FACULTY LEADERSHIP STYLES AND INTELLECTUAL COMMITMENT AMONG COLLEGE STUDENTS

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D E C L A R A T I O N

Certified that the dissertation entitled
"Faculty Leadership Styles and Intellectual Commitment
among College Students" submitted by Chitra Srivastava
is in partial fulfilment of eight credits out of a
total requirement of twenty-four credits for the degree
of Master of Philosophy of this University. This
dissertation has not been submitted for any other
degree of this University and is her own work.

We recommend that this dissertation be placed
before the examiners for evaluation.

Professor Tapas Majumdar
Chairman

Dr.(Mrs.) Sushila Singhal
Supervisor

C O N T E N T S

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A B S T R A C T

Researches focussing on the effective leadership style reveal that the concern of the leader is either the task or human relations. Both may prove to be effective or ineffective contingent on the situation in which a leader has to function. The present study uses three Leadership Styles (authoritarian, nurturant-taskmaster and participative) and attempts to identify an effective style in the context of higher education and if it relates to the intellectual commitment, past achievement and future aspiration of students. One hundred and forty science students of Hansraj College, Delhi University, Delhi, constituted the sample. Thirty eight teachers were identified as effective teachers by the students. Data was obtained on student's perceptions of leadership style of teachers (independent variable), students' intellectual commitment, past achievement, future aspirations (dependent variable), personality characteristic, values, achievement values, interest, college environment, background information, significant other image (mediating variables) and self-perception of style by teachers. An analysis of data using step-wise regression analysis showed the effectiveness of the nurturant - taskmaster style in relation to intellectual commitment ($r = .24$, $p < .01$). The authoritarian

and participative styles as such, did not prove to be effective in raising the commitment of students. An inclusion of mediating variables (personality, value, achievement value, interest, college environment, significant other image, background information) with leadership style increased their predictability considerably. Leadership styles did not explain the past achievement and future aspiration of the students significantly either above or alongwith the mediating variables. The self-perception of teachers corraborated with the effective styles perceived by students.

CHAPTER - I

INTRODUCTION

THE TROUBLE IN EDUCATION - DISCREPANCY IN
THEORETICAL AND PRACTICAL DEVELOPMENTS

"The destiny of India is now being shaped
in her classrooms. This, we believe, is
no more rehetoric... it is education that
determines the level of prosperity,
welfare and security of people."

Nothing can describe better the dreams and plans
of the early Indian educationists in the post Independent
India than this opening line of the Report of the Indian
Education Commission.

Education was conceived of as an investment in
mankind which should yield higher individual and social
returns. Education was a probable tool to develop human
resources, a prerequisite to better utilization of
physical resources. Therefore, educational planners and
politicians rushed for schemes of educational expansion
which could provide trained manpower. The kind of man-
power needed for the kind of society became a secondary
issue. As Dore (1976) comments, the concern of planners
and administrators was less with the question of how to
teach farmers, fishermen and petty traders to be better
farmers, fishermen and petty traders. Their concern was
with producing in the shortest possible time, men to meet
the demands for modern expertise civil engineers, factory

managers, architects, doctors, accountants, teachers.

Such over-emphasis on specialists resulted in a
rush for schooling, university education and modern
sector employment. Education explosion was the obvious
outcome and exactly that happened. Over the years the
number of pupils in schools and colleges has gone on
increasing making a break-through on the resources of
the country. Today, the situation is such that these
institutions do not have either the capacity to cope with
the student inflation as it is or to expand. Overcrowding
in institutions has resulted in a decline in quality which
coupled with 'educated unemployment' problem has taken a
very serious turn, giving way to qualification escalation
or certificate devaluation. The clerical job for which,
a few years ago, mere graduation was the normal requirement,
now tends to select an M.A. or even a higher certificate
holder for the same job. The reason is not that B.A.'s
are not capable of the job, but that the number of
certificate achievers grows far larger than the number of
clerkships that are available.

The prospective unemployment, inspite of the
required qualification, is giving rise to anticipatory
frustration among our students. But, there is yet
another aspect of the problem. In the process of quali-
fication acquisition, the pupil is concerned not with

mastery, but with being certified as having mastered.
The knowledge that he gains is not for its own sake, but
the once-and-for-all purpose of reproducing it in the
examination. Further, the learning and reproducing is
all just a straight means to an end, the end of getting
a certificate, which is a passport to a coveted job, a
status, an income, all of which is acquired without any
aptitude and commitment.

It is not only in the developing countries that
such state of affairs prevails in education. Contemplat-
ing the state of British Universities, Lord Robbins writes -
"It would be quite unrealistic to ignore the presence in
the enlarged higher education population, of a number of
young people who are there simply because friends or
parents have given them to understand that it is the right
thing to do, but who yet lack the motive to exploit the
opportunity once they have arrived." (Financial Times,
21 August 1971).

The difference between actual education and quali-
fication related certification is a difference in what is
now fashionably, called the 'hidden curriculum'. What
the educator is saying implicitly - and sometimes explicitly
- to his pupil is : "learn this or you will not become a
good doctor; a skilful carpenter; a fully developed human
being; a good useful citizen; you will not know how to
earn your living, you will not be able to appreciate the

higher pleasures of art or poetry." What the qualifier says to his pupils is : "learn this or you will not get chance to be a doctor or a carpenter, nobody will give you a living." The first appeals to the inner standards of conscience and promises self-achievement and fulfilment; the second invokes external arbiters, threatens exclusion, and evokes anxiety. The first preserves the teacher - pupil relation as sound and complete in itself; the second makes both dependent on the tyranny of the examiners.

Maslow (1973) one of the most eloquent and humane of psychologists, has tried to illustrate the difference between the two through his characterization of the contrast between self-actualizing activity and activity which merely fulfils lower level deficiency needs. To Maslow in a self-actualizing activity "...gratification breeds increased rather than decreased motivation, heightened rather than lessened excitement. The appetites become intensified and heightened. They grow upon themselves and instead of wanting less and less, such a person wants more and more of, for instance, education." Whereas deficiency - motivated man, whose need (e.g. for a certificate) can only be satisfied from outside, "...cannot be said to be governing himself, or in control of his own fate. He must be beholden to the sources of supply of needed gratifications ... he must adapt and adjust by changing himself to fit the external situation. He is the

dependent variable : the environment is the fixed indepen-
dent variable."

ALTERNATIVE MOVEMENT

The issue is, if it cannot be avoided, find adequate
ways of facing it. In fact, educationists have been
squarely trying to confront this issue over last few
years. Illich (1971) proposed a complete abolition of
schools in his 'Deschooling Society'. Reimer (1971) in
his 'School is Dead : Alternatives in Education' voiced
somewhat similar views. Both Illich and Reimer, perhaps
thought that the whole concept of compulsory schooling is
an affront to individual liberty. They suggest three
prerequisites to the alternatives :

1. Learning from work instead of learning by
   rote during fixed hours in schools.

2. Access to suitably matched peers - someone
   to share the learning experience; someone
   with whom to give and take the stimulus to
   learn.

3. The educational specialists, who can help the
   people select the materials most suitable to
   their talents, character and availability.

Dore, however, does not vote for deschooling of
society. Instead he presents alternatives which give
preference to vocational training and selection for

job on the basis of aptitude. His alternatives, therefore, are :

1. Start careers earlier - around the ages of 15-17 doing as much of the selection as possible within work organisations, and transforming all tertiary education and training into in-career learning, either part-time or full-time, in special educational institutions.

2. At all points where there has to be selection - avoid using learning achievement tests; whether the alternative be aptitude tests, lotteries or special tests, the essential thing is that they be tests which cannot be crammed for.

Support for alternatives like informal and non-formal systems of education has also emerged in India (Naik, 1975). These alternatives appear to be very imaginative and challenging. But many of these alternatives when analyzed for their operational value seem to suit the developed countries only which have the means and method to materialize them. In the developing countries, however, where adult illiteracy rates are higher, channels of educating masses are limited, socio-economic conditions are difficult, political will becomes

important. In these societies more than half of the
population views education as only a means of getting
a salaried employment, This is a formidable situation.

TEACHER AS LEADER IN ALL EDUCATIONAL SYSTEMS

What is required is a drastic change in the
attitude of the people primary to the change in the
content of education. This places great importance
and responsibility on the role of the teacher, be the
system formal, informal, non-formal, who can relate
education to the needs of the masses. To take the
objective of national development as envisaged by
Education Commission, as an example, it is important
for the leadership in education to relate the content
of education to the socio-economic aspects of develop-
ment, on the one hand, and the qualitative needs of a
man's life, on the other. Rightly educationists like,
Mathur (1970), Sen (1971), Naik (1975) and Singhal (1977)
feel that no change in our system of education can be
affected without an inflow of steady and effective
teachers who have to assume active leadership roles in
the reconstruction work. It is quite obvious that the
teacher is the real educational practitioner who should
be recognised as the valid aspirant for effective
leadership in educational matters. Unless such leadership
emerges in plenty at all levels of education, the scene

of education may not improve.

In the area of higher education, another difficulty
emerges from the fact that although it is clear that
colleges and universities have a core need of good
teachers as effective leaders, the evaluation of effective-
ness remains difficult because of the intangible nature
of the work of colleges. Education need to be viewed
as a dynamic process, where the teacher as leader is
continually faced with a group of personalities who bring
with them academic identity, life-style, vocational,
financial and health problems - all of which are to be
seen in the context of a wider social milieu. The nature
of the social environment itself changes at different
points of time.

With the changed perception of situation in
colleges and universities, there is need for teachers who
acknowledge the central importance of students and accept
the fact that a new type of student in the classroom not
only demands, but needs a different type of education.
It is a challenge for the teacher to sense the need of
his students and to either provide for these needs or
rechannelize them depending on the needs of the environment.

The essential constituent that has to be taken
note of in this connection is what determines the effective-
ness of a teacher in relation to what he can do to the

student. The interaction process between the teacher
and student seems to be the crux and has to be taken
cognizance of in planning any change. In the absence of
other imperatives, research in the field of higher
education in India needs to determine whether a particular
style of functioning makes a teacher more competent to
bring about certain desirable changes in the mental set
up of his students, and if so ways should be identified
of reinforcing it during the process of education.

PRESENT STUDY

It is within this educational context that the
present study takes into cognizance the need of discovering
and identifying effective styles for teachers which may
help alter the current state of affairs in which students
feel increasingly alienated and teachers find themselves
as mere mechanized instructors. It is believed that given
the effective teacher style, learning may become a self-
actualizing activity for students rather than a mechanical
process of getting a certificate for a job. The emphasis
on effective teacher style may also disillusion against
the fact that a teacher who has the highest certificate
to his credit is not necessarily the most effective
teacher. Existing research evidence also suggest that
the teacher whom the students consider to be effective
is not the one with the maximum publication work and

research experience, but one who knows how to convey
his subject and ideas to the students and who shows
interest in their academic work and development. With
such a teacher, the students are not only likely to be
more involved so far as their work is concerned but
their commitment may also enhance with time.

Of course, the above statements shall be bound by
the set of following assumptions : -

1. Different teachers have different personality
   make-ups and have gone through different
   socializing processes leading to difference
   in their interaction styles with students
   and others.

2. Students also as individuals differ in their
   personality make-ups and socialization
   experiences, because of which they use
   different criteria of teacher effectiveness.

3. Difference in teacher's functioning may also
   occur because of different working conditions,
   that is, difference in the school, college
   and university environments. This may also
   lead to difference in the student expectations.

Given these methodological constraints and the need
of finding appropriate leadership in education, an attempt

is made in the present study to identify the most
effective teacher style in the college context which may
be closely related to the intellectual commitment of
students and may point out the ways of tapping diverse
areas of growth and functioning linked to teacher
leadership styles. This may also help in its long term
perspective in establishing effective teacher-training
programmes in the context of higher education and provide
a means of bringing teachers and students together to
work as a unit in achieving higher individual and social
returns.

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CHAPTER - II

THEORETICAL BACKGROUND AND RELATED STUDIES

WHO IS A LEADER

The question who is a leader has been variously answered depending upon the particular focus and interest of the investigator.

The Trait Approach

In earliest researches on leadership, the search was often directed towards physical and constitutional factors, intelligence and personality traits. Numerous studies show that leaders compared to non-leaders are more intelligent (Gibb 1947, Mann 1959), have greater self-confidence (Richardson and Hanawalt 1955), self-assurance and self-knowledge (Cox 1926) and have better personality integration (Mann 1959). Leaders were found to be more extroverts and sociable (Mann 1959) and moderately equalitarian in personality (Bass 1954).

The Group Approach

Stogdill (1948) in his review, which is considered classical in exposing the futility of the controversy over leadership traits, gives a new direction to the leadership research. He asserts that search for the leadership components in physical characteristics and personality traits is a misdirected one. Leadership is a group and

particularly organizational phenomenon. Individuals join together to form a group whenever they have common needs and goals which require co-ordinated and joint endeavours on the part of the group members. As soon as a group is formed, depending upon the nature of the goals and the characteristics of the group members, the person who is perceived to be the most capable for realizing the group-goals and keeping the members together is assigned the position of a leader.

The Situational Approach

Stogdill's work led to the emergence of the situational approach, which emphasized the observed leader behaviour in a particular situation. Leadership functions were defined keeping in view the situational demands, making it clear that a set of conditions at a time define the manner of expressing leadership. This approach defined leadership as "the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation" (Hall, 1972). Leadership involves accomplishing of goals within a particular situation, with and through people. Therefore, a leader must have concern with tasks to be accomplished and human relations.

The earliest studies focussing on the task and human relations aspect of leadership were the studies of leadership

style by Lippitt and White (1943). They identified three styles of leadership - authoritarian, democratic and laissez - faire. Authoritarian leaders are those who achieve goals by remaining the focus of group attention, who emphasize obedience, maintain segregation within the group and see that intragroup communication is kept at a minimum. The leader is the key to all group action and becomes somewhat indispensable.

Democratic leadership is, in most aspects, the direct antithesis of the authoritarian pattern. It has as its main concern relationships in which there are shared satisfactions and mutual respect for leaders and followers. The democratic leader attempts to attain maximum involvement and participation of every member in group activities and in the determination of objectives. He attempts to distribute responsibilities rather than concentrate it in himself. He seeks to encourage and reinforce interpersonal contacts and relations throughout the group structure so as to strengthen it. He seeks to reduce intragroup tension and conflict and avoid a hierarchical group structure in which special privilege and status differential predominate.

The Laissez-faire style is one which permits members of the group to do whatever they want. No policies or procedures are established, everyone is left alone. Such a situation, it was later realized, provides an atmosphere that represents an absence of leadership.

The authoritarian and democratic styles were assumed to be the two extremes of a continuum between which existed a broad range of styles moving from authoritarian end to the democratic. Researches focussing on comparative merits of these two 'styles' of leadership show that overall the authoritarian style produces (1) a greater quantity of work, but, (2) less motivation, and, (3) less originality in work, (4) a greater amount of aggressiveness expressed both toward the leader and other group members, (5) more suppressed discontent, (6) more dependent and submissive behaviours, (7) less friendliness in the group, and, (8) less group mindedness. Shaw's (1964) researches demonstrated that authoritarian leaders produced greater work output and lower morale than did non-authoritarian leaders.

A second set of studies that emphasized the task and human relations aspect of leadership were carried out about the same time at the Bureau of Business Research at Ohio State University. Hemphil and Coons and Halpin (1957) operationalized leadership in terms of two dimensions of leader behaviour; initiating structure and consideration. 'Initiating structure' refers to the leader's behaviour in delineating the relationship between himself and the members of his group, and in endeavouring to establish well-defined patterns of organization,

channels of communication and ways of getting the job done. 'Consideration' refers to behaviour indicative of friendship, mutual trust, respect and warmth in the relationship between the leader and members of the group.

The studies of leader behaviour using these two dimensions pointed to the fact that consideration and initiating structure are separate and distinct dimensions. Leader behaviour could be defined as a combination of the two; in the following manner :

CONSIDERATION

		Low	High
I N I T I A T I N G	S T R U C T U R E	**Low** — Low consideration and low initiating structure	High consideration and low initiating structure
		High — Low consideration and high initiating structure	High consideration and high initiating structure.

Theoretically, effective leaderships is characterized by high scores on both consideration and initiating structure and ineffective leadership by low scores on both dimensions. High on one dimension did not necessitate being low on the other.

Scores on these two dimensions are obtained through the leadership Behaviour Description Questionnaire (LBDQ);

an instrument designed to measure how a leader carries
out his activities through subordinate perception of
supervisory behaviour.

Path-Goal Theory

Many of the propositions considered by the Ohio
State Studies have also been investigaged by House (1971)
using the Path Goal Theory. This is a functional theory
which puts forward three fundamental propositions -

(a) One of the major functions of a leader is to
enhance the psychological states of the
subordinates which results in motivation to
perform and increased subordinate satisfact-
ion with the job (consideration).

(b) That the leader's function is to provide subor-
dinates with coaching, guidance, support and
rewards necessary for effective and satisfy-
ing performance that would otherwise be lack-
ing in the environment (initiating structure).

(c) The specific leader behaviour that will
accomplish these functions is determined by
the situation in which the leader operates.

The current position of both the Path Goal approach
and the Ohio State University studies is one of including
and adequately operationalizing situational variables which
are seen as important moderators between the leader

behaviour and the goal of the organization.

Fiedler's Contingency Model

A little different from Path Goal Theory of leadership is Fiedler's Contingency Model. To Fiedler (1967) the effectiveness of leadership depends on two main factors : the degree of situational favourableness and the personality of the leader.

Fiedler defines favourableness of a situation as "the degree to which the situation enables the leader to exert his influence over his group and enables him to predict the consequence of his behaviour". A situation in which the leader cannot predict the consequences of his behaviour tends to be stressful and anxiety arousing.

Two basic propositions of the theory are -

(a) Task-oriented leaders tend to perform best in group situations that are either very favourable or very unfavourable to the leader.

(b) Relationship oriented leaders perform best in situations of intermediate favourableness.

The major situational variables are -

(a) Personal relations with group-members (i.e. leader-member relations).

(b) The degree of structure in the task that
the group has been assigned to perform
(task structure).

(c) The power and authority that his position
provides (i.e. position power).

Fiedler's contingency model as it operates across
'favourable' to 'unfavourable' situations is represented
in Figure 1.

Fiedler distinguishes leader personality in terms
of two different motivational systems - the basic or
primary goals and the secondary goals which people pursue
once their more pressing needs are satisfied. One type
of personality is 'relationship motivated' and primarily
seeks to maintain good interpersonal relationship with
co-workers. He tries to make sure that the important
needs are secured. Under certain anxiety producing
conditions, the relationship motivated individual will
seek out others and solicit their support. However, under
conditions in which he feels secure because he has
achieved the major goal of close relations with subordinates
he will seek the esteem and admiration of others. In a
leadership situation where task performance results in
esteem and admiration from superiors, this leader will
tend to concentrate on behaving in a task-relevant manner,
sometimes to the detriment of relations with subordinates.

Figure I

Predictions of Successful Leadership style based on favourableness of the leadership situation in Fiedler's Contingency Model

	Octant	Leader-Member Relations	Tack-Structure	Leader Position - Power	Effective Leader-ship Style
Favourable for the leader	I	Good	Structured	Strong	Task
	II	Good	Structured	Weak	Task
	III	Good	Unstructured	Strong	Task
	IV	Good	Unstructured	Weak	Relationship
	V	Moderately Poor	Structured	Strong	Relationship
	VI	Moderately Poor	Structured	Weak	Relationship
	VII	Moderately Poor	Unstructured	Strong	Relationship
Unfavourable for the leader	VIII	Moderately Poor	Unstructured	Weak	Task

Adopted from F.E. Fiedler, Leadership, General Learning Corporation, New York, 1971, p.13.

The second type of personality is 'task motivated', who gets satisfaction from the task itself and from knowing that he has done well. In a leadership situation that is uncertain and anxiety producing, this person will put primary emphasis on completing the task. However, when this individual has control and influence and knows that the task will get done, he or she will relax and be concerned with subordinates' feelings and satisfaction.

Fiedler's motivational systems are measured by Least Preferred Co-worker Scores (LPC) which are obtained by asking an individual to think of all people with whom he has been able to work least well. The description of the least preferred co-worker is made on a bi-polar eight point scale or a semantic differential format. High LPC persons are those who describe their least preferred co-worker in relatively positive terms, seem primarily relationship motivated. Low LPC persons are those who describe their LPC in very unfavourable terms and are basically task-motivated.

Fiedler's model suggests an either/or relationship between task orientation and relationship orientation and does not consider that in reality there exists a combination of the two dimensions. It is also not possible to define and study all the important dimensions of the situation. It deals with high and low scores of the

situational variables and does not make predictions
about a leader having medium score on the three situat-
ional dimensions.

The effective leadership style in the Indian Context:

The contingency models (Fiedler, 1967; Kerr et al,
1974) recognized that the effectiveness of a leadership
style is dependent on, among other factors, the character-
istics of the subordinates. A particular type of leader
can influence only a particular type of subordinate.
Based on this assumption, Sinha (1977), tried to identify
the most effective leadership style in the Indian context.
Sinha and Sinha (1974) report that Indians manifest
certain model characteristics such as excessive dependency,
preference for personalized relationship, status orientat-
ion, weak work values etc. To the extent that a subordinate
possesses these characteristics, he needs a leader who
is nurturant and task oriented at the same time (Sinha,
1979). He called this style of leadership as the
Nurturant - Taskmaster style, a style which is interpolated
between the authoritarian style on the one extreme and
the democratic style on the other.

The Nurturant - Taskmaster (NT) style has two main
components - the concern for task and the nurturant
orientation. It requires that task must be completed and

that the subordinates understand and accept the goals
and normative structure of the group and cultivate
commitment in them. The Nurturant - Taskmaster struct-
ures his and his subordinate's roles clearly so that
communications are explicit, structured and task relevant.
He initiates, guides, and directs his subordinates to
work hard and maintain high level of productivity - both
quantitatively and qualitatively. Responsibilities are
pointed and areas of decision making are synchronised
with them. He, thus, creates a climate of purposiveness
and goal-orientation.

His task orientation, however, has the mix of a
nurturant and benevolent father. He cares for his
subordinates, shows affection, takes personal interest
in their well-being and above all is committed to their
growth. He wants them to grow up and mature so that
they can assume greater responsibilities and spare the
leader for minding the boundary properties of the group
or organization.

Thus, his task-orientation and personal warmth
and interest develop into a relationship of trust, under-
standing and commitment to productivity and subordinates
growth. All other aspects of the leader-subordinate
relationship, such as information - sharing, decision-
making, monitoring and controlling of behaviour,

motivation management, process of goal setting etc. are
determined in this framework. The extent of participat-
ion and autonomy in any of these processes depends on the
level of readiness of the subordinates. As a subordinate
is initiated into his task-group, he would heavily depend
on his leader for guidance and direction. As he acquires
the skill and normative structure,develops identification
with job, group and organization, matures and gets ready
to contribute more to the group, he is encouraged to
assume greater responsibility, to interact horizontally
and to participate more freely in the decision making of
the group.

In this sense, nurturant taskmaster is a pre-
runner to the participative style (P) of leadership which
stands for full participation of subordinates, group
decision making and the role of a leader as one of us.
The basic differences lie, first, in the order of
priority attached to task and people and the cognitive
and motivational reasons for such differential priority
allocation. For the participative school of thought -
"Product of job is man". He and his growth are primary
considerations. The NT leader believes that a subordinate
will not start growing only because he is accepted as
equal from the very beginning, particularly when he knows
that he is not yet equal or ready for full participation
and that he must pass through a phase of initiation into

the task system and prepare himself before he can effectively participate.

The nurturant - taskmaster can be contrasted with the authoritarian style (A) of leadership which is predominantly self-oriented. The main concern of an authoritarian leader is his personal vanity, status, power and image management. Hence, he demands complete loyalty, unconditional submissiveness and full compliance from his subordinates. He controls communication network, restricts interaction, wants to make all decisions by himself and imposes them on his subordinates. In sum, he wants his subordinates to remain dependent on him so that he may have power over them. Under such a leader, a climate of distrust and resistance build up. In order to cope with the rising resistance, he has to use punitive and harsh measures which only aggrevate the situation. Such a leader cannot be effective.

Leadership Style Studies in India

Researchers argue that leadership style is a culture related phenomena. If a culture is authoritarian (like Indian Society, where conformity is emphasized) an authoritarian leader is likely to be more effective, because he provides a match between what his subordinates expect and what the leader would provide. Ganguli (1964)

reports that Indian managers and even workers prefer autocratic over democratic superiors. Meade (1967) replicated the famous Lippitt and White (1943) study in a north Indian city, by recruiting boys of 10 and 11 years, who were put into four groups of six each. These groups had worked either under democratic or authoritarian leaders. Contrary to Lippitt and White's .findings, these groups showed more absenteeism under democratic leadership and required more time than under authoritarian leadership which led to better quality of work, more group attraction and stronger preference for the leader. Pestonjee and Singh (1973) reported a high positive correlation between authoritarianism of a leader and morale among the subordinates. Sharma (1973) found the headmaster of open climate type schools high on 'initiating structure'.

Different from above, Kakar (1971, 1974), however, reported the superiority of the democratic style of leadership. Daftuar and Krishna (1971) studied the perceived characteristics of good and bad leaders in a bank organization. They showed that whether a leader is perceived to be good or bad depended on the requirements of an organization. In banks, for example, they observed that 'expert knowledge' does not make a superior good. A good leader, was expected to use minimum of

authority, should not interfere with juniors' activities, should have confidence in his subordinates. He should delegate authority and recognize the merit of his subordinates. In general the leader was expected to be democratic. Pandey (1975) in a well designed experimental study, examined the effect of leadership styles, personality characteristics and the method of leadership selection on group productivity. His results suggested that, among other things, relationship oriented leaders were more effective in creating a favourable and conducive atmosphere leading to high productivity than the task-oriented leaders.

A careful analysis of the two groups of findings revealed that one possible reason, for Meade's (1967) and others' findings reporting authoritarian leader as effective or preferred, is embedded in the confusion regarding the concepts of authoritarianism and task-orientation (Sinha, 1977). As stated earlier, in a society where democracy is not deeprooted in the thinking and attitude of the people, all styles which are not democratic are likely to be clubbed together. Finer differences between gradations of styles are likely to be ignored or undermined. In a similar fashion the researchers in this area who are prone to think dichotomically tend to group all styles which are not democratic, as authoritarian or autocratic.

It is in this perspective that the NT style
falls quite close to the initiating structure and the
low LPC style. These all structure role-relation and
emphasize task accomplishment, though, the LPC leader,
additionally, has secondary goal of people orientation.
The secondary goal does not lead to the primary goal or
vice versa. In fact, the two indicate the extremes of
a continuum, that is, high on one means low on the other.
The initiating structure does not include peoples'
orientation - unless one isolates those leaders who are
high on both - initiating structure as well as consider-
ation (the way Fleishman and Harris, 1962 did), yet
consideration has people orientation of the fraternal type
rather than the benevolent paternal type. This mean that
the nature and quality of human care and consideration
are quite different.

A few authors (Nandy and Kakar 1976) argue that
any strong emphasis on order, efficiency or structure is
reflective of secondary authoritarianism. To disprove
this, it is crucial to distinguish and differentiate
between the authoritarian and nurturant - taskmaster
styles. It is also important to show that the care,
consideration and warmth shown by the nurturant task-
master are qualitatively different from the fraternal
considerations of a participative leader. A series of

laboratory as well as field studies, therefore, were
conducted to ascertain the areas of differentiations and
overlaps between the three styles. Sinha and Chaudhary
(1978) examined the percentage of common variance among
the three styles for a group of 63 engineers and executives
in the service of the Government of Bihar. The common
variance between authoritarian and nurturant taskmaster
style amounted to only 7 per cent while between nurturant
taskmaster and participative style was 77 per cent. There
was inverse relation between authoritarian and participative
styles. In a survey study by Sinha (1977), 522 executives
drawn from eight public and private sector enterprises
rated their leadership styles. The results indicated that
NT style was a lot closer to P style than to A style.
The differences were highly significant (P $<$ .01).
There was some overlap between NT and P, but not between
NT and A or P and A.

One of the interesting sidelights of some of these
studies was the finding that nurturant taskmaster was
preferred over participative style.. The authoritarian
style was invariably rated to be undesirable and least
preferred. Sinha and Sinha (1974) contemplate that in
a culture where dependency, personalized relationship and
status orientation are strong values, nurturant taskmaster
may be viewed as more promising than participative, which

is likely to be taken for a weak leadership. However,
in another study Sinha and Sinha (1977) found that while
Authoritarian style proved to be by and large ineffective,
the relative effectiveness of NT and P styles was not
quite conclusive.

The ambiguity persists in another study (Sinha and
Chaudhary, 1978) in which none of the styles was signi-
ficantly related to the rated effectiveness of the
group. A survey conducted by Sinha (1977) also failed
to report any significant correlation between executives'
leadership styles and overall efficiency of the organizat-
ions. The survey did, however, report a very meaningful
pattern of causal relationships which may have significant
implications for organizational effectiveness. Although
the leadership styles were not directly related to
efficiency, they were significantly related to climate
variables (except P style) which in turn were more
strongly related to the efficiency scores. From this it
seems that the authoritarian and nurturant style executives
create corresponding climates in their organizations
which then affects organizations efficiency negatively
and positively (respectively). That is, the effects are
actually augmented in this process.

Leadership Style Studies in the Indian Educational Context

Studies of leadership carried out in educational institutions are rather few and concerned mostly with the teacher's style of functioning or interacting with the students. These have been carried out in primary and secondary institutions mainly within Lippitt and White's framework of autocratic and democratic leadership. However, the general conclusion to be drawn from these studies is inconclusive. While a number of studies have reported greater learning in teacher - centered groups, others have found student centered groups superior besides many reporting no significant difference at all. A difficulty leading to this seems to be adoption of output as the criteria of group success, despite the fact that output in educational institutions is intangible.

An effective teacher is one who functions in such a way as to satisfy the intellectual, psychological and social needs of the students. Such an approach combines the aspects of the personality of the leader and the situational variables, for example, the characteristics of the students, the type of task, the position power etc. Sinha and Sinha (1977) conducted two experimental studies in which leaders of small laboratory groups of

college students were instructed to behave in either $\underline{A}$, $\underline{NT}$ or $\underline{P}$ styles. The subordinates who were blind to the experimental manipulations, rated their leader at the end of the session. The nurturant taskmaster leaders were rated to be closer to the authoritarian ones in being strict, in pushing their ideas through, and in controlling others ideas and activities. The $\underline{NT}$ leaders in common with the participative leaders encouraged their subordinates and shared information. The $\underline{P}$ leaders, on the other hand, behaved in more friendly ways than the other two. The most revealing was the perception that authoritarian leader was position interested, the nurturant - taskmaster task oriented and participative was interested in greater participation among the group members. Verma (1977) constructed a likert type scale to measure the styles of student leadership. Her study indicated that while the overlap between $\underline{A}$ and $\underline{NT}$ was of the order of 10 per cent, it was 15 per cent between $\underline{NT}$ and $\underline{P}$ styles. There was virtually no common ground btween $\underline{A}$ and $\underline{P}$.

In another of their studies, Sinha and Sinha (1977) explored the hypothesis that nurturant taskmaster style is more effective than participative style for the subordinates who have weak work values and also that the effectiveness of a group will be highest if a phase.

of nurturant taskmaster style is followed by participative
style. The participants of the study were the first year
college students who were first screened in order to
select only those having weak work values. Two person
groups were formed. Each group was provided with a
leader drawn from a senior class. The groups were
randomly distributed among four conditions of leadership
combination - NT, P, P followed by NT and NT followed by
P. The findings revealed a definite pattern - (a) the
highest score in all cases was reported under P leader-
ship when it was preceded by NT leadership, (b) NT-NT
was more effective than P-NT or P - P combinations of
leadership.

To identify the student perceived characteristics
in the three leadership styles, Sinha and Sinha (1979)
asked a group of college students to rate Authoritarian,
Nurturant - Taskmaster and participative styles of
leadership on 20 bi-polar adjectives. Results showed
that the authoritarian leader was perceived to be auto-
cratic, influential and brave. Yet it was reported to
be relatively insecured, impractical, unsuccessful, un-
skillful, dissatisfying, disrespected and unpleasant.
NT leader was perceived to be active, strong, dominant,
firm, independent, alert, encouraging, scientific,
extrovert and on the whole good. Participative leader
was rated to be democratic, respected, satisfying,
secured, skillful, practical and successful. It was also

perceived to be relatively weak, coward, slack and
uninfluential.

Sinha's Nurturant - Taskmaster, thus in all
respects, seems to be an appropriate theoretical model
to investigate the effectiveness of teacher styles in
college situations. Such a teacher is likely to be task-
oriented, having structured expectations from the students
and may also draw on the cultural values such as affect-
ion (Kakar, 1971), dependency (Sinha, 1970) and need for
personalized relationship (De, 1974). In this context,
the influence of the NT style of teacher seems important
in relationship to raising the intellectual commitment
of college students. Of course, this requires an
understanding of intellectual commitment first, in its
different perspectives, and then try to examine the
possibility of its prediction with the help of the
different teacher styles.

INTELLECTUAL COMMITMENT

Research on intellectual commitment of college
students is meager in general and non-existent in Indian
setting. Consequently the issue of conceptualization
and methodology itself become crucial, making it
imperative on the researcher to look into allied concepts
like job-involvement.

The literature reveals usage of varied terms to describe job-involvement, such as, central life interests, work role involvement, morale, intrinsic motivation, job satisfaction, though all describe basically what appear to be two different concepts : (a) performance self-esteem contingency and (b) component of self-image.

The first category of definitions emphasize the extent to which self-esteem is affected by the level of performance (Lodahl and Kejner, 1965). In Allport's (1947) treatment of the psychology of participation, ego-involvement is defined as the situation in which the person "engages the status-seeking motive" in his work. The person is seeking self-esteem as well as the esteem of others.

To Faunce (1959) job involvement means "the commitment to a particular set of tasks or task area where successful role performance is regarded as an end in itself and not a means to some other end. With this type of commitment, self-esteem will be tested through performance in a particular occupational role and in terms of an evaluation of intrinsic rather than extrinsic product of role performance". Faunce thus saw the degree of job involvement as referring to the extent to which success and failure in the occupational role affects self-image. Similarly, Gurin, Veroff, and Feld (1960), viewed involvement in terms of the degree

to which performance affects self-esteem. For French
and Kahn (1962), the centrality of an ability is the
degree to which it affects self-esteem; if job perfor-
mance is central to the worker, then we have "ego-
involved performance". They stated that "this implies
that his job performance will affect his self-esteem".
Vroom (1962) describes a person as ego-involved in a job
or task to whatever extent his self-esteem is affected
by his perceived level of performance. In other words,
for Vroom, involvement exists when a person's feelings
of esteem are increased by good performance and decreased
by bad performance. Finally Lawler (1969), applied the
term "intrinsic motivation" to this area. This refers to
the degree to which a job holder is motivated to perform
well because of some subjective rewards or feelings that
he expects to receive or experience as a result of
performing well. Thus, Lawler argued that one aspect of
intrinsic motivation exists when esteem, feeling of growth,
etc. are tied to performance.

This series of definitions seem to lie together
since all describe the job-involved person as one for
whom work is a very important part of life, and as one
who is very much personally affected by his whole job
situation : the work itself, his coworkers, the company,
etc. On the other hand, the non-job involved worker does
the majority of his work off the job. Work is not as

important a part of his psychological life. His interests
are in some other area, and the core of his self-image,
the essence of his identity, is not greatly affected by
the kind of work he does or how well he does it.

The second conceptualization describes job involve-
ment as "the degree to which a person is identified psy-
chologically with his work, or the importance of work in
his total self-image" (Lodahl and Kejner). Lawler and
Hall (1970) focussed on job involvement as referring to
"psychological identification with one's work", as well
as "the degree to which the job situation is central to
the person and his identity".

Maurer (1969) employed the term "work role moti-
vation" to describe the "degree to which an individual's
work role is important in itself, as well as the extent
to which it forms the basis of self-definition, self-
evaluation, and success-definition". Maurer described
"self-definition" as the "degree to which an individual
defines or conceptualizes himself as a person primarily
in terms of his work role". This appears to be similar
to the psychological identification concept of job
involvement. Self-evaluation is defined as "the extent
to which an individual evaluates or ranks himself as a
person in terms of his work role", and "success-definition",
as "degree to which an individual defines success in

terms of work role success". Maurer observed that if
these two terms are merged they would closely relate to
the performance - esteem definition of job-involvement.
Thus he attacked the conceptual problem by applying both
ways of viewing job involvement to his work.

It is evident that a great deal of conceptual
confusion and proliferation of terms mars the theorizing
of the construct. A relatively clearer picture may be
visualized by incorporating the view points of the
psychologists and the sociologists. The psychologists
have tended to focus on the organizational conditions
that lead to job-involvement, such as meaningfulness of
work, adequacy of supervision etc. (Mc Gregor 1944;
Allport, 1947). The sociologists have been more concerned
with aspects of the socialization process that lead to
the incorporation in the person of work-relevant norms
and values (Hugher, 1958; Dubin, 1958, 1961).

Involvement as Related to Situational Variables : The Psychologist's Viewpoint

Lawler (1973) argued that the design of a job
should have its major effect on motivation and satisfact-
ion related to the strength of an individuals higher
order needs, since higher order need strength is an
individual difference variable of importance (Maslow, 1970).

Those individuals with strong growth needs (i.e. needs
for achievement, fulfilment and competence) should
respond with high motivation and involvemement to jobs
that are high on the four core job characteristics -
autonomy, task identity, variety, and feedback. Those
individuals who are low on these higher order needs
should, according to Lawler, respond with frustration
and irritation at having too demanding a job, to jobs
that are high on the core characteristics. On could
expect that their involvement would probably be low,
since they would be looking for satisfaction of their
needs in places other than the job. Lawler quoted
Dubin (1956), who argued that the work place is not a
central life interest of most industrial workers, and
thus it would not be wise to expect such workers to
be concerned with fulfilling their higher order needs
within the job context.

Related Studies Within the Psychologist's Viewpoint

Maurer (1969) found that for a sample of middle
managers in 18 manufacturing firms, work role involvement
was positively related to the importance, desired amount
and perceived existence of opportunities for satisfaction
of esteem, autonomy and self-actualizing needs. Similarly,
Rabinowitz (1975) found a positive relationship between

higher order need strength and job involvement in a sample of Canadian public employees.

Two studies looked at leadership and leader behaviours in relationship to job involvement. The first carried out by Anderson (cited by Lodahl and Kejner, 1965) used a sample of 25 female head nurses in a large general hospital. Job involvement was measured by Lodahl and Kejner's 40 item scale, while "consideration" and "initiating structure" behaviour was measured using the Ohio State LBDQ. Anderson found that job involvement was negatively associated with the LBDQ consideration scale. In the second study, Jones et al. (1975) examined the effect of job involvement upon the relationship between perceived leader behaviours and a composite measure of confidence and trust in the leader among 112 civil service and military engineering employees. Although the result demonstrated that confidence and trust were positively correlated with perceived leadership behaviours, this relationship was not higher for high (vs. low) job involvement samples. The authors speculated that this reverse relationship could lie in interactions among several factors, like :
(a) Each of the two samples may base its confidence and trust upon different aspects of leadership behaviour,
(b) highly job-involved persons may be more sensitive to

the nuances of leader behaviour, may have different opportunities to observe the leader and his behaviour, or may simply know the leader as a function of being on the job longer, or (c) the highly job-involved person may have less need to interact with the leader.

Ruh and White (1974) focussed on the inter-relationship among job involvement, values, personal background, participation in decision making and job attitudes for a sample of 2,755 employees of six manufacturing organizations. They report a correlation of .53 between participation in decision making and job involvement indicating that characteristics of the immediate job situation may exert considerable influence on job involvement. Siegal and Ruh (1973) found similar results for a sample of 2,628 manufacturing organization employees.

Waters, Roach and Batlis (1974) performed a factor analysis study on 22 perceptually based organizational climate scales drawn from three organizational climate questionnaires (Halpin and Crofts, Litwin and Stringer and House and Rizzo, cited in Waters et al. 1974) and related the obtained dimensions to employees' self-reports of job involvement. Work autonomy was found to moderately correlate with job involvement $(r = .31, p \angle .01)$. This factor appeared to represent a

work situation in which an employee does have control over his job (responsibility). Rabinowitz (1975) also found a significant relationship between this variable and job involvement, even with the effects of other significant variables (age, years with the organization and higher order need strength) held constant.

Batlis (1978) examined relationships between job involvement and perceived environmental conditions (operationalized in the form of organizational climate measures) and investigated moderating effects on climate-satisfaction correlations. Eighty hourly employees at an electrical equipment manufacturing plant responded to a questionnaire containing measures of job involvement, job satisfaction and organizational climate. However, job involvement significantly correlated neither with opportunity ($r = .16$, $n = 72$, $p > .05$) nor with 11 of the 12 climate dimensions examined. The only climate dimension correlating significantly with job involvement was Social Relations ($r = .19$, $n = 79$, $p < .05$). This is consistent with Lodahl and Kejner's (1965) conclusion that job involvement appears to be related to the social nearness of other workers. Although job involvement was found to be independent of climate perceptions, it did serve as a potent moderator of climate satisfaction

relationships; the high job involved group evidenced
significant climate - satisfaction correlations in 9 of
13 cases compared to only one for low job-involved
group.

Wood (1974) concluded by stating that job involve-
ment may be a function of the individual's reinforcement
history from previous work pursuits. By knowing the
work orientation differences of workers it may be
possible to determine whether the organization does
have any power to reward and satisfy effectively.

Involvement as Related to Acquired Work Values :
The Sociologist's Viewpoint

Dubin (1958) held that psychological (i.e. derived
drive) theories of motivation are not adequate to explain
organizational behaviour, since these do not account for
wide variations in modes of drive satisfaction, and the
fact that modes of drive reduction can be changed. In
order to account for the ways in which motivation is
channeled, one has to look to social norms and values
which determine (and in the long run are changed by)
specific modes of behaviour. The social structure then
channels and sustains motivation in specific ways.

This viewpoint presupposes that the main determi-
nant of involvement is a value orientation toward work

that is learned early in the socialization process.
The person internalizes values, norms, goals and
behaviour patterns through social experience and these
then become guides for future activities and thoughtways.

Job-involvement as conceived by Dubin (1956) is
intimately tied up in the protestant work Ethic, the
moral character of work and a sense of personal responsi-
bility. Anyone who has internalized these traditional
values will probably be 'job-involved', regardless of
the situational context within which he might be
employed.

Siegal (1969) concurred with Dubin's point of
view, stating that difference in job involvement can
probably be traced back to value orientation toward
work learned early in the course of socialization and
internalized as determinants of behaviour.

Related Studies Within the Sociologists' Viewpoint

Runyon (1973) investigated the interaction between
management style and the personality variable 'Locus of
control' on workers' job involvement. He found that the
mean job involvement scores increased as one moved from
the External to the Internal under all management
conditions. This confirmed that job-involvement is a

'relatively stable personal characteristic'.

Hall and Mansfield (1971) suggested that if job-involvement was a personal characteristic, then there should be little change in it under periods of organizational stress. Using scientists and engineers from three research and development organizations, the authors studied the effects of external economic stress on job involvement over a 20-month period. They found that the organizational stress did not change the researchers' job involvement. Similar results were obtained by Lawler, Hackman and Kaufman (1973) on directory assistance operators. Redesigning of their job did not produce any significant change in job involvement over a 6 month period.

Based on studies conducted by Turner and Lawrence (1965) and Blood and Hulin (1967), it was argued that job involvement would be negatively correlated to community size, and that the relationship between job involvement participation in decision making would be more positive for individuals from rural areas and smaller communities than for individuals from more urbanized communities. However, data collected from 2,628 employees of six manufacturing concerns yielded results in directions opposite to those predicted

(Siegal and Ruh, 1973). That is, job involvement was positively related to community size and the relationship between participation and job involvement was more positive for those employees from larger (more urban) as opposed to smaller (less urban) communities.

Involvement as a product of the Person-Situation Interaction

Saal (1978) examined the portions of common variance shared by combinations of personal and situational characteristics and job involvement using data collected from 218 workers in a medium sized manufacturing company. Bivariate correlations supported Rabinowitz and Hall's (1977) profile of the job-involved worker. Job involvement was found to be related to three classes of variables : personal characteristics, situational characteristics and work outcomes. Multivariate analysis suggested, however, that job-involvement is better understood by separating 'personal' characteristics into personal - demographic (age, sex, etc.) and personal psychological (higher order needs, protestant work ethic endorsement etc.) variables. Further, these analyses suggested that both the situational (job) characteristics and the personal-psychological variables shared more common variance with job-involvement than did personal demographic variables.

Commitment - the behavioural manifestation of Involvement

Recent trend in job-involvement work is to view involvement and commitment as interchangeable labels for the same class of job behaviours (Wiener and Gechman, 1977). The main difficulty with the current definitions of job involvement is that no relationships are suggested between the attitudinal process of job involvement and concrete operational work behaviours. This point is quite crucial, since the usefulness of a construct like job-involvement is largely determined by its ability to add to the understanding of the behaviour of people at work.

Job behaviours which indicate commitment to job and work has not been investigated much. Commitment is best viewed as a behaviour rather than as merely an internal process or construct. When individuals are committed to a cause, person, activity or institution, they must express this by an overt public act. A relationship process without an overt behavioural component cannot be considered commitment. It may reflect some internal processes as liking, believing or identifying, but these do not necessarily have a one-to-one relationship to behaviour.

Wiener and Gechman (1977) define commitment behaviours as socially accepted behaviours that exceed

formal and/or normative expectations relevant to the object of commitment. Such behaviours may include the amount of personal time devoted to work activities; the amount of time, conversation and reading related to work; or personal sacrifices for the sake of the job (e.g. voluntary postponing or giving up a vacation to complete a manuscript for a journal). A daily record measure for a sample of 54 female elementary school teachers, on the amount of personal time devoted by each subject to work-related activities beyond the required working day, demonstrated moderate correlations with two attitudinal measures of job involvement and job satisfaction scale.

Intellectual - Commitment Studies

Hummel - Rossi (1976) defined intellectual commitment as an intended and perservering involvement with intellectualism, which is manifested by the active pursuing and preferences for intellectual activities. She investigated the effect of college environment and certain personal characteristics of the students on the intellectual commitment of 113 first-semester freshman of a large eastern university. Intellectual commitment was measured through intellectual activities and preferences. The first asked the students to describe

the nature of and the amount of time devoted to various
intellectual activities and the second asked them to
indicate their willingness to choose intellectual over
non-intellectual activities. Both the variables,
university environment (associates influence) and
student characteristics were found to correlate signi-
ficantly with intellectual commitment. In the university
environment a student's peer choice was found to exert
strong influence on his degree of intellectual commitment.

This result is related to Wilson's study (1966)
at Antioch college, which found that seniors attributed
more changes that occured within them during their four
years at college to their peers than to their teachers.
It is also probably related to the Vassar studies, in
which Bushnell (1962) discovered that students tended to
adopt the behavioural norms of their peer group and to
reject the behavioural norms of the faculty.

However, Centra and Rock (1971) found that the
amount of interaction an undergraduate university student
had with the faculty was linearly related to the
students' performance on both the Humanities and the
Natural Sciences tests in the Graduate Record Examinat-
ions.

Chickering (1972) found that a university student's
academic experiences depended neither upon the wealth of

the university, nor upon its physical environment, nor upon the prestige of its faculty; academic experiences, do, however, seem to depend upon the relationship that exist between faculty and students. Both of these studies would seem to suggest that professors can have some observable effect upon a student's intellectual commitment.

The present study was designed in this direction to determine if the style of functioning of faculty members bore associations with past achievement or affected the intellectual commitment and future aspirations of college students.

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CHAPTER - III

STATEMENT OF THE PROBLEM AND METHODOLOGY

PROBLEM

Differences in perceived leadership styles of the faculty members relate to past achievement and lead to differences in intellectual commitment and future aspiration of college students.

METHODOLOGY

SAMPLE

The Universe of population consisted of college students and teachers of University of Delhi, Delhi. Using purposive method of sampling, subjects were drawn from the Science Department, Hansraj College, Delhi University. The student sample represented two grade levels and consisted of a total of 148 undergraduates which was inclusive of five females. The final analysis, however, included only 140 male students, since three boys submitted incomplete questionnaires and the questionnaires of five girl students were taken out as their number was insignificant for sex comparisons. The remaining sample included B.Sc. II year students (N = 89) and B.Sc. III year students (N = 51). All these students were, more or less, taught by the same teachers, hence, their academic level was considered to be unified. Therefore, they were treated as one group in the analysis.

The teacher sample consisted of the 38 male teachers who were perceived and named by students as most effective.

VARIABLES

Independent Variables

Leadership Styles - Following Sinha's (1977) leadership effectiveness model, leadership style was operationalized as an individual faculty's way of influencing the group contingent on the situation and his personality.

Mediating Variables

The effect of perceived leadership styles is likely to be subdued or enhanced by a set of mediating variables like personality characteristic, values, achievement values, interest, college environment, background information and significant other image. Some of these were, therefore, included in the study.

Personality Characteristics

Information on the personality factor was obtained by noting the student's preference for social recognition or seclusion in the environment in which he functions. This refers to both, the college and home environment.

Values

This included information on ways of life preferred and adopted by college students.

Achievement Values

Achievement value was operationalized as the predisposition or forces within the student which impel him to aspire for higher intellectual achievement.

Interest

Interest was measured in terms of the student's preferences for academic activities.

College Environment

College environment was conceptualized in terms of characteristics of each college, as perceived by students, which should differ across colleges. This included college facilities, communication between teachers and student, quality of teachers, dedication of students, discipline and so on.

Background Information

Data on the background information of the students included information on the occupation and educational level of both the parents and the family income.

Significant Other Image

Student's significant other image was defined as his perception of the estimation of own intellectual capabilities by his mother, father, best friend and favourite teacher.

Dependent Variables

A set of the following three criterion variables was used -

Past Achievement

Past Achievement consisted of the grades obtained by the student in his two previous university examination and other awards received for academic achievement.

Intellectual Commitment

Intellectual commitment was defined as an intended and a perserving pursuit of intellectual activities. This is likely to be manifested through the student's active perusal and preference for activities which are directly related to his college life.

Future Aspiration

Future aspirations of a student was operationalized in terms of his future plans regarding academic career and occupation.

Treatment of Variables

The proposed treatment of the variables to explore the desired relationships may be presented in a Tabular form, as follows :

Independent Variable: Perceived teacher style	Mediating Variables	Dependent variables
1. Authoritarian	1. Personality characteristics	1. Intellectual Commitment
2. Nurturant-Taskmaster	2. Values 3. Achievement-values 4. Interest 5. College environment 6. Background information	2. Past Achievement
3. Participative	7. Significant other image	3. Future Aspirations

TOOLS

Leadership Style Questionnaire

This scale had been developed, initially, by Sinha (1977) to differentiate three interaction styles of leaders in an industrial setting - the authoritarian, the nurturant taskmaster and the participative type. It includes a total of 45 items with 15 items for each style. Each item describes the characteristic of the subject's supervisor. The subject is required to place his opinion on a five point scale ranging from 'very true' to 'very false'. High score on authoritarian style is interpreted as the leader being perceived as having a formal relationship with the subordinate laying great stress on the completion of the task and caring little for the satisfaction of the emotional needs of the subordinate. High score on the NT style reflects

the combination of affection and strictness in the personality of the leader as perceived by the subordinate. Similarly, high scores on the participative style reflects that the leader in question has a very informal relationship with the subordinate and lays more stress on maintaining good relationship with his subordinates than on the completion of the task. As reported by Sinha and Chaudhary (1979), the split - half reliability scores for A (rii = .75), NT (rii = .71) and P (rii = .67) were satisfactory, although not very high.

This scale was modified for leaders in the academic setting, with comparable set of 45 items, and tested for its reliability using inter-rater reliability technique. The questionnaire was given to 8 raters and a contingency table was drawn to see if the response categories were differentiative across raters on each item. The items which were non-differentiating were dropped. This included three items, one each on the three styles. In the final questionnaire, therefore, only 42 items remained with 14 items measuring each of the three teacher styles. This questionnaire was again given to 8 raters-students from the Jawaharlal Nehru University and data analysed using analysis of variance test.

The result is included in Table I.

Table I

ANALYSIS OF VARIANCE OF LEADERSHIP STYLE DATA OBTAINED FROM EIGHT RATERS

Source	Sum of Square	Degree of Freedom	Variance
From Items	275.10	41	6.7 Vi
From Raters	62.63	7	
From Remainder	776.85	287	2.7 Ve
	1114.58	335	

$F = 2.26$, $p < .05$

The teachers were also given this modified scale with 42 items. The mode of the items were, however, changed from the second person to the first person. For example, the item 'He/She works hard' was changed to 'I work hard' and so on. This was done in order to check the consistency of students ratings of teachers. A copy of the questionnaire is given in Appendix I.

PERSONAL CHARACTERISTIC INVENTORY

This consists of a battery of five tests assembled by Khader (1969) for college students in India in relation to his doctoral research at the Zakir Husain

Centre for Educational Studies, Jawaharlal Nehru University. A copy of the questionnaire is enclosed in Appendix I. A description of the different sub-tests is as follows :

Sub-test I - Personality Characteristics

This part contains 18 items. The items measure sociability versus non-sociability characteristic of the student in relation to his environment. Each statement has five responses ranging from 'almost always' to 'almost never'. The student is required to choose and tick off one of the five responses which correspondes best with his characteristics. Ten items reflect sociability, for example, 'Like meeting people', while eight items reflect nonsociability, for example, 'Stay in the background at parties or social gatherings'. A high score on this scale denotes that the person concerned is highly sociable and with his extrovert make-up it is possible for him to adjust in all types of different situations with little dependency needs.

Sub-test II - Values

This scale is based on the 'Study of values' questionnaire by Allport, Vernon and Lindzey. Three items each from the theoretical, economic, aesthetic, social, political and religious values respectively have

been selected, making a total of 18. For each item a
choice among the three alternative responses 'True',
'Sometimes True' and 'Never' is to be made.

Sub-test III - Achievement-Values

This consists of 18 items chosen from Mukherjee's
'Sentence Completion Test' (SCT) on a pre try-out
basis on Indian college students. This is a forced
choice measure of verbalized need for achievement and
has been found valid for measuring achievement values
(Mukherjee, 1969). Achievement values refer to a
continuum which is defined by the degree of importance
that an individual attaches to competence in an
achievement area. Thus a high score on SCT is inter-
preted as a keen desire to compete successfully with a
standard of excellence, an expressed interest in under-
taking difficult and challenging tasks and a strong sense
of optimism.

Each SCT item consists of forced choice traids
(one item reflecting achievement related sentiments and
the other two pertaining to other aspects of manifest
needs) selected in such a manner as to minimize the
social desirability factor.

Sub-test IV - Interest

This includes eight items, out of which seven

items require the students to answer by ticking either
'Yes' or 'No'. The eighth item includes six areas of
interest, for example, debate, sports, science contests
etc. and asks the student to tick off those in which
he has received recognition or award. High score on
the test denotes the students interest in the academic
field.

Sub-test V - College-Environment

This part has eighteen items. The subject is
required to mark on a five point scale ranging from
'almost always' to 'almost never'. High score on the
test is interpreted as the college having good facilit-
ies for students, good student-teacher interaction and
discipline etc.

Background Information

This performa was used to obtain information on
the education and occupation of the student's mother
and father separately and the family income on an
yearly basis. In few cases where the father was missing
from home, only the mother's occupation and education
determined the family status. It will be noted that
mother's status is given equal importance with that of
the father's. As the focus of the research involves
educational attitudes and values and since the mother

is a primary socializing agent in the family, it is
felt that if she has graduated from college, the values
of the household will be influenced accordingly.

Significant Other Image

The questionnaire developed by W.B. Brookover
and his associates (1964) to measure the images that
the students perceive significant others hold of their
ability was tested in other studies for its applicability.
It included four items in which the students were asked
to 'guess' how their mother, father, best friend and
favourite teacher would have answered these questions
about their abilities. The response categories were
five ranging from 'as the best' to 'as the poorest' or
similar categories.

Intellectual Commitment Questionnaire

The intellectual commitment questionnaire consist-
ing of 20 items was developed on the model of the job
involvement scale of Lodahl and Kejner (1965) and by
including 7 items from the teacher and student study
used by Singhal (1977), with a total of 27 items. It
was pretested for its reliability by giving it to eight
raters. Each item was rated on a five point scale
ranging from 'Very true' to 'very false'. Intellectual
Commitment refers to active involvement of the students

with intellectual activities. High scores on this
scale is interpreted as the student taking active
interest and showing clear preference for intellectual
activities. The items on which the raters were not able
to differenciate an item across categories were dropped.
There were 8 such items. The remaining 19 items were
than again given to eight student raters, from
Jawaharlal Nehru University. A test of analysis of
variance gave results which is included in Table II.

Table II

ANALYSIS OF VARIANCE OF INTELLECTUAL
COMMITMENT DATA OBTAINED FROM EIGHT
RATERS

Source	Sum of Square	Degree of Freedom	Variance
From Items	57.33	18	3.19 Vi
From Raters	17.65	7	
From Remainder	236.08	126	1.85 Ve
	311.06	151	

$$F = 1.72, \ p < .05$$

A copy of this questionnaire is included in Appendix I.

Past Achievement

Information on this was obtained by asking the

students to give the divisions obtained by them in their last two university examinations. They were also asked to mention any award or prize they might have received for academic performance.

Future Aspirations

Future aspirations of the student were measured by asking him to give the highest degree planned. He had to choose from among three alternatives - graduation, post-graduation and doctorate. He was also asked to give his subject of interest for further study and the probable future occupation.

Name of Favourite Teacher

The student was asked to give the name of his favourite teacher. Alongwith this he had to give the name of his best friend. This was to act as a buffer question.

DESIGN

Within the Ex-post-facto category, the correlational design was used in the present study.

HYPOTHESES

The specific hypotheses formulated for investigation were as follows :

1. Whether it is possible to predict intellectual commitment of college students based on a knowledge of their preference for particular faculty leadership style.

   The number of leadership styles included in the study being three, it gave rise to the following sub-set of hypotheses :

   i) Whether preference for Authoritarian style of leadership helps predict the intellectual commitment of college students.

   ii) Whether the Nurturant - Taskmaster style of leadership helps predict the intellectual commitment of college students.

   iii) Whether the Participative style of leadership helps predict the intellectual commitment of college students.

2. Whether preference for a particular leadership style (Authoritarian, Nurturant - Taskmaster, Participative) is found related to the past-achievement of college students.

3. Whether knowledge of preference for a particular leadership style (Authoritarian, Nurturant -

Taskmaster, participative) helps predict the future aspirations of college students.

4. Whether the Intellectual Commitment of college students can be predicted better by taking into account the role of mediating variables, like, personality factor, values, achievement values, interest, college environment, background information and significant other image of the students alongwith preference for a leadership style (Authoritarian, Nurturant - Taskmaster and Participative).

5. Whether the past achievement of college students is understood better by taking into account the role of the mediating variables like personality factor, values, achievement values, interest, college-environment, background information and significant other image of the students alongwith preference for a leadership style (Authoritarian, Nurturant - Taskmaster and Participative).

6. Whether future aspirations of college students can be predicted better by taking into account the role of mediating varaibles like, personality factor, values, achievement values, interest, college environment, background information and significant other image of the students alongwith

preference for a leadership style (Authoritarian, Nurturant - Taskmaster and Participative).

PROCEDURE

The data on students as well as teachers was collected during the academic year 1978-79. Since the study focused on effective teachers' styles, it was felt that science departments should be the right unit where a continual interaction between the students and teachers takes place because of the practical work, over and above their classwork. Only one college was selected for the study, in order to keep the college characteristic, level of students past achievement and the mode of instruction more or less comparable.

All the students took interest in the test and participated willingly. The teachers also were very cooperative. The following was the standard instruction given after distribution of the questionnaires - "In the booklet before you, you will find a number of tests. Instruction is given before each of them. You have to read the instruction carefully and answer each test accordingly. If you do not understand anything, you are free to ask, Thank you."

The teacher-style questionnaire invited the maximum questions from among the students. Doubts were raised

about the identification of the most effective teacher,
should he be chosen from the college staff or a teacher
from the student's school days could also be identified.
Some students wanted to know if they could identify the
ideal teacher from their imagery. It was explained that
what was needed was the identification of the most
effective teacher from the present set up and to mark
out his characteristics. A few students showed reluct-
ance in giving the name of their favourite teacher. But
on being assured that information would be confidential,
they cooperated. The Sentence Completion Test of
achievement values also presented some problems among
the students. Most students thought that all the three
alternatives given for completing the sentences were
equally attractive. However, they were asked to choose
one as the most attractive from among the three and
mark it.

After going through the questionnaires filled by
students, the names of the effective teachers were
recorded. These teachers were given only the teacher-
style questionnaire, with the mode of items changed as
explained earlier. They were administered the question-
naires individually and were asked to answer the items
keeping in mind their relationship with the students.
Most of them felt that a few items of the test were

ambiguous, like items, 9, 19, 29, and 36.

SCORING AND CODING

The items on the Leadership Style Scale,
Personality characteristics, College environment,
Significant Other Image and Intellectual Commitment
Questionnaire were scored in a similar manner, using
Thurston's equal appearing intervalmethod. The scale
ranged from 1 to 5. The middle category was given a
neutral score of 3 (Doubtful or Occasionally). The
positive categories were given scores of 4 (True or
frequently) and 5 (Very true or Almost always), while
the negative categories were given scores of 2 (False
or Rarely) and 1 (Very false or Almost never). Total
score was calculated by adding the scores on each item.
The coding system of the scales is included in
Appendix II.

A similar method of scoring was used for the
Values Scale. However, the scale, in this case, ranged
from 1 to 3. The middle category was given a neutral
score of 2 (Sometimes True), with the positive category
getting a score of 3 (True) and the negative category
getting a score of 1 (Never). In the Achievement Value
Scale, a score of 1 was given to the answer expressing
achievement value. No score was given for other

alternatives. Total score was obtained by adding up the number of correct choices made. The coding key is given in Appendix II.

In the Interest Scale, only two response categories were given, 'Yes' and 'No'. The choice of 'Yes' in all cases was given a score of 1 and the choice of 'No', a score of 0. The total score thus, was the sum of 'Yes' choices.

The background information was scored at three levels - parent occupation, parent education and family income. Total score was obtained by adding scores on all these three levels. The coding system used to obtain scores on the background information, past achievement and future aspirations of the students is given in Appendix II.

METHOD OF ANALYSIS

The data has been analyzed using analysis of variance, factor analysis and the stepwise regression analysis procedure with the help of the computer at Delhi University and Jawaharlal Nehru University.

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CHAPTER - IV

RESULTS

The leadership style scale is still in its trial phase (Sinha, 1979). It was, therefore, subjected to a correlational analysis in order to understand the underlying relationships among various items purpoting to measure dimensions of styles.

The Inter-correlational Matrix on Leadership Style Scores

The inter-correlation matrix for 42 items used as the basis of factor-analysis is presented in Table III.

A general look at the Table III indicates that a number of items in the leadership scale are highly correlated with each other. Using the significance level for N = 140 at 5 per cent as r = .16 as the criterion, thirteen clusters of items were identified. For example, taking cluster I, items 1,2,3,4,5,6 are found to correlate significantly with each other (1,3 = r = .37; 1,4 = r = .25; 1,5 = r = .23; 2,4 = r = .22; 2,5 = r = .19; 3,4 = r = .26; 3,5 = r = .18). The second cluster of significant correlations is found among items 1,2,3,4,5,6,10,11,12. A third cluster emerges from items 1,2,3,4,5,6,16,17,18. The fourth cluster is found in items 1,2,3,4,5,6,7,8,9,21, 22,23. The fifth cluster includes items 1,2,3,4,5,6, 26,27,28, while another embraces items 1,2,3,4,5,6,7,

TABLE III

INTERCORRELATION MATRIX ON LEADERSHIP STYLE SCALE

I T E M S

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.	·																		
2.	.15																		
3.	.37	.15																	
4.	.25	.22	.26																
5.	.23	.19	.18	.13															
6.	.10	.03	.16	.19	.03														
7.	-.11	.03	-.07	-.19	.02	-.06													
8.	.11	.18	-.02	-.01	.07	.04	.12												
9.	-.06	-.05	-.18	-.24	-.03	-.19	.20	.02											
10.	.37	.24	.48	.33	.18	.29	-.09	.04	-.30										
11.	.15	.15	.16	.31	.15	.31	-.18	-.04	-.29	.34									
12.	.31	.30	.23	.21	.18	.23	-.12	.18	-.10	.35	.38								
13.	-.09	-.06	-.08	-.06	-.09	.01	.18	.13	.27	-.04	-.21	-.06							
14.	.08	.12	.10	.08	.19	-.09	.20	.04	.05	-.01	-.05	-.01	.19						
15.	-.04	-.17	-.15	-.23	-.01	-.12	-.04	-.05	.10	-.16	-.01	-.04	.16	-.03					
16.	.13	.20	.03	.07	.24	-.12	.07	.11	.13	-.10	-.05	.10	.02	.13	.10				
17.	.31	.09	.24	.12	.18	.20	.04	.14	-.01	.28	.03	.22	.20	.36	-.24	-.01			
18.	.26	.12	.43	.21	.06	.31	-.18	-.07	-.30	.57	.49	.26	.02	.09	-.13	-.18	.25		

TABLE III - contd.

INTERCORRELATION MATRIX ON LEADERSHIP STYLE SCALE

I T E M S

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
19.	-.18	.08	-.19	-.05	-.09	-.16	.22	.23	.25	-.37	-.12	.04	.23	-.05	.05	.26	-.04	-.42	
20.	.09	.15	.00	.18	.10	-.01	.07	.08	-.01	.12	.07	.10	.08	.14	-.11	.02	.08	.14	.02
21.	.31	.22	.34	.23	.15	.09	-.15	.04	-.21	.48	.44	.40	-.10	-.00	.02	-.07	.21	.55	-.26
22.	-.18	.02	-.22	-.28	-.07	.01	.28	.23	.23	-.23	-.19	-.12	-.28	.01	.11	.10	-.08	-.27	.60
23.	.21	-.00	.07	.18	.21	-.07	-.07	.14	-.03	.10	.11	.30	.01	.30	-.01	.18	.33	.18	-.06
24.	-.01	.01	-.12	.02	.08	-.17	.14	.09	.29	-.10	-.27	-.00	.13	.26	-.13	.27	.16	-.35	.20
25.	.01	.10	.06	.29	.05	.10	-.26	-.01	-.25	.24	.27	.14	-.16	.01	-.08	.03	-.08	.26	-.10
26.	.26	.09	.45	.14	.10	.11	.04	.02	-.04	.40	.18	.19	.02	.15	.04	.01	.33	.34	.13
27.	.24	.03	.28	.18	.16	.21	-.10	-.06	-.15	.30	.15	.33	-.17	.08	.03	-.05	.08	.24	-.06
28.	.32	.26	.40	.21	.04	.34	-.06	.04	-.22	.52	.33	.26	-.18	.05	-.04	-.02	.18	.43	-.28
29.	-.17	.02	-.05	-.07	-.09	-.01	.23	.08	.14	-.14	-.11	-.07	.13	-.10	-.06	.01	-.08	-.25	.38
30.	.25	.14	.42	.26	-.06	.42	-.12	.02	-.24	.42	.31	.19	-.18	.03	-.09	-.11	.19	.49	-.28
31.	.12	.18	.21	.16	.15	.30	-.02	.14	-.04	.35	.21	.16	.05	.15	-.14	-.01	.28	.39	-.17
32.	.82	.08	.28	.23	.17	.24	-.01	.15	-.07	.37	.24	.24	-.04	.04	.09	.02	.24	.34	-.09

I T E M S

TABLE III - contd.

INTERCORRELATION MATRIX ON LEADERSHIP STYLE SCALE

I T E M S

	20	21	22	23	24	25	26	27	28	29	30	31	32	33
19.														
20.														
21.	.19													
22.	.02	-.22												
23.	.09	.10	-.25											
24.	-.03	-.26	.15	.13										
25.	.18	.33	-.10	.08	-.19									
26.	.17	.42	-.08	.20	.01	.26								
27.	.06	.39	-.15	.22	-.07	.19	.27							
28.	.15	.42	-.23	.14	-.17	.17	.39	.30						
29.	.03	-.20	.29	-.05	.09	-.08	-.05	-.10	-.15					
30.	.09	.39	-.19	.12	-.13	.20	.37	.27	.55	-.17				
31.	.08	.34	-.10	.29	-.05	.07	.34	.16	.34	-.01	.31			
32.	.28	.30	-.12	.24	-.06	.20	.42	.27	.39	-.05	.28	.28		

I T E M S

TABLE III - contd.

INTERCORRELATION MATRIX ON LEADERSHIP STYLE SCALE

I T E M S

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
33.	.05	-.06	-.14	.01	.07	-.04	-.11	.02	-.12	-.04	.15	.09	-.15	-.10	.07	-.12	.04	.03	-.02
34.	-.11	-.07	-.12	-.12	-.03	-.17	.24	.12	.34	-.28	-.37	-.13	.36	.14	-.03	.18	.02	-.31	.34
35.	.19	.14	.26	.25	.07	.33	-.09	.05	-.25	.28	.38	.25	.04	.10	-.09	-.08	.20	.56	-.20
36.	.01	-.05	-.03	-.05	.19	-.12	.16	.04	.17	-.05	-.17	.00	.08	.04	-.04	.07	-.14	-.30	.25
37.	-.06	.01	-.14	-.05	.02	-.18	.19	.14	.13	-.29	-.10	-.03	.14	-.07	-.05	.19	-.07	-.28	.31
38.	.05	.12	.08	.12	.07	.23	.05	-.02	-.20	.14	.15	.01	-.07	.12	-.03	.07	.08	.10	-.08
39.	-.05	-.08	-.23	-.05	-.04	-.02	.25	.08	.31	-.16	-.32	-.11	.25	.01	-.06	.06	-.01	-.19	.16
40.	.35	.08	.13	.03	.00	.11	-.09	.33	-.05	.14	.05	.22	.02	.15	-.02	-.03	.39	.18	-.06
41.	.27	.08	.11	-.03	-.07	.08	-.14	.00	-.08	.06	.14	.18	.01	-.01	.06	.14	.00	.15	-.05
42.	-.02	-.09	-.17	-.13	-.09	-.01	.12	.01	.08	-.22	-.19	-.07	.19	.01	-.01	.03	.01	-.02	.10

TABLE III - contd.

INTERCORRELATION MATRIX ON LEADERSHIP STYLE SCALE

I T E M S

	20	21	22	23	24	25	26	27	28	29	30	31	32	33
33.	.10	-.10	.07	.13	.00	.19	-.00	.08	-.09	-.15	-.07	-.17	.13	
34.	.01	-.35	.37	.02	.29	-.26	-.03	-.19	-.30	.24	-.25	-.10	-.18	-.18
35.	.12	.45	-.15	.34	-.33	.33	.27	.21	.33	-.15	.44	.24	.31	.01
36.	-.01	-.16	.31	-.00	.21	-.12	-.15	-.03	-.22	.27	-.25	-.06	-.04	-.19
37.	-.01	-.23	.20	.07	.11	-.10	-.14	-.17	-.36	.17	-.30	-.14	-.11	.01
38.	-.07	.18	.02	-.04	.09	.07	.15	.03	.17	-.07	.22	.15	.03	.07
39.	-.03	-.07	.25	-.04	.21	-.23	-.09	-.10	-.12	.10	-.21	.06	-.10	-.27
40.	-.03	-.21	-.05	.23	-.01	.14	.29	.10	.13	-.13	.19	.35	.23	.03
41.	.15	.21	-.06	.09	-.04	-.01	.19	.14	.19	-.06	.21	.02	.19	-.01
42.	-.02	-.10	.15	.02	-.08	-.00	-.13	-.11	-.10	.17	-.05	.02	-.09	-.18

Left margin label: I T E M S

TABLE -III - concld.

INTERCORRELATION MATRIX ON LEADERSHIP STYLE SCALE

ITEMS

	34	35	36	37	38	39	40	41	42
35.	-.18								
36.	.35	-.17							
37.	.42	-.14	.26						
38.	-.13	.18	-.10	-.11					
39.	.40	-.17	.20	.16	-.14				
40.	-.06	.19	-.07	.03	.21	-.01			
41.	-.07	.16	-.05	-.01	.17	-.20	.13		
42.	.15	.02	.09	-.13	.03	.10	.22	.17	

29,30,31,32. The six clusters indicate that items 1,2,3, 4,5 and 6 are common to each. This suggests that these items have a common factor variance. They all suggest teacher's emphasis on task completion, with or without maintaining good relationship with the students.

Different from above, the seventh cluster emerges from items 10,11,12,13,14,16,17,18,19,21. The eighth cluster can be seen in items 10,11,12,25,26,27,28,30,31, 32. The ninth cluster contains items 16,17,18,19,20,21, 22,23,24. The tenth cluster includes only items 17,18,30, 31,32, while the eleventh cluster emerges from items 25, 26,27,28,30,31,32. Items 21,22,23,24,34,35,36,37 form one cluster. However, a separate cluster is visible in items 34,35,36,37,38,39,40.

The formation of correlation clusters indicated that the items overlap in measuring the leadership characteristics. The correlation matrix was, therefore, subjected to a principal component solution to obtain the underlying factor structure in the scale.

Factor-Matrix of Leadership Style Scores

The factor analysis resulted into thirteen factors. The factor loadings and eigen values for the obtained factors across 42 items are shown in Table IV.

TABLE IV

FACTOR MATRIX OF LEADERSHIP STYLE SCORES WITH EIGEN VALUES

FACTORS

	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	.4709	.2881	-.2137	.1080	.1050	.2433	.0191	-.3293	-.0440	-.2462	-.0560	-.1703	-.0087
2.	.2627	.2680	-.1532	-.2448	-.3188	.0113	-.3469	.0754	-.1180	.0491	-.3832	-.1863	.1345
3.	.5601	.1641	.0399	.1644	-.2684	.2251	.0364	-.1208	-.1356	-.2197	.2337	-.2017	.1043
4.	.4361	.1056	-.2182	-.0318	-.3213	-.3212	-.1035	-.0619	-.2257	-.0847	.0174	.3337	.0113
5.	.2135	.2816	-.4664	.1408	-.2140	-.0021	-.0066	-.0350	.1409	.3659	.0945	-.2884	.0151
6.	.4488	.0275	.3833	-.2042	-.1320	-.0548	-.1272	-.1097	.2844	.0274	.1052	.1706	-.3299
7.	-.2812	.3795	.2150	-.0047	-.1539	.0875	-.0112	.3518	.1174	.0945	.9901	-.2687	.0309
8.	.0127	.4433	-.0419	-.2817	.1503	-.0834	-.0806	-.0681	.3488	-.0781	-.4054	-.0905	.1502
9.	-.4369	.3171	.0571	.1053	.0435	.2391	.2485	.0470	-.0053	.0173	-.2252	.1440	-.1330
10.	.7079	.1059	.0765	.0967	-.3146	.0208	.0790	-.0662	.0955	-.1313	-.0256	-.1087	.0370
11.	.5806	-.1556	-.1155	-.3489	-.1063	-.1231	-.0369	-.0049	.0400	.1998	.0593	-.0831	-.2637
12.	.4676	.2656	-.2771	-.2976	-.0324	.0297	.0632	-.2731	.0662	.0028	-.0975	.0405	-.2734
13.	-.2276	.4425	.3685	.0372	.116	-.2508	.1301	.1222	-.1527	-.0930	-.0674	-.0978	-.3353
14.	.0955	.4322	-.0873	.4166	.1278	-.1134	-.1683	.3962	-.1427	.2280	.1249	-.0801	-.0050

I T E M S

TABLE IV - contd.

FACTOR MATRIX OF LEADERSHIP STYLE SCORES WITH EIGEN VALUES

FACTORS

ITEMS	1	2	3	4	5	6	7	8	9	10	11	12	13
15.	-.1105	-.1806	-.1601	-.1401	.3138	.5509	.2298	.1389	.1386	.3598	.0820	.0126	.0153
16.	-.1080	.3746	-.3947	-.1051	-.0289	.2880	-.2985	-.0041	-.3344	.2151	-.0729	.0848	-.0556
17.	.3426	.5166	.0245	.3255	.1432	-.2168	-.0205	-.0375	.2079	-.1843	.1139	-.1194	-.0939
18.	.7534	-.0383	.2525	.0408	.0551	-.1513	.1342	.0242	-.1178	.0912	-.0199	-.1891	-.1569
19.	-.4638	.3689	-.1099	-.5128	-.0721	.0255	-.0066	.0722	.0439	-.0767	.0641	.1598	-.0466
20.	.1943	.2151	-.0995	-.2067	-.0488	-.1571	.2874	.4563	-.2666	-.1654	-.2163	-.0896	.1022
21.	.7081	.0592	.0973	-.1432	-.0467	.1042	.1233	-.0464	-.0286	.2313	-.0891	-.0081	-.0113
22.	-.4442	.3489	.2267	-.3910	-.0496	.1213	-.0265	.1859	.2436	.0426	.0988	-.0780	-.0973
23.	.2949	.3708	-.3421	.1531	.3530	-.1989	.1502	-.0512	-.1269	.1791	.0779	.1883	-.0713
24.	-.2963	.4340	-.2788	.3081	-.0998	.0694	-.2455	.1380	.0909	-.2230	.0069	.3527	-.1339
25.	.4201	-.1414	-.1555	-.2571	.0408	-.3484	.0711	.1696	-.0843	.0747	.0905	.2596	.3792
26.	.5313	.3161	.0686	.0693	.0707	.2386	.1900	.2863	.0134	-.1247	.1378	.0713	.1849
27.	.4625	.0603	-.1479	-.0352	-.0436	.2012	.2529	-.0569	.0620	.0418	.2736	.2910	-.0470
28.	.6819	.0563	.1669	.0054	-.1443	.2670	-.0329	.0893	-.0118	-.0423	-.1381	.0834	.0623
29.	-.3202	.2441	.1825	-.3647	-.2507	-.0326	.0839	.0054	.0003	-.1308	.2638	.0734	.2441

TABLE IV - concld.

FACTOR MATRIX OF LEADERSHIP STYLE SCORES WITH EIGEN VALUES

FACTORS

	1	2	3	4	5	6	7	8	9	10	11	12	13
30.	.6687	.0011	.2764	-.0065	-.0246	.1275	-.1368	.0604	-.0344	-.1401	.0483	.1756	-.0147
31.	.4641	.8344	.2696	.1003	.0111	-.0662	-.0230	-.0408	.1254	.2911	-.1506	.1585	.1618
32.	.5279	.2525	-.0818	-.1271	.0907	.1301	.3358	.1669	.1322	-.1179	.0107	.0413	.0838
33.	.0894	-.2290	-.4769	-.1273	.2988	-.2448	.0762	.2552	.3560	-.2718	.0578	-.0451	-.1732
34.	-.5094	.5025	.0943	.1234	-.0159	-.0284	.1125	-.0412	-.1771	-.0362	.1238	.0377	-.0977
35.	.6118	.0784	.1646	-.1821	.1720	-.2545	.0438	.0623	-.1625	.2186	.1315	-.0620	-.1602
36.	-.3242	.3916	-.0916	-.0140	-.2779	-.0312	.1617	-.2888	.0922	.0624	.3950	-.1226	.1249
37.	-.3926	.2984	-.1929	-.2752	.0744	-.1906	.0162	-.2389	-.1394	-.0058	.1143	-.1604	.0106
38.	.2577	.0546	.0925	-.0538	.0662	.0837	-.6743	.2244	.1728	.0599	.2816	.0676	-.0360
39.	-.3537	.3596	.2749	.1459	-.1330	.0043	.1819	-.1562	.0403	.2189	-.2566	.2869	-.0726
40.	.3313	.3567	.0622	.0267	.5311	-.0494	-.1749	-.2492	.2789	-.0402	-.0814	.0073	.3050
41.	.2648	.0631	.0102	-.2680	.3681	.3854	-.1563	-.0202	-.3950	-.2624	.0338	-.0690	-.1846
42.	-.1829	.1627	.3768	-.1804	.4417	-.0741	-.1305	-.2162	-.2761	.0658	.1593	.0001	.2259
Eigen Values	7.7523	3.4917	2.1040	1.8633	1.7471	1.5872	1.4679	1.3709	1.3268	1.1883	1.1832	1.0924	1.0626

(Row labels at left: I T E M S)

The analysis indicates that approximately 65 per cent
of the variance is explained by these factors. The first
factor explains the highest amount of variance about
18 per cent. The second factor explains 9 per cent of
variance, the third factor 5 per cent, the fourth 4 per cent,
the fifth 4 per cent, the sixth explains 4 per cent, the
seventh 4 per cent, the eighth 3 per cent, the ninth
3 per cent, the tenth 3 per cent, the eleventh 3 per cent,
the twelfth 2 per cent and the thirteenth factor explains
3 per cent of the variance.

The results show that high factor loadings on the
first factor emerge from items 1,2,3,4,5,6,10,11,12,17,18,
20,21,23,25,26,27,28,30,31,32,35,38,40,41. High factor
loadings on the second factor come from items 1,2,3,5,7,8,9,12,
13,14,16,17,19,20,22,23,24,26,29,31,32,34,36,37,39,40,42.
This suggests that in the two factors quite a few items
involve common factor variance. Items 6,7,13,18,22,28,29,30,31,
35,39,42 show high loadings on the third factor. The fourth
factor loading is found in items 3,14,17,24. Items 15,23,
33,35,40,41,42 have high loadings on the fifth factor.
Sixth factor is loaded high in items 1,3,9,15,16,26,27,28,41.
Items highly loaded on the seventh factor are 9,15,20,26,27,
32,36,39. In the sixth and the seventh factors thus the
items 9,15,26,27 do commonly contribute to variance. High
factors loadings on the eighth factor arises from items 7,
14,20,22,25,26,32,33,38. The ninth factor is seen in items

6,8,17,22,33,38,40. Ten items 5,11,14,15,16,21,23,31, 35,39 have high factor loadings on the tenth factor. High loadings on the eleventh factor come from items 3,21,29, 36,38. Items 4,6,23,24,25,27,30,39 contribute to factor twelve and items 25,26,29,31,40,42 to the thirteenth factor.

The Rotated Factor Matrix on Leadership
Style Scores

The original factor matrix on the 42 items was rotated using varimax procedures to obtain a meaningful picture and results are included in Table V.

This table presents a somewhat changed picture of Table IV, as a result of rotation. Items 2,23,25 and 38 which showed high positive loading on the first factor in Table IV, have low positive loadings after rotation. Items 1,2,3,5,26,32,37,40,42 assume negative loadings on the second factor. Similarly, negative loading are noticed for the previously high positively loaded items (7,13,18, 31,35,42) in the third factor. Some previous high positive loading become low even if directions do not change. Thus it is evident that rotation reduces the ambiguity across items and makes factors more meaningful.

The four items 3,14,17,24 which had high positive loading on the fourth factor after rotation either acquire a negative loading or low positive loading, while items

TABLE V

ROTATED FACTOR MATRIX OF LEADERSHIP STYLE SCORES

					F A C T O R S								
	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	.5077	-.0673	-.1206	.1077	.2797	-.0888	.2368	-.2123	.0999	-.3200	-.2001	.0836	-.0166
2.	.1265	-.0859	.0538	.0009	.1495	-.1970	-.0834	.2060	-.0532	.0109	-.7166	-.0676	-.0995
3.	.7169	-.2283	-.0886	.0152	-.0996	-.1947	.0812	-.1241	-.1043	-.1050	-.0955	-.0301	-.0678
4.	.2248	-.0709	-.0827	.0053	-.1084	-.3924	-.0935	.1293	.0388	.0783	-.2320	.5486	-.1566
5.	.1682	-.1628	-.4416	-.0686	.0195	.1136	.1789	-.1959	.1632	.2916	-.4364	-.0199	-.1202
6.	.2726	.1156	.1951	-.0093	.0719	-.1605	-.4043	-.1950	.0744	.0445	.1031	.0828	-.5408
7.	.0213	.1494	-.1939	-.3374	-.0321	.0309	-.1238	.1326	-.0725	.1483	-.0675	-.5292	.0864
8.	-.0093	.1472	.0778	-.1667	.6775	-.0544	.0092	.1353	.1464	.0440	-.2609	-.1159	-.0193
9.	-.0776	.5939	-.0376	-.1346	.0101	.1626	.1374	.0355	.0041	-.0413	-.0014	-.1357	.2702
00.	.6732	-.1244	.0271	.1718	-.0506	-.2494	.0199	-.0109	.0475	.1366	-.1241	.0197	-.2769
11.	.1518	-.2447	.0527	.0875	-.0694	.0246	-.0951	.0093	.2158	-.0075	-.1955	.1525	-.6552
12.	.2850	.0811	.0040	-.0802	.2046	-.0200	.1009	-.1176	.3010	-.1692	-.3171	.2760	-.4102
13.	-.1375	.4690	-.2344	-.1992	.0378	-.3278	.0488	.1644	-.0475	-.1710	.1867	-.8016	-.1462
14.	.0595	.0599	-.7594	.0786	-.0041	-.0564	-.1760	.1435	-.0865	.0449	-.0968	-.1319	.0687

I T E M S

TABLE V - contd.

ROTATED FACTOR MATRIX OF LEADERSHIP STYLE SCORES

						F A C T O R S							
	1	2	3	4	5	6	7	8	9	10	11	12	13
15.	-.0208	.0121	.0184	.0314	-.0397	.8371	.0274	-.0421	.0549	-.0802	.0408	-.0718	.0182
16.	-.0762	.1392	-.2717	-.1625	-.0550	.1722	-.0692	-.0440	-.0786	-.2835	-.6063	.1585	.1454
17.	.3507	.0684	-.4771	-.0073	.3591	-.3503	-.0247	-.1110	.1633	.0034	.1194	-.0816	-.0759
18.	.4039	-.1168	-.1236	.3505	.0259	-.1589	.0424	.1176	-.0735	-.0616	.0873	-.0265	-.6228
19.	-.2322	.2296	.1097	-.6687	.0591	.0813	-.1014	.1415	.1420	-.1063	-.1613	.0240	.1110
20.	.1740	.0210	-.0995	-.0634	-.0244	-.0950	-.1664	.7024	.1117	-.0708	-.1334	-.0818	-.0793
21.	.4750	-.0856	.0064	.1979	.1021	.1129	-.0060	.0799	-.0986	.0111	-.1640	.1260	-.5285
22.	-.1629	.2519	.0907	-.5758	.0859	.1427	-.2152	.0536	.0481	.0061	-.0207	-.3906	-.0054
23.	.0879	.1054	-.5871	.0338	.2254	.0578	.1374	.0498	.0963	-.1033	.0012	.4104	-.1560
24.	-.0023	.3604	-.3035	-.1523	-.0056	-.1708	-.2753	-.0991	.2542	-.0087	-.1570	.1265	.5308
25.	.0917	-.3742	.0183	.0042	.0959	.0226	-.0874	.4386	-.0496	.1744	.0433	.4872	-.2119
26.	.6782	-.0136	-.2287	.0046	.1253	.1210	-.1227	.2749	-.0135	-.0716	.0768	.0122	-.0352
27.	.4987	.0004	-.0756	-.0484	-.0761	.2275	-.0393	-.0710	.1299	-.0008	.0774	.3717	-.1884
28.	.6277	-.0671	.0987	.2806	.0567	-.0019	-.2003	.1197	-.0895	-.0395	-.1685	.0481	-.2201

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TABLE V - concld.

ROTATED FACTOR MATRIX OF LEADERSHIP STYLE SCORES

| | | | | | FACTORS | | | | | | | |
	1	2	3	4	5	6	7	8	9	10	11	12	13
29	.0139	.0159	.1874	-.6626	-.0323	-.0653	-.0508	.1284	-.1666	.0808	.0616	-.0334	.1130
30.	.5378	-.0673	.0727	.2351	.0467	-.1247	-.3479	.0642	-.1012	-.1480	.0463	.1219	-.2655
31.	.3367	.1875	-.1704	.1387	.3560	-.0331	-.1683	.0492	-.2816	.2409	-.0785	.0941	-.2914
32.	.5674	-.0002	-.0896	-.0310	.2183	.1572	.0534	.2777	.2042	-.0368	.0358	.0940	-.1863
33.	-.1519	-.3009	-.0622	.0814	.1369	.0725	-.0124	.1617	.7362	-.0346	.1819	.0958	-.0096
34.	-.1595	.4075	-.2307	-.4954	-.0440	-.1161	.1179	-.0201	-.1294	-.1138	.0450	-.1102	.2042
35.	.1879	-.1284	-.2356	.0918	.0652	-.0663	-.0824	.1684	-.0862	-.1238	.0661	.1146	-.6795
36.	.0539	.0205	-.1632	-.6345	-.0330	-.0487	.2418	-.3023	-.0766	.2107	-.0198	-.0327	.1264
37.	-.3338	-.0082	-.1076	-.5029	.1213	-.0822	.2717	-.0592	-.0095	-.1547	-.1148	.0272	.0303
38.	.0692	-.2703	-.1655	.0138	.0839	-.0174	-.7404	-.1404	-.0155	-.0960	-.1177	-.0711	-.0818
39.	-.0995	.6837	.0014	-.1361	.0749	-.0297	.0672	-.0794	-.2354	.2334	-.0048	.0015	.0793
40.	.1796	-.0894	-.1879	.0676	.8137	.0084	-.0881	-.0933	-.1095	-.1073	.0781	.0905	-.0348
41.	.1896	-.0675	.0290	.0514	.0325	.1006	-.0765	.0568	-.0356	-.7950	-.0826	.0045	-.0998
42.	-.2343	-.0285	-.0577	-.2283	.2857	.0051	-.0318	.0046	-.5403	-.3339	.2378	.0046	-.0547

I
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10,18,21,28,30 given high positive leading. A similar
trend is evident in the case of other factors. For
example, in the fifth factor, items 15,33,35,41 gained
either negative loading or low positive loading after
rotation, while items 1,8,17,31,32 acquired high positive
loadings on the same factor. Of the previously nine high
positively loaded items only items 9,15,16 and 27 remain
so in factor six. Factor seven shows only three high
positively loaded items. Only five of the seven items
retain their previous high position on the eighth factor.

From the ten high positively loaded items in factor
ten only three (5, 31, 39), remain so after rotation. With
two more items (25, 36) being added to this group the
number increases to five. None of the items which had
high positive loading on the eleventh factor remain same
after rotation. In the twelfth factor items 6,24,30,39
change position after rotation. In the thirteenth factor
items 25,26,29,31,40,42 which had high positive loadings
earlier have either become low in positive loading or
negative after rotation.

The Inter-correlational-Matrix on Intellectual Commitment Scores

The Intellectual Commitment Scale was formulated
for this study. This being in its trial phase, the raw
scores were subjected to a correlational analysis. Table
VI presents the inter-correlation matrix for 19 items on
the intellectual commitment scale.

TABLE VI

INTERCORRELATION MATRIX ON INTELLECTUAL COMMITMENT SCALE

I T E M S

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.																			
2.	.10																		
3.	.02	.14																	
4.	-.00	.05	.13																
5.	.01	.08	.23	-.02															
6.	-.00	-.06	-.10	-.04	-.09														
7.	.21	.13	.14	.14	.02	.21													
8.	.01	.04	-.05	.22	.02	.15	.03												
9.	.03	.21	.11	-.00	.12	.12	.07	.12											
10.	-.10	.07	.12	.08	.07	.09	.18	.18	.11										
11.	.14	.01	.05	.13	.14	.09	.42	.14	.12	.16									
12.	-.07	-.15	.02	-.07	.03	.12	.07	-.08	.01	.07	-.09								
13.	.02	-.08	-.16	-.11	-.05	.16	-.01	.01	.06	-.13	-.02	.27							
14.	.18	.34	.08	.02	.12	-.09	.17	.10	.21	.15	.08	-.03	-.12						
15.	.01	.00	.12	.02	-.04	.10	.22	.09	.01	.12	.02	.22	.02	-.08					
16.	-.04	.06	.06	.11	.13	.06	.15	.10	.18	.16	.00	.18	.14	.15	.11				
17.	-.02	-.12	-.13	.01	.06	.15	-.05	-.03	-.04	.00	.01	.02	.00	-.21	.10	-.19			
18.	-.02	-.10	-.14	.25	.03	-.01	-.04	.17	.03	.01	.02	-.09	.02	-.12	-.04	.97	.08		
19.	.02	.21	.17	-.00	.13	-.02	.10	.04	.27	.09	-.13	.10	.01	.26	.07	.19	-.21	-.13	

This Table show that only few items are significantly correlated with each other. One cluster of items emerge from correlation among items 7, 8, 10, 11 (7, 10 = r = .18; 8, 10 = r = .18; 7, 11 = r = .42; 8, 11 = r = .14; 10, 11 = r = .16). In the second cluster items 9, 10, 12, 14, 15, 16 correlate significantly with each other. In the third cluster significant correlation is found among items, 6, 7, 13, 14, 15. The items 14 and 15 are common in the second and third clusters which indicates that these have common variance. A fourth cluster emerged from items 2, 3, 4, 18, 19 (3, 18 = r = .25; 2, 19 = r = .21; 3, 19 = r = .17). No other cluster is visible. This indicates that the scale does not include items measuring common dimensions of intellectual commitment.

A Factor-Matrix of Intellectual Commitment Scores

The intercorrelation matrix was subjected to a principal component solution. Table VII includes the factor loadings and the eigen values of the obtained seven factors across 19 items. Results show that these seven factors explain about 58 per cent of the variance. Factor I accounts for the highest amount of variance, that is about 18 per cent. The second factor explains 9 per cent of variance, the third 5 per cent and the rest 7 per cent each.

TABLE VII

FACTOR MATRIX OF INTELLECTUAL COMMITMENT SCORES WITH EIGEN VALUES

		1	2	3	4	5	6	7
	1.	.2141	-.0575	-.1507	.4430	-.3943	-.0849	.3373
	2.	.4958	-.3512	-.0463	.0304	-.1856	.0221	-.2268
	3.	.4226	-.0110	.0307	.1174	.5528	-.0098	.1556
	4.	.2323	.1843	-.4791	-.3252	.1833	-.3364	.1647
	5.	.3207	-.1074	-.0082	-.0714	.2870	.6352	.3988
	6.	.0624	.5891	.1230	.1480	-.2520	.1519	-.3402
	7.	.5356	.3583	-.1285	.4545	-.0170	-.1987	.1210
I	8.	.2781	.3321	-.2980	-.3762	-.1984	-.0501	-.2449
T	9.	.4856	.0337	.1191	-.1893	-.2520	.4191	-.1126
E	10.	.4236	.2465	-.0875	-.1095	.3114	.0587	-.3853
M	11.	.3524	.0193	-.4450	.3668	-.0620	.1362	.2043
S	12.	.0463	.3724	.6278	.0165	.2048	-.0562	.1792
	13.	-.1153	.3672	.4611	-.0849	-.4109	.0411	.3131
	14.	.5948	-.3233	-.0041	.0210	-.2686	-.0065	-.0828
	15.	.1899	.4201	.2144	.1911	.3458	-.2454	-.1389
	16.	.4365	.2221	.2922	-.3965	-.0143	-.1247	.2551
	17.	-.3049	.3431	-.1563	.1661	.1758	.5078	-.1546
	18.	-.0975	.2865	-.4011	-.5252	-.0729	.0495	.2877
	19.	.5139	-.2217	.4066	-.1692	-.0133	-.0147	-.0937
	Eigen Values	2.4975	1.8194	1.6832	1.4083	1.3187	1.1287	1.1060

Table VII indicates that high factor loading on the
first factor emerge from items 1, 2, 3, 4, 5, 7, 8, 9, 10,
11, 14, 15, 16, 19. The second group of factor loadings
come from items 4, 6, 7, 8, 10, 12, 13, 15, 16, 17, 18.
This indicates that items 4, 7, 8, 10, 15, 16 are common
in factors one and two showing common factor variance.
High loadings on the third factor is found in items 12, 13,
15, 16, 19. The fourth factor shows high positive loadings
on items 1, 7, 11, 15, 17. The fifth factor has high
positive loadings on items 3, 4, 5, 10, 12, 15, 17. Item
15 appears to be common to factors 3, 4 and 5. Evidence
to high positive loadings on the sixth factor is found in
items 5, 9, 17. The seventh factor shows high positive
loading on items 1, 3, 4, 5, 11, 12, 13, 16, 18.

A Rotated Factor-Matrix on Intellectual Commitment Scores

Table VIII presents the rotated factor matrix of
19 items of intellectual commitment scores using a varimax
solution. It emerges from this table that the item
loadings appearing in Table VII change substantially after
rotation.

Items 4, 11, 15 which had high positive loadings
on factor 1, assume negative loadings after rotation.
Items 1, 5, 7 have low positive loadings in Table VIII as
compared to their earlier loadings. On the second factor,

TABLE VIII

ROTATED FACTOR MATRIX OF INTELLECTUAL COMMITMENT SCORES

		FACTORS						
		1	2	3	4	5	6	7
	1.	.1318	.5599	.0364	.1161	.0802	-.0643	.2577
	2.	.6334	.0945	-.2155	.0424	.0127	.0081	-.0072
	3.	.1683	.0890	-.0815	.0770	.4378	.3652	-.4402
	4.	-.0401	.1413	-.0964	-.6827	.2490	-.0468	-.1899
	5.	.1001	.0620	.0541	-.0108	.0937	.8593	.0183
	6.	-.0280	.1391	.1738	.0174	-.6954	-.1309	-.1972
	7.	.1316	.7102	.0895	-.0554	-.0524	-.0366	-.3948
	8.	.2109	.0061	-.0459	-.5801	-.3401	-.1109	-.0933
I	9.	.5245	.0034	.1267	-.0918	-.3564	.3324	.0411
T	10.	.2153	-.0629	-.1477	-.2241	-.2241	.1228	-.5655
E	11.	-.0423	.6910	-.1408	-.1900	-.1655	.2218	-.1061
M	12.	-.1251	-.0744	.6547	.1929	-.0145	.0634	-.3482
S	13.	-.0851	.0519	.7074	.0450	-.2343	-.0662	.2525
	14.	.6970	.2012	-.0768	.0005	.0568	.0296	.0381
	15.	-.1065	.1065	.2003	.0480	-.0595	-.1171	-.6417
	16.	.2968	-.0208	.5579	-.3370	.0954	.1074	-.1710
	17.	-.4510	-.0336	-.1956	.0929	-.4700	.3145	-.0642
	18.	-.2306	-.0425	.0761	-.6953	-.0373	.1365	.2337
	19.	.6172	-.1416	.2389	.0889	.0997	.0862	-.1774

items 1, 7, 11, 14 show high positive loadings, instead of items 4, 6, 7, 8, 10, 12, 13, 15, 16, 17, 18 in the earlier Table. High factor loading on the third factor is found in all the previous items seen in Table V with the addition of item 6. Items 1, 7, 11, 15, 17 which had high positive loading on the fourth factor show either low positive loading or negative loading after rotation. Item 12 alone has high positive loading now, which earlier had low positive loading.

Among the items which had high positive loadings in the fifth factor only items 3 and 4 show similar loadings after rotation. Others have either low or negative loadings. Items 5, 9, 17 which had high positive loading on the sixth factor in Table V have not changed after rotation. Two other items 3 and 11 also show high positive loading on this factor after rotation. In the seventh factor only items 1, 13, 18 have retained their high positive loading. Others show either low positive loading or negative loading.

Inter-correlation Matrix for the Independent Mediating and Dependent Variables

The inter-correlation matrix for the total independent, mediating and dependent variables is presented in Table IX.

In the set of independent variables the correlation between the nurturant - taskmaster (NT) style and the

TABLE IX

INTERCORRELATION MATRIX FOR INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

		A	NT	P	PERS.	VAL.	ACH. VAL.	INT.	COL. ENV.	BACK. INF.	SIG. OTH.	INT. COM.	PAST ACH.	FUT. ASP.
		1	2	3	4	5	6	7	8	9	10	11	12	13
A	1.	1.00												
NT	2.	..02	1.00											
P	3.	-.32	.62	1.00										
PERS.	4.	-.04	-.01	-.04	1.00									
VAL.	5.	.01	.07	.12	.33	1.00								
ACH.VAL.	6.	-.03	.15	.11	-.07	-.01	1.00							
INT.	7.	-.07	.15	.17	.47	.49	-.10	1.00						
COL.ENV.	8.	+.10	.24	.27	.10	.32	.28	.18	1.00					
BACK.INF.	9.	-.10	.19	.11	.04	-.09	.03	.06	.06	1.00				
SIG.OTH.	10.	-.07	.28	.12	.10	.12	.14	.10	.22	.18	1.00			
INT.COM.	11.	.14	.24	.11	.23	.37	.21	.27	.28	.07	.27	1.00		
PAST.ACH.	12.	.10	.07	-.05	.09	-.02	.06	.08	-.09	.15	.25	.09	1.00	
FUT.ASP.	13.	-.05	.08	.03	-.06	-.07	.22	-.01	.04	-.04	.16	-.04	.19	1.00

participative style (P) is found to be positive and significant $(r = .62 < .01)$. The correlation, between, Authoritarian and Nurturant - Taskmaster Style is very low $(r = .02 > .05)$ and Authoritarian and Participative style is negative and significant $(r = -.32 < .01)$. This indicates that a very high relationship exists between Nurturant Taskmaster and Participative styles, but almost no or a very insignificant relationship is found between Authoritarian and Nurturant Taskmaster. The Authoritarian and Participative styles seem to correlate negatively with each other, implying that these two have separate orientations.

The correlations between the three perceived styles of leadership and personality characteristics of students are consistently insignificant $(r = -.04; r = .01; r = -.04$ respectively).

The Authoritarian and Nurturant - Taskmaster styles correlate insignificantly with values $(r = .01; r = .07$ respectively). The Participative style has positive correlation with values $(r = .12)$ but it is not significant.

The correlation between Nurturant - Taskmaster style and Achievement values and between the Participative style and Achievement values is positive though not significant $(r = .15; r = .11$ respectively). An insignificant correlation $(r = -.03)$ is seen between the Authoritarian style and Achievement values.

Similar correlations are found when the mediating variable 'Interest' is taken into account. The correlation of Participative style and interest, however, seem to be significant (r = .17 $\angle$ .05). Results indicate that influence between the three perceived styles of teachers do not interact with the personality, value orientation, achievement values and interest of the students, except in the case of the participative style. All the three styles of leadership correlate with the college environment positively. The correlation between the Authoritarian style and college environment is not significant (r = .10), but the correlation of Nurturant Taskmaster style and Participative style with college environment are significant at 1 per cent level (r = .24; r = .27 respectively). It is evident from this that the Authoritarian style of teacher interaction as perceived by the students does not have any significant influence on the college environment, whereas the other two interact with college environment and do influence it positively.

The Nurturant Taskmaster Style correlates with the background information significantly (r = .19 $\angle$.05), but not the Authoritarian style (r = -.10) and the participative style (r = .11). This points out the important role of background information in preparing the students to look forward and accept the NT style of leadership later in

their work environment. The Authoritarian and the
Participative styles of leadership do not show any signi-
ficant correlation with the significant other image
$(r = -.07; r - .12$ respectively), but again, the Nurturant
Taskmaster style does significantly correlate with this
variable $(r = .28 \, \underline{/}.01)$ indicating the importance of
parental influence on the acceptance of the teacher's
style.

A look at the correlations between sets of
independent and dependent variables indicates that only
the Nurturant Taskmaster style has a positive and signi-
ficant correlation with the intellectual commitment of
students $(r = .24 \, \underline{/}.01)$. The other two styles show
positive but insignificant relationship $(r = .14; r = .11$
respectively). This is in support of the assumption that
Nurturant Taskmaster style helps increase the commitment of
students because of the leader's mixed attitude of affect-
ion and hard taskmaster. The Authoritarian style may
result in better performance but not in better commitment.
Similarly, the participative style may create a very
congenial atmosphere for its students, but, because of lack
of importance to work, is of little help in creating and
sustaining commitment.

The table shows that the relationship of the three
styles with the past achievement of the students is almost

nil (r = .10, .07, -.05 respectively). This is not in the
expected direction in that the achievement of students does
make them more fit for the acceptance of one or the other
style of teacher interaction, but for the teachers and
environment variables at schools and colleges which vary
widely. The three styles of leadership do not have any
significant relationship with future aspiration variable
as well. One speculates, though, that the commitment
generated by the Nurturant Taskmaster style should produce
high future aspirations among the students. To this extent,
the results are contrary to the expectation, either because
of uncertainty for future in student's own minds or lack
of an appropriate measure.

Results of Stepwise Regression Analysis Using Independent and Mediating Variables

Table X includes the Regression Coefficient and
the Multiple R for Intellectual Commitment, past achieve-
ment and future aspiration using Authoritarian style as
one predictor and this style in combination with different
mediating variables as predictors.

It emerges from the stepwise regression analysis that
the Authoritarian style can predict Intellectual Commitment
to the level of .14, that is, 2 per cent alone. Similarly,
it can predict Past Achievement to the level of .10, that

TABLE X

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Authoritarian Style		.0163		.14	.10	-
Authoritarian Style	.1469	.0168		.27	.14	-
Personality	.1572	.0099				
Authoritarian Style	.1403	.0170				
Personality	.0845	.0120		.41	.15	-
Values	.4594	-.0131				
Authoritarian Style	.1467	.0173	-.0159			
Personality	.0954	.0125	-.0065			
Values	.4564	-.0132	-.0305	.47	.16	.23
Achievement Values	.5266	.0246	.1775			

TABLE X - contd.

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Authoritarian Style	.1537	.0183	-.0141			
Personality	.0691	.0085	-.0130			
Values	.3946	-.0225	-.0458	.48	.18	.24
Achievement Values	.5462	.0276	.1824			
Interest	.4824	.0724	.1194			
Authoritarian Style	.1435	.0208	-.0142			
Personality	.0695	.0084	-.0130			
Values	.3561	-.0132	-.0400	.49	.22	.24
Achievement Values	.4799	.0435	.1819			
Interest	.4493	.0804	.1192			
College Environment	.0747	-.0179	.0005			

TABLE X - concld.

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Authoritarian Style	.1524	.0233	-.0165			
Personality	.0675	.0079	-.0125			
Values	.3805	-.0064	-.0523			
Achievement Values	.4788	.0432	.1822	.49	.27	.25
Interest	.4056	.0681	.1304			
College Environment	.0671	-.0201	.0025			
Background Variables	.1956	.0550	-.0501			
Authoritarian Style	.1639	.0259	-.0129			
Personality	.0605	.0063	-.0147			
Values	.3664	-.0096	-.0567			
Achievement Values	.4388	.0340	.1697	.52	.37	.29
Interest	.3990	.0666	.1283			
College Environment	.0433	-.0255	-.0049			
Background Variables	.1327	.0405	-.0698			
Significant Others	.1813	.0417	.0568			

is, 1 per cent. Positive weights on the variable, though, indicates that the style is a meaningful indicator, even-though this style alone cannot predict the Intellectual Commitment, past achievement and future aspiration of the students. By introducing the personality variable into the regression equation alongwith the Authoritarian style, the level of prediction increases considerably in relation to intellectual commitment ($R = .14$ to $R = .27$), that is, from 2 per cent to 7 per cent. The increase is not proportionate in the case of past achievement, only 1 per cent increase is evident with the personality variable and nothing happens in the case of future aspirations.

A further inclusion of values to Authoritarian style and personality, increases prediction to 18 per cent in the case of intellectual commitment. Addition of another variable, achievement values increases the prediction to 22 per cent. Interest increases it to further 1 per cent and so does college environment. Background information does not make any difference. The increase is again evident with the significant other image. All the variables taken together can predict approximately 27 per cent of the variance in intellectual commitment. Of course, the inclusion of mediating variables results into a significant increase from the earlier prediction of 2 per cent using Authoritarian style alone.

A similar trend is visible in the prediction of
past achievement and future aspirations. The level of
prediction goes on increasing with the addition of
variables, till the prediction from the total variables
in the case of past achievement is 14 per cent and for
future aspiration it is 8 per cent. This shows that
intellectual commitment can be predicted by using
Authoritarian style alongwith other mediating variables,
but the extent of predictive efficiency is very low for
past achievement and future aspiration.

The Regression Coefficients and the Multiple R
for Intellectual Commitment, Past Achievement and Future
Aspirations using Nurturant Taskmaster style as one
predictor and this style in combination with different
mediating variables as predictors is given in Table XI.

The Nurturant Taskmaster style predicts Intellectual
Commitment to the level of .24 that is, 6 per cent, and
past achievement and future aspiration to the level of
.07, that is, about 1 per cent. It is interesting to
note that while the level of prediction of intellectual
commitment goes on increasing significantly with the
addition of the mediating variables, the level of predict-
ion of past achievement and future aspiration of the
students does not increase to the same level. The result

TABLE XI

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT AND MEDIATING VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Nurturant Task-master Style	.2785		.0347	.24	.07	.08
Nurturant Task-master Style	.2806	.0139	.0345	.33	.11	.10
Personality	.1548	.0095	-.0143			
Nurturant Task-master Style	.2542	.0147		.44	.13	-
Personality	.0854	.0118				
Values	.4387	-.0140				
Nurturant Task-master Style	.2213		.0240	.48	-	.24
Personality	.0939		-.0057			
Values	.4395		-.0333			
Achievement Values	.4527		.1716			

TABLE XI - Contd.

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT AND MEDIATING VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Nurturant Task-master Style	.2111	.	.0197			
Personality	.0795		-.0118			
Values	.4073		-.0469	.49	-	.24
Achievement Values	.4660		.1772			
Interest	.2604		.1100			
Nurturant Task-master Style	.1947	.0158	.0207			
Personality	.0790	.0091	-.0118			
Values	.3742	.0115	-.0450			
Achievement Values	.4164	.0368	.1801	.49	.20	.24
Interest	.2486	.0601	.1107			
College Environment	.0627	-.0180	-.0037			

TABLE XI - concld.

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT AND MEDIATING VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Nurturant Task-master Style	.1848	.0113	.0260			
Personality	.0773	.0084	-.0109			
Values	.3865	-.0060	-.0515			
Achievement Values	.4170	.0370	.1798	.49	.24	.25
Interest	.2306	.0520	.1203			
College Environment	.0605	-.0190	-.0026			
Background Variables	.1026	.0462	-.0548			
Nurturant Task-master Style	.1489	.0014	.0122			
Personality	.0696	.0063	-.0139			
Values	.3742	-.0094	-.0563			
Achievement Values	.3742	-.0094	-.0563			
Interest	.2445	.0559	.1256	.51	.33	.29
College Environment	.0471	-.0226	-.0077			
Background Variables	.0622	.0350	-.0704			
Significant Others	.1438	.0397	.0555			

is, therefore, while the level of prediction of intellect-
ual commitment reaches to .51, that is 27 per cent with
the style combined with all the mediating variables, the
level of prediction of past achievement is .37, that is,
14 per cent and that of future aspiration is .29, that
is, 8 per cent only.

One very interesting phenomenon, which is noticea-
ble in this connection is that while there is a lot of
difference in the prediction of the intellectual commit-
ment from the Authoritarian and Nurturant Taskmaster
styles taken separately, their combination with the
mediating variables puts them to the same level of predict-
ion, that is, 27 per cent.

The Regression Coefficients and the Multiple R for
Intellectual Commitment, Past Achievement, Future Aspirat-
ions using Participative style as one predictor and the
style in combination with different mediating variables
as predictors is given in Table XII.

The participative style seems to predict intellect-
ual commitment to the level of .11, that is, 1 per cent
only. Its level of prediction of past achievement and
intellectual commitment is negligible. Its combination
with the personality variable increases it to the level of
.26, that is, 7 per cent in the case of intellectual commit-
ment. An increase of 1 per cent is also visible in the

TABLE XII

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT AND MEDIATING VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Participative Style				.11	-	.03
Participative Style	.1346	-.0091		.26	.10	-
Personality	.1569	.0093				
Participative Style	.0870			.39	-	-
Personality	.0850					
Values	.4477					
Participative Style	.0613		.0079	.45	-	.23
Personality	.0939		-.0056			
Values	.4498		-.0324			
Achievement Values	.5038		.1769			

TABLE XII -contd.

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT AND MEDIAT- ING VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Participative Style	.0453		.0027			
Personality	.0721		-.0126			
Values	.4040		-.0471	.45	-	.24
Achievement Values	.5224		.1828			
Interest	.3823		.1227			
Participative Style	.0194		.0032			
Personality	.0701		-.0126			
Values	.3605		-.0464			
Achievement Values	.4534		.1840	.47	-	.24
Interest	.3712		.1228			
College Environment	.0861		-.0014			

TABLE XII - concld.

STEPWISE REGRESSION ANALYSIS USING INDEPENDENT, MEDIATING AND DEPENDENT VARIABLES

INDEPENDENT AND MEDIAT- ING VARIABLES	REGRESSION COEFFICIENTS			MULTIPLE R		
	Intellectual Commitment	Past Achievement	Future Aspiration	Intellectual Commitment	Past Achievement	Future Aspiration
Participative Style	.0118	-.0104	.0054			
Personality	.0677	.0067	-.0119			
Values	.3806	-.0062	-.0524			
Achievement Values	.4820	.0403	.1844	.47	.24	.25
Interest	.3383	.0671	.1326			
College Environment	.0818	-.0159	-.0002			
Background Variables	.1598	.0515	-.0473			
Participative Style	.0019	-.0128	.0020			
Personality	.0601	.0049	-.0144			
Values	.3675	-.0094	-.0568			
Achievement Values	.4137	.0312	.1714			
Interest	.3356	.0664	.1316	.50	.34	.29
College Environment	.0623	-.0205	-.0068			
Background Variables	.1000	.0373	-.0675			
Significant Others	.1702	.0405	.0575			

prediction of past achievement and future aspiration.

The combination of the participative style with
the other mediating variables like personality, values;
personality, values and achievement values; personality,
values, achievement values and interest and so on till
it is combined with personality, values, achievement
values, interest, college environment, background infor-
mation and significant other image, gradually goes on
increasing the prediction level of Intellectual Commitment
till it reaches the level of .50, that is, 25 per cent
prediction, close to prediction made by Authoritarian and
Nurturant Taskmaster styles in combination with the same
mediating variables. The maximum level of predict on in
the case of past achievement is .34, that is, 12 per cent
and in the case of future aspiration, it is .29, that is,
8 per cent.

The dominant style of teachers as perceived by
students as well as teachers themselves is included in
Table XIII.

It is evident from this table that out of 129
students who have given the names of their favourite
teachers from the college staff, about 86 students hold
the Nurturant Taskmaster style as the most effective
teacher style. This means that almost 67 per cent students

TABLE XIII

PERCEPTION OF EFFECTIVE TEACHER STYLE BY
THE STUDENTS AND TEACHERS THEMSELVES

Teachers	Perception of style by students				Self-perception of style by teachers
	A	NT	P	Total	
1	–	11	3	14	NT
2	–	5	1	6	NT
3	–	2	–	2	NT
4	–	2	5	7	P
5	–	3	–	3	NT
6	–	2	1	3	NT
7	–	2	2	4	NT
8	–	1	–	1	P
9	–	–	1	1	NT
10	–	1	–	1	NT
11	–	1	2	3	NT
12	1	–	–	1	NT
13	–	3	2	5	P
14	–	1	–	1	NT
15	–	1	–	1	NT
16	–	1	–	1	NT
17	–	3	–	3	NT
18	3	9	–	12	NT
19	–	–	1	1	NT

TABLE XIII - concld.

PERCEPTION OF EFFECTIVE TEACHER STYLE BY
THE STUDENTS AND TEACHERS THEMSELVES

Teachers	Perception of style by students				Self-perception of style by teachers
	A	NT	P	Total	
20	-	3	-	3	NT
21	-	1	-	1	P
22	-	3	1	4	NT
23	-	6	1	7	NT
24	-	1	-	1	P
25	1	1	1	3	P
26	1	4	1	6	NT
27	-	1	-	1	NT
28	-	-	1	1	NT
29	-	-	1	1	NT
30	1	11	5	17	NT
31	-	1	1	2	NT
32	-	1	-	1	NT
33	-	1	1	2	NT
34	-	4	1	5	NT
35	-	-	1	-	P
36	-	-	1	-	NT
37	-	-	1	-	NT
38	1	1	-	-	NT
Total	8	86	35		P = 7, NT = 31

seem to have chosen teachers whom they perceive as
functioning in Nurturant Taskmaster style. About 27
per cent students have mentioned teachers, whose style
they perceive as participative. Only 6 per cent seem
to favour the Authoritarian style of teachers as
effective. This shows that the majority of the students
find the Nurturant Taskmaster style as the most effective
style of teacher interaction. The student's perception
corraborates with the self-perception of the teachers
in that those who have been mentioned by most of the
students as having the Nurturant - Taskmasters style have
also perceived themselves as functioning in this style;
so much so that 31 teachers, that is, almost 82 per cent
teachers perceive themselves as Nurturant Taskmaster,
while only 18 per cent perceive themselves as Participative.
This illustrated the congruence between the perception of
the style by the students and the actual style of the
teachers as perceived by them.

CHAPTER - V

D I S C U S S I O N

THE LEADERSHIP STYLE QUESTIONNAIRE

Results of the factor-analysis of the Leadership Style items indicate that the scale measures about thirteen factors relating to the three styles of leadership - Authoritarian, Nurturant - Taskmaster and Participative.

The thirteen factors represent the characteristic dimensions along which styles may compare and differ. The items that are found positively loaded on the first factor (Table IV and V) and which also show high correlations among each other (Table III) seem to focus on the level of friendliness and cooperation shown by the teacher toward his students. This indicates that basic human values, acceptance, close mixing are important in leadership styles in the college context. In terms of Sinha's characterisation some of these items measure the Nurturant Taskmaster style of leadership, and some the participative style. These two styles seem to have quite a few common characteristics arising out of the participative requirements or perceptions and these combine into the form of one factor. This factor may, therefore, be labelled as acceptance.

The second factor measures just the opposite
characteristic of that measured by the first factor. It
portrays the teacher as a strict disciplinarian in
contrast to the cooperative and friendly nature of the
first type. The dominant characteristic measured by the
items on which it loads heavily is that of an authoritarian
leader. This requires compliance and obedience on the
part of students and emphasizes the need of task complet-
ion. This might be called the conformity factor.

The third set of items which have high positive
loadings on the next factor measure the love and affect-
ionate attitude of the teacher with high preference for
the completion of the task. In Sinha's classification
these items seem to measure only one characteristic of
the nurturant-taskmaster style of leadership as different-
iated from the participative style. To the extent it
happens, the leader becomes task-oriented.

The fourth factor also emerges from items having a
high preference for the task and task alone. However, these
items combine common characteristics of authoritarian and
Nurturant-Taskmaster styles. The task is important to
both types of leaders and relationship with students
seems to be accepted through task itself.

The fifth characteristic measured by the scale
emphasizes the clear-concept of the task given by the

teacher to the student for the understanding of which
communication is encouraged. This factor differentiates
task preference of the Nurturant Taskmaster from that of
the Authoritarian teacher, suggesting that inspite of the
higher emphasis on task the teachers working on the basis
of these two styles do not adopt common tactics and
channels of interaction.

The items which correlate with each other to
measure the sixth factor indicate the teacher's character-
istic of getting the students involved in their work.
Evidently, these items measure the involvement character-
istic of the Nurturant Taskmaster style, which comes more
because of the nurturant role of the teacher rather than
his task-orientation. This finding is somewhat unexpected
in the sense that it should have also had a positive
loading on participative style, but it does not, indicat-
ing cultural factor.

The seventh factor measures the positive attitude
of the teachers toward the students, in getting the task
completed. Positive attitude here indicates an understand-
ing on the part of the teacher towards his students,
encouraging them to participate in all sorts of activities,
like, participation in class, interaction with the teacher
and so on. As expected this weighs positively on nurturant
roles and participative attitudes of teachers, which should

generate and sustain student involvement in class as well as outside class activities.

Items having high loadings on the eighth factor indicate that this factor focusses on the teacher's positive image of students, which here appears to be one of respect and understanding. This counts more on participative characteristics and to a lesser degree on nurturant style.

The ninth factor rests on authority as base and measures unfavourable attitude of the teacher toward his students. This indicates that the teacher does not have a positive image of his students, and has the feeling that the students will not work unless they are forced to work and a constant vigilance is required in getting the work done. As expected this counts heavily on items measuring the authoritarian style.

The tenth factor indicates preference for task completion with good guidance from the teacher, implying a nurturant taskmaster characterization. If students can have good relationship with the teacher, can obtain proper and timely guidance, the task-orientation will generate.

The eleventh factor measures a strange combination of friendliness and a loofness on the side of the teacher in his interaction with the students. The teacher is

helpful when required but also believes in non-interference —
a mix of sympathy and empathy depending on the insight and
understanding of the teacher himself.

The items contributing to the twelfth factor measure
the teacher's false sense of superiority, who feels that
if students are allowed to mix with the teacher, they will
start taking undue advantage and delay the completion of
the task. This draws on the authoritarian characteristics
and preference for maintaining a social and psychological
distance.

The thirteenth and the last factor measures the high
handed way in which the teacher treats the students,
tolerating no interference and driving them harshly to
finish the task. This is purely authoritarian factor,
which overlooks the human relationship dimension completely.

It emerges from factor analysis of the items of the
leadership style scale, that one item has potential to
measure more than one dimension of leader behaviour and
being grouped with more than one style. Same items are
found to be in clusters of authoritarian, nurturant-
taskmaster and participative styles. However, common
grouping seems to be more in the case of nurturant task-
master and participative styles and less in the case of
authoritarian and participative style. This is also found

in the correlational analysis (Table IX) in which autho-
ritarian and nurturant taskmaster styles show negligible
relationship (r = .02). A negative but significant
correlation (r = .32, p∠.01) is seen between authoritarian
and participative styles. However, a highly significant
positive correlation (r = .62, p ∠.01) is found between
the nurturant taskmaster and participative styles. These
findings support the earlier findings (Sinha 1977, Sinha
and Chowdhary 1979). Sinha and Chowdhary showed that
inspite of the high correlation, the nurturant taskmaster
and the participative styles are associated with distinctly
different patterns of perception of the units and
subordinates.

The Intellectual-Commitment Questionnaire

Results of the factor-analysis (Table VII and VIII)
of the intellectual-commitment scale indicate that the
scale is measuring about seven factors related to the
intellectual commitment of college students.

The first factor is based on items measuring the
importance attached by the student to his studies, which
form the most important part of his life. Evidently, a
higher importance attached to study is the crux of the
definition of intellectual commitment.

The second factor has items that indicate the student's intellectual expectations from the college environment. To be doing high academically involved studies, a congenial and permissive environment is needed, since it becomes an important mode of reinforcing involvement.

The high positive loadings of the items measuring the third factor indicate the negative attitude of the student toward his studies, the little importance he attaches to it and the very little time he keeps for it. This characterizes the large number of students who do not perceive college as a challenging experience and are not enthusiastic about it.

The fourth factor measures the anxiety in the student and his concern for doing well in the college. This emerges from high competition in jobs in the society, in which academic performance is used as a screening device.

The fifth and sixth factor items show the students deep involvement with his intellectual life, and his strong interest toward activities related to studies. A little different is the seventh and the last factor which measures the student's preference for studies and college related activities.

Overall, the intellectual commitment scale weighs
heavily on items measuring student's emphasis on academic
activities. In a way the items in the intellectual
commitment questionnaire, thus, seem to measure character-
istics which fall close to job involvement as it is
defined by Vroom (1962), Faunce (1959) and Maurer (1969)
who described job involvement as the degree to which an
individual's work is important to him. The items in
general emphasize commitment as a stable personality
characteristic but whether they indicate its dependence
on the situational variables is not very clear. The
regression analysis of results using specific leadership
styles as predictors offers important insights.

HYPOTHESIS I

The hypothesis I explores the possibility of the
prediction of intellectual commitment of college students
based on a knowledge of their preference for a particular
faculty leadership style. Results of a correlational
analysis (Table IX) indicate that all the three styles are
positively correlated with intellectual commitment.
However, it is only the nurturant-taskmaster style which
has significant correlation with intellectual commitment.

The correlation of the authoritarian style with the
intellectual commitment is not significant ($r = .14$, $p < .05$)

though it seems to have high positive correlation. This result, therefore, does not support the findings of Ganguli (1964), Meade (1967) and Pestonjee and Singh (1973) whose findings illustrate the effectiveness of the authoritarian style over the democratic style. However, it supports several other previous findings, like that of Sinha and Sinha (1977) who found the authoritarian leader to be ineffective because of his self-orientation and demand of loyalty, unconditional submissiveness and full compliance from his subordinates. However, the present results do not show a negative correlation between the authoritarian style and intellectual commitment. This might be because through their task orientation even authoritarian teachers help students in completing the task. The mere pleasure of success may create and repeatedly reinforce a positive commitment in the student towards studies; though this may not be significantly related to the teacher's style of functioning. This points out the possibility that the authoritarian style does create a positive commitment in the students, but, needs further probing since the relationship is not very clear.

The highly significant correlation between the nurturant taskmaster style and the intellectual commitment of students is in the predicted direction ($r = .24$, $p < .01$).

This is also consistent with the earlier findings (Sinha and Sinha, 1977), who predicted the effectiveness of this style in the Indian context over and above other styles of leadership. It also supports the psychological viewpoint that commitment, which is the behavioural manifestation of involvement, is related to the situational variables. However, the finding does not support Anderson's study (cited in Lodahl and Kejner, 1965), where a negative relationship was obtained between the consideration style of the leader and job involvement. Similarly, it negates Jone's (1975) study where he fails to find any significant relationship between the two.

The reason for the difference in the present finding and the earlier research seems to provide further support to the previous assumption of culture difference. The excessive dependency need, preference for personalized relationship and weak work values among the Indians (Sinha and Sinha, 1974), help the student put his confidence and trust more in a leader who combines a nurturant orientation with the concern for task. This alongwith the satisfaction of task completion helps boost up the commitment of the student and makes him more and more involved with intellectual activities, giving him pleasure and satisfaction in life.

The participative style correlates with the

intellectual commitment of the student positively but
not significantly $(r = .11, p < .05)$. In fact the
correlation is even less than the one obtained between the
Authoritarian style and intellectual commitment. This is
quite contrary to the Lippitt and White's (1943) observat-
ion that except in the work output, which has been found
to be maximum in the case of the authoritarian style, all
work related effects on the worker is highly positive in
the case of the democratic style as compared to the autho-
ritarian style. The participative style which is very
close to the democratic style fails to confirm this. It
does not also confirm the findings of the studies conducted
on the Indian people by Kakar (1971, 1974); Daftuar and
Krishna (1971) and Pandey (1975) who established the
effectiveness of the democratic style over the authoritarian
style in creating a favourable and conducive atmosphere
leading to high productivity. However, the result is in
close confirmity with Sinha and Sinha's (1978) finding in
which a group of college students rated the participative
leader as democratic, skillful, practical, but at the same
time relatively week, coward, slack and uninfluential.
Sinha and Sinha (1974) give one plausible - although post
hoc-interpretation that in a culture where dependency,
personalized relationship and status orientation are strong
values, the participative leader is likely to be taken

for a weak leader. The present results do adhere to
this interpretation in the absence of findings otherwise.

The findings on Hypothesis I, therefore, seem to
confirm Fiedler's theoretical proposition that the
effectiveness of a leader does not depend only upon his
characteristic but also on the situational variables,
one of them being the characteristic of the followers.
The Indian students display relatively weak work values.
With such subordinate characteristics, the nurturant task-
master style of teachers automatically gains an edge over
the other two styles of leadership (Sinha and Sinha, 1977).

HYPOTHESIS II

The second hypothesis explores the possibility of
relationship between past achievement of college students
and their preference for a particular style of leader-
ship. The analysis reveals that none of the three styles
included here are found to have significant correlation
with the past achievement of college students (Table IX).

The correlation between the authoritarian style
and the past achievement of college students is positive
but not significant ($r = .10$, $p > .05$). This implies
that the past achievement of the students perhaps does not
prepare them to accept the authoritarian style of
leadership. Students in this particular college enter at
a higher level of school achievement and perhaps do not

enjoy the specific guidance of teachers. This confirms earlier findings which indicate that even with high output, the subordinates show little preference for an authoritarian leader (Lippitt and White, 1943). Sinha and Sinha's (1979) study also reported that though college students perceive an authoritarian leader as autocratic, influential and brave, yet they show dissatisfaction, disrespect, insecurity, impracticability and unpleasant feelings toward him.

The correlation of both nurturant taskmaster and participative styles are also not significant in relation to the past achievement of students ($r = .07, -.05$). This indicates lack of any relationship between these styles and past achievement. This appears to be in contrast with our assumption. The negative trend of relationship between participative style and past achievement may be explained on the basis of the student's weak work values because of which they do not consider any of the style of teachers as effective. Perhaps, either students are not clear of their expectations or teachers do not know how to relate to their needs effectively.

HYPOTHESIS III

The third hypothesis attempts to predict the future aspirations of college students based on a knowledge of their preference for a particular leadership style. The

correlational table (Table IX) shows an almost insigni-
ficant relationship between the three styles and the
future aspiration of students (r = -.05, .08, .03). This
is also a reflection of the cultural factors perhaps.
The Indian culture does not induce and nourish
in students, high motivational and competitive values,
as a result of which they neither aspire high for the
future nor make very advanced plans about it. They are
quite pragmatic but short sighted. Hence, even the high
intellectual commitment of students and the taskmaster
orientation of the leader does not increase their future
aspiration to the same level.

HYPOTHESIS IV

The fourth hypothesis explores the possibility of
a better prediction of intellectual commitment of college
students by combining the student's preference for a
particular leadership style in interaction with other
mediating variables like personality, values, achievement
values, interest, college environment, background infor-
mation and significant other image through stepwise
regression procedures. The result shows (Table X, XI,
XII) that the predictive efficiency of all the three
styles increase considerably when they interact with all
these mediating variables.

In the authoritarian style which predicts by
itself intellectual commitment to the level of .14, that
is, 2 per cent, a significant difference is observed when
the mediating variables personality, values and achieve-
ment values are combined with it. The Authoritarian
style in interaction with personality characteristics
increases its prediction value to 7 per cent, while
personality and values increase it to 18 per cent. The
authortarian style combined with personality, values and
achievement values increase prediction to 22 per cent.
A further inclusion of interest, college environment,
background information and significant other mediating
variables increases it to 27 per cent. This indicates,
of course, personality, values and achievement values as
important interacting variables. It is so because the
personality characteristics, values and achievement values
all develop and acquire functional values through the
socialization process which may make the students more
acceptant of the authoritarian style of leadership. This
further strengthens the point made earlier that if a
culture is such which produces excessive dependency in
the students and makes them look up to a strong superior
who can force them to work, their intellectual commitment
will increase when they interact with an authoritarian
leader (Sinha and Sinha, 1974). The correlational analysis

(Table IX), however, does not show significant correlation of the authoritarian style with these three variables.

In the case of Nurturant Taskmaster style a similar trend is visible. The style alone can predict intellectual commitment to the level of 6 per cent. The combination of this style with the mediating variables of personality, values and achievement values produces a significant increase in the prediction of intellectual commitment, from 7 per cent to 23 per cent. The addition of other mediating variables increase the prediction level to 27 per cent. The significant correlation of intellectual commitment with all the mediating variables, except background information (Table IX) provides further evidence to their importance in increasing the prediction level.

For the participative style also the level of prediction increases in the same manner. This makes the total results indifferentiated and demands researcher's choice of selection. The question to be faced squarely is that if in the Indian culture, the student imbibes certain characteristics in his personality and value make up, how should it interact in such a random manner with three different styles of leadership to give the same level of intellectual commitment. This does not, however, establish the effectiveness of any single style over other

styles. Another plausible interpretation may be that the Indian student has such flexible personality and value orientation that he can interact with any type of teacher style to attain a certain level of intellectual commitment.

HYPOTHESIS V

The fifth hypothesis explores the possibility of a better understanding of past achievement of college student based on the knowledge of preference for a particular leadership style in interaction with other mediating variables like personality characteristic, values, achievement values, interest, college environment, background information and significant other image.

A better understanding of the past achievement of college students can be obtained by combining the authoritarian style to the mediating variables like personality, college environment and significant other image, which seems to increase the understanding from 1 per cent to the level of 14 per cent but, the addition of other variables like values, achievement values, interest and background information does not seem to affect the level of understnading much. A similar trend is visible in the nurturant taskmaster style and the participative styles (Tables XI, XII). The reason may be that the variables like, personality, college environment and significant other

image directly help to increase the achievement of students. The results of style combined with the college environment and significant other image helps students to have academic interests and high expectations helps its understanding a little better of course.

HYPOTHESIS VI

The sixth hypothesis attempts to explore the possibility of a better prediction of the future aspiration of the college students by combining the knowledge of their preference for a particular style with the earlier mentioned mediating variables.

The level of prediction of the future aspiration of the students is not even 1 per cent from any of the three teachers styles taken separately. However, the combination of the mediating variables like values and significant others image helps to increase the prediction to the level of 11 per cent in the case of nurturant taskmaster style; to 14 per cent in the case of authoritarian style and to 12 per cent in the case of participative style. The explanation may again be given on the basis of the learned values and the expectation of significant others, the interaction of which helps to increase the future aspiration of the students, though not to a considerable level. This result is supported by earlier finding (Table IX) where no significant correlation

was obtained between the teacher style and the future aspiration of students.

It is thus evident from the above findings that the nurturant taskmaster style is a somewhat better predictor of intellectual commitment, than the authoritarian and participative styles. The variableslike personality, values, college environment, and significant other image are important interacting variables which interact with the styles to bring them to better level of prediction of intellectual commitment. The two other dependent variables, past achievement and future aspiration do not show significant correlation with any of the three styles. The interaction of these styles with the mediating variables also does not help to increase the level of prediction. This may be interpreted as styles represent one aspect of a person's functioning and rest for their better utility on some other individual and social variables which need to be carefully identified to be incorporated in training programmes etc.

A comparison of student's preference for a particular teacher style against self-perception of teachers themselves indicated that those who are preferred by majority are nurturant taskmaster and are perceived so by teachers themselves. This illustrates the dominantly suitable cultural style in the college context. Whether

it would be transformed into participative style at a
later stage as suggested by Sinha (1977) remains to be
seen in future research. Perhaps one should include
students from terminal courses to assess its probability.

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CHAPTER - VI

CONCLUSION, IMPLICATION AND PROPOSED EXTENSION

CONCLUSION

The approaches to leadership styles are many. A review of the theoretical models of leadership reveals strikingly overlapping areas of concern relating to the task and the people a leader has to deal with despite the different approaches and styles he may adopt. Leadership style researches use varied expressions like democratic, high on consideration, high LPC (Least Preferred Coworker), relationship oriented and participative, all having a common concern, that is, human orientation. Similarly, concepts like authoritarian, high on initiating structure, low LPC and task-oriented are used to represent a second set of more or less common expressions, the concern for task-orientation. It is believed that a people oriented leader cares primarily for human relationship, maintains openess and a climate of trust and understanding, treats subordinates as equal encourages free and all directional information flows and feedbacks and thus helps the members grow and actualize their potentialities. The task-oriented leader, on the other hand, has little concern for human relationship, demands complete loyalty, unconditional submissiveness and full compliance from his subordinates for the completion of task.

He controls communication network, restricts interactions, takes all decisions by himself and thus stunts the growth of his subordinates and breeds discontent among them.

A logical corollary of the above is that an effective leader is one who meets the needs and requirements of his subordinates and the organization he represents. Researchers report that in the Indian context, the subordinates cherish from the leader personalized relationship, emotional support, help and direction (Sinha and Sinha, 1974). In such a situation a nurturant orientation of the leader becomes in itself a very critical component determining his effectiveness. Equally crucial component becomes the task accomplishment without which the organization cannot remain viable for him over time.

Keeping in view these two pre-requisites of effectiveness, Sinha (1977) formulated a model of leadership style known as Nurturant Task leader (NT). Such a leader requires that the task must be completed, the subordinates understand and accept the goals and normative structure of the organization and introject them. He structures his subordinates roles clearly so that communications are explicit, structured and task relevant. He initiates, guides and directs his subordinates to work hard and prefers to maintain a high level of productivity. His task orientation, however, does have a mix of nurturance. He cares for his

subordinates, shows affection, takes personal interest in their well being and above all is committed to their growth. His general warmth helps create a climate of trust and understanding where organizational processes such as information sharing, decision making, goal setting, and controlling are graduated with the level of maturity and preparedness shown by the subordinates. Sinha and his associates (1977, 1978, 1979) found supportive evidence to this.

Drawing on the effectiveness of the nuturant task-master style reported in industrial setting, the present study attempted to determine if NT style emerges as the most effective style in the educational institutions. The teacher was conceived as a leader in the academic set up, the students as his subordinates with whom he interacted to achieve the institutional goals of good academic achievement and the individual goal of higher intellectual commitment.

The following six hypotheses were tested :-

(1) Whether it is possible to predict intellectual commitment of college students based on a knowledge of their preference for particular faculty leadership style (authoritarian, nurturant taskmaster and participative).

(2) Whether preference for a particular leadership style relates to the past achievement of college students.

(3) Whether preference for a particular leadership style helps predict the future aspirations of college students.

(4) Whether intellectual commitment of college students can be predicted better by taking into account the role of mediating variables (personality, values, achievement values, interest, college environment, background information and significant other image), alongwith the preference for a leadership style.

(5) Whether the past achievement of students can be understood better by taking into account the role of the mediating variables alongwith preference for a leadership style.

(6) Whether the future aspiration of students can be predicted better by taking into account the role of mediating variables, alongwith preference for a leadership style.

Using purposive sampling procedure, students from one educational complex (Hansraj College) were selected for the study. All of them were drawn from the Science Department in order to keep certain extraneous variables under control. Questionnaires pretested for reliability were administered to 140 students in the above departments. Teachers listed as most effective by students (N = 38) were also given a leadership study questionnaire. Data was analysed using analysis of variance, factor analysis and step-wise regression analysis.

Results of the correlational analysis supported
hypothesis I. The nurturant taskmaster style was found
to be positively and significantly related to the
intellectual commitment of students ($r = .24$, $p < .01$).
The authoritarian and participative styles showed positive
but insignificant relationship ($r = 14$, $p > .05$; and
$r = 10$, $p > .05$). This result supported the findings of
authors like Sinha and Chaudhary. It also confirmed the
assumption of similarity between effective leadership
approaches in the educational and industrial complex.
Hypothesis II does not find any support in the inter-
correlation table of the independent and dependent
variables. None of the three styles were found to have
significant relationship with the past achievement of
students (Table IX). This might be because the teacher
and environment variables at school and college vary
widely. Therefore, the past achievement does not relate
with the style of functioning of teachers in the present
set up. The relationship between the styles and the
future aspiration of students is also insignificant
(Table IX). This does not support Hypothesis III. This
result may have been obtained because the teacher styles
fail to evoke high future aspirations in the students
because of failure to instil confidence and trust in the
students.

The step-wise regression analysis provides support
for Hypothesis IV. Results reveal that the predictability
of intellectual commitment increases from 2 per cent to
27 per cent if the authoritarian style was combined with
the mediating variables (personality adds 5 per cent,
values add 11 per cent, achievement values add 4 per cent,
interest and college environment add 1 per cent each and
significant other image adds 3 per cent). The predict-
ability of intellectual commitment increases from 6 per cent
to 27 per cent in the case of nuturant taskmaster style
in combination with the mediating variables. The increase
is from 1 per cent to 25 per cent in the case of participat-
ive style in combination with the mediating variables.
The variables like, personality, values, college environment
and significant other image stand out as important mediating
variables, which augment the predictive strength equally of
all the three styles. One explanation might be that there
are certain such factors in the personality development,
value orientation, college environment and expectations of
significant others which level off the positive and negative
aspect related to the styles.

Similar trend of findings were visible in relation
to Hypothesis V. The past achievement of students could
be understood better by taking into account the role of
the mediating variables in combination with the teacher

styles. The predictability of past achievement increased from 1 per cent to 14 per cent when the authoritarian style was combined with the mediating variables (Table X). Similar results were found when the other two styles were combined with the mediating variables. The predictive level of the future aspirations of students also increased when the styles were combined with the mediating variables (Table X, XI, XII). However, the increase was much less as compare to Intellectual Commitment. This shows that past achievement and future aspirations of college students are not related to the teacher styles which was also confirmed by the correlational findings (Table IX).

IMPLICATIONS

The confirmation of Hypothesis I in the research implies that in the Indian context nuturant task leaders are likely to prove effective in the college to initiate high commitment in the students. To the extent research can help in identifying such teacher characteristics and suggest ways of nurturing them, teacher training programmes can be evolved to reinforce these. Such teachers would interact with students in a manner which will involve them into their academic pursuits and invoke an enquiring mind.

Hypothesis II has not found support in the present study. This implies that the present achievement of students also cannot be increased as a result of posting

effective teachers in the colleges. This is a strange finding and calls for future study. Either an attempt should be made to locate variables in the school and college curriculum which help understand such a finding or better methodological structure should be obtained to assess the effect of the styles on the past achievement variable.

Hypothesis III has also not been supported in the study. The teacher styles are not related to the future aspiration of students. This also calls for further research.

The confirmation of Hypothesis IV implies that the styles of teachers functioning are not as important in predicting the intellectual commitment of students as they become when they are combined with such variables as personality of the students, their values, their achievement values and significant other image so that all the styles predict intellectual commitment equally well when combined with the mediating variables. In the case of Hypothesis V one finds similar result, though the predictive level of past achievement is not increased to the same extent as the level of intellectual commitment when the styles combined with the mediating variables. Hypothesis VI also shows similar trend. The predictive level of future aspiration is raised only to 8 per cent when the styles

combine with the mediating variables. A study can be made to see the effect of these personal and social variables on the intellectual commitment, past-achievement and future aspiration of students.

PROPOSED EXTENSION

The findings of this study while resolve certain problems also raise a number of issues which may be mentioned as follows :-

(1) This study took students from only one educational complex. Hence, it is imperative that future research should make a comparison across sifferent colleges and different curriculums to ascertain the general effective- ness of the nurturant taskmaster style.

(2) The effect of personality, values, and significant other image need to be studied in detail to see if the influence of these on the intellectual commitment of students varies across student types, curriculum types etc.

(3) Alternative methodology need to be utilized to clarify relationship between the three teacher styles and past achievement and future aspiration of students.

(4) Attempt may be made to study the personality characteristics of effective teachers, to see if a matching of the teacher-student characteristic is possible and if

it enhances its effect on the intellectual commitment of students.

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APPENDIX - I

Intellectual Commitment

Questionnaire

The question given here measure a students' intellectual commitment. Intellectual commitment is defined as an intense and persevering involvement with intellectual activities. An intellectually committed student is one who prefers intellectual (reading a serious book) to non-intellectual (playing cricket or gossiping) activities and actually spends more time on intellectual activities. Keeping this in mind please read each statement carefully and see how true or false it is with regard to your own interest in your study related matters. Read the five alternatives provided for each statement and decide which one describes you best. Put a small tick mark before the most appropriate alternative. Thank you for your kind cooperation.

1. Sometimes I lie awake at night thinking ahead to the next day's work in the class.

    (a) ---------- Very True
    (b) ---------- True
    (c) ---------- Doubtful
    (d) ---------- False
    (e) ---------- Very False.

2. The most important things that happen to me involve my studies.

    (a) ---------- Very True
    (b) ---------- True
    (c) ---------- Doubtful
    (d) ---------- False
    (e) ---------- Very False.

3. I'll stay overnight to finish the work that has been assigned to me in the class.

      (a) ---------- Very True

      (b) ---------- True

      (c) ---------- Doubtful

      (d) ---------- False

      (e) ---------- Very False.

4. I feel depressed when I fail at something connected with my studies.

      (a) ---------- Very True

      (b) ---------- True

      (c) ---------- Doubtful

      (d) ---------- False

      (e) ---------- Very False.

5. I usually go a little early to the class to make sure that I don't miss the lectures.

      (a) ---------- Very True

      (b) ---------- True

      (c) ---------- Doubtful

      (d) ---------- False

      (e) ---------- Very False.

6. I would like the various academic programmes in the colleges to encourage the students creative thinking and imagination.

      (a) ---------- Very True

      (b) ---------- True

      (c) ---------- Doubtful

      (d) ---------- False

      (e) ---------- Very False.

7. I do not like the students to disrupt the normal academic life of the college campus.

      (a) ---------- Very True

      (b) ---------- True

      (c) ---------- Doubtful

      (d) ---------- False

      (e) ---------- Very False.

- 3 -

8.. I like to be interested in the academic problems of other fellow students.

     (a) ---------- Very True
     (b) ---------- True
     (c) ---------- Doubtful
     (d) ---------- False
     (e) ---------- Very False.

9. I often meet the teachers outside the classroom and regular study hours.

     (a) ---------- Very True
     (b) ---------- True
     (c) ---------- Doubtful
     (d) ---------- False
     (e) ---------- Very False.

10. I am able to give a piece of classwork the attention it deserves.

     (a) ---------- Very True
     (b) ---------- True
     (c) ---------- Doubtful
     (d) ---------- False
     (e) ---------- Very False.

11. Sometime I'd like to kick myself for the mistakes I make in my studies.

     (a) ---------- Very True
     (b) ---------- True
     (c) ---------- Doubtful
     (d) ---------- False
     (e) ---------- Very False.

12. I used to be more ambitious about my studies than I am now.

     (a) ---------- Very True
     (b) ---------- True
     (c) ---------- Doubtful
     (d) ---------- False
     (e) ---------- Very False.

13. I avoid taking on extra duties and responsibilities in the class.

    (a) ---------- Very True

    (b) ---------- True

    (c) ---------- Doubtful

    (d) ---------- False

    (e) ---------- Very False.

14. I am very much involved personally in my studies.

    (a) ---------- Very True

    (b) ---------- True

    (c) ---------- Doubtful

    (d) ---------- False

    (e) ---------- Very False.

15. To me, my academic activities are only a small part of who I am.

    (a) ---------- Very True

    (b) ---------- True

    (c) ---------- Doubtful

    (d) ---------- False

    (e) ---------- Very False.

16. Quite often I feel like staying home, instead of coming to the college.

    (a) ---------- Very True

    (b) ---------- True

    (c) ---------- Doubtful

    (d) ---------- False

    (e) ---------- Very False.

17. I feel that the students should be free to present in the class even an idea which is not related to studies but is conducive to intellectual growth.

    (a) ---------- Very True

    (b) ---------- True

    (c) ---------- Doubtful

    (d) ---------- False

    (e) ---------- Very False.

18. I feel that the students should be involved personally in the admission policy, provision and content of course and disciplinary matters of the college.

      (a) ----------- Very True

      (b) ----------- True

      (c) ---------- Doubtful

      (d) ---------- False

      (e) ---------- Very False.

19., I spend on my studies on an average per week.

      (a) More than 15 hours.. -----------

      (b) Ten to 14 hours -----------

      (c) Six to nine hours -----------

      (d) Three to five hours -----------

      (e) Less than two hours -----------

Teacher Style Questionnaire

The question given describe how a teacher deals with students. Please read each statement carefully and relate it to <u>the teacher you feel</u> <u>is most effective.</u> You are required to judge how true or false the statement is with regard to the one teacher you consider most effective. An effective teacher is defined as one who makes education most meaningful to you and helps you satisfy your expectations of the educational experience.

1. Read each item carefully.

2. Think about how true or false the statement is with reference to the teacher you consider most effective.

3. Read the five alternatives provided for each statement and decide which one of the five most nearly describes the teacher.

4. Underline the most appropriate alternative.

The alternatives are defined thus :

1. ----------- Very True
2. ----------- True
3. ----------- Doubtful
4. ----------- False
5. ----------- Very False.

1. He/She works hard.

    1. Very True   2. True   3. Doubtful   4. False   5. Very False.

2. He/She believes that personal loyalty is important.

    1. Very True   2. True   3. Doubtful   4. False   5. Very False.

3. He/She encourages students to get involved in their work.

    1. Very True   2. True   3. Doubtful   4. False   5. Very False.

4. He/She seeks the participation of students in all decisions concerning them.

    1. Very True   2. True   3. Doubtful   4. False   5. Very False.

5. He/She insists on discipline among students.

    1. Very True   2. True   3. Doubtful   4. False   5. Very False.

6. He/She feels that if a teacher is friendly with students, the group will be strengthened.

    1. Very True   2. True   3. Doubtful   4. False   5. Very False.

7. He/She believes that one's performance record is a true refeldtion of ability.

    1. Very True   2. True   3. Deoubtful   5. False   5. Very False.

8. He/She believes that one can really grow by doing one's work well.

    1. Very True   2. True   3. Doubtful   4. False   5. Very False.

9. He/She does not tolerate interference from students.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

10. He/She has regard for the opinions and feelings of his/her students.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

11. He/She feels that a friendly approach can make the laziest student hardworking.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

12. He/She believes that under the guidance of a good teacher, a sense of responsibility among students can be promoted.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

13. He/She easily categorizes students as good and bad.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

14. He/She likes hard working students.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

15. He/She is considerate towards lazy for troublesome students.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

16. He/She feels a teacher must have power and control over his students.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

17. He/She takes special care that work gets top priority.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

18. He/She encourages his/her students to feel free to communicate with him/her.

    1. Very True 2. True 3. Doubtful 4. False 5. Very False.

19. He/She thinks that power and position are necessary to earn student regard.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

20. He/She takes decisions quickly.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

21. He/She feels that to get work done the students and teacher must understand and share each other feelings.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

22. He/She feels that one has to lose one's temper to get compliance from students.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

23. He/She insists that work be completed and done with responsibility.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

24. He/She feels that one sometimes has to be harsh and unsparing to be a successful teacher.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

25. He/She does not interfere in students' work, yet gives them direction if and when necessary.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

26. He/She explain all the work that is required of students in the very beginning.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

27. He/She believes that quality performance of the class of students requires the cooperation of all concerned.

     1. Very True   2. True   3. Doubtful 4. False 5. Very False.

28. He/She has affection for his/her students.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

29. He/She is watchful of his/her professional rivals.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

30. He/She is friendly.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

31. He/She explains to students what he/she expects of them and what they can expect from him/her.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

32. He/She gives detailed direction to students as to how to do their work.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

33. He/She believes that nearly all students have equal potential.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

34. He/She believes that most students will not work unless forced to.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

35. He/She likes students to feel free to discuss anything regarding their work.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

36. He/She feels that a wise teacher will keep some crucial information to himself.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

37. He/She tries to maintain some distance from students.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

38. He/She abides by the joint decision of students and teachers.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

39. He/She sticks to his/her apoint even when students disagree.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

40. He/She is recognised for his/her knowledge of subject matter.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

41. He/She changes rules and procedures if the work so requires.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

42. He/She mixes freely with students.

   1. Very True   2. True   3. Doubtful   4. False   5. Very False.

~~43.   He/She feels that not all students have the potential to be successful.~~

   ~~1. Very True   2. True   3. Doubtful   4. False   5. Very False.~~

Significant other Image

Questionnaire

In the questions given below, you have to guess how your <u>mother</u>, <u>father</u>, <u>best friend</u> and <u>favourite teacher</u> would have answered certain questions about your ability. You have, therefore, to give four responses to each question in relation to your mother, father, best friend and favourite teacher. There are five probable responses given against each question. You pick out the one best suited for each of the four persons separately and mark (a), (b), (c), (d) or (e) against the blank space given before their names. Now read the questions carefully

and respond.

1.   How do you think this person would rate your college ability compared with young people of your age?

    (a) As the best

    (b) As above average

    (c) As average

    (d) As below average

    (e) As the poorest.

Your mother --------------- Your father ------------

Your best friend -------------- Your favourite teacher ------------

2.   Where do you think this person would say you would rank in your class in the B.A. final Examination?

    (a) Among the best

    (b) Above average

    (c) Average

    (d) Below Average

    (e) Among the poorest.

Your mother ------------- Your father ---------------

Your best friend ------------ -- Your favourite teacher ------------

3.   In order to become an administrator lawyer or university professor, work beyond four years of college is necessary. Do you think this person would say you have the ability to complete such advanced work?

    (a) Yes, definitely.

    (b) Yes, probably

    (c) Not sure either way

    (d) Probably not

    (e) No.

Your mother ----------------- Your father ---------------

Your best friend ------------ Your favourite teacher ---------------

4.   What kind of marks do you think this person would say you are capable of getting?

        (a) Above 75%

        (b) Above 60%

        (c) Above 45%

        (d) Above 30%

        (e) Below 30%

Your mother ----------------- Your father -------------------

Your best friend ------------ Your favourite teacher --------------

Give the following information

Name of your best friend --

Name of your favourite teacher --

PERSONAL CHARACTERISTICS INVENTORY

On the following pages are a number of statements pertaining to your personal characteristics. Each becomes meaningful if you link it up with any of the responses offered. The inventory is divided into five parts. Instructions pertaining to each part is given at the beginning. As this is not a test of intelligence there is no question of a right or wrong answer. Read each statement carefully and answer all the items. Remember your careful answering should reveal the truth of your actual practice or practice intended by you and it is applicable in your case alone.

YOU ARE REQUESTED TO ANSWER ALL ITEMS.

Don't skip any.

PART - I

Responses :   1. ALMOST ALWAYS   2. FREQUENTLY
                 80-100%   60-80%

             2. OCCASIONALLY   4. RARELY
                 40-60%   20-40%

             5. ALMOST NEVER
                 Below 20%

For each statement there are 5 responses. You are requested to choose ONE of the 5 responses which may indicate the best answer that corresponds with your characteristics. Put a tick mark (_/) on the response of your choice for each statement. Answer all items. Now turn

1. Like meeting people.

   1. Almost always   2. Frequently   3. Occasionally   4. Rarely
   5. Almost never.

2. Embarrassed after doing or saying the wrong thing.

   1. Almost Always   2. Frequently   3. Occasionally   4. Rarely
   5. Almost never.

3. Take the initiative while talking to strangers.

   1. Almost Always   2. Frequently   3. Occasionally   4. Rarely
   5. Almost never.

4. Like to be observed by others.

   1. Almost Always   2. Frequently   3. Occasionally   4. Rarely
   5. Almost never.

5. Like to be a leader of a group.

   1. Almost Always   2. Frequently   3. Occasionally   4. Rarely
   5. Almost never.

6. Stay in the background at parties or social gatherings.

   1. Almost Always   2. Frequently   3. Occasionally   4. Rarely
   5. Almost never.

7. Recover quickly from social blunders.

   1. Almost Always   2. Frequently   3. Occasionally   4. Rarely
   5. Almost never.

8. Like to do anything to attract the people.

   1. Almost Always   2. Frequently   3. Occasionally   4. Rarely
   5. Almost never.

9. Feel shy while talking (speaking) to a group or at parties.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

10. Dislike to persuade people to do things.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

11. Like to be left alone.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

12. Like to participate in activities leading to friendships.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

13. Embarrassed while taking part in competitive games at parties.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

14. Feel to limit social life to a few people.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

15. Participate easily in a group discussion.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

16. Like to take the initiate in making friends.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

17. Do not like to waste the time in the company of friends.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

18. Like asking favours of people.

   1. Almost always. 2. Frequently 3. Occasionally 4. Rarely

   5. Almost never.

PART - II

   For each statement a choice among the three responses : "TRUE, SOMETIMES TRUE and NEVER", is desired. You are requested to choose your response for each statement by putting a tick mark (/) on your response.

1.	Scientific research leads to the discovery of truth.	True	Sometimes True	Never
2.	Teaching is the best profession.	True	Sometimes True	Never
3.	Development of modern society depends on research and discovery of laws.	True	Sometimes True	Never
4.	The most important function of every individual is to attain the economic stability of the country.	True	Sometimes True	Never
5.	Industrial and scientific developments are the signs of a greater degree of civilization than those attained by ancient societies such as India or Greece.	True	Sometimes True	Never
6.	I like those people who have a practical bent of mind.	True	Sometimes True	Never
7.	Artistic works such as paintings, drawings clay models etc. fascinate me very much.	True	Sometimes True	Never
8.	One should guide one's conduct according to the ideals of beauty.	True	Sometimes True	Never
9.	I would prefer a woman/man who is gifted along artistic lines as my partner.	True	Sometimes True	Never

10. Social service is an interesting activity for me.	True	Sometimes True	Never
11. Generally I go to see those movies that have a theme of human love.	True	Sometimes True	Never
12. The most important function of education should be the preparation for participation in communities and aiding less fortune persons.	True	Sometimes True	Never
13. If I have the opportunity, I always like to associate myself with a debating society or forum.	True	Sometimes True	Never
14. I like mostly those people who possess qualities of leadership and organizing ability.	True	Sometimes True	Never
15. Mostly I prefer books on the lives of great men.	True	Sometimes True	Never
16. Human qualities should be guided by religious principles.	True	Sometimes True	Never
17. I like mostly those who are very spiritual by nature.	True	Sometimes	Never
18. Religious studies will ultimately prove to be more beneficial for mankind.	True	Sometimes True	Never

PART - III

For each statement there are three responses. You are requested to choose one which corresponds MOST with your characteristics by putting a tick mark (/) on the number of the response. Remember, out of the three responses you are requested to tick the one which you like the most. Answer all items.

1. I like

A. to be faithful to my friends.
B. to be very systematic in my work.
C. to do my best in whatever work I undertake.

2. In accomplishing a task I like
    - A. to be neat and clean.
    - B. to do much better than others.
    - C. to finish it before time.

3. My aim of life is
    - A. to make a long record of successful achievement.
    - B. to serve my nation.
    - C. to attain high status in the society

4. My secret ambition in life is
    - A. to enjoy a happy married life.
    - B. to obtain a highly paid job.
    - C. to establish a glorious record of achievement.

5. I am of the opinion that for pleasure and happiness one must
    - A. support charities.
    - B. get the basic amenities of life.
    - C. enrich the record of one's achievement.

6. I like
    - A. reading fiction, adventure, travel etc.
    - B. visiting different places of the world.
    - C. to think of my future career.

7. I frequently desire
    - A. to be a popular social reformer.
    - B. to be a great political leader.
    - C. to do something of great significance.

8. I am very serious
    - A. about being truthful as much as possible.
    - B. about helping those who really desire help.
    - C. about being a great man in my own job or profession.

9. In whatever work I undertake
    - A. I like to make
    - B. I like to do my very best.
    - C. I like to assume full responsibility.

10. I am always keen
    - A. to fight for a noble cause.
    - B. to remove segregation and other social evils.
    - C. to develop my qualifications.

11. I frequently aspire to be

    A. a man with wonderful achievement.

    B. a very rich man.

    C. a happy go lucky man.

12. I am happiest when

    A. making others happy.

    B. I am successful in my work.

    C. I become the centre of other's attention.

13. I have a general tendency

    A. to continue a work till it is finished.

    B. to analyse other's judgement critically.

    C. to be polished im manners.

14. Before starting a difficult task.

    A. I would take other's suggestions.

    B. I would plan its details

    C. I would imagine the difficulties that might arise.

15. I am

    A. tolerant of people who hurt me.

    B. morally upright person.

    C. determined to work toward a high goal.

16. I feel upset when

    A. I am blamed on my own account.

    B. I fail to reach my desired goal.

    C. I am neglected or unloved.

17. I believe that it is possible for me.

    A. to be a recognized authority.

    B. to achieve social status.

    C. to get sufficient power in my hand.

18. I am anxious

    A. to know my own defects so as to overcome them.

    B. to do something of great significance.

    C. to be the object of attraction in the group.

PART - IV

Each statement in this part is accompanied by 'YES' or 'NO' responses. If the item is true to your characteristics put a tick mark (_/) on 'YES. If it is not true put a tick mark (_/) on 'NO'.

Choose either yest or no but not both for each statement. Be sure not to omit any item.

1. Like to do some creative painting
    or other art work.   Yes   No

2. Participated in the exhibitions of
    creative work at School/college or
    some place other than school or
    college.   Yes   No

3. Interested in reading atleast a
    book once in a month.   Yes   No

4. Interested in writing essay, story,
    play, poem etc.   Yes   No

5. Like to participate in speech/
    debate contests.   Yes   No

6. Like to participate in music
    competitions.   Yes   No.

7. Interested to attend athletics
    events   Yes   No

8. Tick those items for which you have
    won award or prize or position from
    the following :

    1. Creative work in art   2. Literary work

    3. Debate/Speech   4. Music competition

    5. Sports, games   6. Science contests.

PART - V

College Environment :

Responses : 1. Almost always   2. Frequently   3. Occasionally
               80-100%   60-80%   40-60%

            4. Rarely   5. Almost never
               20-40%   below 20%

The following statements are related to your college/University.
Each statement has 5 responses which may indicate the best answer that

corresponds with the characteristics of your college/university. Put a tick mark (✓) on the response of your choice. Answer all items :

1. ✿ Students are very serious and interested in their studies.

1. Almost always   2. Frequently   3. Occasionally   4. Rarely

5. Almost never.

2. Most of the teachers are dedicated scholars in their fields.

1. Almost always   2. Frequently   3. Occasionally   4. Rarely

5. Almost never.

3. The college/university is well known for its standard and reputation.

1. Almost always   2. Frequently   3. Occasionally   4. Rarely

5. Almost never.

4. There is a lot of participation among students in the class room activities.

1. Almost always   2. Frequently   3. Occasionally   4. Rarely

5. Almost never.

5. There is plenty of time in this college/university for initiative and personal interests.

1. Almost always   2. Frequently   3. Occasionally   4. Rarely

5. Almost never.

6. The college/university is outstanding for the emphasis and support it gives to scholarship and basic research.

1. Almost always   2. Frequently   3. Occasionally   4. Rarely

5. Almost never.

7. Most of the students secure high marks/credits in their examinations.

1. Almost always   2. Frequently   3. Occasionally   4. Rarely

5. Almost never.

8. In studying your subject you must read many books.

1. Almost always   2. Frequently   3. Occasionally   4. Rarely

5. Almost never.

9. There is a lot of group spirit among students.

   1. Almost always   2. Frequently   3. Occasionally   4. Rarely

   5. Almost never.

10. College organizes lectures, discussions and seminars by outstandin scholars at regular intervals.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

11. Here everybody attends the class because it is very lively and interesting.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

12. Most of the courses offered here demand intense and vigorous work.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

13. It is rather easy here to meet the authorities and get things done.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

14. Most of the students have independent or common projects.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

15. Here the courses are relevant to your future job.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

16. Students generally do not deviate from the established rules and regulations of the campus.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

17.   Authorities consult students while taking top decisions.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

18.   On their own initiative teachers try to come into contact with you.

    1. Almost always   2. Frequently   3. Occasionally   4. Rarely

    5. Almost never.

Furnish the following information :

    Name --------------------------   Course ---------------------

    College ----------------------   University ------------------

    Sex --------------

1.   Division/Grade obtained in :

    a) S.S.L.C. --------------------

       or Higher Secondary -----------------------------

    b) Graduation : First year -------------------

                   Second year -------------------

2.   Award or prize or special recognition
    received for academic performance   -------------------------

3.   Highest degree planned :

        a) Graduation

        b) Post-graduation

        c) Doctorate.

4.   Subject of interest for further study : -------------------

5. Probable future occupation : -------------------------

6. Education of (1) Father ------------------- (2) Mother ----------------.

7. Occupation of (1) Father ------------------- (2) Mother ----------------.

8. Family income per month --------------------

9. Name of School last attended :

                                        ----

10. Permanent Home address   ------------------------------

Teacher Style Questionnaire

The questions given describe how a teacher deals with students. Please read each statement carefully and relate it to yourself as a teacher.

1. Read each item carefully.

2. Think about how true or false the statement is with reference to yourself.

3. Read the five alternatives provided for each statement and decide which one of the five most nearly describes you.

4. Underline the most appropriate alternative.

   The alternatives are defined thus :

   1. ———————— Very True

   2. ———————— True

   3. ———————— Doubtful

   4. ———————— False

   5. ———————— Very False.

1. I work hard.

   1   2   3   4   5

2. I believe that personal loyalty is important.

   1   2   3   4   5

3. I encourage students to get involved in their work.

   1   2   3   4   5

4. I seek the participation of students in all decisions concerning them.

   1   2   3   4   5

5.   I insist on discipline among students.

             1   2   3   4   5

6.   I feel that if a teacher is friendly with students, the group will be strengthened.

             1   2   3   4   5

7.   I believe that one's performance record is a true reflection of ability.

             1   2   3   4   5

8.   I believe that one can really grow by doing one's work.

             1   2   3   4   5

9.   I do not tolerate interference from students.

             1   2   3   4   5

10.   I have regard for the opinions and feelings of my students.

             1   2   3   4   5

11.   I feel that a friendly approach can make the laziest student hardworking.

             1   2   3   4   5

12.   I believe that under the guidance of a good teacher, a sense of responsibility among students can be promoted.

             1   2   3   4   5

13.   I easily categorize students as good and bad.

             1   2   3   4   5

14.   I like hard working students.

             1   2   3   4   5

15. I am considerate towards lazy and troublesome students.

          1   2   3   4   5

16. I feel a teacher must have power and control over his students.

          1   2   3   4   5

17. I take special care that work gets top priority.

          1   2   3   4   5

18. I encourage my students to feel free to communicate with me.

          1   2   3   4   5

19. I think that power and position are necessary to earn student regard.

          1   2   3   4   5

20. I take decisions quickly.

          1   2   3   4   5

21. I feel that to get work done the students and teacher must understand and share each other feelings.

          1   2   3   4   5

22. I feel that one has to lose one's temper to get compliance from students.

          1   2   3   4   5

23. I insist that work be completed and done with responsibility.

          1   2   3   4   5

24. I feel that one sometimes has to be harsh and unsparing to be a successful teacher.

          1   2   3   4   5

25. I do not interfere in students' work, yet give them direction if and when necessary.

       1   2   3   4   5

26. I explain all the work that is required of students in the very beginning.

       1   2   3   4   5

27. I believe that quality performance of the class of students require the cooperation of all concerned.

       1   2   3   4   5

28. I have affection for my students.

       1   2   3   4   5

29. I am watchful of my professional rivals.

       1   2   3   4   5

30. I am friendly.

       1   2   3   4   5

31. I explain to students what I expect of them and what they can expect from me.

       1   2   3   4   5

32. I give detailed direction to students as to how to do their work.

       1   2   3   4   5

33. I believe that nearly all students have equal potential.

       1   2   3   4   5

34. I believe that most students will not work unless forced to.

       1   2   3   4   5

35. I like students to feel free to discuss anything regarding their work.

       1   2   3   4   5

36. I feel that a wise teacher will keep some crucial information to himself.

       1   2   3   4   5

37. I try to maintain some distance from students.

       1   2   3   4   5

38. I abide by the joint decision of students and teachers.

       1   2   3   4   5

39. I stick to my point even when students disagree.

       1   2   3   4   5

40. I am recognized for my knowledge of subject matter.

       1   2   3   4   5

41. I change rules and procedures if the work so requires.

       1   2   3   4   5

42. I mix freely with students.

       1   2   3   4   5

APPENDIX - II

I. TABLES GIVING CODES FOR THE SCALES

Leadership Style Scale		Personality Characteristic		
Response Categories	Codes	Response Categories	Codes	
			Sociabi-lity	Non-socia-bility
Very True	5	Almost Always	5	1
True	4	Frequently	4	2
Doubtful	3	Occasionally	3	3
False	2	Rarely	2	4
Very False	1	Almost Never	1	5

College Environment Questionnaire		Significant Other Image	
Response Categories	Codes	Response Categories	Codes
Almost Always	5	As the best or Yes defi-nately or above 75%	5
Frequently	4	Above Average or Yes pro-bably or above 60%	4
Occasionally	3	As Average or Not sure either way or above 45%	3
Rarely	2	Below Average or Probably Not or above 30%	2
Almost Never	1	As the poorest or No or below 30%	1

Intellectual Commitment Questionnaire		
Response Categories	Codes	
	Commitment	Non-commitment
Very True or more than 15 hours	5	1
True or 10 to 14 hours	4	2
Doubtful or 6 to 9 hours	3	3
False or 3 to 5 hours	2	4
Very False or less than 2 hours	1	5

Values		Interest	
Response Categories	Codes	Response Categories	Codes
True	3	Yes	1
Sometimes True	2		
		No	0
Never	1		

II. TABLES GIVING SCORING KEY FOR THE SCALES

		Leadership Style Scale			
Items	Style	Items	Style	Items	Style
1	NT	15	P	29	A
2	A	16	A	30	P
3	NT	17	NT	31	NT
4	P	18	P	32	NT
5	A	19	A	33	P
6	P	20	A	34	A
7	NT	21	P	35	P
8	NT	22	A	36	A
9	A	23	NT	37	A
10	P	24	A	38	P
11	P	25	NT	39	A
12	NT	26	P	40	NT
13	A	27	P	41	NT
14	NT	28	NT	42	P

Personality Characteristic Scale

Item	Personality Measure	Item	Personality Measure
1	Sociability	10	Non-sociability
2	Non-sociability	11	Non-sociability
3	Sociability	12	Sociability
4	Sociability	13	Non-sociability
5	Sociability	14	Non-sociability
6	Non-sociability	15	Sociability
7	Sociability	16	Sociability
8	Sociability	17	Non-sociability
9	Non-sociability	18	Sociability

Achievement Value Test

Item	Correct Choice	Item	Correct Choice
1	C	10	C
2	B	11	A
3	A	12	B
4	C	13	A
5	C	14	B
6	C	15	C
7	C	16	B
8	C	17	A
9	B	18	B

Intellectual Commitment Questionnaire

Item	Measure	Item	Measure
1	Commitment	11	Commitment
2	Commitment	12	Non-commitment
3	Commitment	13	Non-Commitment
4	Commitment	14	Commitment
5	Commitment	15	Non-commitment
6	Commitment	16	Non-commitment
7	Commitment	17	Commitment
8	Commitment	18	Commitment
9	Commitment	19	Commitment
10	Commitment		

Background Information

Parent Education		Parent Occupation		Family Income	
Level of Education	Code	Type of Occupation	Code	Rs. per month	Code
Illiterate	1	No occupation or retired	1	Below 500	1
				501 - 1000	2
Non-Graduate	2	Non-professional	2	1001 - 1500	3
Graduate	3			1501 - 2000	4
Above Graduate	4	Professional	3	2001 - 2500	5
				2501 - 3000	6
				3001 and above	7

Past Achievement			
Division obtained	Code	Awards received	Code
IIIrd Division	1	None	1
IInd Division	2	One	2
Ist Division	3	More than one	3

Future Aspirations					
Degree Planned	Code	Subject of Interest	Code	Future occupation	Code
Graduation	1	Business	1	No occupation	1
Post Graduation	2	Political	2	Non-professional	2
		Artistic	3		
Doctorate	3	Academic	4	Professional	3
		Technical	5		
		Medical	6		