate the relevancy of the subject to the subjects to the treatment of patients whenever possible	I	51.05	32.63	16.32
		II	57.28	21.89	20.83
		III	52.66	24.00	23.34
88	Teachers encourage students to experiment with new ideas	I	47.12	26.18	26.70
		II	37.30	28.49	34.21
		III	24.83	25.51	49.66
89	Teachers keep the students informed of the up-to-date knowledge of the subjects	I	43.45	26.18	30.37
		II	39.37	22.81	37.82
		III	36.18	24.35	39.47
90	Students work mainly to impress teachers	I	40.53	23.67	35.79
		II	39.58	23.45	36.97
		III	30.06	21.58	48.36
91	In this college there is enough equipment to work in various areas	I	56.53	25.79	23.68
		II	41.89	23.04	35.07
92	There are enough books in the library to read on the subjects taught here	I	67.37	13.68	22.95
		II	66.31	15.27	18.42
		III	70.39	10.53	19.08

1	2	3	4	5	6
93	Students do not absent them-selves usually from the classes	I	64.56	17.46	17.98
		II	54.39	30.07	15.54
		III	37.50	30.26	32.24
94	Students are helpful to each other	I	54.21	28.59	16.84
		II	49.52	27.09	22.39
		III	56.38	17.77	25.65
95	Students behave in a highly disciplined way in the class	I	35.79	30.52	33.69
		II	43.45	27.75	28.80
		III	37.91	27.45	34.64
96	Punctuality is maintained by students	I	48.16	29.32	22.52
		II	52.58	32.99	14.43
		III	41.06	21.86	37.08
97	The college is generally liked by all students	I	67.55	18.85	13.60
		II	54.40	28.87	20.73
		III	47.37	21.71	30.92
98	College politics do not influ-ence the student development in this college	I	47.65	21.98	30.47
		II	43.52	21.76	34.72
		III	51.65	18.55	29.80
99	Many students like to do their post-graduation in this college or work here	I	68.58	18.33	13.09
		II	69.95	12.96	17.09
		III	61.18	21.69	17.16
100	The college authorities provide facilities for students who take active interest in extra-curri-cular activities	I	54.45	25.13	20.42
		II	47.16	19.17	33.67
		III	41.45	26.98	31.57

Table - 1

AGE DISTRIBUTION OF THE RESPONDENTS FROM THE THREE YEARS OF MBBS

Group	Percentage of students in the age group (in years)										Total No. responding
	17	18	19	20	21	22	23	24	25	26 and above	
First year	2.8	25.6	26.7	25.0	10.8	7.4	1.1	0.6	-	-	176
Second year	-	2.3	11.6	35.8	26.6	14.5	7.5	1.2	0.6	-	173
Third year (final)	-	-	-	2.1	20.8	40.3	24.3	7.6	3.5	1.4	144
Total	1.0	10.0	12.3	22.8	19.5	19.7	10.2	2.9	1.2	0.4	493

Table - 2

EDUCATION LEVEL OF RESPONDENTS'
FATHERS

(n=437)

Percentage of respondents reporting their fathers' education as					
No education	Upto primary school	Upto high school	Upto Gra- duate	Post Gra- duate (MA/MSc)	Ph.D
9.4	26.5	24.2	30.0	7.4	2.5

Table - 3

OCCUPATIONS OF THE RESPONDENTS' FATHERS
(n=466)

Percentage of respondents reporting their fathers' occupation as:								
Retired, No occupation	Agriculture/ Labourer	Business	Teacher	Doctor	Lawyer	Engineer/ Technical	Other admi- nistrative work	Industrial worker
5.4	22.5	23.2	7.9	6.2	2.4	1.7	26.6	4.1

Table - 4

Mean and Standard Deviation of different groups on Physician's Work-value

(The mean scores for each group are ranked and indicated in brackets)

Sl. No.	Variables	First MBBS students Mean	S.D	Second MBBS students Mean	S.D	Third MBBS students Mean	S.D.	National Sample of final years Mean	S.D.
1	Academic value	12.85 (6)	3.91	13.27 (5)	4.98	11.39 (9)	4.67	10.31 (10)	4.32
2	Creative value	17.05 (2)	3.81	17.01 (2)	3.44	17.23 (4)	3.50	15.92 (3)	3.64
3	Economic value	11.31 (8)	3.94	11.84 (8)	4.07	13.19 (5)	4.47	12.32 (6)	4.35
4	Independence value	15.75 (3)	3.63	16.07 (3)	4.94	16.92 (2)	3.81	16.46 (1)	3.42
5	Rural value	12.72 (7)	4.16	12.69 (7)	5.61	11.97 (7)	5.07	11.85 (8)	4.87
6	Security value	10.51 (9)	3.34	11.13 (9)	5.53	11.42 (8)	4.05	14.68 (9)	4.08
7	Social value	17.44 (1)	3.31	18.01 (1)	5.17	15.87 (3)	3.28	16.14 (2)	3.49
8	Status value	13.27 (5)	3.61	13.10 (6)	3.46	13.42 (4)	3.40	14.70 (4)	3.32
9	Work-condition	10.37 (10)	3.25	10.46 (10)	3.59	11.13 (10)	3.48	12.36 (7)	3.34
10	Co-worker value	13.74 (4)	3.28	13.62 (4)	3.80	12.40 (6)	3.25	12.94 (5)	5.68

Table - 5

't'-ratios between the different groups on value questionnaire

Sl. No.	Variables	Group-1/ Group-2	Group-2/ Group-3	Group-1/ Group-3
1	Acaademic value	0.920	3.587*	3.16*
2	Creative value	0.099	0.597	0.471
3	Economic value	1.303	2.938*	4.158*
4	Independence value	0.729	1.743	2.90*
5	Rural value	.049	1.25	1.513
6	Security value	1.33	0.549	2.29**
7	Social value	1.294	4.470*	4.399*
8	Status value	0.450	0.859	0.411
9	Work-condition value	0.247	1.762	2.095**
10	Co-workers value	0.326	3.173*	3.795*

* Significant at .01 level
** Significant at .05 level

Table - 6

PROFESSIONAL ASPIRATIONS OF RESPONDENTS FROM DIFFERENT GROUPS

Sl. No.	Category of aspiration	Percentages of students mentioning this aspiration from:			
		1st year MBBS	2nd year MBBS	3rd year MBBS	National sample of final years n=431
1	To go to USA (or abroad)	7.8	12.4	11.0	10.2
2	To specialize or to do post graduation	28.5	33.7	27.9	45.5
3	To be known in the field	9.8	10.9	3.9	30.8
4	To set up ones own practice	0.0	4.1	9.7	12.3
5	To teach	2.6	2.1	0.6	4.5
6	To do research	18.1	21.2	13.6	13.0
7	To get respect from others	7.8	22.3	21.4	23.0
8	To serve others	55.4	58.0	48.7	55.0
9	To earn money and comforts	12.4	23.8	18.2	35.3
10	To have a good and stable job	5.2	10.9	9.0	23.2
11	To be stable in the profession	15.7	6.2	3.9	2.0
12	To do independent work	9.3	12.9	5.8	3.3
13	To be working with good colleagues	5.7	1.5	4.5	2.5
14	To work in an urban setting	1.6	5.7	6.5	1.8
15	To work in a rural area	18.1	14.5	12.3	7.8
16	To accomplish some thing difficult or high	6.2	0.0	0.0	7.0
17	To pass MBBS or to leave the college	1.0	0.0	0.7	1.5
18	To attain salvation and to be doing good things	3.1	0.0	1.3	0.0
19	To work for reducing political problems in medical education	5.7	5.7	5.2	0.0
20	To work for other doctors and for facilities in profession	4.7	10.4	21.4	0.0

Table - 7

PROFESSIONAL APPREHENSIONS OF RESPONDENTS
FROM DIFFERENT GROUPS

Sl. No.	Category of apprehension	Percentages of students mentioning this apprehension from:			
		1st year MBBS	2nd year MBBS	3rd year MBBS	National sample of finalyears n = 431
1	Can't go to USA (or abroad)	0.52	7.77	1.30	1.8
2	Can't specialize	1.55	10.88	12.34	18.5
3	May not be popular in the field	1.04	2.07	0.65	4.0
4	May not be able to put practice	1.04	1.55	3.89	2.3
5	May not be able to teach	0.52	–	–	0.5
6	May not be able to do research	0.52	3.11	1.30	4.3
7	May not be enjoying respect from people	1.04	3.11	5.19	2.3
8	May not be able to serve others	3.63	4.18	4.54	4.0
9	May not be able to earn money and comfort	6.73	12.43	7.79	11.8
10	May not have a good or stable job the	11.91	20.20	33.11	43.0
11	May have to leave/profession	4.66	2.07	3.25	8.5
12	May not be working independently or have interference of work	1.55	6.22	0.65	2.0
13	May not have good colleagues	1.55	3.11	1.95	1.5
14	May not be working in city	0.52	2.07	2.60	4.8
15	May not be working in ruralarea	2.59	4.66	4.54	2.3
16	May fail in profession	10.36	2.07	1.30	16.3
17	May fail MBBS	1.03	1.55	3.25	6.8
18	Corruption in the environment	7.25	6.22	2.60	0.0
19	Political interference	15.54	23.83	26.62	13.8
20	Poor work-condition	4.66	9.32	12.34	0.0
21	Other incompetent doctors	4.66	6.22	12.34	4.3
22.	Fear of lack of empathy & understanding	1.04	1.04	1.95	0.0
23	Financial problems to become good doctor	1.55	5.70	0.65	0.0
24	Don't have faith in medicine	0.52	1.04	0.0	0.0
25	Self-confidence and mastery of subject	13.99	11.91	9.74	0.0
26	Not applicable/No response	30.04	34.19	0.0	0.0

Table - 8

MEANS AND STANDARD DEVIATION OF DIFFERENT GROUPS ON THEIR LADDER RATINGS AND LEVEL OF ASPIRATION

Dimension of ladder rating	First year MBBS		Second year MBBS		Third year MBBS		National sample of medical students (n=319)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Present	4.77	3.09	5.18	3.42	5.50	3.54	5.26	2.47
Future (expected)	7.65	2.66	8.11	2.58	8.25	2.44	7.61	2.04
Future (wanted)	6.48	3.20	6.40	3.95	6.42	2.92	-	-
Future expected- present	2.88	3.60	2.93	1.20	2.75	0.61	2.35	2.62
Future wanted - present	1.71	3.98	1.22	4.15	0.92	3.36	-	-
Future wanted-future expected	-1.17	3.10	-1.71	2.40	-1.93	3.23	-	-

Table - 9

't' ratios between the mean ladder rating of the three different groups of students and their levels of significance

Dimension of the ladder rating	't' ratio for the difference between means		
	First & Second year students	First & Third year students	Second & Third year students
Estimated present	1.235	2.373*	0.979
Expected future	1.716	2.150	0.507
Wanted future	0.233	0.206	0.044
Expected future-Present	0.45	0.481	1.300
Wanted future-Present	3.63*	4.47**	0.744
Wanted future-expected future	1.89	3.34**	0.71

* Significant at .05 level
** Significant at .01 level

Table - 10

PERCENTAGE OF MEDICAL STUDENTS WITH DIFFERENT
ASPIRATION PATTERNS FROM THE
THREE GROUPS

Aspiration patterns	Percentage of students showing aspiration pattern from:		
	First year	Second year	Third year
1 Expected future is 7 or more steps more than the present	3.2	2.6	1.4
2 Expected future is 4 to 6 steps more than the present	31.1	33.0	32.7
3 Expected future is 1 to 3 steps more than the present	30.6	42.7	42.0
4 Expected future is about the same as the present	5.5	4.7	4.0
5 Expected future is about 1 to 3 steps below the present	11.5	6.7	13.3
6 Expected future is about 4 or more steps below the present	7.0	4.1	0
7 Wanted future is about 7 to 10 steps higher than the present	14.2	7.2	2.7
8 Wanted future is about 4 to 5 steps higher than the present	18.0	23.7	17.3
9 Wanted future is about 1 to 3 steps higher than the present	31.6	24.8	46.0

Aspiration pattern	First year	Second year	Third year
10 Wanted future is about the same as the present	7.7	10.3	5.3
11 Wanted future would be worse than the present	28.3	33.8	27.0
12 Wanted future is about 4 or more steps higher than expected	3.2	2.6	1.4
13 Wanted future is about 1 to 3 steps higher than expected	21.8	17.5	12.0
14 Wanted future is about the same as the expected	26.2	17.0	21.3
15 Wanted future is about 1 to 3 steps less than expected	28.9	37.6	46.0
16 Wanted future is about 4 or more steps less than expected	18.5	25.1	20.7

Table - 11

MEANS AND STANDARD DEVIATION OF DIFFERENT GROUPS ON
MCEI SCALES

Sl. No.	MCEI scale dimension	Theoretical mid-point	First year MBBS		Second year MBBS		Third year MBBS		National sample of medical students (n=309)	
			Means	S.D.	Means	S.D.	Means	S.D.	Means	S.D.
1	General esteem	66	69.23	9.57	63.17	10.71	58.92	9.63	60.63	12.24
2	Academic interest and enthusiasm	50	34.89	4.65	34.43	5.83	33.08	5.73	32.08	6.57
3	Extrinsic motivation for academic achievement	24	27.21	4.48	26.09	4.87	23.74	5.55	23.98	5.20
4	Breadth of interest	21	20.20	4.26	18.77	4.53	17.65	5.06	18.04	4.93
5	Student scholarship	12	11.41	2.94	11.19	3.18	10.42	2.81	9.23	2.65
6	Clear, concise and encapsulated instruction	21	22.21	4.42	21.79	5.38	20.02	5.47	21.12	4.82
7	Faculty discipline and tolerance	45	46.92	8.81	43.28	8.30	41.10	9.52	42.59	9.05
8	Teacher scholarship and academic attitude	48	53.29	9.65	51.30	9.09	46.97	11.09	50.97	11.34
9	Work facilities and student discipline	33	38.08	6.76	37.36	6.41	36.02	6.82	34.22	7.10
10	Total scores on MCEI	300	321.99	42.97	310.27	42.25	288.45	41.96	294.36	50.56

Table - 12

't' ratios between means of the different groups
on MCEI scales

Sl. No.	MCEI scale dimension	Group-1/ Group-2	Group-2/ Group-3	Group-1/ Group-3
1	General esteem	5.862**	3.835**	9.933**
2	Academic interest and enthusiasm	0.857	2.153*	3.236**
3	Extrinsic motivation for academic achievement	2.349*	4.193**	6.429**
4	Breadth of interest	3.195**	2.167*	5.084**
5	Student scholarship	0.704	2.357*	3.174**.
6	Clear, concise and encapsulated instruction	0.839	3.03**	4.13**
7	Faculty discipline and tolerance	4.163**	2.302*	5.946**
8	Teacher scholarship and academic attitude	2.084*	4.000**	5.666**
9	Work facilities and student discipline	1.081	1.787	2.811**
10	Total score on MCEI	2.699**	4.794**	7.291**

  * Significant at .05 level
  ** Significant at .01 level

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