

**MOVING  
FROM  
MARGIN TO MAINSTREAM:**

*A study on the effectiveness of formal and teacher  
initiated student mentoring in B-schools in Kerala*

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*for the award of the Degree of*

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*under*

*the Faculty of Social Sciences*

*by*

**MANJU P. GEORGE**

*Under the guidance of*

**Dr. SEBASTIAN RUPERT MAMPILLY**

**SCHOOL OF MANAGEMENT STUDIES  
Cochin University of Science and Technology  
COCHIN – 682 022**

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School of Management Studies  
Cochin University of Science and Technology  
*Cochin - 682 022*

**Dr. Sebastian Rupert Mampilly**  
Reader

Phone : Off : 0484- 2575310  
Res : 0484 -2424378

## **Certificate**

This is to Certify that the thesis entitled “**Moving from Margin to Mainstream: A study on the effectiveness of formal and teacher initiated student mentoring in B-Schools in Kerala**” is a record of bona fide research work done by Ms. Manju P. George, full-time research scholar, under my supervision and guidance.

The thesis is the outcome of her original work and has not formed the basis for the award of any degree, diploma, associateship, fellowship or any other similar title and is worth submitting for the award of the degree of Doctor of Philosophy under the Faculty of Social Sciences of Cochin University of Science and Technology.

**Dr. Sebastian Rupert Mampilly**  
(Research Guide)

## *Declaration*

I hereby declare that the dissertation entitled “**Moving from Margin to Mainstream: A study on the effectiveness of formal and teacher initiated student mentoring in B-Schools in Kerala**” is a record of the bona fide research work done by me and that it has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or any other title of recognition.

**Manju P. George**

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*"A lot of people have gone further than they thought they could because someone else thought they could"*

- Anonymous

## 1.1 Historical perspective of mentoring

The phenomenon of mentoring dates back to ancient Greece and the mention of the concept started appearing in scholarly writings during the 19<sup>th</sup> century. It has evolved as a corollary of the progress of mankind and gained substantial popularity in recent years and garnered wide acceptability among business organisations around the world (Schelee, 2000) and in higher education as an emerging and highly promoted intervention (Kram, 1984). Mentoring has been construed as a relationship-centered transaction between two people with learning and development as its purpose (Megginson and Garvey, 2004). Mentoring is primarily meant for the mentee, and the mentee's dream is central to mentoring (Caruso, 1996).

Mentoring has had its origin thousand years ago in Indian civilization in the form of Guru-Shishya relationship or the 'gurukula' system of education.

Gurukula is an ancient Indian concept of education, wherein the student imbibed knowledge by residing with his or her teacher as part of his family. 'Guru' stands for the teacher/master, and 'Kul' for his domain. Thus students of the gurukula lived a life of tutelage, obedience and discipline. The guru was not merely a teacher. He was a father, a guide, and a role model for all the students (Nachimuthu, 2006). Nachimuthu also says that mentoring is not a fad of the day, but existed from time immemorial, in the Indian mythology.

According to Clutterbuck (2001) modern mentoring had its origin in the concept of apprenticeship. When the guilds of craftsman dominated the commercial world, the young apprentice was taken under the wing of an older, more experienced master craftsman. It was through this relationship that the apprentice received knowledge as to how the task was to be performed and how to operate it in the commercial world. The relationship often became intimate and ensured that the key skills, knowledge and ability were kept intact and not lost to a competitor.

The term mentor, originated in Homer's *Odyssey* when, Odysseus, King of Ithaca, went to fight in the Trojan War. He gave away the responsibility of nurturing and educating his son Telemachus to a wise and learned man named Mentor. Mentor served as a teacher and overseer to Odysseus' son. After the war, Odysseus was on exile for 10 years. Telemachus went in search of his father. He was accompanied on his quest by goddess Athena, who had then assumed the role of Mentor. Eventually, the father and son were united, and with the passage of time, the word mentor came to mean a trusted advisor, friend, teacher and a wise person.

The relationship between Mentor and Telamachus was a formal one. Odysseus requested Mentor to take on the role and established the parameters of relationship. Current formal mentoring programmes have a strong link to Odysseus' model of a mentor being a family friend, providing long term guidance and counsel.



This relationship vanished due to the rise of the industrial revolution with its importance on mass labour, mass training and mass production. In spite of this it was usual for a supervisor to keep an eye on a talented worker and help him prepare for a better position. Though the term mentoring was not used, the ethos has always been alive.

Of late, mentoring seems to have gained a strong foothold in many organisations and the meaning seems to change every decade (Megginson and Clutterbuck, 1995). In the 1960s Stodgill defined a mentor as an ambiguous authority figure. In the 1970s Levinson described a mentor as a transitional figure in a person's life. In the 1980s the view of mentoring process was very much of a 'managerial tutelage', but this view has become inappropriate as organisations become flatter, and individuals become more self-reliant. Hay (1995) in her book 'Transformational Mentoring' describes mentoring as a 'developmental alliance'; a relationship between equals in which someone is helped to develop his or her self. This is the model that suits comfortably with the higher education sector.

New entrants to any profession need somebody who can 'show them learn the ropes', develop their proficiency and understanding, and help them fit in. Teaching is no exception. After decades of assumption that teachers only teach and the taught get better through their own individual trial and error, there is increasing commitment to the idea that all teachers are more effective when they learn from and are supported by a strong community of colleagues. While new teachers can benefit greatly from a mentor, mentors can also learn from their protégés by developing new insights into their own and others' ways of conduct, new relationships, and a renewal of enthusiasm and commitment to their craft and career.

## **1.2 Substance of mentoring**

Lester and Johnson (1981) envelope the total nature of mentoring by saying that mentoring is a one-to-one learning relationship between an older person and a younger person based on a modeling of behavior and extended dialogue between them. Mentoring is a way of individualising a student's education by allowing or encouraging the student to connect with a college staff member who is experienced in a particular field, having a set of skills. The relationship has formal and informal aspects - what seems to confirm a mentoring relationship is its informal dimensions, which give greater significance to the contact between the two persons involved. The student must have respect for the mentor as a professional and as a human being who is living a life worthy of that respect. The mentor must care enough about the student to take time to teach, to show, to challenge, and to support. In some elusive fashion, the mentor must embody values, aspirations, wisdom, and strength that the student respects and perhaps wishes to attain (Kram and Isabella, 1985). Mentors provide youngsters with career-enhancing functions, such as sponsorship, coaching, facilitating exposure and visibility, and offering challenging work or protection, all of which help the younger person to establish a role in the organisation, learn the ropes, and prepare for advancement. In general, during mentoring, mentees identify with, or form a strong interpersonal attachment to their mentors; as a result, they become able to do for themselves what their mentors have done for them. To succeed, mentoring must occur between a younger person and an older person, who is ahead of the mentee, but not distanced by social difference. Through the mentoring relationship the mentee can achieve a modest targeted goal, already achieved by the mentor (Blackwell, 1989).

In the educational field there is a variation in the definitions of mentoring ranging from being viewed as a process by which people of superior rank, special achievements, and prestige do instruct, counsel, guide, and facilitate the intellectual and/or career development of those identified as protégés; mentoring is viewed as a form of professional socialisation whereby an experienced individual acts as a guide, role model, teacher and patron for a less experienced and young person. Regarding the field of higher education, Moses (1989) viewed mentoring as a relationship between a professor and an undergraduate or graduate student in which the mentor takes the mentee under his/her wing, assisting the student in setting goals, developing skills, and successfully entering both academic and professional circles. From this perspective, mentoring is regarded as a means of facilitating a student's intellectual development while ensuring their academic, personal and professional success. Wunsch (1994) cites that higher education has been slow to define mentoring. He also states that 'possibly the strongest perception is that mentoring is a form of teaching that goes on naturally between students and faculty and between junior and senior faculty colleagues and the popularisation of mentoring as a 'quick fix' for advancement in the workplace has blurred the definition, devalued the concept, and done little to advance the understanding of the process of the relationship.

Alternately, mentors are individuals with advanced experience and knowledge who are committed to providing upward mobility and support to protégés' careers; generally they are higher-ranking, influential individuals in the work environment who have advanced experience and knowledge and are committed to providing upward mobility and support to the mentee's career (Ragins, 1997 b). It is also possible that the mentor may or may not be in the same organisation or that she/he may or may not be the mentee's immediate

supervisor. Mentoring in modern organisations can be a formalised process whereby a more knowledgeable and experienced person actuates a supportive role of overseeing and encouraging reflection and learning within a less experienced employee so as to facilitate that person's career and personal development (Carrad, 2002). This relationship is typically developed at a time of transition in the mentee's life, and lasts for a significant and sustained period of time (Miller, 2002).

### **1.3 Mentoring as an intervention in education**

Studies conducted in educational settings indicate that faculty mentors improve the student's employment possibilities (Cameron, 1978), professional skills (Bova and Philips, 1984) and professional growth (Harris and Brewer, 1986). Faculty mentors also have reported that their own growth continues when they mentor students (Busch, 1985). Educational institutions now turn to mentoring as a possible intervention, despite the lack of accepted empirical evidence on the effect of mentoring in education (McNamara and Rogers, 2000). Mentoring relationship is believed to bring to the protégé (student) the benefits of enhanced social skills, interpersonal skills, experiences and working relationships particularly those of non-parent/teacher type, increased academic focus with intentions to help students with study skills and provides to target those with low aspirations or poor motivation to succeed academically. Effective mentoring involves facilitating, networking, sponsorship, coaching, role modeling, counseling and friendship. Recently, there has been an increased interest in mentoring as a management development strategy in both education and industry. In business management and higher education literature, mentoring is emerging as a highly promoted intervention (Kram, 1984). Many successful executives have vouched the positive impact of how critical mentors, when they were in college and later in

their careers. Mentors encouraged their personal and professional development by offering advice and leads, encouraging them through difficult periods and motivating them to continue to push ahead, and helping them identify their prominent talents.

#### **1.4 Mentoring in academics and higher education**

The principles underlying mentoring and work place learning are relevant and useful in an academic environment as they are in any other organisational environment. The major focus of mentoring in higher education is mentoring of the students where the teacher mentor links work place experience along with the theoretical study. The mentor also extends career guidance and support to the students as they enter an establishment.

According to Clutterbuck (1992), mentoring in higher education has become the subject of intense academic study and widespread experimentation. Experts in higher education are focusing on implementing new and flexible learning strategies to improve the quality of education. Mentoring is being considered as an intervention to improve an individual both personally and professionally and for achieving this, as integral to the higher education programme in one form or the other. Programmes like teacher-training courses rely heavily on mentoring as a mechanism to support students in the attainment of their professional qualification. Some educational institutions employ senior students to mentor junior students (Jowett and Stead, 1994). Mentors in an academic setting perform the same functions as in the business management environment that include transfer of marketable, discipline-based skills and support that makes the transfer of knowledge and skills possible.

Cusanovich and Gilliland (1991) state that a mentoring relationship involves professors acting as close, trusted, and experienced colleagues and guides. It is recognized that part of what is learned in graduate school is not cognitive, but are socialisation to the values, practices, and attitudes of a discipline and university, and it transforms the student into a colleague. Mentoring in education has numerous missions. At the graduate level, mentors are needed to offer advice and guidance in academic matters. In addition, the mentor becomes a valuable support person for the protégé. He or she can assist the protégé in finding resources such as funding for research support, becoming a legitimate member of the department. Mentoring is an attempt to maximize student growth and development – academically, professionally, and otherwise. As such it must be viewed as a nurturing process in which the faculty member serves as a role model, teacher, sponsor, encourager, counsellor, and friend to the students with the end goal of promoting the latter's professional and personal development.

Three activities contribute to the academic mentoring relationship. Academic mentors (1) educate their protégés in a particular subject or skill, serving as masters to developing apprentices, (2) as role models, orient their protégés to the ethics, values, and protocols of a given profession or discipline, (3) provide psychological support for their protégés, recognizing the rigors of study and applauding success while building self-esteem and confidence.

The goal of student mentoring is to help students involved in the mentoring programme to gain the skills and confidence to be responsible for their own future. The mentor provides consistent support, guidance and concrete help to a student who is in need of a positive role model. Students involved in the mentoring programme may be going through a difficult or challenging situation, a period of life in which they need extra support or they

may simply need to have another significant adult present in their life. Successful mentoring programmes provide appropriate role models that encourage, help, and support students through the educational process, as well as help students to deal with the intricacy of the institution they are attending (Mayo et al., 1995 and Tinto, 1993). Mentor is the one who takes a personal interest in the student and leads, guides, and advises the student in matters concerning his or her career. The nurturing influence is a conscious one, and it is implemented through an array of role modeling, information-giving, and door-opening functions (Rogers, 1986). Mentors teach what textbooks cannot and mentors make available to their protégés their professional expertise and know-how.

### **1.5 Mentoring in management education**

In business management and higher education literature, mentoring emerges as a highly promoted intervention (Kram, 1984). Traditionally, business schools have focused on the academic preparation of students. The management institute is an ideal seat for holistic development and enrichment of skills of prospective managers. It is essential for management institutes to mentor the managers of tomorrow by developing and nurturing their soft and hard skills. Mentoring programmes attempt to bridge the gap between academic training and students' successful entry into the business world. It reflects an increased interest in the professional preparation of students (Cunningham, 1995) and training of managerial skills such as communication, conflict management, group management, motivation, self-awareness, career management and goal setting (Bigelow, 1995).

In contrast to other professional schools, schools of business have traditionally focused on the academic rather than the professional preparation of the students (Cunningham, 1995). Business schools have

focused more on the development of specific skills and competencies in the classroom rather than on the supervision of skills in an applied setting or the development of social skills and professional character through mentoring. However, the Association to Advance Collegiate Schools of Business (AACSB) Faculty Leadership Task Report (1996) emphasises that one of the major problems with business education is the lack of real-world business contact. In fact Bigelow (1995) states that business schools are beginning to incorporate professional practice, skills, and managerial skills, into business training.

Dreher and Ash (1990) conducted a study among business school graduates and provided information about their backgrounds, company positions, mentoring practices, compensation and compensation satisfaction in a “Comparative study among men and women in managerial, professional and technical positions”. Schelee (2000) describes how business schools have implemented mentoring programmes and what makes mentoring relationships more effective and whether a mentoring programme is necessary for the professional preparation of business students.

## **1.6 Context and significance of the present study**

Today, management education has become a popular choice among majority of the students who prefer to pursue higher education. Because of the interdisciplinary nature of this stream of education and the bright job prospects available in the market, students have a strong expectation that post-graduation, particularly in management, will provide them with special skill sets like good communication abilities, leadership quality, decision making skills, ability to work in teams and exposure to current trends in business and commerce would enhance their employability.



The demand, from the industry and students, motivated old and new educational institutions to introduce management education with state-of-the-art infrastructure and curriculum. Educational institutions have carefully designed full-time, part-time programmes and MBA with degree conferred by foreign universities (local institutions have collaborations and twinning arrangements with the universities in the USA, UK, Australia or other foreign countries) and distance education programmes to cater to the requirements of the students from different segments. While business schools proliferate in India and overseas, it is increasingly becoming clear that students who graduate from them and the curriculum they offer are often not fully relevant for the corporate and social environment of today (Gates, 2007).

The modern MBA degree is facing a crisis as the academic and business communities have begun questioning its value and relevance. Pfeffer and Fong (2002) is of the opinion that business schools do not adequately prepare students for future success because the knowledge and skills taught in the MBA programme do not resemble those needed in the real world of business. Employability of management degree holders is an issue and so the B-schools have to devote a lot of their time on additional training for imparting ‘soft skills’ to their products. This argument is supported by empirical evidence indicating that “non MBAs perform their jobs as well as or better than those who possess an MBA degree” (p. 81).

In the last few decades, various strategies have been used by educational institutions to provide students with the academic, personal, and social support systems necessary to facilitate their academic persistence. These intervention strategies include the implementation of developmental courses, education technology programmes, individual and group tutoring, freshman seminar

courses, summer bridge programmes, academic advisory programmes, and career guidance seminars (Cohen, 1986 and Lang and Ford, 1992).

In spite of all these, educational institutions are unable to provide human resources on par with the expectations of the corporate world. Most of the companies today are willing to procure prospective employees who do not have this degree, lowering the demands for MBA graduates. Kretovcis (1999) in a US based study of the learning outcomes of an MBA programme found that it added value in key areas such as information analysis, sense making and initiative, but not in interpersonal or communication skills. Similarly Boyatzis and Renio (1989) suggest that attending an MBA programme adds value on a number of abilities related to effective managerial performance but not on interpersonal and leadership abilities. Kakabadse and Kakabadse (1999) point out that maturity, self awareness, and empathy are required to make high quality decisions and communication and leadership skills as critical for success in the workplace. But Shipper (1999) contends that an MBA qualification does not provide an advantage in key managerial and leadership skills over those who possess only a bachelor or some other masters' degree. Hence, business schools must be able to bring forth changes in the curriculum, ensure students are provided with knowledge, skills, abilities and attitudes that are required for enabling success in business. The student should be exposed to challenges which will sharpen his skills and make him effective in the real business world.

It is almost an organisational struggle to seek and find managers who are comfortable and effective in the increasingly complex and intriguing global economy. Most of them suffer from a lack of cultural awareness while dealing with employees and partners overseas, and from a lack of experience in managing increasingly complex processes over long distances. Most of the

human resource leaders and senior executives continue to be archaic with obsolete skills and resources (Rifkin, 2006).

The prime responsibility of the management educator of today is thus to ensure career success of the graduates by providing sound theoretical knowledge, backed with soft skills such as integrative thinking, healthy life styles, interpersonal relationship, leadership skills, communication and negotiation skills, and cultural and emotional intelligence. In today's turbulent business environment the development of these soft skills through a mentoring relationship can be a key strategy for enhancing individual growth and learning (Latham et al., 2004).

Management institutions, being the seat for the holistic development of students, should be able to create a learning environment rather than a teaching environment. Business schools must be able to bring forth changes in the curriculum, so as to ensure that, students are provided with adequate knowledge, skills and abilities and attitudes that are needed for achieving success in the evolving and turbulent business environment. The students should be exposed to challenges which will sharpen their skills and make them relevant and effective in the real business world.

Many successful executives, artists and others have told how critical mentors were to them when they were in college and later in their careers. Mentors encouraged their personal and professional development by offering advice and leads, encouraging them through difficult periods and motivating them to continue to push ahead, helped them identify strong talents and encouraged their development. Behind successful people often are mentors who encourage them to pursue particular career and open the doors of opportunity that they might not see themselves. Mentors connect them with

prospective employers, and provide them with guidance that could be instrumental later in their career. “Turn professors into mentors and learn how to build on what you have learned and to apply them constructively”, says Scheele (2005, p.19).

Exploration and review of literature on management education in India reveals the dearth of studies on mentoring programmes implemented by business schools in India. Having located the need for comprehensive studies on mentoring of students in the B-schools in the country, the present study is a limited, yet decisive attempt to analyse and evaluate the teacher initiated mentoring attempts among the student population in Kerala B-schools in terms of the antecedents leading to their socio-psychological and professional maturation, if any, that happen across their life in a B-school. The attempt here is to depict ‘protégé maturity’ as an outcome of effective mentoring inputs from the part of the institution and teachers, moderated by the socio-demographic and personality profile of the teachers and the mentoring activities initiated.

This research study will be instructive to the management institutions which have not incorporated mentoring as part of their pedagogy. The teaching fraternity would realize how much they can influence the personal and professional development of students. They may also come to realise that the success or failure of any ‘developmental’ programme implemented in the institutions depends solely on their contribution and attitude. A mentor is usually a highly resourceful person who is organized, rich in skills and experience, knowledge, attitude and willingness to impart his qualities to the younger generation. The teacher mentor being aware of this will be motivated to enrich his skills and knowledge. Mentoring supports professional growth and renewal, which in turn empowers faculty as individuals and colleagues

(Boice, 1992). Faculty involved in mentoring are more likely to have opportunities to develop not only professionally (career orientation) but personally as well (psycho-social needs) over the span of their careers (Kram, 1986). Mentoring is an ideal training and development tool which helps individuals develop both professionally and personally (Human Resource Management International Digest, 2002).

Mentoring relationship can be a powerful and life changing event in the life of a student. The investigator is led to believe that mentoring will result in better student personalities (competent, confident, compassionate and impressive) who would later on tend to become mentors and contribute towards improving the effectiveness and efficiency of their prospective organisations; effective and efficient organisations will result in the progress and prosperity of the nation, and thus society will be benefited with socially responsible managers. The investigator is thus optimistic of the use of the study outcomes to management institutions, students, parents, teachers, corporate houses and the society at large.

### **1.7 The study perspective**

The teacher is the axis on which any educational system revolves. True teachers descend to the level of students and influence them with their strong character and ideals. The teacher at a professional programme level should also be highly devoted towards spreading wisdom and be involved in the holistic development of the students.

The quality of an education system depends on procuring well educated and well equipped and conscientious teachers with a strong urge towards acquiring and imparting knowledge. The essence of management education centers around preparing and enabling students to evolve into professionals

capable of meeting challenges both from within their place of work and without at the local, national and global levels.

Some of the proactive B-schools have included mentoring as part of their pedagogy. But, Jacobi (1991) is convinced of the lack of theoretical or conceptual and empirical bases to explain the proposed links between mentoring and the academic and career success of graduates. This study is a step to make good and bridge this limitation. The investigators' conviction about the possible effects of the mentoring programme and the curiosity to learn about the effectiveness of mentoring programme were also causative to the study in this direction.

Mentoring, as an ideal tool for improving the quality of management education, is directly extendable to the industrial and business sectors. Mentoring ensures enrichment of career related and psycho-social maturity of students and employees that make them more industry fit. At the same time, it will bring about professional development of teacher mentors. The researcher proposes to contribute from the findings of the study to the growing fields of management instruction and management development.

The current study was designed to propose and validate a mentoring process model which would link up the effectiveness of formal mentoring programme in B-schools with the socio-demographic and personality profiles of teachers, initiated mentoring activities and the protégé maturity attained across their MBA programme.

The following were the initial research questions: What proportion of business schools has mentoring programmes as part of their pedagogy? Does the personality profile of teachers influence the mentoring activities initiated? Can teachers be discriminated as highly effective mentors or less effective

mentors? Do the teachers who are high in mentoring effectiveness differ from those who are less effective? Are the mentoring activities similarly or varyingly followed by these two groups? In general which are the factors that significantly discriminate between highly effective and less effective teacher mentors? Does a mentoring package help protégés achieve maturity?

To summarise, the intention herein is to establish protégé maturity as the outcome of the effectiveness of mentoring, which in turn is purported to be brought about by the mentoring activities and inputs that are moderated by the socio-demographic and personality features of the mentors, given that mentoring attempts are part of the recognised and formally instituted pedagogy.

## **1.8 Organisation of chapters**

All the materials that make up this thesis have been organized and sequenced into nine chapters. The chapters have been arranged in such a way that each unfolds into the succeeding one and the details of the contents of each chapter have been explained in the following paragraphs.

**Chapter 1: Introduction to the study** - This chapter comprises of the broader perspectives on mentoring, its substance, an appreciation of mentoring as an intervention in education in general, higher education and management education in particular, context and significance of the study.

**Chapter 2: Review of Literature** – This chapter deals with the concepts of mentor and protégé, the essential information available hitherto on the issues and debates on types and functions of mentoring in education, phases of mentoring, mentor protégé relationship, mentorship as social exchanges, formal mentoring, mentoring in higher education, mentoring in professional education,

mentoring in management education, mentors' personal profile and personality, mentoring activities, effectiveness of mentoring, protégé maturity, learning in mentoring, social learning, Pygmalionism, mentoring models. The chapter concludes with a listing of the insights gained.

**Chapter 3: Conceptual Framework** – This chapter is about the conceptual core of this study covering the conceptual focus, research problem, objectives, hypotheses and conceptual clarifications, and the methodological choices and measurement details.

**Chapter 4: Faculty Environment** – This chapter gives details about the study results and discussions on the variable of 'faculty environment' covering the formalization of mentoring in the B-schools, socio-demographic variables, and personality profile of teachers.

**Chapter 5: Mentoring Activities** – This chapter presents the analyses, results and discussions about the nature and extent of mentoring activities initiated by teachers, the implications of the socio-demographic variables and personality profile of teachers on the mentoring activities.

**Chapter 6: Effectiveness on Mentoring** – This chapter deals with the analyses of the dependent variable of this study namely, effectiveness on mentoring in terms of its six behavioural functions, and the extent to which mentoring activities explain the effectiveness of mentoring.

**Chapter 7: Validation of the Conceptual Model (Visuals PLS)** – This chapter deals with statistical validation of an empirical model



that explains effectiveness of formal teacher initiated student mentoring in B-Schools. The chapter offers a predictive analysis of the data resulting in a theoretical confirmation what was conceived as the conceptual framework of the study.

**Chapter 8: Protégé maturity** – This chapter essentially serves to illustrate and establish the overall and tangible benefit of mentoring initiatives in B-schools to its students. It presents the changes that come about in the psycho-social make up of the protégés.

**Chapter 9: Findings, Conclusions, Implications and Recommendations -** This chapter presents the summary of the thesis. It narrates the substantial findings and contributions of this research including the theoretical, methodological and social implications. In addition, possible directions for future research and a reflective framework of mentoring procedure for management institutions are also discussed.

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## Review of Literature

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<b>C</b> <b>a</b> <b>n</b> <b>t</b> <b>e</b> <b>n</b> <b>t</b> <b>s</b>	2.1	Mentor
	2.2	Protégé
	2.3	Types of mentoring
	2.4	Functions of mentoring
	2.5	Phases of mentoring
	2.6	Mentor-protégé relationships
	2.7	Formal mentoring
	2.8	Mentoring in higher education
	2.9	Mentoring in professional education
	2.10	Mentoring in management education
	2.11	Significance of mentor's personal profile
	2.12	Mentors personality
	2.13	Mentoring activities
	2.14	Effectiveness of mentoring
	2.15	Protégé maturity (transition through mentoring)
	2.16	Learning in mentoring
	2.17	Social learning
	2.18	Pygmalionism
	2.19	Mentoring models
	2.20	Insights gained

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'Knowing the field' is a vital part of research indicating that one is aware of the main theories, structures, debates and propositions in a topic area and, what is the active thinking about it. Without this knowledge it is meaningless to put together a research proposal and almost impossible to carry out research with any hope of success.

This chapter reviews the pertinent literature related to mentoring and has been done with the purpose of collecting and critically reviewing the research literature available on the concept, its components, types, functions, phases, nature and quality of the relationship between the parties involved and would

serve to point out what has and has not been investigated, develop a general explanation for observed variations in the phenomenon, learn how others have defined and measured key concepts and identify potential relationships between concepts. It would also be instructional to know of the current thoughts on the relevance and significance of (i) mentoring in higher education, (ii) mentoring in professional education and (iii) mentoring in management education. The review includes studies that can legitimately be classified as empirical in nature; a small number of non-empirical comparative materials have also been included.

Mentoring is a relationship between two people with learning and development as its purpose. It is an encouraging and empowering intervention, which has attracted the attention of trainers, educators and policy makers interested in initial preparation and continuing professional development. Within colleges and universities, planned mentoring is being used to improve retention and graduation rates among demographically underrepresented students, faculty and administrators (Redmond, 1990; Ross-Thomas and Bryant, 1994 and Shultz et al., 2001). Mentoring among undergraduates and graduate students is also being encouraged to improve student's levels of academic achievements, assist at-risk students, and promote growth in graduate programmes and the professoriate (Jaccobi, 1991 and Waldeck et al., 1997). Ambitious claims have been made of the actual or potential benefits of mentoring, such as the development of students or newly qualified staff into skilled professionals (Oliver and Aggleton, 2002).

It has been observed that in an increasingly competitive environment, business schools must combine experience inside and outside the classroom to provide students with both education and real world knowledge necessary to succeed in business. It would be ideal to employ a mentoring programme to

foster strong links between the current students, alumni and business community along side the faculty members in order to succeed in their venture. Mentoring current MBA students is a great way to help future business leaders. Through participation in a mentoring programme, students can explore career paths, obtain an inside view of industries, learn how executives meet difficult challenges, and gain insight into corporate strategy. Students' experience with the mentor helps them make better career choice and a smooth transition into the business world upon graduation.

## **2.1 Mentor**

A mentor is an adult who offers continued support, guidance and contributes towards the development of an individual. He is an influential person who significantly helps the protégé achieve major goals in life. Garrick and Alexander (1994) say a mentor is now defined as a person who takes, or is given the responsibility for another's learning and general development. Alleman (2002) defines mentor as a person with greater rank, experience and/or expertise who teaches, counsels, inspires, guides and helps another person to develop both personally and professionally. A mentor is also an experienced influential member of an organization who provides career guidance, psychosocial support and organizational information to a less experienced organisational member, i.e. a protégé.

Levinson et al. (1978) argued that ideally a mentor should be approximately half a generation older (i.e., 8 to 15 years) than a protégé. If the mentor is much older, the relationship may take on qualities of a parent and child relationship, and if the mentor is too close in age to the protégé, the pair may become more like friends or peers. A young mentor is not perceived as matching his or her role well. A younger individual may elicit stereotypes of being inexperienced and naïve; this certainly does not fit the typical

characteristics of a mentor. However, there is evidence in the literature that the age matching process is not necessarily symmetrical (Perry et al., 1996).

Ragins (1997) and several others suggest that women are more likely than men to provide emotional support and informal theoretical perspectives suggest that men may be more apt to provide career mentoring whereas women may be more appropriate to provide psychosocial mentoring. Allen and Eby (2004) reported of mentors providing more psychosocial support to females than to male protégés with no difference in career mentoring. Mentors in an informal mentoring relationship reported no differences in mentoring provided to their protégés than did mentors in formal mentoring relationships. Typically, mentors are experienced individuals committed to facilitating upward mobility and providing support for a protégé's personal and professional development (Role, 1979; Klauss, 1981; Hunt and Michael, 1983; Kram, 1985 and Noe, 1988a). Mentors can increase a protégé's exposure and visibility in situations where decision makers can see and appreciate their competence, abilities and special talents (Kram, 1985 and Noe, 1988a, b). Mentors also encourage protégés by sponsoring, supporting, acknowledging and advocating their abilities (Kram, 1983, 1985). A mentor's protection consists of actions that either minimize the likelihood of a protégé getting involved in controversial situations or reduce unnecessary risks that threaten a protégé's reputation (Noe, 1988a).

Research has provided evidence of the benefits of mentoring as higher productivity, better performance ratings, development of leaders, advancement of minorities and reduced turnover. In addition, participants acquire greater knowledge of the business, politics, policies, products and customers. Levinson et al. (1978) express the mentor's benefits as follows. Being a mentor with young adults is one of the most significant relationship available to a man in middle adulthood. The distinctive satisfaction of a mentor lies in

furthering the development of young men and women - facilitating their efforts to form and live out their dreams, to lead better lives according to their own values and abilities.

A mentoring relationship is a close, individualized relationship that develops over time between a B-school student and a faculty member and that includes both care and guidance. Although there is a connection between mentors and advisors, not all mentors are advisors and not all advisors are mentors. Mentors, as defined by The Council of Graduate Schools, are advisors, people with career experience willing to share their knowledge; supporters, people who give emotional and moral encouragement; tutors, people who give specific feedback on one's performance; masters, in the sense of employers to whom one is apprenticed; sponsors, sources of information about and aid in obtaining opportunities; models of identity, of the kind of person one should be to be an academic (Zelditch, 1990).

## **2.2 Protégé**

An individual who is under the protection, care or patronage of another person is called a protégé. Alleman and Clarke (2002) opines that a protégé is the less experienced person in a mentoring relationship. Phillips Jones (2001) says the word protégé came from the French verb, *protéger*, meaning to protect, and is used to denote both men and women who are helped to reach their career and life goals by mentors. The term protégé is replaced by mentees, although several publications and organizations still use protégé. Others prefer terms such as mentoree, associate, trainee, partner, aspirant, learner or participant.

The important elements the protégé brings to mentoring experience are initial interpersonal maturity, self confidence, reaction to stress, ability to

benefit from constructive feedback, personal determination to succeed which are all components that can directly impact the possibility of a successful mentoring relationship (Cohen and Norman, 1999).

The benefits derived by protégés from their experience in a mentoring dyad need little highlighting. A short assorted list derived from the literature includes access to the mentor's network, acquiring skills and knowledge, improved promotion opportunities, status, obtaining a role model etc., (Phillips Jones, 1982). The sense of being needed, of being recognised professionally, does much for improving or recovering the lost self-esteem.

Alleman (2002) has identified an impressive range of organisational benefits from mentor-protégé relationships. Some of these are : increased productivity by both partners; better assessments gained by both partners; management and technical skills improved; latent talent discovered; leadership qualities refined; performance improvement; rusting managers challenged to grow and better recruitment and retention of skilled staff. Management morale tends to be high as there are available sources of counsel. Protégés can feel significant as individuals, not merely as a manipulated commodity. Finally, there is a prevailing sense of humaneness, since the mentor-protégé relationship involves greater intimacy, sharing of value systems and feelings, disclosure of personal data and boastings and confessions. Murray and Owen (1991) identified several benefits of formal mentoring programs including increased productivity, improved recruitment efforts, motivation of senior staff and enhancement of services offered by the organisation.

Good mentoring is not accomplished easily. It depends on selection of mentors and how mentors and protégés are assigned and matched to each other, type of mentoring relationship and time allotted for mentoring (Little, 1990). While

the value and quality of mentoring depends partly on the quality of the mentors, very few studies have examined personality predictors of the willingness to mentor (Niehoff, 2006). Allen and Eby (2003) found that a pro-social personality predicted the willingness to mentor others, and (Hunt and Michael, 1983) felt personality is a motivator of mentoring activity. Effectiveness of mentoring relationship also depends on quality. Relational quality encompasses satisfaction with relationship, perceived benefits accrued to both individuals (i.e., mutuality), and relational depth (Hinde, 1981; Huston and Burgess, 1979 and Kram, 1985).

It is meaningless to think that all human interactions are pleasant experiences. It is not surprising, then, that the intimacy of the mentor-protégé relationship can result in bitterness. Practical mentors will be prepared for the situations which can diminish the value of the mentoring dyad. Clark et al. (1986) use the expressions of ‘the Matthew effect’ and ‘the Salieri phenomenon’ to describe related disadvantages in mentor-protégé relationships. The Matthew effect comes from St. Matthew’s gospel: ‘For to everyone that hath shall be given, and he shall abound; but, from him that hath not, that also which he seemed to have shall be taken away’ (Douay Version, Matthew 25:29) and the Salieri phenomenon is based on the story of Salieri, the court composer, who acted as musical gatekeeper and kept the genius of Mozart from being publicly recognised. When a mentor prevents the outstanding work of a protégé receiving just acclaim, the Salieri phenomenon is operating. Jealousy can develop, with or without reason, because of the creation of the mentor-protégé link. This is even more probable if the link involves cross-sex mentoring. Mentors can become jealous of gifted protégés who might be perceived as a professional threat. By the nature of the mentor role, there is a difference between mentor and protégé in learning, experience, expertise or other qualities. However, it is also possible for a mentor to be



younger in age than the protégé. An example of this could be found in a mature, aged student returning to study.

The goal of an undergraduate student may be obtaining knowledge, while the goal of the graduate (B-school student) could be the ability to contribute to the growing field of knowledge. Mentoring is an important mechanism that enables graduate students to acquire the body of knowledge and skills they need as well as an understanding of the way their discipline operates. Research shows that students who have mentoring relationships have higher productivity levels, a higher level of involvement with their departments, and greater satisfaction with their programs (Green and Bauer, 1995).

### **2.3 Types of mentoring**

Mentoring is generally classified into two namely, formal mentoring and informal mentoring. Formal and informal mentoring have increasingly been seen as part of a human resource strategy in which organisations seek to develop their human resources in a way that leads to competitive success (McKeen and Burke, 1989; Wright and Werther, 1991 and Cunningham and Eberle, 1993). Informal mentoring comprises mentoring relationships where the mentor and the protégé, on their own accord, agree that the protégé will trust the mentor to counsel or teach him or her (Noe, 1988a). Informal mentoring tends to germinate as a result of work or non-work issues that lead the mentor and protégé to realize they have shared interests, admiration, and commitment, which makes informal mentorships more in-depth and personal (Chao et al., 1992; Lawson, 1996 and Noe, 1988b).

Formal mentorship refers to mentoring relationships where a third party sanctions an agreement between the mentor and the protégé, whereby the protégé should trust the mentor (Noe, 1988a, 1988b).

Both informal and formal mentoring can be intra-organisational and inter-organisational relationship in form (Ragins, 1997). Intra-organisational mentorships refer to those mentoring relationships in which both the mentor and the protégé are employed by the same organisation. Inter-organisational mentorships pertain to mentoring relationships where the mentor and protégé are employed by different organisations.

The following are different types of formal mentoring programs which cater to organisations' and individual needs (Lacey, 2001).

### **2.3.1 One-to-one mentoring**

One mentor works with one protégé in a close one-to-one hierarchical relationship. This model is expensive over time and severely limits the numbers of matching that can be made. It provides a guaranteed commitment of the mentor to each mentee (Lacey, 2001).

### **2.3.2 Mentoring hubs**

This model includes a mentor working with a number of mentees simultaneously. On some occasions the mentor works with each mentee individually and on other occasions the mentor would be with all the mentees as a group. This allows and encourages the mentor to peer-coach each other and develop significant peer relationships. This model increases the number of matches that can be made but requires larger time and commitment on the part of the mentor. It is very difficult to guarantee equal commitment to each mentee. The mentees in this type of matching will need to be more self-reliant and take more responsibility for their own development (Lacey, 2001).

### **2.3.3 On-site mentoring**

In this model the mentor is usually considered to be someone in a more senior position than the mentee but is not mandatory. Effective mentors can

also be a more experienced peer. Most organisations practice on site mentoring (Lacey, 2001).

#### **2.3.4 Off-site mentoring**

Large organisations have the ability to locate mentors from a variety of work sites. The mentee has the opportunity to see a variety of ways of working and management styles. The mentor is different from the mentee's direct line manager. Management of leadership skills can be transferred from one setting to many others (Lacey, 2001).

#### **2.3.5 Group mentoring**

In group mentoring, a number of mentees are brought together with a few mentors. The group meets on a regular basis and jointly chooses topics relevant to the mentees. This group setting allows mentees to gain insight from more than one mentor, in addition to receiving peer mentoring from the other mentees.

Group mentoring increases the diversity of the mentoring network. Because the mentees normally set the agenda for the group, the group approach can have the advantage of better suiting their needs but is perhaps less tailored to individual needs compared to a one-to-one relationship. A critical factor in group mentoring is the trust built among group members. Normally this requires a strong confidential bond and "leaving status at the doors." The ability to provide this type of environment is affected by the size of the group, which normally does not exceed 15 members, both mentees and mentors together (Marilu Good Year, 2006).

#### **2.3.6 Peer mentoring**

Miller (2002) opines when people of similar age and / or status take on the roles of mentor and mentee, it is called as peer mentoring and is more likely to be of the one-to-one type of mentoring. Mentors in peer mentoring

can be of the same age, peer age (1-3 years of age difference) or cross age (4 years or more). In case of further or higher education, they may be of the same age. The use of relatively high-ability students to help their less able peers is based on the assumption that they are likely to be more effective mentors. Peer mentoring involves one student as a mentor and the other as mentee. It can be intra-institutional where mentors and mentees are drawn from the same institute. Cross institutional programmes involve mentors and mentees from different institutions. The main aim of peer mentoring has been the subject learning. Concerned with supporting basic skills, they also include the development of high-order knowledge and skills in higher education or in professional development.

### **2.3.7 Telementoring**

Telementoring involves the use of distance technology to develop the mentoring relationships. Telementoring can use e-mail, text, audio or video conferencing or a combination of these varied means of communication. It has been defined as the use of e-mail or computer conferencing systems to support a mentoring relationship when a face-to-face relationship is impractical (O'Neill et al., 1996). Telementoring was first used for the professional development of teachers in curriculum development and use of new technologies. In 1993 the University of Texas launched the first, and most ambitious, telementoring programme for the students. E-mentoring is probably the most common form of telementoring, where a telemmentor is paired with a mentee. Such relationship can be called telemmentorships (Harris et al., 1996). Telementoring has the potential to be a key element of a school's links with the community (Nellen, nd).

### **2.3.8 Network mentoring**

Network mentoring model focuses on the ways in which the mentor and protégé operate which are naturally affirming and empowering. In this model,

the 'initiation phase' begins as the mentor provides education and role modeling for the protégé. The mentor's subsequent undertaking of the function of sponsoring involves the risk of greater commitment to the protégé which marks the onset of the 'cultivation phase'. As mentor and protégé actively engage in the functions which emerge during the cultivation phase, their relationship grows stronger and correspondingly the overall width and breadth of the mentoring functions expand. As the mentor provides the later functions, however, less time may be allotted to some of the earlier functions, which will eventually disappear altogether. The waxing and waning of functions continues during the 'separation phase' at which time ambivalence is experienced as mentor and protégé begin a process of psychological disengagement. By the time the relationship has progressed to the 'redefinition phase', the primary function of the mentor becomes one of moving from a transitional figure to a friend/peer (Haring's et al., 1983).

## **2.4 Functions of mentoring**

The overall function fulfilled by a mentor can be explicitly taken to be of facilitating and helping the protégé to achieve a shift from being on the margin to a more engaging role as a participant of the mainstream life referred to as the 'protégé maturation'. This maturation process comprises two important dimensions classified as 'career function' and 'psychosocial function' (Kram, 1983).

### **2.4.1 Career function**

Career functions are those aspects of mentoring that prepare the protégé for career advancement. These functions include nominating the protégé for desirable projects, lateral moves and promotions; providing the protégé with assignments that increase his/her visibility to organisational decision makers and exposure to future opportunities; sharing ideas, providing feedback and suggesting strategies for accomplishing work objectives; reducing unnecessary

risks that might threaten the protégé's reputation; and providing challenging work assignments (Noe, 1988).

#### **2.4.2 Psychosocial function**

Psychosocial functions enhance the protégé's sense of competence, identity and work role effectiveness. These functions include serving as a role model of appropriate attitudes, values and behaviours for the protégé; conveying unconditional positive regard (acceptance and confirmation); providing a forum in which the protégé is encouraged to talk openly about anxiety and fears (counseling) and interacting informally with the protégé at work (friendship). Kram (1985) suggests that greater the number of functions provided by the mentor, more beneficial the relationship will be to the protégé. The functions that actually occur between the mentor and protégé differ with specific needs of the protégé involved. It depends on the purpose and intensity of the relationship.

The mentoring functions listed are meant to stimulate thinking about the range of behaviours that characterize mentor-protégé relations, and raise questions about the relative frequency and effectiveness of these behaviours within higher education environments. It is observed that youth fail to develop certain qualities, attitudes, habits and patterns of behaviour which are widely recognised as essential to their effectively assuming and successfully acting in adult roles. Adolescence, the period of development immediately preceding adulthood, invites attention of adults in all societies (Coleman and Husen, 1985; Condon, 1987 and Halles and Leis, 1989). By the end of adolescence the young man or woman is expected to have learnt appropriate social roles and skills and, by implication, to accept obligations to the community for safeguarding its functions. Among the various developmental tasks occurring in the transition from adolescence to adulthood are the acquisition of adaptive social and psychological capacities, skills, values, and habits which serve to

establish the individual in a culturally appropriate adult role (Rosenthal, 1987; Taylor et al., 1979 and Keefe and Padila, 1987). Psychosocial functions can assist individuals early in their career by developing competence, confidence, and a clear sense of professional identity (Greiman, 2002). According to Hall (1986), these psychosocial functions “enhance a sense of competence, clarity of identity, and effectiveness in a professional role”.

The psychosocial functions are *role modeling*, *counseling*, *acceptance* and *friendship*. In 1990, Ragins and McFarlin identified that cross-gender mentoring may bring about a social and parenting function. As a result, Greiman (2002) added the *social* function to his study of mentor and fresh teachers. The *role modeling* function is “demonstrating valued behaviors, attitudes and/or skills that aid the junior in achieving competence, confidence, and a clear professional identity” (Hall, 1986). The *counseling* function is when a mentor is “providing a helpful and confidential forum for exploring personal and professional dilemmas”. When a mentor provides “mutual caring and intimacy that extends beyond the requirements of daily work tasks” and is “sharing experiences outside the immediate work setting,” then the mentor is providing the *friendship* function. In providing support related to the *acceptance* function, a mentor is “providing ongoing support, respect, and admiration, which strengthens self-confidence and self-image”. Greiman (2002) identified the *social* function as one that includes “social interaction and informal exchanges about work and outside work experiences.” Greiman (2002) found that there were no significant differences between the extent mentors met psychosocial needs, as perceived by fresh teachers and mentors. Mentors and fresh teachers agreed that mentors were providing the psychosocial functions of acceptance, counselling, friendship and role modeling to a large extent.

According to Inkeles et al. (1998) the concept of ‘adolescent maturity’, understood as readiness to assume competently the roles typical for men and

women in a modern industrial society, is measured across six psychosocial qualities of efficacy, perseverance, planfulness, responsibility, individualism, and cooperativeness that can be effectively ascertained in the five domains of school, family, peer group, work, and community.

## **2.5 Phases of mentoring**

Although developmental relationships vary in length, they generally proceed through four predictable yet not entirely distinct phases : 1. initiation phase, during which time the relationship is started; 2. cultivation phase, during which time the range of functions provided expands to maximum possible limits; 3. separation phase, during which the established nature of the relationship is substantially altered by structural changes in the organisational context and /or by psychological changes within one or both individuals and 4. a redefinition phase, during which time the relationship evolves a new form that is significantly different from the past, or the relationship ends entirely.

Each phase is characterized by particular affective experiences, developmental functions, and interaction patterns that are shaped by individual needs and surrounding organizational circumstances.

This dynamic perspective delineates how a mentor relationship can enhance both the individuals development as it unfolds. When primary tasks are complementary, a mentor relationship is likely to reach the cultivation phase and provide a range of career and psychosocial functions that enable the young adult to meet the challenges of initiation into the worlds of work, and the senior adult to meet the challenges of reappraisal at midlife. When, however, the young adult begins to feel established and more autonomous, she/he no longer will look toward the senior adult for the same kind of guidance and support. If the senior adult has other avenues for creative



expression of generative needs and can accept continued growth and advancement in the younger adult, then the relationship will follow its course through separation and redefinition.

**Exhibit 1.0 Phases of the Mentor Relationship**

Phase	Definition	Turning points*
Initiation	A period of six months to a year during which the relationship gets started and begins to have importance for both managers.	<ul style="list-style-type: none"> <li>▪ Fantasies become concrete expectations.</li> <li>▪ Expectations are met; senior manager provides coaching, challenging work, visibility; junior manager provides technical assistance, respect and desire to be coached.</li> <li>▪ There are opportunities for interaction around work tasks.</li> </ul>
Cultivation	A period of two to five years during which time the range of career and psychosocial functions provided expand to a maximum.	<ul style="list-style-type: none"> <li>▪ Both individuals continue to benefit from the relationship.</li> <li>▪ Opportunities for meaningful and more frequent interaction increase.</li> <li>▪ Emotional bond deepens and intimacy increases.</li> </ul>
Separation	A period of six months to two years after a significant change in the structural role relationship and / or in the emotional experience of the relationship.	<ul style="list-style-type: none"> <li>▪ Junior manager no longer wants guidance but rather the opportunity to work more autonomously.</li> <li>▪ Senior manager faces midlife crisis and is less available to provide mentoring functions.</li> <li>▪ Job rotation or promotions limits opportunities for continued interaction; career and psychosocial functions can no longer be provided.</li> <li>▪ Blocked opportunity creates resentment and hostility that disrupt positive interaction.</li> </ul>
Redefinition	An indefinite period after the separation phase, during which time the relationship is ended or takes on significantly different characteristics, making it a more peer like friendship.	<ul style="list-style-type: none"> <li>▪ Stresses of separation diminish, and new relationships are formed.</li> <li>▪ The mentor relationship is no longer needed in its previous form.</li> <li>▪ Resentment and anger diminish; gratitude and appreciation increase.</li> <li>▪ Peer status is achieved.</li> </ul>

**Source:** Kram (1983) *Examples of the most frequently observed psychological and organisational factors that cause movement into the relationship phase.*

## **2.6 Mentor-Protégé relationships**

Mentoring functions exists as a part of many activities and relationships (Kanter, 1977 and Shapiro et al., 1978). Several terms have been used to describe dyadic relationships such as; teacher-student; master-apprentice; sponsor-token and mentor-protégé. Change is inevitable in life and when encountered with, people meet it with a degree of reluctance largely because of the apprehension about what the new situation would demand of them. Change can be frightening; adaptation to new circumstances is accomplished quite quickly by some, but for others it can be distressing. Some newcomers adapt effectively to their new positions through personal qualities, while others are assisted by one or more of their new colleagues. In the process of this kind dyadic socialisation, mentors can prepare the new entrants to get rid of the shock and make the entry comfortable. This is an important facet of mentor-protégé relationships. If it is important to assist a colleague overcome difficulty of any kind, or to help a colleague rise up in the profession, then mentoring is important.

Evidences supporting the importance of mentor-protégé relationships have accumulated. Mentoring relationships have tangible benefits for students in terms of productivity (Crane, 1965; Cronan-Hillix et al., 1986 and Reskin, 1979) and initial job placement (Long, 1978). Roche (1979) suggests that mentors are the most beneficial when they instruct protégés on the informal aspects of their career and help them become socialised into a professional environment. In a survey of graduate students in psychology at a large Midwestern University, Cronan-Hillix et al. (1986) show that graduate students with mentors are more productive than those without mentors. The researchers also indicate that good mentors can be hard to find; not all mentors

are good, and matching interests and personalities is important for a successful mentor-protégé relationship.

Mentoring is considered as an established management development intervention and an important resource for learning and coping with organisational change (Rigsby et al., 1998). It is considered an important training and development tool in the academic literature of Hunt and Micheal (1983). Jennings (1991) found that most corporate presidents had a successful mentoring relationship and that the mentoring process was a major contributing factor to their success. Schein (1978) defined the mentoring relationship within the organisation and examined the extent to which organisational life is influenced by the development of necessary technical, interpersonal and political skills.

Academic literature says the benefits of mentoring relationship extend not only the protégé but also the mentor and the organisation (Fagenson et al., 1989 and Burke et al., 1994). Mentors can gain personal prestige, recognition and self satisfaction as well as developing a network of supporters (Clutterbuck, 1991). Tabbron et al. (1997) considered mentoring as a way of unlocking talent in the organisation and ensuring individuals are given additional support. Mentoring relationship can offer significant reward for the students through the contextualisation of their learning and also through personal development (Levinson et al., 1978).

### **2.6.1 Mentorship as a social exchange**

Theoretical perspectives such as social exchange (Homans, 1958) provide a useful framework for examining dyadic issues related to perceived cost and benefits of mentoring. Social exchange theory has been cited extensively in support of many recent mentoring studies (Scandura and

Schriesheim, 1994 and Young and Perrewe, 2000b). The idea behind social exchange is that the mentoring relationship, like any relationship, involves costs and benefits associated with participation in the relationship. Costs to the mentor could include time, efforts, and risks associated with working with a visible protégé, whereas benefits include career revitalization and learning (Kram, 1985). Similarly, costs to the protégé include time, effort, and risks associated with offending influential others (Kram, 1985 and Scandura, 1998), whereas benefits include visibility, knowledge and advice (Kram, 1985).

According to Young and Perrewe (2000a), once a relationship is initiated, exchange of behaviours takes place. Mentors provide career and social support behaviours to protégés; however, protégés in turn reciprocate with related career and social behaviors. So, for example, when a mentor suggests that a protégé participate in a special project, the protégé can either accept or decline the project and participate enthusiastically or tentatively. The mentor is likely to react to the protégés reciprocal behavior, which incites additional behavior from the protégé, and the cycle of exchange behaviors between a mentor and protégé continues throughout the relationship. According to exchange theory, when benefits outweigh costs, individuals will be more likely to remain in the relationship. As costs outweigh benefits, individuals are more likely to consider terminating the relationship. Perceived costs and benefits are embedded in mentoring support and the exchange that takes place throughout the relationship (Young and Perrewe, 2000a). Efforts to support a mentoring partner or reciprocate support with positive behaviours involve costs of time and energy, whereas positive tangible and intangible outcomes such as increased opportunities, compensation, feelings of friendship and accomplishment represent benefits.

## **2.7 Formal mentoring**

Attention is now turned to the relevance of mentoring on adult life in organisation and formal career situations after having discussed the earlier research positions and available information on mentoring and the various components that naturally form part of the phenomenon.

The term mentoring was adopted within the business context during the late 1970s, to describe someone who encourages career development and personal skills (Levinson et al., 1978). Informal and formal mentoring relationships and their impact in the business world have been gaining importance all these years. This movement occurred because organisations could see the advantage of implementing formal mentoring programs as they enabled potential learning and growth for employees on the job (Ehrich and Hansford, 1999). Five major trends that have influenced the growth of formal mentoring programs in business are the quest for innovation, the merger explosion, the changing composition of the workforce, the upcoming labour shortage, and the emergence of the cross-cultural corporations (Zey, 1984).

Mentoring is accepted as a means for facilitating learning in the work place, and is designed to make use of guided learning to build up the knowledge and skills required for high performers (Tovey, 1999). In many organisations, both private and public sector, mentoring is being considered a means for promoting and enabling the development of new and promising individuals (Jowett and Stead, 1994). Wiggans (1994) says a few organisations are setting up mentoring as part of their wider staff development or training programmes while others use mentors as part of positive strategies to encourage and retain staff.

According to Mathew (2003), the use of formal mentoring has moved beyond private sector organisations into public sector organisation as well and the

outcomes from these programmes include more motivated and skilled people; improved interaction among functional areas and departments; increased support systems and networks in times of change; improved networking and communication; increased self-confidence and job satisfaction; better understanding of organisational culture and values; better perception of career prospects and opportunities to discuss career planning and better resource utilization.

Chao et al. (1992) conducted a field survey comparing protégées who were involved in mentorship programmes and people who did not have mentors. Respondents involved in informal mentoring and formal mentoring were compared along psychosocial and career related mentoring functions. All the three groups were compared. Results indicated that protégés in informal mentoring received more career related support from their mentors and higher salaries than protégés in formal mentorship. For all outcome variables it was found that protégés in informal mentoring relationship received more favourable outcomes than those who did not have a mentor.

Ehrich et al. (2004) in a research based article examined the positive and more problematic outcomes of mentoring for the mentor, mentee and the organisation. This article comprises of the findings of two other databases, namely, 151 research-based articles from business context and 82 articles from medical contexts and the commonalities across the three databases is highlighted. The article also mentions about the key issues which should be focused for successfully establishing a mentoring programme.

Allen et al. (2006a) in their study examined the perceived programme effectiveness from the perspective of both mentor and the protégé. The results indicate that voluntary participation may be key to retaining willing mentors within a program across time, both mentor and protégé characteristics in the

matching process moderates the perceived programme effectiveness through their relationship with mentor, programme commitment and understanding. Armstrong et al. (2002) in their study involving mentor-protégé dyads indicate that cognitive style was found to work indirectly through its influence on other variables to enhance mutual liking and psychosocial and career mentoring functions. Gender composition also was found to have significant impact on the mentoring process. Dyads with female mentors and male protégés were found to be the least favourable combination.

Allen et al. (2006b) examined the perceived design features of formal mentoring programs and outcomes from both mentor and protégé perspectives. The outcomes of mentoring such as career and psychosocial mentoring, role modeling and mentorship quality were examined. The results indicated that the mentoring process and training perceived as high in quality were consistently related to the outcome variables.

Wanberg et al. (2006) examined the predictors and outcomes of mentoring received by participants of a 12 month formal mentoring programme. Based on relationship theory, they examined how the personality of the individuals in the mentoring dyad, perceived similarity, and mentor perceived support for mentoring contributed to relationship outcome. The results further portrayed the relationship between protégée reported similarity to the mentor and psychosocial mentoring. It makes intuitive sense that friendship, role modeling, counselling and acceptance would occur more often among pairs for whom there was perception of similarity.

## **2.8 Mentoring in higher education**

Busch (1985) sampled a large number of professors working with graduate students in educational programs in state colleges and universities

across the United States to study mentoring relationship from the mentor's perspectives. The author found that professors–mentors see benefits for themselves as well as for mentees in the relationship. Younger professors reported more depth in the relationships; whereas older mentors reported more breadth in their relationships.

Wilde et al. (1991) explored the mentoring relationships in graduate schools of education from the perspectives of mentees. A sample of professors and student mentees were chosen from the education department for the study. The results indicated that the students received both career and psychological aspects in their mentoring relationships. The mentees reported benefits, not only to themselves but also to their mentors in their relationships. The structure of mentoring was perceived differently by male and female students. Both the sexes reported strong occurrence of the psychological component of mutual support. There was age variation with regard to pervasiveness of career development. The older the student, the less professional development occurs in mentoring.

Jadwick (1997) measured the perceptions of effectiveness between faculty and protégés involved in formal mentoring relationships in higher education. The author claims this as an initial study. The subjects were drawn from a non-probability sample of 35 faculty and 53 protégés active in a mentor program. The subjects were administered the 55–item Principles of Adult Mentoring Scale; an Instrument based on adult development psychology theories and transactional process of learning with six behavioural mentoring functions : relationship emphasis, information emphasis, facilitative focus, confrontive focus, mentor model and student vision. The results indicated that the perception of mentor and protégé resulted in effective mean scores in case of relationship emphasis and facilitative focus, the perception of mentors and



protégés were less effective in the case of information emphasis, student vision and confrontive focus, and very effective in the case of mentor model.

Larose et al. (2005) in their study examined the impact of teacher-student mentoring relationship on the academic adjustment of at-risk college students. Academic adjustment and performance were assessed before five months after involvement in mentoring and after the last mentoring meeting and the study showed the quality of mentoring relationships facilitates college students' social adjustment and institutional attachment for the students with high level of relatedness and autonomy than for the other groups. In addition, students with low relatedness presented lower academics and emotional adjustment in college than students with no mentors.

Hezlett et al. (2005) in their study, which is one of the first to examine the process of protégé learning, found protégés to be learning mostly through observing their mentors, from mentors' explanations and by interacting with their mentors. Less frequently, protégés learned from asking questions, shadowing, trial and error, working with their mentors and receiving encouragement.

## **2.9 Mentoring in professional education**

There are debates about the association between different models of mentoring and specific professional contexts. Legislative, organisational and professional contexts are of primary importance in determining how mentoring comes to be applied (Parsloe and Wray, 2000). Teacher mentors function as gate keepers to the teaching profession. In nursing, mentors also have an assessment role, but the title of mentor is often regarded as interchangeable with that of the more traditional "preceptor" who is generally responsible for supervising the professional practice of student nurses (UKCC, 1999 and

Morton-Cooper and Palmer, 2000). The medical profession has resisted external regulation and within it, mentoring has had a far lower profile. Its introduction has been largely internally driven and focused upon the continuing professional development (Freeman, 1998 and SCOPME, 1998). By comparing mentoring in different professional context, it is clear that there is a relationship between the model of mentoring promoted, and the extent to which the profession is externally regulated.

In a profession, a mentor is described as someone who provides an enabling relationship that facilitates another's personal growth and development. The relationship is dynamic, reciprocal and can be emotionally intense. With such a relationship, the mentor assists in career development and guides the mentoree through the organisational, social and political networks' (Morton-Cooper and Palmer, 1993).

Hayes (1998) studied the relationship between nurse practitioner students and their clinical teachers (preceptors) may have an impact on students' confidence in their ability to take on the advanced practice role of the nurse practitioner. The study investigated the relationship between nurse practitioner students' perceptions of mentoring by their clinical preceptors and student's self-efficacy. Bandura's Self-Efficacy Theory and Biddle's Role Theory provided the framework for the research. The results indicate that mentoring has an impact on graduate nursing program philosophy, clinical placement management strategies and preceptor selection.

Kaul (1996) examined the nature and extent of the influence of mentor relationship in the development of talent and to explore the life goals of the talented subjects from among the post graduate students from three national universities in India namely, Jawaharlal Nehru University, Jamia Milia Islamia

and University of Delhi, belonging to the faculties of science, social science, commerce, management, law, engineering and medicine. The results revealed that the phenomenon of mentorship is quite pervasive in the Indian educational setting. Majority of the respondents preferred male mentors. The students of engineering and medicine said they came in contact with the mentor when they were pursuing their professional education while the management students opined that they contacted the mentor at the primary level. Almost all the students had older mentors and a majority of them were over 40 years of age. Finally, the results revealed that students from all the three universities scored the highest mean on personal-happiness and prestigious goal and lowest on religious and artistic goals.

### **2.10 Mentoring in management education**

Management institutions, as already mentioned in the introduction chapter, are being increasingly considered the seat for the holistic development of students and strive to create a learning environment rather than a teaching environment. Business schools, therefore, must be able to ensure that students are provided with adequate knowledge, skills, abilities and attitudes that are needed for achieving success in any business environment. The students should be exposed to challenges which will sharpen their skills and make them relevant and effective in the real business world.

Although there is little information on the use of mentoring programmes by business schools, there are many articles citing successful implementation of mentoring programs in business. Allen et al. (1997) in their study say it is particularly important to examine the mentoring experiences of business graduate students (MBAs). As future business leaders, their educational mentoring experiences are likely to have an immediate impact on not only

their career successes but also on their interests in serving as mentors to others in their immediate academic setting or later in the employment context.

Schelee (2000) described the state of mentoring programs in business schools. His findings indicate that a mentoring programme attempts to bridge the gap between academic training and students' successful entry into the business world. Mentoring programs also reflect an increased interest in the professional preparation of students (Cunningham, 1995) and training of managerial skills such as goal setting, self awareness and career management (Biggelow, 1995). In spite of all these benefits the study revealed that almost 59 per cent of the business schools did not have a formal mentoring program.

Levesque et al. (2005) in their study identified the difference between men and women's perception of the mentoring function. The data was collected from 637 graduate respondents (alumni) of a top-tier MBA program. The study revealed that the two sexes are similar in their perceptions of the most valued mentoring behavior. The two mentoring behaviors found to be significantly important to women than men were championing and acceptance and confirmation. Championing was one of the five mentoring behaviors identified most by both men and women, with women perceiving it as significantly more important than did men.

A Canadian survey (Simpson et al., 2005) of 225 MBA graduates revealed that the most popular reason for taking the MBA programme was to improve job opportunities followed by the desire for a career change with the least favoured choice of obtaining general life-related skills. Some age and gender differences were also noticed with respect to salary or status expectation and credibility enhancement. Men in the study were more hopeful of gaining increased confidence from having a fuller skill set, whereas women

were expecting to gain confidence from feelings of self-worth. This study was in fact suggested the mentoring experiences that the students of an MBA necessarily have in the course of their studentship that help them achieve their personal and career goals. Mentoring dimension of the MBA programme typically equips the students become politically savvy and avoid traps and dead ends in life generally and in career in particular. On the whole, management education, with its mentoring component, helps students achieve their fuller potential and encourage them to be proactive.

The researcher, in the light of the theoretical and empirical information presented so far, proposed to undertake a study to evaluate and establish the significance of mentoring phenomenon prevailing in management institutes in the state of Kerala, whether or not it is part of the formal faculty environment. The study was conceived to demonstrate 'protégé maturity' among the students as the culminating outcome of 'effective mentoring' brought about by legitimate 'mentoring activities' that can be moderated by the socio-demographic backgrounds and personality orientations that precipitate the psycho-social dispositions of the teachers who act as mentors in B-schools.

### **2.11 Significance of mentor's personal profile**

The influence of relational demography, especially with respect to gender and ethnicity, on mentoring relationship has repeatedly been recognized but there has been little investigation of its effect on indirect mentoring relationships (Ensher and Murphy, 1997 and Godshalk and Sosik, 2000). Mentors are more experienced in the organisation than protégés, resulting in tenure differences between mentors and protégés (Levinson et al., 1978). Studies exploring the effect of tenure diversity within intact groups have generally found that heterogeneity with respect to tenure has resulted in

compromised functioning and higher level of turnover (Wagner et al., 1984; O'Reilly et al., 1989; Zenger and Lawrence, 1989; Jackson et al., 1991 and Wiersema and Bird, 1993). While tenure differences are expected between parties in a mentoring dyad, it is likely that as differences in tenure grow larger, and as age differences grow, there is likely to be less agreement between the mentoring partners about mentoring activities within the relationship (Fagenson- Eland et al., 2005).

In the seminal work on mentoring, it is suggested that the mentor should be eight to fifteen years older than the protégé, or the relationship might become more peer like (Levinson et al., 1978). One of the studies on age diversity within mentoring dyads found differences in vocational and psychosocial functions reported by the protégé based on age differences within the dyad, but agreement on these perceptions between the dyadic partners was not assessed (Finklestein et al., 2003). Gender has been studied as an important factor which influences groups and dyadic functioning (Shaw and Barret-Power, 1998; Ostroff and Atwater, 2003 and Chatman and O'Reilly, 2004).

The effects of gender are moderated by the relative proportion of men and women within groups, but in general, heterogeneity with respect to gender has a negative effect on group functioning (Pelled, 1996). Cross-gender mentoring relationships result in less mentoring and more expected difficulties than in same sex relationships (Noe, 1988; Ragins and McFarlin, 1990; Thomas, 1990; Gaskill, 1991 and Burke et al., 1993). Differences in outcomes for men and women in terms of receiving mentoring and mentoring outcomes have been evidenced in research (Burke et al., 1990; Burke and McKeen, 1996; Ragins, 1997 and Ragins and Cotton, 1991).

Heterogeneity with respect to the educational level has also been found to have an effect on group functioning. Individuals who are the most dissimilar from the work group in terms of education have been found to be the least well integrated (Kirchmeyer, 1995).

Dreher and Ash (1990) examined the role played by mentorship in the career outcomes of men and women. In particular, the goal was to explore gender differences in mentoring experiences and the degree to which mentoring is differently associated with the career outcomes of men and women in managerial and professional occupations. The study revealed that individuals who had extensive mentoring relationship reported receiving more promotions, had higher incomes and were more satisfied with their pay and benefits than individuals who had less extensive mentoring relationships. It also revealed that there was no gender difference with regard to the frequency of mentoring activities and gender did not moderate mentoring outcome relationships.

Ragin and Cotton (1999) examined the effects of the types of mentoring relationship and the gender compositions of the relationship on mentoring functions and career outcomes. The results indicate that men were significantly more likely to have formal mentors than women and the type of mentoring relationship was found to be related to mentoring and career outcomes. Female protégés with female mentors were significantly more likely to engage in social activities with their mentors than female protégés with male mentors. Male protégés with female mentors were significantly less likely than all other gender combinations to report that their mentor provided exceptances roles. Protégés with a history of male mentors reported more promotions over the last 10 years, than protégés with a history of female mentors.

Wood and Lindroff (2001) in their study tested the prediction that there will be sex difference in how middle managers perceive promotion requirements, and that such differences will be influenced by societal expectations of gender appropriateness, in which women expected to display communal (nurturing, interpersonal and sensitive) and men agentic (independent, assertive and ambitious) qualities and behavior. No sex differences were found in the percentage of middle managers who felt that everyone in the organization has the same opportunities for promotion or in the personal aspirations of middle managers to achieve senior promotions. Women reported that individual qualities such as potential for development, personality and mentoring relationships had influenced their promotion, whereas men believed that years of experiences had influenced their promotion. Further women believed that lack of personal interest, family reasons or negative stereotyping would be the reasons why future promotions may not occur, while men thought that politics, personal inadequacy or lack of opportunities would be the cause.

Allen and Eby (2004) examined the relationship between mentor gender, protégé gender, mentorship characteristics (mentorship type, mentorship duration and mentor experiences) and mentoring functions provided as reported by mentors. The researchers proposed that mentoring effectiveness would vary as a function of the gender of the mentorship participants and the characteristics of the relationship. The findings revealed that mentors reported providing more psychosocial mentoring to female protégés than to male protégés but no differences in career mentoring were observed. Mentors in informal mentoring relationship reported no differences in mentoring provided to their protégés than did mentors in formal mentoring relationships. Mentor experiences were the only variable to contribute uniquely to both psychosocial and career related mentoring.



Levesque et al. (2005) identified the difference between men and women's perception of the mentoring function. The findings revealed two mentoring behavior significantly important to women than to men were championing and acceptance and confirmation. Championing was one of the five mentoring behavior identified by both men and women, with women perceiving it as significantly more important than did men.

Fagenson–Eland et al. (2005) examined the influence of demographic differences on mentors and protégés perceptions of developmental support and frequency of communication. This research is one of the few studies that used mentoring dyads and focused on how the participants view the mentoring relationship. Data on demographics (organizational tenure, age, gender and educational level), mentoring functions and frequency of communication were collected from both the mentor and protégé in 27 mentoring dyads from two medium sized high technology companies. The study revealed dissimilarity between the mentee and protégé on organizational tenure, age, gender and educational level. The correlation between mentors and protégés perception of communication frequency was positive and significant. It also indicated that younger protégés perceive more developmental support and more frequent communication from their mentors.

Simpson et al. (2005) explored gender difference in career benefits from the MBA program, as well as from a national culture in which more official policies have been initiated and supported to promote women in management. The results indicated significant differences in terms of the profile of male and female MBA graduates. The study revealed that the most popular reason for taking the MBA was to improve job opportunities followed by the desire for a career change. The least popular choice was the desire to obtain general skills.

However some age and gender differences emerged with respect to salary or status, confidence and credibility.

Young et al. (2006) in their study focused on issues of gender and mentoring through several theoretical lenses—similarity attraction paradigm, power dependence, social exchange, biological and psychological theories—to provide a more comprehensive view of mentoring from a gender based perspective.

Dua (2007) in her study explored the relationship between gender, mentoring and graduate student success for women in doctoral degree granting programs in the USA. The focus of this study was on feminist mentoring compared to more traditional models. The study revealed the relationship with female mentors, characterized by mutual empowerment, empathy, reciprocity, role flexibility, acceptance and caring that allows female student to develop a professional identity.

The personal profile of teachers comprises of 1) socio-demographic variables and 2) personality profile of teachers. Researchers consistently found that the demographic characteristics of both mentor and protégé (i.e., age, gender, rank, experience and race) can affect perceptions of the mentoring relationship as well as its outcomes (Murray, 1991; Thomas, 1993; Turban, 1994 and Mullen, 1999).

The present study attempts to investigate and understand if socio-demographic factors like age, gender, designation, educational qualification, teaching experience and industrial experience influence the effectiveness of mentoring in B-schools.

## **2.12 Mentor's personality**

Examining personality types opens a window to a better understanding of the personal preferences and people's ways of functioning. In the context of

mentoring, consideration of individual personality types can provide important insights into how mentors interact, make decisions, and perceive different situations interpersonally and take actions in the workplace. Looking at personality differences is particularly helpful in the areas of growth and development of self and of those one proposes to help. For mentors, learning about their personality types and its implications is an interesting and insightful tool for self-reflection and discovery.

Only very few studies have examined the significance of personality-related predictors to the process of mentoring. Allen and her colleagues (Allen, 2003 and Allen et al., 1997a) found that pro-social personality features like empathy and readiness to help others predicted the willingness to mentor others. Other researchers supported locus of control (Allen et al., 1997b and Turban and Dougherty, 1994) and upward striving (Allen et al. 1997b and Hunt and Micheal, 1983) as personality-based motivators of mentoring activities. Waters (2004) found that the personality characteristics of mentor and protégé, specifically agreeableness, openness, and extraversion were significant predictors of protégé–mentor agreement about the provision of psychosocial support. Lima Lizzette (2004) investigated the relationship between mentor characteristics (motivational tendencies and personality traits) and protégé outcomes. A motivational approach was taken in the sense that motivation to mentor, as well as personality characteristics of the mentor were considered with regard to their ability to predict the type of mentoring provided and outcomes for the protégé.

Literature review seems to suggest the need for exploring and analysing the possible linkages between the personality characteristics of individuals motivated to mentor others, the type of mentoring inputs they provide and the quality of mentoring outcomes. It would also be instructive to know which

mentor personality characteristics or traits influence the type and quality of mentoring. The researcher understands that, given the available literature on personality and mentoring, a typical set of personality traits could be instrumental in deciding the mentoring activities resorted to by the mentors as well as the quality of mentoring outcomes.

Personality has been conceptualized from a variety of theoretical perspectives, and at various levels of abstraction or breadth (John et al., 1991 and McAdams, 1995). Each of these has made unique contributions to the understanding of individual differences. Some of the researchers reported on the importance of individual differences on the part of mentors in general. Roche (1979) identified certain key personal characteristics that explain the mentors' power, position, insightfulness and respectability. Hunt and Michael (1983) found that mentors have to be high in self confidence and considerate about the needs and advancement of the mentees while Cronan-Hillix et al. (1986) attempted to differentiate between good and bad mentors in terms of their characteristics.

The Big Five Personality Factors has been considerably debated upon in recent times. Many researchers view the Big Five Factors as useful predictors of outcomes and performances in different contexts (Hogan, 1991; Cortina et al., 1992 and Salgado, 1997). The five personality factors that constitute this model are : 1) Extraversion – sociability, dominance ambition, positive emotionality and excitement – seeking; 2) Agreeableness – cooperation, trustfulness, compliance, and affability; 3) Emotional Stability – lack of anxiety, hostility, depression and personal insecurity; 4) Conscientiousness – dependability, achievement striving and planfulness and 5) Openness to Experience – intellections, creativity, unconventionality and broad – mindedness (Barrick et al., 2001). These personality factors have been shown

to be stable across the lifespan (Conley, 1984 and Costa and McCrae, 1988) and have a genetic influence (Bouchard, 1997). They also consistently emerge despite different measurement approaches, languages, cultures and using ratings from different sources (Digman and Shemelyov, 1996). Barrick et al. (2001) conclude “while there is no universal agreement on the Big Five model, it is a useful taxonomy and currently the one considered most useful in personality research”.

Some of the factors have been pointed out as more predictive than others. The adjectives used to describe the Big Five Factors also reflect the ideal mentor characteristics as seen in the literature. To illustrate, good mentors are described as agreeable, compassionate, people oriented and willing to share their expertise with others; mentors have also been depicted as conscientious, honest and trustworthy, dedicated and achievement oriented, extraverted, confident and effective in communicating with others. Conversely, bad and dysfunctional mentors have been described to be exploitative, dishonest, manipulative and unwilling to help others (Lizzette, 2004). Thus it seems reasonable to adopt the Big Five Factor Taxonomy as a worthwhile framework to unearth the personality implications for the mentors in explaining their initiatives, activities and effectiveness of the outcomes.

It was found that extraversion and neuroticism act as mediators between goals and subjective well being of individuals. Bono et al. (2007) revealed that people high on extraversion and neuroticism react differently to stress, cardiac arousal and performance. Rammstedt (2007) identified an increase in agreeableness and conscientiousness scores with age and that extraversion decreases across the life span of the individual. Females were found to be less emotionally stable or high on neuroticism, agreeableness conscientiousness and openness as compared to their male counterparts. The clearest and largest

effect was found for openness: the more educated the respondents, the higher the self-reported openness. Furthermore, extraversion and conscientiousness proved to be affected by the educational level. Moon et al. (2003) found that neuroticism was not significantly correlated with commitment. After a thorough review of both the personality and mentoring literature, it was thought that the Big Five dimensions were relevant to the current study.

### **2.12.1 Conscientiousness**

Conscientious individuals tend to be careful, dependable, thorough, responsible, organized and planful (Barrick and Mount, 1991). “Because highly conscientious people are hardworking, achievement oriented, and perseverant, they tend to do what needs to be done to accomplish work” (LePine and VanDyne, 2001). A number of studies have demonstrated that conscientious individuals tend to be more successful at a variety of tasks due to persistence, self-discipline and achievement orientation. Holland et al. (1993) found that the importance of achievement, working hard and persisting in the face of obstacles is highly related to conscientiousness.

Conscientiousness has been linked to achievement, competence, and discipline. Costa and McCrae (1992) have noted that high conscientiousness is associated with academic and occupational achievements. Additionally, conscientious individuals tend to engage in active planning and problem-solving strategies when they encounter challenging tasks (Watson and Hubbard, 1996). Conscientiousness individuals are known for their strong work ethic, reliability and diligence. Such individuals are likely to engage in activities that support the overall functioning of their organisation and operationalise their sense of duty. These individuals are committed to engage in actions that benefit their organization.

### **2.12.2 Agreeableness**

Individuals who are high on agreeableness tend to be courageous, flexible, trusting, good natured, cooperative, forgiving, empathetic, soft-hearted and tolerant, avoid controversy and differ with others when conflict arises (Wanberg and Kammeyer–Mueller, 2000). Because of these tendencies, they are more likely to have positive interactions with others (Costa and McCrae, 1992). Similarly, Graziano et al. (1996) found that agreeable people minimize interpersonal conflict by being less aggressive or by provoking less aggression in others.

Mentoring, in some cases, constitutes an altruistic activity. Those who engage in mentoring activities may be motivated to mentor out of a willingness to help others, often at the cost of their own time and expense. A number of studies have shown that agreeable individuals may be well suited to the task of providing mentoring function to protégés given that agreeableness, which is considered a socially oriented characteristic (Costa and McCrae, 1992), tends to be related to altruism. In addition, Graziano et al. (1996) suggested that agreeable individuals are motivated to maintain harmonious social relationship with others. It may be that agreeable individuals may be motivated to mentor in order to benefit other students or the university in some manner given that this motive tends to be altruistic in nature. In addition, those who are high on agreeableness tend to be motivated to maintain interpersonal relationships, an important function of the mentoring relationship (Graziano et al., 1996).

### **2.12.3 Extraversion**

Wilson (1981) reports extraverts are more open to social influences, may also be willing to engage in the emotions prescribed by their job roles.

Furthermore, extraverts have the ability to better regulate their emotional expressions, as they have been found to be better at communications. People who are extraverted are sociable, gregarious, assertive, talkative and active (Costa and McCrae, 1992). There is evidence that extraversion is linked with positive peer relations because it consists of characteristics such as sociability, social interest and a preference for social interaction (Elphick et al., 1998). Although there is some debate about the core dimensions of extraversion (e.g.) reward sensitivity : (Lucas et al., 2000); or sociability; (Ashton et al., 2002). Extraversion relates to the individual's energy levels and positive affectivity, traits that may promote positive and cooperative interactions with others in the course of accomplishing work (LePine and Van Dyne, 2001).

Psychosocial functions seem dependent upon a high level of interpersonal interest in others. Functions (i.e., psychosocial) that “enhance personal development and an increasing sense of competence and self-worth, like role modeling, or friendship, are common to those relationships characterized by considerable interpersonal intimacy” (Kram, 1985, p.9). Mentors who excel in interpersonal situations may feel more comfortable acting as a role model or friend to a protégé because they enjoy interacting with others and may have become proficient at making others feel comfortable and secure. Mentoring is an interpersonal relationship that requires individuals who enjoy engaging others in conversation and seek out relationships with others. Extraverted mentors may spend more time getting to know their protégé, thus strengthening the bond between the two partners. Mentors who are extraverted may be more likely to provide psychosocial functions, which require a high level of social interaction, since they excel in interpersonal relations.



Extraverts are generally positive, social, energetic, joyful and interested in other people (Costa and McCrae, 1992). In addition, research suggests that these individuals tend to be more sympathetic towards others, engage in organizational citizenship behaviors, and place a high value on the company and welfare of others. Extraverted mentors might be motivated to mentor in order to benefit others given that they are generally sympathetic, have positive attitudes and genuinely care about others. Thus, it seems likely that individuals high on extraversion would be more motivated to mentor in order to benefit others since they are generally positive individuals.

#### **2.12.4 Openness**

Openness is an important personality facet among the big five personality traits. McCrae and Costa (1985a) say it is one of the most widely researched domain among the personality traits. Intellectual curiosity is an aspect of openness that has long been recognised (Fiske, 1949). McCrae (1987) is also of the same opinion, and says openness is modestly related to measures of intelligence and somewhat more strongly related to measures of divergent thinking, an ability generally thought to contribute to creativity. The elements of openness are active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety and intellectual curiosity. Individuals high on openness are curious about both inner and outer worlds, and their lives are experientially richer. They are willing to entertain novel ideas and unconventional values, and they experience both positive and negative emotions more keenly than do closed individuals (Costa and McCrae, 1992). While men or women who score low on openness tend to be conventional in behaviour and conservative in outlook. They prefer the familiar to the novel, and their emotional responses are somewhat muted. Although openness and closedness may influence the form of psychological

defence used there is no evidence that closedness itself is a generalized defensive reaction. Instead, it seems likely that closed people should not be viewed as authoritarians (McCrae and Costa, in press-a).

### **2.12.5 Neuroticism**

Neuroticism was initially designed to measure emotionality (Eysenck et al., 1964) and has been identified as a major personality dimension by nearly all subsequent investigators (John, 1990). In adulthood, neuroticism is stable over time (McCrae and Costa, 1990); high levels are associated with risk for major depression both cross-sectionally (Hirschfeld and Klerman, 1979 and Wetzel et al., 1980) and prospectively (Hirschfeld and Klerman, 1979) genetic risk factors for neuroticism and major depression are closely related.

The general tendency to experience negative effects such as fear, sadness, embarrassment, anger, guilt and disgust are the core of the neuroticism domain. Men and women high on neuroticism are prone to have irrational ideas, to be less able to control their impulses, and to cope less than others with stress. Individuals who score low on neuroticism are emotionally stable. They are usually calm, even-tempered, and relaxed and they are able to face stressful situations without becoming upset or rattled (Costa and McCrae, 1992). Larsen and Ketekar (1991) found that individuals high on neuroticism were more responsive to a negative affect manipulation than the low scorers. Further more, regulating personality congruent emotions may also be less stressful, as Cote and Moskowitz (1998) reported that when individuals high on neuroticism engaged in trait congruent behaviours, they experienced increased feelings of well being. When faced with a role requiring the expression of enthusiasm, however, individuals high on neuroticism may tend to express only the outward displays of the required positive emotion. Such outward displays of a personality is incongruent emotion and may also require

individuals high on neuroticism to simultaneously suppress negative affect, which has shown to be stressful (Gross and Levenson, 1997). Individuals high on neuroticism find it difficult and are more stressed when asked to exhibit enthusiasm, while they are more comfortable when asked to exhibit anger/irritation. Across jobs, neuroticism is generally negatively associated with performance, individuals high on neuroticism tend to perform poorly both in positive and negative emotional tasks (Barrick et al., 2001).

Of all the big five personality traits, openness and conscientiousness promise to be of particular interest in the area of educational psychology (McCrae, 1987). Openness is modestly related to measures of intelligence and somewhat more strongly related to measures of divergent thinking, an ability generally thought to contribute to creativity. Conscientious people consider themselves, and are rated by others as being, more intelligent, and scores of this domain is a useful supplement and has the ability to measure predictors of academic and later-life success (McCrae and Costa, 1987).

### **2.13 Mentoring activities**

Mentors decide to utilise planned activities to foster the mentoring relationship and to contribute to a mentee's personal and professional development. Activities form the basis for developing and maintaining a trusting and caring relationship between mentors and mentees. Regardless of the type of mentoring program, it is important to sponsor a mix of activities that support program goals and encourage interaction among all participants in addition to one-to-one activities. Activities help to foster a sense of community for both mentors and mentees, providing informal support for the mentors and a strong support system for mentees.

Sanghi and Robins (2006) opines that mentoring role includes, coaching, counseling and sponsorship. As a coach, mentors help to develop their protégés skills. As counselor mentors provide support and help bolster their protégés self confidence. As sponsor, mentors actively intervene on behalf of their protégés, lobby to get their protégé's visible assignment and politic to get their protégé's reward such as promotions and salary increases.

The way mentoring occurs for mentors and protégés is idiosyncratic. Mentoring for one pair is different from the way mentoring occurs for others (Mary Ann and Nancy Sindelar, 1992). Daloz (1986) suggests that mentors offer their protégés support, challenge and vision. They support their protégé through listening, providing structure, expressing positive expectations, serving as advocate, sharing with their protégés and making it special.

Successful mentors are good teachers. They can present ideas clearly, listen well and empathize with the problems of their protégés. They also share experiences with the protégés, act as role models, share contacts, and provide guidance through the political maze of the organisation. They provide advice and guide on how to survive and get ahead in the organization and act as a sign board for ideas.

Beardwell and Holden (1995) say that a mentor helps the protégé to identify and develop his potential, question and reflect on his performance. The mentor 1) stimulates, 2) encourages, 3) guides, 4) supports, 5) cautions and 6) gives. These activities contribute to the development of the higher order skills needed in life and careers. Alleman and Clarke (2002) found that mentors use a set of specific and identifiable activities. These behaviours can be measured. Mentoring activities are multi-faceted, and contain items assessing nine activity categories characteristic of typical mentors, such as

teach the job, counseling, endorse activities, sponsor, protect, teach politics, career help, challenging tasks, friendship and demonstrate trust. The amount and quality of mentoring activity must be measured, not merely in terms of frequency of contact but what actually happened during that contact and how much mentoring took place.

Mentoring relationship may require both mentor and mentee to engage in challenging activities, utilise new skills and exhibit different behaviour (Pittenger and Heimann, 2000). Although there is an understanding about roles and possible ways to carry out the roles, the nature of the relationships as well as the level of learning varies. To credit the mentoring program with success, however, it is necessary to demonstrate that mentoring activities were also successful. Hence the researcher identified the mentoring activities as the independent variable and chose to study its influence on mentoring effectiveness.

#### **2.14 Effectiveness of mentoring**

Informal mentoring is seen as occurring naturally in young people's lives, through the support they receive from parents, teachers and others, and in the normal course of their lives as they interact with, seek out, learn from and are guided by older people and quite often by peers with more experience.

Formal mentoring seeks to replicate some aspects of this natural mentoring. It aims to provide young people with support and guidance through planned relationships which are purposeful in that they focus on young people's social and learning development and the purpose of formal mentoring varies with the needs of the students and status in life that they are prepared for.

Mentoring relationships are different from the often numerous professional relationships young people experience e.g., with teachers,

counselors, social workers, where mentors are generally volunteers and there is an emotional and social element to the relationship. However, some professional relationships might include an element of mentoring. Mentoring also differs from role modelling, although it can be regarded as a particular example of role modelling. Role modelling focuses on how the role model is perceived by the young people concerned and the young person's desired goal, whereas mentoring focuses on explicit action or activities by the mentor to assist the young person to reach their goal. Effective mentoring :

- is a relationship that focuses on the needs of the mentee
- fosters caring and supportive relationships
- encourages all mentees to develop to their fullest potential; and
- is a strategy to develop active partnerships.

This outline of effective mentoring brings together three key elements underlying the rationale for formal mentoring programs for young people. They are : a focus on the young person's needs; mentoring is essentially about relationships; and the close connection between mentoring and the wider community, whereby effective mentoring both develops and strengthens many levels of community partnerships. There is still much that is not clear about how formal mentoring relations between adults and young people actually work. Perhaps this is not surprising since relationships are one of the most complex aspects of human functioning. It may be that some young people naturally draw support from others, or it may be the involvement of a caring and supportive adult that engages the young person.

Many formal mentoring programs aim to help young people's learning and/or assist them to make more informed decisions about education, training and employment. Education, training and employment systems have become

more complex. The different options and pathways available offer a greater range of opportunities but they sometimes make it more difficult for young people to make the best informed choices. Some young people have access to resources, through schools, their families and communities, to help them navigate their way through the education and training systems. Many do not. Even those who are relatively well informed sometimes find it difficult to find their way 'through the system'. In many respects, entering employment now has different challenges than in the past. Young people are generally expected to be 'work ready' when they enter employment. The capacity for employers and more experienced workers to provide mentoring and support in the early stages of employment has generally diminished. Colleges and B-schools specifically have responded to this reality by putting considerable effort into preparing young people for employment and helping them through the various 'transition' points along the way. The available evidence is that well planned and organised formal mentoring programs can provide strong individual support, advice and guidance for young people and help in practical ways at important 'transitions' points in their lives. Across the very diverse field of mentoring, and depending on the young person's needs, some mentoring focuses primarily on the relationship and the journey which the mentor and young person share. Others see the relationship as the basis for a more clearly defined purpose such as helping young people to make more informed decisions in relation to education, work or life, helping them to set personal goals, and helping them to gain work experience and pathways to employment. Whatever the particular focus, the relationship is always the context and the positive impacts of mentoring are likely to be greatly reduced or even harmful when this is not the prime consideration. In practice, the relationship and its purpose are frequently intertwined. In programs with focus on direct assistance or skill development, relationships often reach a new level

when an emotional and social bond is formed, and in programs built on providing social and emotional support, skills are developed and assistance given as part of the relationship. Mentoring relationships are seen as mutually beneficial and reciprocal, having positive outcomes for mentors as well as mentees.

The effectiveness of a mentoring relationship from the perspective of the mentor may be reflected in a number of factors. An important aspect of mentoring effectiveness is the relationship quality. Relational quality encompasses satisfaction with the relationship, perceived benefits accrued to both individuals (i.e., mutuality), and relational depth (Huston and Burgess, 1979; Hinde, 1981 and Kram, 1985). Kram (1985) discusses how mentorship can vary greatly in terms of quality and depth, suggesting that higher quality relationships are the basis for more effective mentoring relationships.

Cohen (1993) is of the opinion that while the benefits of mentor protégé programmes in higher education have been evaluated, a gap between the professional obligation of faculty mentors to evaluate their own adult psychological competencies with responses from faculty colleagues and protégés needs to be studied to reveal faculty mentor effectiveness in mentoring relationships in higher education. The principles of adult mentoring scale developed by Norman H. Cohen in 1993 for the purpose of assessing the behavioural mentoring functions advocated by prominent adult education scholars is most likely to be significant in relationship between mentors such as faculty, counselors and administrators and their protégés.

The six behavioural mentoring functions of the mentor role and a description of each are as follows: a) relationship emphasis - conveys through active, empathetic listening a genuine understanding and acceptance of



protégé's feelings. b) information emphasis - directly requests detailed information from and offers specific suggestions to protégés about their current plans and progress in achieving personal, educational and career goals. c) facilitative focus – guides protégés through a reasonably in-depth review of an exploration of their interests, abilities, ideas and beliefs. d) confrontive focus – respectfully challenges protégé's explanations for, or avoidance of decisions and actions relevant to their development as adult learners. e) mentor - model - shares (self-disclosure) life experience and feelings as a role model to protégés in order to personalize and enrich the relationship. f) student-vision-stimulates protégé's critical thinking with regard to envisioning their own future and to developing their personal and professional potential.

Jadwick (1997) measured the perceptions of effectiveness between faculty mentors and protégés involved in formal mentoring relationship in higher education. The results revealed that faculty mentors and protégés' perception of effectiveness resulted in variety of findings for the six behavioural mentoring functions. Relationship emphasis and facilitative focus for faculty mentors and protégés resulted in effective mean scores; information emphasis and student vision mean scores of faculty mentors resulted in less effective mean scores while information emphasis and student vision mean scores of protégés resulted in effective mean scores. Faculty mentors and protégé mean score for confrontive focus resulted in less effective scores while the mentor-model mean score for faculty mentor and protégés revealed very effective scores.

Allen and Eby (2003) focused on mentorship effectiveness from the perspective of the mentor and in identifying factors related to a positive mentoring experience for the mentor. The respondents were members of a professional women's business association employed in accounting related

occupations. The study revealed that perceived similarity was consistently associated with mentor reports of relationship learning and quality. Mentorship type was not directly related to mentorship effectiveness, but did interact with mentorship duration. There was significant relationship between mentorship duration and mentoring effectiveness for formal mentors and not for informal mentors. Finally the results indicated that it was very important to consider time in the study of mentoring relationships

Pittenger and Heimann (2000) hold that effective mentoring typically involves role modelling, and so it is important that an organisation has a positive culture with a shared understanding of organisational purpose and objectives. Effective mentoring relationships require good interpersonal skills. So much of the training received in educational institutions and the workplace involves technical, job-related skills, often at the expense of attention to develop other skill areas. In mentoring relationships mentors are expected to provide psychosocial and career support to their mentee (Kram, 1985). Traditionally, studies measuring mentorship effectiveness focus on variables such as promotion rate increases, upward mobility and speed of career advancement (Aryee et al., 1996). For psychosocial outcomes, they tend to focus on factors related to interpersonal relationships such as sense of identity, intimacy, socialisation and commitment (Heimann, 1996). Not all relationships are equally effective. Evidence has indicated that mentoring arrangements are more likely to be successful if they operate within a certain framework, which includes a number of individual and organisational characteristics (Noe, 1988 and Whitely et al., 1992).

### **2.15 Protégé maturity (transition through mentoring)**

Common expectation in any society is that its youth develop certain qualities, attitudes, habits and patterns of behaviour widely recognised as essential

to their effective assuming and successful enactment of the adult roles. Adolescence, the period in psychosocial development immediately preceding adulthood, invites attention in all societies. By the end of adolescence, the young man or woman is expected to have learned appropriate social roles and skills, and by implication, accept obligations to the community for safeguarding its functions. Among the various developmental tasks to be fulfilled in the transition from adolescence to adulthood are the acquisition of adaptive social and psychological capacities, skills, values, and habits that serve to establish the individual in a culturally appropriate adult role (Taylor et al., 1979; Keefe and Padila, 1987 and Rosenthal, 1987). Psychosocial functions can assist individuals early in their career by developing competence, confidence, and a clear sense of professional identity (Greiman, 2002). According to Hall (1986), the psychosocial functions would serve to “enhance a sense of competence, clarity of identity, and effectiveness in a professional role”. The psychosocial functions include role modeling, counseling, friendship and acceptance. The role modeling function is “demonstrating valued behaviors, attitudes and/or skills that aid the junior in achieving competence, confidence, and a clear professional identity” (Hall, 1986). The counseling function is when a mentor is helpful and offers a confidential forum for exploring personal and professional dilemmas. When a mentor shows “mutual caring and intimacy that extends beyond the requirements of daily work tasks” and is “sharing experiences outside the immediate work setting”, then the friendship function is provided. In realising support related to the acceptance function, a mentor “provides ongoing support, respect, and admiration, which strengthens self-confidence and self-image”.

One of the most important but less studied adaptive psychosocial qualities is responsibility. Early on, Brown and Landsberger (1960) took on the task of definition and measurement of "the sense of responsibility" in

young workers. More recently studies by Werner and Smith (1982) and have provided us with clear empirical evidence about its importance. They found that responsibility, along with socialisation, achievement, conformity, and communality were the most important personality characteristics in predicting resilience in an adolescent population.

The mentor relationship can significantly enhance psycho-social development in early adulthood and also in the mid-career stage of the more experienced individual (Kram, 1985). An individual who is entering the adult world and the world of work is likely to encounter a variety of developmental tasks that are reflected in concerns about self, career, and family (Bray et al., 1978; Schein, 1978; Super, 1957 and Valliant, 1977).

A young adult, in the first stage of career is likely to be engaged in forming an occupational identity, forming a dream, and forming intimate relationships (Levinson et al., 1978). Learning the ropes of organisational life encompasses the development of requisite technical, interpersonal and political skills, as well as a sense of competence in a particular work context or occupation (Berlew and Hall, 1966; Hall, 1976; Schein and Van Mannen, 1977 and Webber, 1976). Thus the young adult is likely to seek relationships at work that provide opportunities for resolving the dilemmas posed in early adult and career years.

Childhood and adolescence are the periods of growing up and adulthood is a period of settling down to patterns of life and new social expectations. The young adult is expected to play new roles, such as that of spouse, parent, and breadwinner, and to develop new attitudes, interests and values in keeping with the new roles. These make early adulthood period difficult in the life span (Hurlock, 1990). Examination of literature indicates that the psychosocial

qualities of young adults have been studied only sparingly. A study of this developmental phase and its characteristic transformations provides a baseline assessment of previous experience, and as well, possible insights into the adaptive psychological and social capacities involved in the transition to the adult status (Clausen, 1991). This was considered important from the conceptual perspective of the present study and has been treated as the outcome variable.

### **2.16 Learning in mentoring**

Humanist approaches to learning recognise the power in every human being to learn in a self-directed way, finding the suitable method and medium for whatever the person desires to learn, with the following beliefs : a) People are ok; they are basically good, b) A person is a whole person, c) Human beings are driven to transform and grow, d) The ‘abundance’ model rather than the ‘deficiency’ one is suitable for personal development and e) Humans operate with a spiritual dimension.

Evolutionary mentoring and life coaching require trust in the client and confidence in the client’s capacity for development. Evolutionary mentors and life coaches hold the belief that clients are fundamentally sincere and desire to change and develop. In addition, humanist principles of learning emphasize the significance of being authentic rather than being impersonal. Rogers (1983) described the conditions for learning and development as ‘person-centered’, a statement that grows from the humanistic belief in the ‘actualizing tendency’ of human beings, the striving to-wards growth and development present in every person. Rogers offers three conditions for a person-centered climate:

- Congruence, i.e. genuineness, realness, sharing feelings and attitudes rather than opinions and judgments;

- Unconditional positive regard (UPR), i.e. acceptance and ‘praising’ of the other;
- Empathy, i.e. understanding of the others’ feelings, experience and attitudes and communicating that understanding.

If teachers can understand the learning styles of individual students, they are in a better position to anticipate their perceptions, their behaviours, understanding and misunderstanding. The way in which a learner prefers to learn is indicative of his learning styles. According to Brookfield (1986), one important element in facilitating adult learning is helping learners to become aware of their learning stages and the idiosyncratic learning styles.

### **2.16.1 Learning cycle**

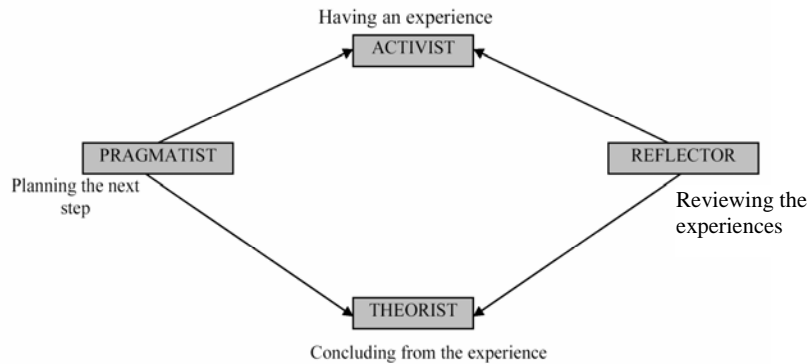
Kolb (1984) developed the concept of a learning cycle; the model suggests that individuals have a learning preference that is located in one of four distinct stages. The most explanatory framework for the evolutionary learning relationship and transaction happening between a mentor and learner seems to follow a learning style, based on Kolb’s learning cycle that proposes four modes of a) learning-concrete experience, b) reflective observation, c) abstract conceptualisation and d) active experimentation. He maintains that a learner would begin learning at any point in the cycle and then continue around the cycle during the learning process. Wolf and Kolb (1984) considered that experiential learning theory offers a model of learning and adaptation processes that reflect the stages of human growth and development and are consistent with human cognition. An individual learns from concrete experience through the reflection on the experiences from a number of perspectives. The individual then reforms learning on the basis of that reflection and then test out their learning through discussions and problem

solving. A learning style has been defined as a distinctive and habitual manner of acquiring knowledge, skills or attitudes through study or experience (Sadler-Smith, 1999). Woodd (1997) believes that using these learning styles inventory to pair mentors to protégés may generate a useful dialogue on the similarities and differences between the parties. It may allow them to focus discussions on the learning process that will take place. Woodd further explains that an examination of the learning styles will offer an insight to the mentor as to how to coach the protégé or provide an indicator of how the mentor could further develop the protégé's ability to learn from experience. In a mentoring situation each stage demands deliberate attention before moving on to the next. Following the cycle can ease an individual out of a constant pattern of 'doing' without improving, by setting aside time for reflection and creativity. Many cultures influence people to skip the reflection stage, partly because of the assumption about the way people should spend their time. If someone is reflecting it is considered perfectly acceptable to interrupt because "they're not doing anything". In the abstract conceptualisation phase ideas and possibilities for action are created by looking for links between potential actions and patterns of behaviour.

Reflection and experimentation require an element of risk-taking; a mentee risks being shown as wrong about a solution and the mentor risks in having supported something which may not work out. However, if these risks are not taken, practice will never move on, and people/services will not grow and develop. Inherent in this approach is that experimentation is seen as an opportunity for growth and development. It follows then, that mistakes are seen as opportunities for growth and learning and not as opportunities to blame.

### **2.16.2 Stages of learning**

Honey and Mumford (1992) have adopted a learning cycle approach to indicate four stages of the learning process as visualised below.



The activists are 'here and now', gregarious, seeks challenge and immediate experience, open minded, bored with implementation and long-term consolidation, and constantly involve themselves with other people (Mumford, 1995).

The reflector likes to stand back and review experiences from different perspectives; collect data and analyse them before coming to a conclusion; likes to consider all possible angles and indications before making a move; tends to be cautious; enjoys observing other people in action; often takes back seat in meetings (Mumford, 1995).

The theorists are keen on assumptions, principles, theories, models and system thinking; praise rationality and logic; tend to be detached and analytical; are unhappy with the subjective or ambiguous; are tidy and fit tasks into rational skills (Mumford, 1995).



The pragmatists search out new ideas or techniques which might apply in their situation; take the first opportunity to experiment with applications; respond to problems and opportunities as a challenge; are keen to use relevant ideas from management courses; like to get on with things with clear purpose (Mumford, 1995).

The four different learning styles are strongly associated with four stages of the learning cycle and researchers have suggested that if the learning styles of the coach or mentor and the learners are similar, the relationship will be more rewarding.

### **2.17 Social learning**

Researchers (Erkut and Mokros, 1984) have noted that social learning theory or social cognitive theory (Bandura, 1986) provides theoretical foundations for construing changes that happen in mentoring. Bandura's theory focuses on cognitive concepts, the way children and adults operate on their social experiences and how these cognitions then influence behaviour and development. Bandura introduced the notion of modeling or vicarious learning as a form of social learning. In 1986, Bandura renamed, Social Learning Theory to Social Cognitive Theory, with the introduction of concepts including self-efficacy. The Social Cognitive Theory defines human behaviour as a triadic, dynamic, and reciprocal interaction of personal factors, behaviour, and the environment.

Jones (1989) suggested that the Social Cognitive Theory determines the mind as an active force that constructs one's reality, selectively encodes information, performs behaviour on the basis of values and expectations, and imposes structure on its own actions. Through feedback and reciprocity, a person's own reality is formed by the interaction of the environment

(including other people, mentors) and one's cognitions. Also, cognitions change over time as a function of maturation and experience (McCormack Brown, 1998). Therefore, through an understanding of the process involved in one's construction, human behaviour can be understood, predicted, and changed.

Bandura (1989) further noted that human beings are able to model observed behaviour through cognitive processes. Symbols provide the mechanism that allows for cognitive problem solving and foresighted action. Observational learning allows one to develop a concept of how a new behaviour is formed without actually performing the behaviour. Also, the observer is most likely to attend to, and model behaviours of people that are most like themselves and those that they associate with the most. Bandura (1986) believed that modeling was an important way of teaching people overt behaviour and also one of the most powerful means of transmitting values, attitudes, and patterns of thought and behaviour. Further, the theorist believed people could learn not only by imitating the overt behaviour of others, but also by observing how others were affected by situations that occurred in their lives. Reciprocally, the vicarious success experience of others provides incentives for individuals to undertake challenges. Bandura also noted that expectations of behavioural outcomes, more so than actual outcomes, influence the likelihood that behaviour will be performed again. While social learning theory describes the role of modeling in learning, it does not deal with other aspects of mentoring such as professional or emotional support (Jacobi, 1991).

### **2.17.1 Self – Efficacy**

Bandura (1994) defined self-efficacy as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine

how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes.

A strong sense of efficacy enhances human accomplishment and personal well-being in many ways. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Such an efficacious outlook fosters intrinsic interest and deep engrossment in activities. They set themselves challenging goals and maintain strong commitment to them. They heighten and sustain their efforts in the face of failure. They quickly recover their sense of efficacy after failures or setbacks. They attribute failure to insufficient effort or deficient knowledge and skills which are acquirable. They approach threatening situations with assurance that they can exercise control over them. Such an efficacious outlook produces personal accomplishments, reduces stress and lowers vulnerability to depression.

Bouffard-Bouchard et al. (1991) corroborated Collins' (1982) finding that students with stronger belief in their efficacy were able to solve more problems, rework those in which they failed, and work more accurately than children of equal ability with less self-efficacy.

Bandura (1997) further noted that efficacy beliefs are intimately involved in the cultivation of cognitive competencies. These mediators include cognitive, motivational, affective, and selective processes. Bandura found three ways in which efficacy beliefs operate as contributors to the development of cognitive competencies governing academic achievement : student's beliefs in their efficacy to master different academic subjects; teachers' beliefs in their personal efficacy to motivate and promote learning in

their students; and faculties' collective sense of efficacy that their students can accomplish significant academic progress.

Schunk (1996) found that although efficacy beliefs are influenced by acquisition of cognitive skills, it is not a reflective concept. Accordingly, several factors may account for the predictive superiority of efficacy belief over acquired skills. Subjects vary in how they interpret, store, and recall their successes and failures. They evaluate social influences that contribute to efficacy beliefs independently of skills. Academic performances are the products of cognitive capabilities applied through motivational and other self-regulatory skills. Schunk concluded that perceived self-efficacy is a better predictor of intellectual performance than skills alone. Bandura and Schunk (1981) noted that perceived efficacy impacts directly on academic performance by affecting quality of thinking and effective use of acquired skills, and indirectly by heightening persistence in the search for solutions. The motivational link was convincingly demonstrated when efficacy beliefs were altered by arbitrary means without changing skills. Other researchers (Brown and Inouye, 1978 and Lyman et al., 1984) confirmed that individuals with high efficacy were persisters in trying to solve intractable or insoluble intellectual problems.

Further, researchers (Pajares et al., 1995; Pajares and Kranzler, 1995 and Pajares and Miller, 1994) found that efficacy beliefs play an influential mediating role in academic achievement. These factors included level of cognitive ability, prior educational preparation and attainment, gender, and attitudes toward academic activities.

Bandura (1991) found that those who do not set improvement goals are outperformed by those who set themselves goals for progressive improvement accompanied by feedback. Informative feedback enables one to achieve progress

leading to beliefs of personal efficacy not evident by level of performance attainments. Schunk and Swartz (1993) verified the benefits of combining training in strategies with feedback of progress in mastering them particularly where transferred skills are necessary. Locke and Latham (1990) identified that self-set goals increase satisfaction but do not improve performance over assigned goals. Researchers further noted that increased perceived efficacy is accompanied by higher academic attainments (Bandura, 1997).

In the area of social cognitive theory, Bandura (1997) adopted an ecological perspective on the contribution of efficacy beliefs to cognitive and social development. Family, education and peer influences operate as multiple interacting influences in shaping the student's development.

At the university level, students need to choose which education directions to pursue and assume responsibility for their own learning. Students who have a high sense of efficacy are more successful in regulating their learning and achieve better academically than those who are uncertain about their intellectual capabilities (Pintrich and Schrauben, 1992). Multon et al. (1991) meta-analysis of academic achievement provided conclusive evidence showing that efficacy beliefs contribute significantly to scholastic performance. This was supported by other researchers (Shell et al., 1989) who found that beliefs in personal efficacy have substantially greater impact on academic performance than the personal, social, and occupational outcomes expected for proficient performance. Lent et al. (1993) suggested that students' beliefs in their academic efficacy mediate the relationship between ability and educational goals and achievements. For the institutions, teachers, or researchers, these findings suggest that the development of scholarly careers, mastery experiences, modeling of strategies, and supportive feedback should be structured in ways that build a clear and strong sense of efficacy.

Researchers (Suls, 1986 and Wei, 1994) suggested that social comparison theory would support self-efficacy. They examined the process of seeking out people who are similar to help evaluate themselves. In this process, according to Suls (1986), individuals make causal attributions regarding beliefs or abilities on a given task.

### **2.17.2 Self-esteem**

Self-esteem refers to how favourably individuals evaluate themselves (Brokner, 1988 and Tourban and Dougherty, 1994). High self-esteem individuals perceive themselves more positively and believe they are more capable and competent to cope with different situations and tasks (Brockner, 1988 and Tourban and Dougherty, 1994) as success experiences are attributed to a strong expectancy of further success (Dreher and Bretz, 1991).

### **2.18 Pygmalionism**

According to Appelbaum et al. (1994) expectancy theory helps to suggest that “behavior is a function of a person’s expectancies about the future and the value of future outcomes”. An obvious manifestation of expectancy theory is the process of self-fulfilling prophecy.

In an organisation, leaders may hold prophecy or expectation about subordinates, and that subordinates may behave in such a way as to realize those expectations. Obviously, there can be self-fulfilling prophecies that are detrimental or beneficial. To an individual or for the organization, the constructive management of self-fulfilling prophecy is one way to enhance job satisfaction and employee motivation; and mentoring is one way to manage self-fulfilling prophecy constructively. Another term for self-fulfilling prophecy is the Pygmalion effect derived from Greek mythology. Mentoring is a typical example of the Pygmalion effect. In this particular case the mentor must act as

a possible Pygmalion to rate the process effectiveness. A positive Pygmalion is a mentor and must provide the climate, feedback, input and output so that all subordinates are given opportunities to experience satisfaction and realize their potential. If leaders want to encourage productivity, and satisfaction through self-fulfilling prophecy, they must accept mentoring as a viable leadership technique. According to Livingston (2003), Pygmalion effect is one of the missing links in the mentoring/leadership relationship. Most parents are aware that the teachers' expectations about individual children become self-fulfilling prophecies; if a teacher believes a child is slow, the child will come to believe that and will indeed learn slowly. The lucky child who strikes a teacher as bright also picks up on that expectation and will rise to fulfill it. This finding has been confirmed so many times, and in such varied settings, that is no longer debated. The powerful influence of one's expectations on another's behaviour has long been recognised by physicians and behavioural scientists, and more recently, by teachers.

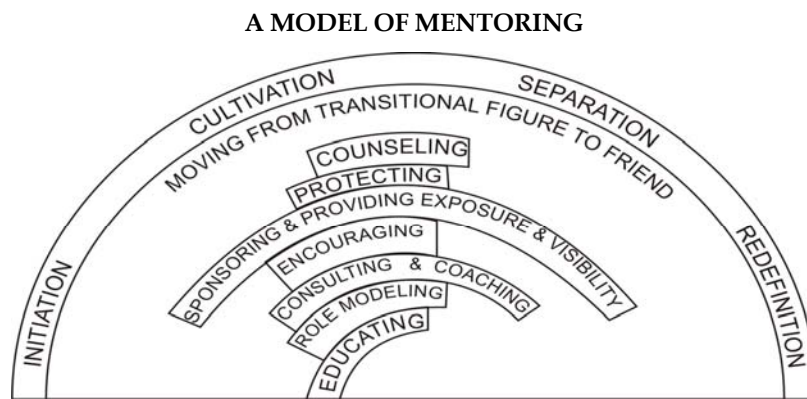
Rosenthal and Jacobson (1968) of Harvard university demonstrated that a teacher's expectation for a pupils intellectual competence can come to serve as an educational self-fulfilling prophecy. The early years in a business organisation when young people can be strongly influenced by management expectations, are critical in determining future performance and career progress. Berlew and Hall (1964) studied the career records of 18 college graduates who were hired as management trainees in one of AT and T's operating companies and found that both expectations and performance in the first year correlated consistently with later performance and success.

In Rotters' (1982, 1975) view, behaviour is a function of the expectation that the actions will lead to a particular reinforcement. People who perceive

events as determined by themselves perform better than to people who perceive events as controlled by chance (Ryckman, 1997).

## 2.19 Mentoring models

Incorporating elements of Kram's psychosocial phases of mentoring, Schockett et al. (1983) Network Mentoring Model focuses on the ways in which the mentor and protégé operate, which are mutually affirming and empowering.



Source : Schockett et al. (1983).

In this model, the initiation phase begins as the mentor provides education and role modeling for the protégé. The mentor's subsequent undertaking of the function of sponsoring involves the risk of greater commitment to the protégé which marks the onset of the cultivation phase. As mentor and protégé actively engage in the functions which emerge during the cultivation phase, their relationship grows stronger and correspondingly the overall width and breadth of the mentoring functions expand. As the mentor provides later appearing functions, however, less time may be allotted to some of the earlier functions, which will eventually disappear altogether. The functions continue to progress and decline during the separation phase at which time ambivalence is experienced as mentor and protégé begin a process



of psychological disengagement. By the time the relationship has progressed to the redefinition phase, the primary function of the mentor is one of moving from a transitional figure to a friend/peer.

This model, while incorporating Kram's psychosocial functions of initiation, cultivation, separation and redefinition, reconceptualizes them to correspond in a manner which emphasizes the shifting nature of the mentor/protégé relationship. That is at any time during the relationship, the mentor may become a protégé, while the protégé becomes the mentor. Thus, "connected knowing" strategies are encouraged rather than those which support the more "traditional" roles of mentor and protégé discussed earlier. Generally, the ways in which mentors and protégés might together construct the experience have not received much attention. Although the literature, much of which focuses on mentoring relationships in business, industry and higher education, has acknowledged the importance of consensus between the mentor and protégé on the goals and objectives of the relationship, an implied acceptance of the unequal distribution of power has existed in which the mentor identifies the "promising" protégé whom he/she then agrees to enculturate into the norms of the organization. This perspective ignores the protégé's "connections" which pre-date the mentoring relationship. It also assumes that altruism on the part of the mentor is the sole rationale guiding selection of the protégé. The networks and resources of the protégé which the mentor finds attractive are overlooked.

More recent research on career advancement mentoring (Henderson, 1990 and Mertz et al., 1990) suggests the importance reciprocity in the mentoring relationship. In this research, the authors found that potential mentors considered access to the networks of a prospective protégé a significant factor in their decision to mentor. Certainly this was true in examinations of more traditional same-sex

mentoring relationships involving white males in which the perceived potential of the protégé to open previously inaccessible networks or to create new networks for the mentor constituted an important selection criterion. It is the protégé's co-equal ability to bring something of value to the mentoring relationship which is a major component of this Network Mentoring Model.

In a sense, network mentoring shares many of the characteristics described in the Holland (1995) and Heinrich (1995) studies. In both cases, protégés who described satisfying mentoring relationships were engaged in developmental relationships which went beyond the concept of the mentor/protégé dyad. A developmental relationship is one that provides support for an individual's professional development and career enhancement. It is also a relationship in which the parties have knowledge of one another and from which both may potentially benefit. Thus developmental relationships are separated from connections to "heroes" after whom individuals may model themselves but with whom they do not have personal relationships, and form only temporary instrumental relationships that are of very short duration and require no mutuality between the parties (Thomas and Kram, 1987).

### **2.19.1 Hay's mentoring model**

Hay's (1995) transformational mentoring model of seven stages emphasizes the quality of a relationship that recognizes and values the subjective, adopts humanistic principles and, because of its person-centered approach, promotes transformation. The relationship is defined as a developmental alliance, and the holographic model (for one session or the entire relationship) is in seven 'a' stages:

- alliance – getting to know each other and establishing a contract, the all-important building of a relationship within agreed boundaries.

- assessment – a reminder of Dicken’s character Fagin, who assessed the situation’, including the context and the ‘dream’.
- analysis – a chance to see things differently and become aware of potential opportunities and problems.
- alternatives – exploring options, even silly ones, and challenging or conforming.
- action planning – what each means and selection.
- application – how to proceed.
- appraisal – review the actions from last session.

## **2.20 Insights gained**

Sufficient insight into the topic of study has been gathered from the aforesaid review of literature consisting of concepts, theories, models and review of previous studies. Mentoring constitutes a unique and personal relationship between two people - one who has achieved a certain level of experience on one side and on the other side one who is aspiring for a higher level.

Historically, participation in mentoring relationships was a common practice as an aid in vocational development. In the old university, a student learned in the [teacher's] home, the knight passed on the warrior's skills to a novice, and in the studio the master helped the young artist to develop. Master-apprentice, physician-intern, teacher-student are often mentoring-type connections. Unlike serving as a role model, which does not require any direct exchange, a mentor assumes active responsibility for the development to others an advisory/support based dyadic relationships that facilitate access to positions of leadership. The mentor-protégé dyad appears to be most intense or emotionally charged hierarchical, parental, exclusionary, and elitist type of relationship.

Mentoring has been a relationship of choice for professional development in the business arena for many years. A mentoring relationship involves a more experienced professional serving as a supportive and guiding role model for another professional who is less experienced in the field. Mentoring has also become a focus in the educational sphere. Graduate students are encouraged to seek out a mentor. New and junior faculty receives similar messages. Female students and female faculty are advised to solicit the help of a mentor to open doors they may be unable to penetrate on their own. This mentoring relationship can take place in a formal or informal setting, depending upon the goals of the organization.

Formal mentoring involves a structured and organized plan set out by an educational institution or organisation in identifying a mentor, match the mentor with an inexperienced protégé be it a student, apprentice or a worker, and then provide guidelines on how the mentor should assume the mentoring role. Growing interest in the potential benefits of mentoring relationships has led to an increase in the number of research studies devoted to the topic. Many of these studies focus on corporations and businesses and, in academy, on the relationship between faculty and students.

The term 'mentoring' has surged into the literature in many disciplines (e.g., sociology, social psychology, education, management, social work, healthcare management, etc.) over the last several decades. Mentoring emerged in the organizational literature in the late 1970s, since then, hundreds of books and articles (popular press, practitioner-oriented, and academic) have been published on mentoring in various organizational settings alone, not to mention other settings in which mentoring has been examined (e.g., teaching, nursing, social work, etc.). An examination of over 200 practitioner and academic journal articles in the field of

management alone revealed that most definitions in the literature of mentoring, stated or implied, include sponsor or sponsoring as inherent in mentoring.

The theme of mentoring relationships has been widely discussed in the literature from the perspectives of the developmental sequence or phases of mentoring; differences between formal and informal and, mentoring with non-dominant groups, and characteristics in both the mentor and the protégé that promote positive mentoring. It also includes a few articles that have identified interactive qualities of relationships. These promising works have explored the qualities of altruism and other-oriented empathy; listening to, caring about, and cooperating with one another; friendship, modeling, acceptance, confirmation, and counseling; and authenticity and mutual gain.

Of all the potential mentor-protégé dyad combinations in academe, the relationship between professor and student often receives exclusive attention, and many of the mentoring studies in the field of higher education focus on these relationships. Although results from these studies can be useful in understanding the nature of mentoring among faculty, studies specifically examining the extent, nature, and benefits of participation in teacher student mentoring relationships appear necessary and relevant.

Earlier studies of faculty mentoring relationships isolated the importance of a collaborative or 'hands-on' model of mentorship and the resulting outcomes of academic productivity, advancement, and ongoing professional development for the protégé. Mostly all these studies have been descriptive, indicating the exploratory nature of the field as an area for research. One exception was a study in which 25 mentoring pairs were established for the purposes of analyses. While supporting earlier findings of improved

professional development of mentored versus non-mentored new faculty, it also focused on the dynamics of formalizing the mentoring process.

Although the benefits of mentoring are widely discussed, the actual practice of it among faculty may be hindered for a variety of reasons, many of them unique to the academic culture. At most of the universities, there are no specific incentives for the faculty to be mentors. If there are promotion requirements that include mentoring, they rarely reward faculty for being good mentors or give them any reason for trying to improve their performance.

Even at universities, where mentoring is valued and recognized, it is still up to individual faculty members to take the initiative. In a societal culture, and in an academic culture, where enormous value is placed upon individualism, autonomy, and or trivial, the success of mentoring cannot be ensured through textbook implementation, but by a genuine desire for all members involved, management, mentors and mentees, to make the program work in their environment.

The functions of mentoring have been explored within the areas of career development, psychosocial dimensions, and role modeling. Psychosocial mentoring functions operate at an interpersonal level and can assist protégé's in developing healthy self-images of their academic and nonacademic selves. It is important to note that mentoring involves a constellation of activities that goes beyond advising or guiding a student through a project. Instead it involves a variety of ways for assisting and supporting students through their graduate careers and beyond. Influencing protégé's on a personal level, psychosocial functions of mentoring include such behaviors as demonstrating positive regard, being friendly, role modeling, acceptance, confirmation, and counseling.

In an academic setting, this might reflect itself in such activities as helping balance career and family responsibilities, providing encouragement, and

demonstrating sensitivity and concern. Career functions of mentoring operate at organizational and system levels, usually referring to the more objective aspects of mentoring that assist protégé's in entering and navigating organizational structures. Academically, this may include activities such as educating the protégé on negotiating organizational barriers, assisting in research and scholarship, including the protégé in significant professional activities, making the protégé known to others, helping in the development of professional goals and priorities, and giving concrete assistance in new tasks. Education institutions have now taken to mentoring as a possible intervention, despite the lack of accepted empirical evidence on the effect of mentoring in education.

The review of literature and the insights gained there from resulted in a conceptual understanding of the phenomenon of mentoring and motivated the researcher to propose a mentoring process model for evaluating the effectiveness of formal and teacher initiated student mentoring programme in B-schools. The model included hypothesized interlink-ages among the following constructs of formalisation of mentoring, socio-demographic variables, personality facets of mentors, mentoring activities, effectiveness of mentoring and assessed protégé maturity as an outcome. The researcher perceived a robust and workable framework involving these variables and the study progressed with the direction typically offered by the framework. The following chapter on conceptual framework provides a vivid idea of the framework and the variables considered significant in the study.

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## Conceptual Focus and Methodology

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- 3.1 Conceptual focus
  - 3.2 The research problem
  - 3.3 Objectives
  - 3.4 Hypotheses
  - 3.5 Conceptual clarifications and measurements
  - 3.6 Methodological details
- 

Having presented the available and relevant readings on the core and allied constructs that go into the making of the thematic content of the proposed study, attempt is now directed towards delineating a conceptual framework that affords the focus and structure to the empirical validation envisaged in the present research. The literature provides enough insights to suggest and legitimize an integrated model to proposed linkages among the faculty environment, the mentoring activities initiated within the B-school, and effectiveness of mentoring imparted to the students that lead to the latter's psychological cum career-related maturity as the functional and demonstrable outcome. The set of objectives and the anticipated tentative answers towards the objectives, framed in the form of the initial hypotheses, supported by the conceptual framework have also been presented.

### 3.1 Conceptual focus

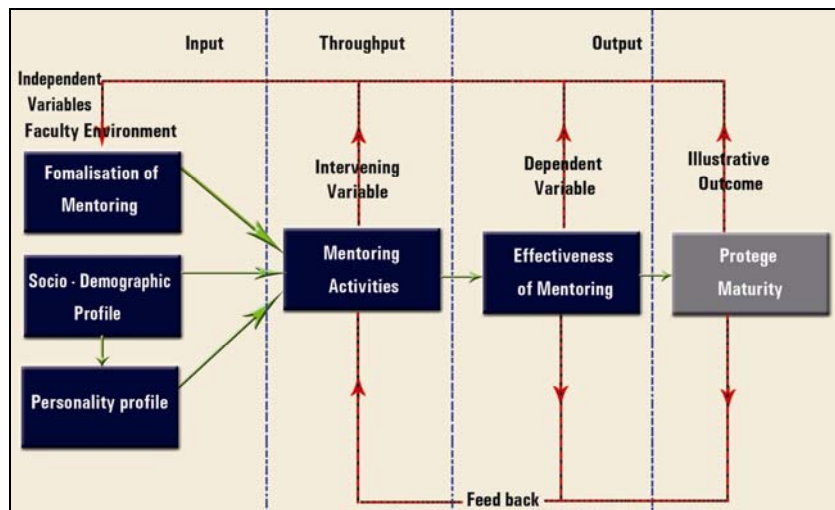
Mentoring is mostly a one-to-one involvement between more experienced and less experienced persons. It is a deliberate, considered and consistent human processing interaction based upon openness, mutual trust,



encouragement, constructive comments, respect and a willingness to learn and share, intended to help the less experienced person to unfold and evolve from an initial state of being a marginal in a given life context to a more matured and functionally savvy state of a mainstreamer. It is a relationship based engagement, not just a procedure or activity, wherein one person personally and professionally assists the career development of the other that extends to domains even outside the normal superior/subordinate relationship.

The mentoring environment thought to be ideally prevailing in a typical B-school has been perceived in the context of the present study from a system perspective, comprising the elements of input, throughput and output that would serve to offer a descriptive perspective than being normative or prescriptive in nature. The frame work identifies faculty environment as the system's input, mentoring activities as its throughput and the effective mentoring as the output. Protégé maturity is incorporated for its appropriateness as the illustrative outcome or a demonstrable effect of the system in the lives of the B-school students.

**Figure 3.1 Mentoring process model**



‘Faculty environment’ for the purpose of this study is construed to be enveloping the dual aspects of formalisation of mentoring efforts in the school and the personal profile of its teachers. Formalisation refers to the institutionalization of mentoring efforts as an essential element of pedagogy through consistent efforts for implementation, legitimised by rules and procedures put in place and norms of behaviour adopted as appropriate between the teachers and students. Personal profile of teachers in turn comprises the socio-demographic backgrounds and their predominant personality traits for these can unquestionably affect the rigorousness of the mentoring culture intended to be brought into operation through the school’s systemic and formal components. The faculty environment that evolves as a result of the combined effect of these specific factors decide the quality and intensity of the initiated mentoring activities that performs the transformational function in moving the students from their initial position of being marginal into the mainstream as regards their psychological and professional preparedness to face the challenges in store for them as independent managers later in their lives.

Teacher mentors choose and initiate certain mentoring activities, given the faculty environment composed and coloured by formalisation of mentoring in the school and the personal profile of teachers, to contribute to the students’ personal and professional development. Regardless of the formalisation of mentoring in the school, it is important to sponsor a mix of activities that support the cherished goals and encourage the interventions. Alleman and Clarke (2002) hold that mentors use a set of specific, identifiable and measurable activities that are multi-faceted, containing three primary human processing activity categories of ‘guiding’, ‘helping’ and ‘encouraging’. Guiding activities envisage teaching the job, providing challenging tasks and

teaching politics; helping activities subsume extending career help, protecting and sponsoring and encouraging include career counseling, offering friendship and demonstrating trust. A formal mentoring programme characterized by these activities help young people's learning and assist them to make more informed decisions about education, training and employment as these systems have become complex in today's world. Options and pathways available offer a greater range of opportunities but make it difficult for young people to make the best informed choices. Some young people have access to resources, through schools, their families and communities, to help them navigate their way through the education and training systems. Even those who are relatively well informed sometimes find it difficult to find their way 'through the system'. Entering employment now has different challenges than in the past. Young people are generally expected to be 'work ready' when they enter employment. Mentoring activities in B-schools become significant in this scenario in responding to this reality by putting considerable efforts through their teachers in preparing young people for employment and helping them through the various transition points along their way of becoming a mainstreamer.

Mentors play many roles in the life of a protégé. Guide, counselor, advisor, consultant, tutor, teacher, and guru are just some of the functions a mentor might perform. Mentors wear several "hats" over the course of protégé's development, and might be comfortable wearing many hats at once, or only one or two at a time. Whatever the case, it is important for the educational system to realise that effective mentoring, like wisdom itself, is multidimensional. Of all the different mentoring roles that exist, academic institutions have to monitor and ascertain effectiveness of core roles and functions that teacher mentors perform in order to make possible and

strengthen the educational, professional, and personal growth of the beneficiaries.

Jadwick (1997) ascertained effectiveness of mentoring intervention by measuring the perceptions of effectiveness of faculty mentors and protégés involved in formal mentoring relationship in higher education. The results revealed that faculty mentors' and protégés' perception of effectiveness varied for the six behavioural mentoring functions considered as criteria for the measurement, the criteria being the dimensions of relationship, facilitation, informational content, confrontation, role modeling and stimulation of critical thinking. The framework afforded by Jadwick has been adopted in this study to ascertain the levels of mentoring effectiveness among mentor teachers.

It is only logical to expect the teacher mentors to differ in their levels of effectiveness as mentors. Differences in the levels of effectiveness of teachers as mentors and the explanations for such variations are of immense value to academics and mentor teachers themselves in the context of their avowed commitment to ensure improvement in the functional faculties of their students especially in the case of B-schools offering professional management education. The information can also form the basis for moulding an ever evolving team of resourceful teachers and trainers in the field of management education.

Outcomes are the behaviors, attitudes, skills, or products that result from the mentoring activities, such as students' improved outlook or development of certain skills. These may be proximal outcomes (immediate results of activities), enabling outcomes (intermediate outcomes that moderate or mediate the relationship between proximal and distal outcomes), or distal outcomes (outcomes further removed from the immediate activities; often the

desired final outcome of a programme, such as increased self-esteem graduation).

Examination of literature indicates that the psychosocial qualities of young adults have been studied only sparingly. An assessment of the transformations that have happened to students during their tenure in a B-school, aided and abetted by a select set of mentoring inputs provides a baseline assessment of experiential changes over a span of 18 months, and as well, possible insights into the adaptive psychological and social capacities involved in the transition. This transition, referred to as protégé maturity in this study, was considered an important intermediate effect from the conceptual perspective of the present study and has been treated as the illustrative outcome variable.

Protégé maturity has been sought as student visions in terms of changes they experience and vouch for on factors of efficacy, cooperativeness, individualism, perseverance, planfulness and responsibility taken to be adaptive, social and psychological capacities, skills, values, and habits that serve to establish the individual in a culturally appropriate adult role. Adroitness that emerges from a combination of these psychosocial adaptations can assist individuals early in their career by developing competence, confidence, and a clear sense of professional identity (Greiman, 2002) enhancing a sense of competence, clarity of identity, and effectiveness in a professional role.

The model, though sufficiently functional for a research project, cannot be taken to be comprehensive. It does not account for factors that can possibly be active as moderating or controlling in quality. These variables can interfere in between the input and throughput or between the intervening and dependent

variables. For maintaining the study within manageable proportions, all those variables not explicitly accounted for in the model have been treated to be exogenous.

### **3.2 The research problem**

Mentoring as a tool for improving the quality of students engaged in management education is extendable to the industrial and business contexts also. Management institutes have to develop and nurture both soft and hard skills of their students so that they are prepared to accept and encounter the challenges and realities their professional career would offer.

Some of the proactive B-schools have included mentoring as part of their pedagogy. But the lack of theoretical and empirical bases to explain the proposed links between mentoring and the academic and career success of graduates is quite obvious. Having located the need for comprehensive researches on mentoring of students in the B-schools in the country, the present study is a limited, yet decisive attempt to analyse and evaluate teacher initiated mentoring attempts in the B-schools in Kerala as factors affected by faculty related antecedents, and further to examine the instrumentality of mentoring activities in deciding teachers' effectiveness as mentors. The socio-psychological maturation that happens to students during their internship in a B-school is also explored.

The essence of the research problem has been summarised and stated through the set of objectives and hypotheses given below.

### **3.3 Objectives**

- To describe the faculty environment in B-schools in the context of mentoring as borne out in terms of formalisation of mentoring and personal profile of teachers.

- To depict the nature and extent of mentoring activities initiated in B-schools.
- To bring out the implication of personal profile of teachers on the mentoring activities initiated.
- To ascertain the effectiveness of teacher initiated mentoring in B-schools.
- To explain the effectiveness of mentoring as a function of the nature and extent of mentoring activities
- To validate a model explaining the effectiveness of mentoring in terms of socio-demographic factors, personality profile of teachers, and mentoring activities as applicable to B-schools.
- To depict protégé maturity acquired by students in B-school as the illustrative effect of mentoring process.

### **3.4 Hypotheses**

- **H1.** Personal profile attributes of teacher mentors correlate with and influence significantly the extent of mentoring activities carried out in B-schools.
- **H2.** The nature and extent of mentoring activities vary among B-schools as they vary in the formalisation of mentoring.
- **H3.** The mentoring activities, severally and collectively, correlate positively and significantly with the effectiveness of mentoring.

### **3.5 Conceptual clarifications and measurements**

This part of the thesis comprises of conceptual and operational definitions of the constructs and variables used, in order to help understand meaningfully the concepts employed in the present study.

### **3.5.1 Mentoring**

Merriam (1983) and Jacobi (1991) concluded that the phenomenon of mentoring takes one definition when viewed from the field of business management and assumes different dimensions for the perspective of adult development and even diverse dimensions in the field of higher education.

Schlossberg (1984) offered yet another definition and considered mentoring to be a mutually beneficial relationship which assists both the development of the mentor and the protégé. Schlossberg further stressed the importance of a mentor in providing psychological support and practical guidance through difficult stages of development towards adulthood.

Flaxman (1988) has developed the following workable definition of mentoring : a supportive relationship between a youth or a young adult and someone more senior in age and experience, who offers support, guidance and concrete assistance as the younger partner goes through a difficult period, enters a new area of experience, takes on an important task, or corrects an earlier problem. In general, during mentoring, mentees identify with, or form a strong interpersonal attachment to their mentors; as a result, they become able to do for themselves what their mentors have done for them. To succeed, mentoring must occur between a younger person and an older person who is ahead of the mentee, but not removed by great social distance. Through the mentoring relationship the mentee can achieve a modest targeted goal, already achieved by the mentor.

In the educational field there is a variation in the definitions of mentoring ranging from being viewed as a process by which people of superior rank, special achievements and prestige instruct, counsel, guide, and facilitate the intellectual and/or career development of those identified as protégés (Blackwell, 1989). To mentoring is being viewed as a form of



professional socialization whereby an experienced individual acts as a guide, role model, teacher and patron of a less experienced usually younger protégé.

Regarding the field of higher education, Moses (1989) viewed mentoring as a relationship between a professor and an undergraduate or graduate student in which the mentor takes the mentee under his/her wing assisting the student in setting goals, developing skills, and successfully entering both academic and professional circles. From this perspective mentoring is regarded as a means of facilitating a student's intellectual development while ensuring their academic, personal and professional success. Carr (2001) identifies mentoring, coaching, teaching, and supervision as having many commonalities: they all use, and rely upon, the same interpersonal skills, they all involve learning, they all have an impact on career development, and the roles are often interchangeable. Mentoring is a learning process as well as a teaching process. The mentor/mentee relationship is one of mutual empowerment.

Mentoring has been operationalised for the purpose of the study as a whole host of systematic, continuous, graduated and progressive interactions of a B-school teacher with a chosen student or a group of students, over and above the requisite academic exchanges, legitimized by the pedagogy adopted in the institution with the intention of enhancing career related and or psycho-social abilities of the student/s, which the teachers in a B-school are able to identify and acknowledge as such.

### **3.5.2 Mentor**

Mentor is an adult who offers continued support, guidance and contributes towards the development of an individual. Levinson et al. (1978) defined a mentor as a "teacher, advisor and sponsor". Phillips Jones (1982) stated that mentors are influential people who significantly help one reach one's major life

goals. According to Reece and Brandt (1993), mentors are people who have been where you want to go in your career and who are willing to act as your guide and friend. While Garrick and Alexander (1994) say a mentor is now defined as a person who takes, or is given responsibility for another's learning and general development. Daloz (1999) involves mysticism and tells that mentors give the magic that allows us to enter the darkness, a talisman to protect us from evil, a gem of wise advice, a map, and sometimes simply courage.

Alleman and Clarke (2002) defines mentor as a person with greater rank, experience and/or expertise who teaches, counsels, inspires, guides and helps another person to develop both personally and professionally. A mentor is an experienced influential member of an organization who provides career guidance, psychosocial, support and organizational information to a less experienced organisational member, i.e., a protégé (Allen et al, 2004; Allen et al., 1997a; Dreher and Cox, 1996; Kram, 1985 and Wangberg et al., 2003).

In the present study a mentor is taken to be a regular teacher in a management institute/B-school where mentoring has been formally acknowledged as an integral part of the pedagogy followed.

### **3.5.3 Protégé**

Protégé is an individual who is under the protection, care or patronage of another. Alleman and Clarke (2002) opine that a protégé is the less experienced person in a mentoring relationship. Phillips-Jones, (2001) says the word protégé came from the French verb, proteger, to protect, and is used to denote both men and women who are helped to reach their career and life goals by mentors. The term protégé is replaced by mentees, although several publications and organizations still use protégé. Others prefer terms such as mentore, associate, trainee, partner, aspirant, learner or participant.

The term Protégé has been operationalised as a student in B-school who willingly participates in all the initiatives provided by the mentor, for his personal and professional development. In this context, protégé is a regular student belonging to first (I) or fourth (IV) semester batches in a B-school.

#### **3.5.4 Faculty environment**

Faculty environment is the systemic, academic, and socio-emotional milieu prevailing in the B-school thought to be capable of deciding the content, courage and quality of curricular and developmental initiatives in the school. Faculty environment covers the extent of formalisation effected as regards mentoring activities carried out in a school and also the personal profile of teachers. B-schools have been classified into mentoring and non-mentoring in terms of this variable.

#### **3.5.5 Formalisation of mentoring**

Formalisation refers to the institutionalization of mentoring efforts as an essential element of pedagogy through consistent efforts for implementation, legitimised by rules and procedures put in place and norms of behaviour adopted as appropriate between the teachers and students.

Formalisation of mentoring is operationalised as the institutionalisation of mentoring by management institutes that have implemented formal teacher initiated student mentoring programme as a part of the pedagogy with adequate and appropriate systemic supports.

#### **3.5.6 Personal profile**

The personal profile of teachers comprises the socio-demographic (age, gender, educational qualification, designation, teaching experience and industrial experience) and their predominant personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) of teachers.

Variables related to the biosocial background of the respondents such as gender, age, education qualification, designation, teaching experience and industrial experience are the operational indicators of socio-demographic status of teacher mentors.

Allport (1961) defines personality as the dynamic organization within the individual of those psychophysical systems that determines his characteristics behaviour and thought. Personality has been conceptualized from a variety of theoretical perspectives, and at various levels of abstraction or breadth (John et al., 1991 and McAdams, 1995).

The personality profile of a teacher has been operationalised as any or a combination of dominant psychological traits of openness, conscientiousness extraversion, agreeableness, and neuroticism, evinced by their responses, detected and measured by the scores on the respective items in NEO- FFI scale (Costa and McCrae, 1992).

The explanations of big-five personality facets according to Costa and McCrae (1992) are offered in the paragraphs that ensue.

#### **3.5.6.1 Openness (P<sub>3</sub>)**

The elements of openness are active imagination, aesthetic sensitivity, attentiveness to inner feelings, and preference for variety, intellectual curiosity and independence of judgment. Open individuals are curious about both inner and outer world and their lives are experientially richer. They are willing to entertain novel ideas and unconventional values and they experience both positive and negative emotions more keenly than do closed individuals. Men and women who score low on openness tend to be more conventional in behavior and conservative in outlook (Costa and McCrae, 1992).

### **3.5.6.2 Conscientiousness (P<sub>5</sub>)**

The conscientious individual is purposeful, strong willed, and determined. On the positive side, conscientiousness is associated with academic and occupational achievement. On the negative side, it may lead to annoying fastidiousness, compulsive neatness or workaholic behavior. Conscientiousness is an aspect of what is called character; high conscientiousness is scrupulous, punctual, and reliable. Those with Low scores are not necessarily lacking in moral principles, but are less exacting in applying them (Costa and McCrae, 1992).

### **3.5.6.3 Extraversion (P<sub>2</sub>)**

Extraverts are sociable, but sociability is only one of the traits that comprise the domain of extraversion. Extraverts are assertive, active and talkative. They like excitement and stimulation and tend to be cheerful in disposition. They are upbeat, energetic, and optimistic. (Costa and McCrae, 1992).

### **3.5.6.4 Agreeableness (P<sub>4</sub>)**

Agreeableness is primarily a dimension of interpersonal tendencies. The agreeable person is fundamentally selfless. He or she is sympathetic to others and eager to help them and believes that others will be equally helpful in return. By contrast the disagreeable or antagonistic person is ego-centric, skeptical of others' intentions and competitive rather than cooperative (Costa and McCrae, 1992).

### **3.5.6.5 Neuroticism (P<sub>1</sub>)**

The most pervasive domain of personality scale that contracts adjustment or emotional stability is neuroticism. The general tendency to experience negative affects such as fear, sadness, embarrassment, anger, guilt and disgust is the core of neuroticism domain. Men and women high on

neuroticism are also prone to have irrational ideas, to be less able to control their impulses and to cope more poorly than others with stress. Individuals who score low on neuroticism are emotionally stable. They are usually calm, even-tempered, relaxed and able to face stressful situations without becoming upset or rattled. (Costa and McCrae, 1992).

### **3.5.7 Mentoring activities**

Alleman and Clarke (2002) says mentors use a set of identified, specific activities, or behaviours that can be measured and classified using nine subscales which are further collated into three broader categories of a) guiding activities – that subsumes subscales on ‘teach the job’, ‘provide challenge’ and ‘teach politics’ that reflects the mentor’s task of developing the protégés’ competences b) helping activities - the practical help provided by the mentor to enable career advancement and showcasing of the protégé, measured using the statements that relate to the subscales of ‘career help’, ‘protect’ and ‘sponsor’ and c) encouraging activities – the scales that cover ‘career counseling’, ‘friendship’ and ‘trust’ which deal with the mentor’s role in developing the protégé’s confidence in themselves as well as with the colleagues.

The mentoring activity specifies individual mentor actions that reflect the mentor practices. It has been operationalised for this study in terms of the nine subscales on teach the job, provide challenge, teach politics, career help, protect, sponsor, career counseling, friendship and trust. These activities are further re-grouped into three broader categories of guiding activities, helping activities and encouraging activities. The nature and extent of mentoring activities initiated by teachers have been measured with the scores reflected obtained on the Allemans Mentoring Activities Questionnaire (Alleman and Clarke, 2002).

### **3.5.8 Effectiveness of mentoring**

Research studies of the past and present have emphasized protégé behaviour as a means to determine the effectiveness of a mentor programme. Redmond (1990), an experienced developer and administrator of mentoring programmes, cite that effective mentoring involves not only the transfer of academic skills, attitude, and behaviour but a level of interaction, trust, and communication which results in a psychosocial comfort that empowers a student with the knowledge and confidence to grow academically and socially, regardless of the environment.

However, Cohen (1993) is of the opinion that assessing the effectiveness of mentor behaviour would assist in determining the behaviour necessary to create and maintain more effective mentoring relationships in higher education. He also indicates that adult development theories suggest that mentor-teacher relationship reveal a similar relationship as an interaction that depends to a significant extent on the interpersonal competency of the mentor (teacher) for the development of a meaningful relationship.

Effectiveness of mentoring, for the purposes of this study, has been measured using the Principles of Adult Mentoring Scales (faculty and student versions) incorporating the two strands of evaluation namely, a) self evaluation by the teachers and b) protégé (student) evaluation of the teacher. It has been used to measure the six behavioural facets of a mentor's role such as relationship emphasis, information emphasis, facilitative focus, confrontive focus, mentor model and student vision. Each of these facets has been explained at some length below.

#### **3.5.8.1 Relationship emphasis**

Relationship emphasis of the mentor role pertains to all those behaviours, actions and exchanges initiated by the mentor with the mentee that

get conveyed through active empathetic listening, attempts towards developing a genuine understanding and acceptance of protégés feelings the purpose of all of which is to create a psychological climate of trust that allows protégés to honestly share and reflect upon their personal experiences as adult learners (Cohen, 1993).

#### **3.5.8.2 Information emphasis**

Information emphasis takes into account the direct and indirect requests, performed as part of the mentor role-set, for the detailed information from the protégé and also covers the specific suggestions to protégés about the plans and progress in achieving personal, educational and career goals (Cohen, 1993).

#### **3.5.8.3 Confrontive focus**

Confrontive focus involves the respectful challenge of protégé explanations for his or her decisions and actions or avoidance of the same that are thought to be relevant to the protégés' stage of development as an adult learner. The purpose of this role dimension is to help protégé attain insight into unproductive strategies and behaviors and to evaluate the need and capacity to change (Cohen, 1993).

#### **3.5.8.4 Facilitative focus**

Facilitative focus guides protégés through a reasonably in – depth review of an exploration of the interests, abilities, ideas and beliefs whose purpose is to assist protégés in considering alternative views and options while reaching their own decisions about attainable personal academic and career objectives (Cohen, 1993).

#### **3.5.8.5 Mentor model**

Mentor model involves sharing (self–disclosure) of life experiences and feelings as a role model to protégés in order to personalize and enrich the



relationship and whose purpose is to motivate protégés to take necessary risks and to overcome difficulties in their own journeys towards enhanced maturity (Cohen, 1993).

#### **3.5.8.6 Student visions**

Student vision relates to the assumption of responsibility by the protégé to stimulate and make possible changes from within the self. Such informed and responsible stances stimulate protégés as they embark upon the road to manage personal changes and take initiative in their transitions through life events as independent adult learners (Cohen, 1993).

#### **3.5.9 Protégé maturity**

Among the various developmental tasks occurring in the transition from adolescence to adulthood are the acquisition of adaptive, social values and psychological capacities, skills, and habits which serve to establish the individual in a culturally appropriate autonomous role (Rosenthal, 1987; Taylor et al., 1979 and Keefe and Padilla, 1987). A study of this developmental phase provides a base line assessment of previous experience, as well as possible insights into the adaptive psychological and social capacities involved in the transition to adult status (Clausen, 1991). Four characteristics seem likely to play a significant part in facilitating the ability to adequately adopt the roles which later in life would make for competent and effective performance as an adult. It is notable that these qualities seemed important elements in a personal organization and the functioning of the individuals in all ethnic and social class groups. The qualities identified were: efficacy, perseverance, planfulness, and responsibility and they seemed to differentiate students who were managing their lives well from those who were not. Two additional qualities, individualism and cooperativeness also appeared to be important

characteristics manifested by some of the adolescents who seemed to be managing better than the average in their respective environments and who were more likely to assume and perform effectively in adult roles (Inkeles and Leiderman, 1991).

Protégé Maturity has been operationalised to measure the psychosocial qualities of efficacy, perseverance, planfulness, responsibility, individualism and cooperativeness that help individuals to adopt roles which later in life would facilitate competency and effective performance as an adult. This is measured using the Stanford scale of transition from adolescents to adulthood (Inkeles and Leiderman, 1991).

The six psycho-social dimensions thought to be appropriate in ascertaining the quality of protégé maturity and that have been measured in this study are explicated below:

#### **3.5.9.1 Efficacy**

The conviction that one can successfully execute the behaviour required to produce a desired outcome (Inkeles and Leiderman, 1991).

#### **3.5.9.2 Cooperativeness**

The ability to work jointly with others in advancing group goals in a relatively impersonal organizational framework (Inkeles and Leiderman, 1991).

#### **3.5.9.3 Individualism**

Belief in the centrality of others personal development, expression and goals as contrasted to the relatively complete submergence of self in defence to family and clan type needs. Its essence is being autonomous without being uncooperative (Inkeles and Leiderman, 1991).

#### **3.5.9.4 Perseverance**

Maintaining a course of action despite obstacles (Inkeles and Leiderman, 1991).

#### **3.5.9.5 Planfulness**

Knowing and thinking about the means to achieve a stated goal, both in the short term and especially in the long term (Inkeles and Leiderman, 1991).

#### **3.5.9.6 Responsibility**

Acceptance of the belief, that the individual is accountable for his or her actions (Inkeles and Leiderman, 1991).

### **3.6 Methodological details**

This segment of the chapter describes the methodological options employed in this study and includes the detailed explanation of the design of study, pilot study done, population of the study, sampling size and procedures, sources of data, tools for data collection, pre-testing of the data instruments, data processing and statistical analyses. The identified limitations of the study have also been acknowledged.

#### **3.6.1 Research design**

The researcher employed a conclusive approach that combined the features of descriptive and explanatory research designs. The study was intended to bring to light the effectiveness of formal and teacher initiated student mentoring programmes in B-schools and to examine the antecedents of psychosocial changes and development that happen among the students across their life in a B-school. The study took off with a convincing perception of attestable improvement of protégé maturity among the B-school students, in the course of their study at the school, as an illustrative outcome of mentoring

by their teachers. The study proceeds to focus on the effectiveness of mentoring determined by the nature and extent of mentoring activities, which in turn was considered to be affected by personal profile of teachers (socio-demographic variables and personality properties).

Though there was sufficient literature on the concept of mentoring, its quality, functions and a whole array of related and incidental issues, a closer perusal of the available literature base revealed a perceptible lack of theoretical and empirical bases to explain the dynamics of student mentoring in management institutes in the country. A similar lacuna was suggested by the literature regarding the requisite research bases to substantiate the links between mentoring and the academic and career success of graduates. Hence an attempt in this direction was conceived and made within the folds of this study to pursue systematically and fulfill the felt research gap that led to the formulation of a research framework with present set of objectives and hypotheses.

### **3.6.2 Pilot study**

A pilot study was conducted by the researcher in order to identify the number of institutions that offer full time MBA programme in the state of Kerala. It was found that there were 38 management institutions in Kerala as on December 2006. Closer observation of these institutes from the historical perspective revealed that there was a linkage between the period of existence of the institutions and the functional philosophy that partly decided the kind of activities and services offered by these institutions for the benefit of their students. Moreover, any institute will need at least three years to frame and try out a system and get established.

Based on this realization, it was decided that B-schools having a minimum of 3 years of existence and those with the approval of All India Council for Technical Education (AICTE) as on December 1, 2006 alone need be brought within the ambit of this study. The reason is that any institute will require at least three years to frame and try out a system and establish itself.

Pilot study also offered enough leads to the researcher about the nature of the possible population elements, their characteristics and inclinations that proved helpful in deciding the final population and the sample lot.

As a part of the pilot study the researcher obtained permission from the respective institutes for collecting data from the staff and students understand the attitude of the respondents, test their views on the feasibility of the study and to identify the strengths and weakness in the design and instruments proposed to be employed by the researcher.

### **3.6.3 Population**

The population of the study comprised all the permanent teachers and the regular students enrolled in the management programmes in the B-schools in Kerala. More specifically, the population covered the teachers and students in B-schools that were both departments any one of the universities in Kerala state and the colleges affiliated to the universities in the state offering a full time programme. Teachers and students from the lone national level Institute (IIM-K) located within the state were also brought within the purview of the study (list of management institutions is available in appendix – IV).

Table 3.1 shows the population of teachers and students considered for the study. The final tally of institutions included was only 19 as one B-school

had to be excluded because the only permanent teacher in one of the university departments declined to co-operate with the research attempt.

**Table 3.1 Population of teachers and students**

Sl.No.	Classification	No. of institutions	No. of teachers	No. of II year students	No. of I year students
1.	National level Management Institution in Kerala	1	25	197	178
2.	University Departments in Kerala	5	38	252	248
A.	Affiliated Colleges - Management Institutes in Engineering and Arts and Science Colleges in Kerala	11	93	637	746
B.	Affiliated Colleges – Stand alone Institutions in Kerala	3	61	510	510
<b>Total</b>		<b>20</b>	<b>217</b>	<b>1596</b>	<b>1682</b>

### 3.6.4 Sampling

The sampling approach adopted was double sampling or two phase sampling. In the first phase, B-schools that had a minimum of 3 years existence as on December 2006 were selected into the sample basket. Kerala had a total of 38 Management institutions of which 20 were eligible as per the first stage inclusion criteria.

In the second phase of sampling, separate samples were drawn from among teachers and students of each eligible institution to constitute the respondents for the study. The sample sizes for the respondent groups were decided using Taro Yamane's (1970) formula for determining sample size  $n$  by confidence interval ( $p=.05$ ).

Simple random samples were drawn from among the teachers and students available in the institutions identified in the first phase of sampling. Separate and exhaustive sampling frames were drawn for the teachers and students (separately for the senior and junior batches) and the final sample elements were arrived at through lottery procedure with replacement to ensure equal probability to all the sample elements. Sample elements identified were contacted as far as possible. The cases of sample elements who could not be accessed in spite of repeated attempts were replaced by convenient samples.

The respondent groups of the study comprised 141 permanent teachers, 327 first year students and 318 second year students, which roughly accounts for 65 per cent of teachers and 20 per cent of the student population. The samples of teachers and students included in the study are presented in Table 3.2 (Available in appendix – IV).

**Table 3.2 Sample of teachers and students**

S.No.	Classification	No. of Institution	No. of teachers	No. of I year Students	No. of II year Students
1.	National level Management Institution in Kerala	1	10	39	36
2.	University Department in Kerala	4	27	35	35
a.	Affiliated Colleges - Management Institutes in Engineering and Arts and Science Colleges in Kerala	11	63	152	142
b.	Affiliated Colleges – Stand alone Institution in Kerala	3	41	101	105
	<b>Total</b>	<b>19</b>	<b>141</b>	<b>327</b>	<b>318</b>

### **3.6.5 Sources of data**

Both primary and secondary data had to be collected to fulfill the data requirements of the study. Primary data were gathered from teachers and students on the significant variables in the theoretical model. Secondary data were collected from the institutions' official records and documents to decide whether the institutions lived up to the inclusion criteria, to prepare the sampling frame for the respondent categories and to obtain a clear picture of the respective institutions and their pedagogy.

Primary data was collected from 141 permanent teachers, 318 second year students and 327 first year students of management institutions approved by the AICTE and with 3 years of existence as on December 2006. The sample of the study comprised of 3 strata – a) 141 permanent teachers (83 respondents belong to management institutions with mentoring as part of their pedagogy and 58 belong to non-mentoring institutions), b) 327 students (1<sup>st</sup> semester) (167 students belong to mentoring institutions and 160 belong to non-mentoring institutions) and c) 318 students (4<sup>th</sup> semester) (172 belonging to mentoring institution and 146 students to non-mentoring institutions). Standard questionnaires were adapted to collect meaningful data from the respondents.

In the first phase of research, data were collected from permanent teachers for evaluating the effectiveness of the formal mentoring programme vis-à-vis the socio-demographic variables, personality profile of the teachers and the mentoring activities initiated by the teachers. Simultaneously data were collected from the fourth semester students to cross verify the evaluation of teachers regarding their effectiveness of mentoring.



In the second phase, the regular students were evaluated to measure the illustrative outcome (protégé maturity) of the effectiveness of mentoring whereby data was collected from the first semester students belonging to strata II and not exposed to any form of mentoring. This was juxtaposed with the data collected from the final year and fourth semester students from the third strata, who were thoroughly exposed to the faculty and a comprehensive mentoring process. The gathered data were analysed to explore the relationships between variables and to interpret and clarify the reason for certain outcomes that were revealed fulfilling the characteristics of a conclusive research.

### **3.6.6 Tools for data collection**

Standardised scales authored by well known researchers in the field of education and psychology were adopted and used to gather information on the designated variables, alongside socio-demographic details of the respondents. Separate inventory booklets were administered for gathering primary data from teachers and students of management institutes.

#### **3.6.6.1 The inventory booklet administered among teachers**

##### **1. *Inventory 1 (Personality)***

NEO-FFI Form 'S' (Adult Version) was used to obtain the personality profile of teachers as mentors. The instrument was developed by Paul T Costa, Jr., PhD. and Robert Mc Crae., PhD. The NEO five factor inventory (NEO-FFI) is a brief, 60-items assessment of the five major dimensions of personality namely, Neuroticism (N), Extraversion (E), Openness to experience (O), Agreeableness (A) and Conscientiousness (C). The instrument used was a shortened version of the 240-item personality Inventory-Revised (NEO PI-R) (available in appendix – II.A). A description of the original NEO-FFI materials and their development is presented in the revised NEO

Personality Inventory (NEO-PI-R) professional manual (Costa and McCrae, 1992). The coefficient alphas for the five factors are, N =.86, E =.77, O =.73, A =.68 and C =.81 respectively. The NEO-FFI inventory has been updated to increase the versatility of the instrument so as to provide clinicians and researcher's better access (Costa and McCrae, 1992) to personality relevant attributes of the subjects. The dimensions were assessed using a five point scale, ranging from strongly disagree to strongly agree. Twenty seven items carried reverse scores and this was not revealed to the respondents in order to avoid bias.

**E.g.** Question item 1. I am not a worrier (reverse scored),

The values assigned for strongly disagree (SD) = 5, disagree (D) = 4, neutral (N) = 3, agree (A) = 2, strongly agree (SA) = 1.

Question item 2. I like to have a lot of people around me.

The values assigned for strongly disagree (SD) = 1, disagree (D) = 2, neutral (N) = 3, agree (A) = 4, strongly agree (SA) = 5.

List of statements, that had reverse scores were: 1, 3, 8, 9, 12, 14, 15, 16, 18, 23, 24, 27, 29, 30, 31, 33, 38, 39, 42, 44, 45, 46, 48, 54, 55, 57, 59.

## **2. Inventory 2 (mentoring activities)**

Alleman's Mentoring Activities Questionnaire (AMAQ) was originally developed by Alleman and Clarke (2002). It is designed to measure the frequency and quality of mentoring activities initiated. The questionnaire comprises 72 items structured with five point Likert scale items specifying individual mentor actions that reflect the mentor practices (available in appendix - II.B). Another five items reflect possible outcomes from the mentor-protégé relationship, such as type of relationship, career benefit,

personal development, career satisfaction and value of relationship. The last two items provide background context information. The AMAQ has nine subscales, grouped into three categories as depicted in the exhibit 2.0.

**Exhibit 2.0 AMAQ Scale**

<b>Guiding Activity</b>	<b>Action Item</b>
a. Teach the job	1 – 8
b. Provide challenge	9 – 16
c. Teach Politics	17 - 24
<b>Helping Activity</b>	<b>Action Item</b>
a. Career help	25 - 32
b. Protect	33 – 40
c. Sponsor	41 - 48
<b>Encouraging Activity</b>	<b>Action Item</b>
a. Career Counseling	49 – 56
b. Friendship	57 - 64
c. Trust	65 - 72

Source: Alleman and Clarke, (2002) AMAQ

This instrument has been used in diverse situations and in numerous research studies which included managers and professionals, civil service professionals, staff nurses, accountants, teachers, clerical staff, engineers, graduate students and a variety of other job settings. The instrument measures mentoring activities which can be relevant in most situations. The instrument has established reliability and validity status borne out by the details given in Exhibit 3.0

**Exhibit 3.0 AMAQ reliability and validity**

Reliability (Cronbach's Alpha):	.99 p=.001
Validity : Content (agreement of experts that Items describe mentor behavior	86%
Items sample entire array of mentor behavior	89%
Items sample mentor behavior in a wide variety of settings	86%
Discriminative (predicts labeling relationship as mentoring) :	r =.58 p =.001
Criterion based concurrent (predicting career benefit from the relationship)	r =.82 p =.001
Criterion based concurrent (predicting career satisfaction)	r =.52 p=.01

Source: Alleman and Clarke, (2002)

The researcher has included the 72 statements which were assessed using a five point scale ranging from very frequently or very likely = 5, frequently or likely = 4, sometimes or possible = 3, seldom or unlikely = 2, never or very unlikely = 1.

**E.g.** Question item 2. Help turn failures into learning experiences

The values assigned for very frequently or very likely = 5, frequently or likely = 4, sometimes or possible = 3, seldom or unlikely = 2, never or very unlikely = 1.

**3. Inventory 3 (Effectiveness of Mentoring (Mentor Version)**

To measure the effectiveness of mentoring the investigator has used Principles of Adult Mentoring Scale (PAMS) (Teacher version) developed by Dr.Norman Cohen (1993). It is an ideal tool that measures relationship between mentors such as faculty, counselor and administrator and their protégés. The PAMS is a 55 statement questionnaire developed for the purpose

of assessing behavioural mentoring functions (available in appendix-II.C). The PAMS is a self-assessment instrument which is a forced choice five point Likert scale with ratings scale used to measure the frequency of response patterns (a) never, (b) infrequently, (c) sometimes, (d) frequently and (e) always from faculty mentors. The responses are then converted into five categories: (1) not effective, (2) less effective, (3) effective, (4) very effective and (5) highly effective, that determine the effectiveness of faculty mentors with respect to the behavioural mentoring functions subscale :- (1) relationship emphasis, (2) information emphasis, (3) facilitative focus, (4) confrontive focus, (5) mentor model and (6) student vision. The PAMS has been examined for its reliability and validity. Coefficient alpha reliabilities for each of the six behavioural mentoring functions ranged from .67 to .80's (Cohen, 1993).

**E.g** Ques. No. 1 I encourage students to express their honest feelings (positive and negative) about their academic and social experiences as adult learners in college.

The values assigned for (a) never = 1; (b) infrequently = 2; (c) sometimes = 3; (d) frequently = 4 and (e) always = 5.

### **3.6.6.2 The inventory booklet administered among students consisted of:**

#### **1. *Inventory 1 (Assessed protégé maturity)***

The Stanford Scale of Transition from Adolescence to Adulthood (SSTA) developed by Inkeles and Leiderman et al. (1991) was used to assess protégé maturity between the first semester and fourth semester batches of MBA students. The questionnaire attempts to measure the psychosocial properties of youth in contextual or ecological domains (e.g., school, work, family, peer and community).

These domains measure qualities like 1) efficacy, 2) perseverance, 3) planfulness, 4) responsibility, 5) individualism and 6) cooperativeness. It was structured as a 5 point Likert scale and the questionnaire has an established validity and reliability with Cronbach alpha at .90 for the US and .92 for Chile. The original questionnaire comprises of 111 statements but the researcher has considered only 64 items to measure the three domains 1) work, 2) peer and 3) college for the purpose of this study (available in appendix – III.A).

The dimensions were assessed using a five point scale, ranging from strongly disagree to strongly agree. Twenty one items carried reverse scores and this was not disclosed to the respondent in order to avoid bias.

**E.g.** Question No. 1 I take the responsibility for the grades I get, good or bad. The values assigned for strongly disagree (SD) = 1, disagree (D) = 2, mixed feelings (MF) = 3, agree (A) = 4 and strongly agree (SA) = 5.

Question No. 4 If I don't understand something pretty quickly, I usually drop it and go on to something else. (Reverse Scores)

The values assigned for strongly disagree (SD) = 5, disagree (D) = 4, mixed feelings (MF) = 3, agree (A) = 4, strongly agree (SA) = 5.

List of statements that had reverse scores: 2, 4, 7, 8, 19, 21, 22, 25, 26, 31, 33, 34, 35, 36, 40, 50, 53, 55, 59, 60, 62,

## **2. *Inventory 2 Effectiveness of Mentoring (Protégé version)***

The protégé version of the PAMS developed by Dr. Norman Cohen (1993) is the same as the PAMS except the wordings for 55 specific mentor's interpersonal behaviours that have been changed to reflect a protégé perspective ( available in appendix – III.B) . This version was used for cross verification of effectiveness of faculty mentoring. Protégé scores in relation to

the PAMS is an indicator of the protégés' perception of the faculty mentor behavioural competency.

**E.g.**

Question no.1 My mentor encourages me to express my honest feelings (positive and negative) about my academic and social experiences as adult learners in college.

The values assigned for (a) never = 1, (b) infrequently = 2, (c) sometimes = 3, (d) frequently = 4 and (e) always = 5.

Apart from these, socio-demographic details of teachers (age, sex, educational qualification, designation, industrial experiences, teaching experience, type of institution, year of establishment, number of students taught and guided) and personal details of students (age, sex, course of study and experience) were gathered.

**3.6.7 Pretesting**

The tools employed in the present study were pretested to identify if there were any flaws in the instruments.

The adapted questionnaire with sequenced scale and format for collecting personal details was pretested on a sample of 25 teachers, 35 students from the first semester and 35 students from the fourth semester, all belonging to Master of Social Work departments of four different institutions affiliated to Mahatma Gandhi University. Data was systematically collected and analysed to measure the reliability and validity of the tools used in the context of the present study using SPSS. The Cronbach alpha value for the personality inventory was.72, mentoring activities was.87, effectiveness of mentoring (teachers) was.94 and the assessed protégé maturity was.72. Since

the reliability coefficients is around .7 and .94. The scale adopted was considered to be fairly reliable.

In the process of pre-testing the researcher identified that the respondents were not comfortable with certain terms. Such terms were replaced with more appropriate and familiar ones. The revised questionnaires were administered at the time of actual data collection in the study.

### **3.6.8 Statistical analyses**

The data gathered from the sample of teachers and students were processed and analysed using the Statistical Packages for Social Sciences (SPSS) and visual PLS. Descriptive statistics were used to draw up the characteristic profiles of the respondents. Bivariate analyses were used to find possible relations between the dimensions of variables of personality, mentoring activities and effectiveness of mentoring. Inferential statistical tools of 't' test, ANOVA, Multi Linear Regression (Step-wise) was used to find the effect of independent variables like age, gender, designation, industrial experience, teaching experience, educational qualification and other personality variables on mentoring activities. Discriminant Function Analysis was applied to establish the dimensions of mentoring activities which maximally discriminated between low and high effective mentors. Structural Equation Modeling using Visual PLS was used to propose and validate a partial model for evaluating the dynamics of mentoring. Inferences from statistical tests have been drawn at  $p = 0.05$ .

### **3.6.9 Limitations of the study**

In spite of all the methodological and measurement precautions that were built into the study, certain limitations that have been perceived in the current research are acknowledged herein.



- Results of the study cannot be confidently generalized to other professional disciplines as the current attempt has been confined to the teachers and the mentoring activities in B-schools. The feedback from students was also restricted to B-schools.
- The transformational dynamics in mentor-protégé relationship dyads though significant, have been ignored from the purview of the current study and still remain a definite research gap in the available information base.
- The assessment of protégé maturity has been from the data provided by two separate batches of students. The assessment would have been more reliable had the study been conducted in a longitudinal format than the currently used cross-sectional study.
- Respondent bias that would have affected the quality of data in spite of the standardised attitudinal scales used cannot be ruled out..
- Influence of contextual variables that can act as moderators have not been accounted for.

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- 4.1 Faculty environment
  - 4.2 Formalisation of mentoring
  - 4.3 Socio - demographic background of teacher mentors
  - 4.4 Personality profile of teacher mentors
- 

This chapter begins with the presentation of results and discussions that emanate from the analyses of data collected. Researcher's overall attempt was to analyse and evaluate the effectiveness of formal and teacher initiated student mentoring in B-schools in Kerala and to establish the antecedents of socio-psychological changes and development that happen to the students during their studentship in a B-school. The study was taken off with a convincing perception of attestable improvement of protégé maturity of the B-school students in the course of their study as an illustrative outcome of effective mentoring by their teachers. The study proceeds to delineate the effectiveness of mentoring as affected by the nature and extent of mentoring activities, which in turn is affected by the personal profile of teachers (socio-demographic and personality attributes).

The study envisages socio-demographic variables, personality profile of teachers, and formalisation of mentoring in B-schools as independent variables, mentoring activities as the intervening variable, effectiveness of mentoring as the dependant variable and assessed protégé maturity as the

illustrative outcome. The researcher perceives that there is a strong link among these variables and depicts the results of the study in six parts – (I) faculty environment namely, (a) formalisation of mentoring, b) socio-demographic background and c) personality profile), (II) mentoring activities, (III) effectiveness of mentoring, (IV) model estimation with visual PLS, (V) protégé maturity (illustrative outcome) and (VI) findings, conclusions, implications and recommendations.

#### **4.1 Faculty environment**

Educational Institutions have to create a healthy, hopeful and high minded environment for the favourable development of the teacher, students and the society at large. The head of the institution should take the initiative of understanding each faculty members' potential or capacity in general, their aptitude and attitude in specific, and identify their weaknesses. Simultaneously they should take the initiative of kindling the enthusiasm of faculty by upgrading their knowledge and skills through proper orientation, interventions and training programmes. This indeed will help promote a healthy faculty environment and help institutions have well equipped teachers who are highly devoted to their profession.

Mentoring is an interactive relationship that takes place within a system. If mentoring is to be successful, faculty members must be willing to participate in the relationship and must be informed about the responsibilities. Many things compete for mentors' time and energy (Ragins and Scandura, 1999) and most mentors must balance the demands of their positions (programme responsibilities, teaching, and research and service requirements) with their availability to students. An analysis of the faculty environment can help assess whether or not the conditions are conducive for mentoring.

This chapter presents the faculty environment in the B-schools in order to highlight and portray the situational quality and context in which the other significant variables included in the conceptual framework of the present study become operational.

## **4.2 Formalisation of mentoring**

‘Formalisation of mentoring’ refers to the prescribed and definite components (interventional) in a pedagogical structure and administrative stipulation. Many people presume that good mentoring just happens naturally or is only for those who are lucky enough to stumble upon the right individuals to guide their intellectual and professional development. Good mentoring, however, is not a matter of luck. It is a matter of awareness, intention, and a genuine desire to see protégés succeed. Administrative positions are both shaped up and dependent on the institution in which they are found (Brown, 2000). The success of mentoring cannot be ensured by merely implementing a formal mentoring programme in the institution, there should be genuine desire by all members involved, management, mentors and mentees to make the program work effectively in their environment.

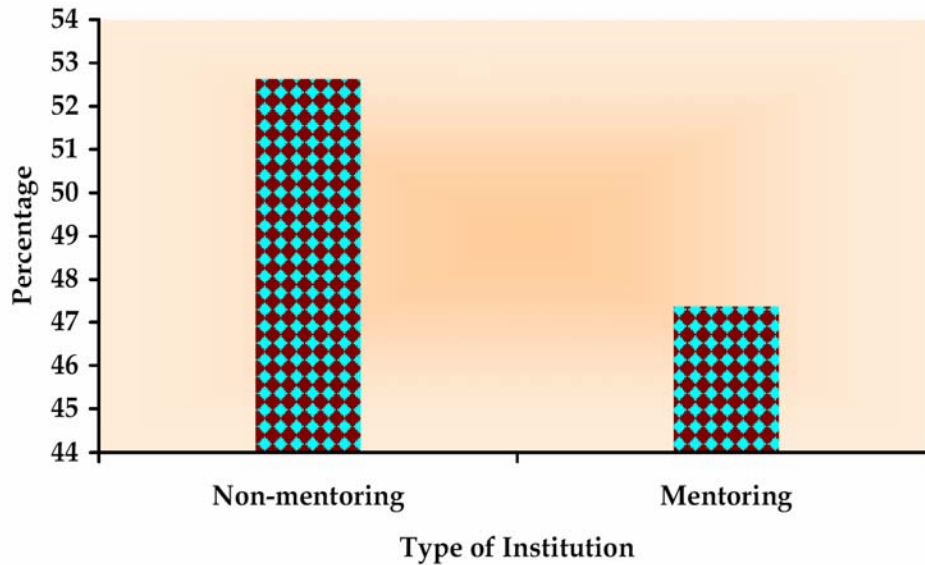
Formalisation of mentoring in B-schools was identified as an independent variable and the study has examined this variable to understand its influence on the mentoring activities and their effectiveness. The following tables and discussions classify and reflect the data related to mentoring and non-mentoring institutions.

### **4.2.1 Classification of B-schools**

Figure 4.1 depicts the type of institutions included in the present study. The sampled institutions were classified into mentoring and non-mentoring institutions. There are 9 mentoring institutions which account for 47.37 per

cent of the sample and 10 (52.63%) are non-mentoring institutions to further suggest that mentoring, as a pedagogy, has not taken real roots in the domain of management education in the state.

**Figure 4.1 Representation of institutional types**



#### **4.2.2 Teachers and students in mentoring and non-mentoring institutions**

The distribution of Permanent teachers and students among mentoring and non-mentoring institutions has been reported in Table 4.1. Among the sampled respondents of 141 teachers, 83 teachers belonged to institutions which have formal mentoring programmes, while 58 teachers belonged to non-mentoring institutions.

The table also reports that 167 (51.07%) of the sample of first year students and 172 (54.1%) from among the second years belonged to the (nine) institutions which had formal mentoring programmes while 160 (48.93%)

respondents from among the first years and 146 (45.9%) respondents from the second year students represented the non-mentoring institutions (10).

**Table 4.1 Teachers and students in mentoring and non-mentoring institutions**

S.No.	Type of Institution	Distribution							
		Teacher		Student				Total	
				I year		II year			
		No	%	No	%	No	%	No	%
1	Mentoring (n=9)	83	58.87	167	51.07	172	54.1	339	52.56
2	Non-Mentoring (n=10)	58	41.13	160	48.93	146	45.9	306	47.44
	Total	141	100	327	100	318	100	645	100

The MBA as a post graduate degree program is open to any graduate. By the time a student completes graduation, he or she would be 21 years old. The academic content of the MBA programme, bereft of the mentoring elements, would hardly serve to transform a student with all the characteristic immature tendencies of a teenager into a mature person capable of assuming and performing the role of a business executive in an employment. It thus appears imperative for any B-school to have mentoring components integrated into its pedagogy. The fact that majority of B-schools are yet to recognise the significance of mentoring and formalize as part of their faculty environment is a valuable observation.

The mentoring program was introduced in Harvard University Business School ever since it came into existence and only a few management institutions in the state have implemented mentoring as part of their pedagogy notwithstanding that almost all the B-schools in Kerala hope to imitate the American standards wherever possible. Literature suggests that situations in American B-schools are not far too different (Schelee 2000).

### **4.3 Socio - demographic background of teacher mentors**

The most common characteristics that influence the mentoring relationship are the mentor's age, gender, organizational position, power and self confidence. Similarly the age of the potential protégé may also be an important factor in the selection process and protégé's gender, like mentor's gender, will influence the nature and outcomes of mentor- protégé relationships. Allen and Eby (2004) examined the relationship between mentor's gender, protégé's gender, mentorship characteristics (mentorship type, mentorship duration, mentor experiences) and mentoring functions provided as reported by mentors. Research has found that prior experience as a protégé or a mentor is one of the strongest demographic predictors of the willingness to be a mentor (Allen et al., 1997 and Ragins and Cotton, 1993) and mentoring effectiveness would vary as a function of the gender of the mentorship participants and the characteristics of the relationship. Fagenson-Eland et al. (2005) predicted that there was difference in perceptions between protégés and mentors regarding the mentoring activities occurring in their relationship and there is dissimilarity in perception between the mentor and protégé in organizational tenure, age, gender and educational level.

The present study has included and surveyed socio-demographic variables like age, gender, educational qualification, designation, teaching experience, industrial experience, average number of students taught and guided, institution and the year of establishment with the intention of exploring if these independent variables have any bearing on the effectiveness of mentoring.

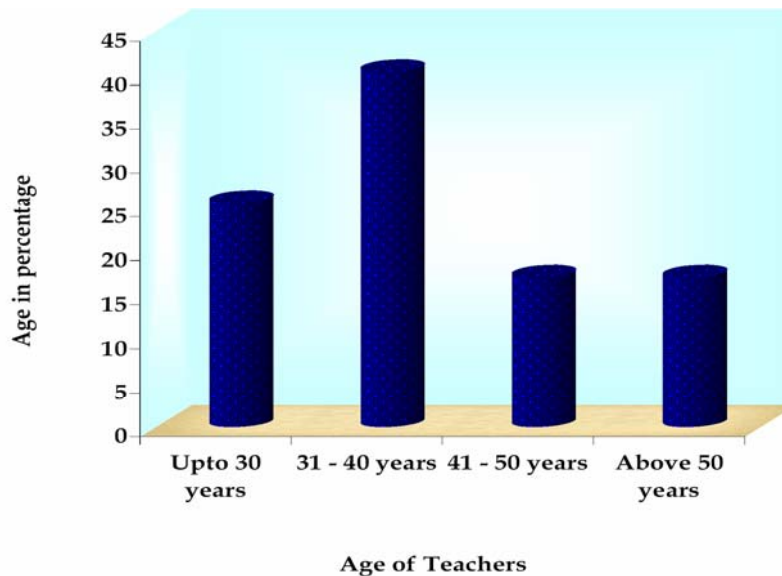
#### **4.3.1 Age of teachers**

Age-wise distribution of the permanent teachers included in the present study is reported in the Table 4.2. Majority of teachers were between 31 to 40 years of age accounting for 40.4 per cent followed by respondents less than or equal to 30 years (25.5%), 41-50 years (17%) and above 50 years (17%).

**Table 4.2 Age distribution of teachers**

Age	No.	Per cent	Mean	SD
Upto 30 years	36	25.53	38.67	10.34
31 – 40 years	57	40.43		
41 – 50 years	24	17.02		
Above 50 years	24	17.02		
<b>Total</b>	<b>141</b>	<b>100.00</b>		

The mean age of the sample respondents is 38.67 indicating that teachers were relatively young. Age diversity in mentoring relationships is not given much importance, because the very notion of a mentor has been almost exclusively associated with being senior in age and experience. The sample chosen for the present study reveals that majority of the teachers had their age ranging from 31 to 40 years. The data have been depicted in a pictorial graph appended (Figure 4.2).

**Figure 4.2 Age of teachers**



Levinson et al. (1978) argued that ideally a mentor should be approximately half a generation older (i.e. 8 to 15 years) than a protégé. If the mentor is much older, the relationship may take on qualities of a parent and child relationship, and if the mentor is too close in age to the protégé, the pair may become more like friends or peers.

A young mentor is not perceived as matching his or her role well. A younger individual may elicit stereotypes of being inexperienced and naive; this certainly does not fit the typical characteristics of a mentor. However, it must be cautioned that there is evidence in the literature that the age matching process is not necessarily symmetrical (Perry et al., 1996).

#### 4.3.2 Gender of teachers

Table 4.3 gives us information about the gender composition of teachers included in the present study. The sample reveals that the teaching population of B- schools in Kerala is dominated by male teachers. 109 respondents (77.3%) comprise of male respondents and female respondents constitute 22.7 per cent (32 respondents).

**Table 4.3 Gender of teachers**

<b>Gender</b>	<b>No.</b>	<b>Per cent</b>
Female	32	22.7
Male	109	77.3
<b>Total</b>	<b>141</b>	<b>100.0</b>

According to Kundu (2003) changing population structure, social patterns concern for socio-economic upliftment, organisation concerns and the women's movement are some reasons that create pressure in organisations for creating a diverse workforce. The women's liberation movement and the

subsequent focus on their development has resulted in the increase of women employees in the workforce. The last quarter of the twentieth century has largely witnessed females' formal entry into business organizations. But in spite of this it can be observed from the present study that nearly 77.3 per cent of the faculty members are male. Theoretical perspective of mentoring, says men may be more apt to provide career mentoring whereas women may be more apt to provide psychological mentoring.

However, some researchers have stated that female mentors lack the organizational power available to male mentors and this limits their effectiveness because mentoring essentially is a power-based behaviour. Several others like Olian et al. (1988) examined protégé attraction to mentors using three experiments in their study. They identified that gender did not emerge as a significant factor influencing protégé attraction to mentors.

According to Ragin's theory regarding diversified mentoring relationships, gender makes a difference in mentoring relationships because the mentoring partners are members of groups that possess differing degrees of power within the organisations (Ragins, 1997b).

### **4.3.3 Educational qualification of teachers**

The educational qualification of teachers is reported in Table 4.4. The table depicts that most of the faculty (51.77%) were post graduates only and 33.33 per cent were Ph.D holders and 21 (14.89%) respondents had M.Phil qualification.

**Table 4.4 Educational qualification of teachers**

<b>Educational Qualification</b>	<b>No.</b>	<b>Per cent</b>
Post graduation	73	51.77
M.Phil.	21	14.89
Ph.D.	47	33.33
<b>Total</b>	<b>141</b>	<b>100.0</b>

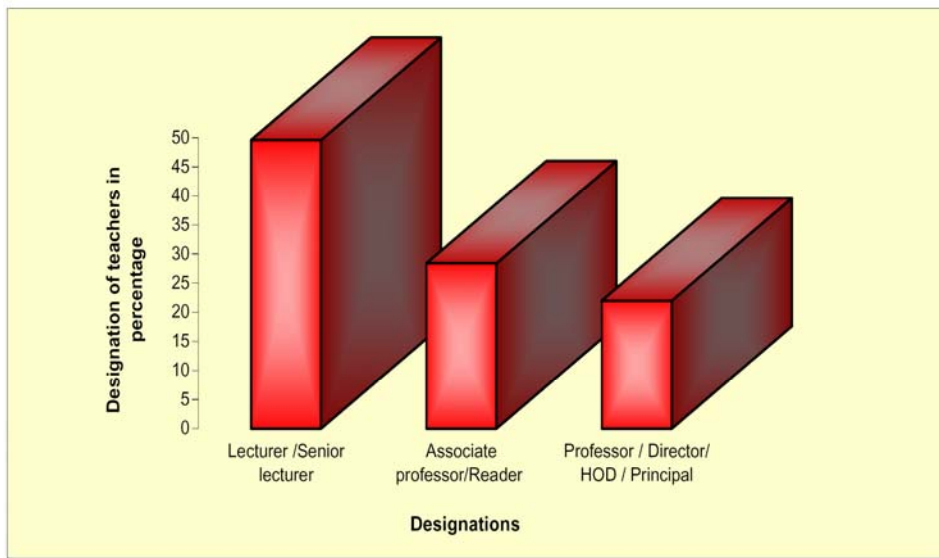
Education is, in a way, development of desirable habits, skills and attitudes (competence) which make an individual a good citizen (Chauhan, 1999). Competence are attributes (knowledge, skills, attitudes) which enable an individual or group to perform a role or set of tasks to an appropriate level or grade of quality or achievement and thus make the individual or group competent in that role (Walker, 1992). The present study reveals that most of the faculty (51.8%) were post graduates only fulfilling the minimum qualification to be a teacher at the master's level. Mentoring contribute to the professional development of staff and team building in staff rooms. Colleagues can encourage to work for further qualifications and higher degrees (Barbara and Terry, 1996). Allen et al. (1997) says each stage of an individual's academic and career development may require a different type of mentor with different types of skills and knowledge. The MBA students being the protégés in the present study require well qualified mentors with better knowledge and skill sets to groom them into better managers. Hence the teachers in management institution continuously update their knowledge and skills.

#### **4.3.4 Designation of teachers**

The designation of teachers included in the study is represented in figure 4.3. It reveals that 49.6 per cent (70 respondents) of the sample constitutes

Lecturers and Senior Lecturers, 28.4 per cent are Associate Professors and Readers and 22 per cent (31 respondents) are Professors, Directors, Heads of the departments and Principals. Designations of faculty in educational institutions may differ significantly among categories of educational institutions.

**Figure 4.3 Designation of teachers**



Teachers in government colleges and Universities are promoted based on seniority, while self-financing institutions have their own policies for deciding the promotion of faculty members. Further, number of years of teaching experience an individual has acquired in the profession can also be reflected in the designation one holds. It can be seen from the present study that most of the teachers in the B-schools were lecturers (and senior lecturers) by designation, followed by associate professors and professors, implying majority of the teachers were relatively young in their profession. A teacher, as he advances in his experience and career, is likely to become more insightful and capable of displaying greater levels of personal and

professional maturity with the attendant qualities. To sum up, the more experienced a teacher is, greater could be the person's ability to perform the role of a mentor.

#### 4.3.5 Teaching experience of teacher

The Table 4.5 depicts the teaching experience of teachers included in the present study. 64 respondents (45.39%) have claimed up to 5 years of experience, 21.99 per cent have 5 to 10 years experience, 17.02 per cent have experienced above 15 years and 15.6 per cent (22) are 10 to 15 years experienced. The mean teaching experience of the sample respondents is 9.29 and the standard deviation is 8.34.

**Table 4.5 Teaching experience of teachers**

Teaching Experience	No.	Per cent	Mean	SD
Upto 5 years	64	45.39	9.29	8.34
5 – 10 years	31	21.99		
10 – 15 years	22	15.60		
Above 15 years	24	17.02		
Total	141	100.0		

#### 4.3.6 Industrial experience of teachers

Table 4.6 depicts the industrial experience of the faculty. Majority of the respondents (45.39%) have more than 2 years experience, 27.65 per cent (39 respondents) have 1 to 2 years experience, and 38 respondents have no industrial experience at all accounting for 26.95 per cent.

**Table 4.6 Industrial experience of teachers**

<b>Industrial Experience</b>	<b>No.</b>	<b>Per cent</b>	<b>Mean</b>	<b>SD</b>
No experience	38	26.95	4.72	6.94
1-2 years	39	27.65		
Above 2 years	64	45.39		
Total	141	100.0		

The majority of the faculty had almost 5 years of teaching and above 2 years of industrial experience. Allen et al. (1997) says successful mentors often view the experience as an opportunity to make productive use of their knowledge and work experience during their mid career (Freedman, 1988 and Levinson et al., 1978). Quite a few factors influence teachers' beliefs about classroom management which include teachers' values, educational goals, gender and experience (Martin and Baldwin, 1992 and 1994; Burden, 1995 and Martin and Yin, 1997). It is evident from literature that typically, mentors are experienced individuals committed to facilitating upward mobility and support for a protégé's personal and professional development.

#### **4.3.7 Period of existence of B-schools covered**

The Table 4.7 represents the years of existence of B-schools included in the present study. 41.13 per cent (58) belong to institutions that were 3 to 5 years old, 14 respondents were from 6 to 10 year old institutions, 48 were from institutions 11 to 15 years old, and 21 respondents were from institutions that were in existence for more than 15 years.

**Table 4.7 Period of existence of B-schools**

<b>Years of establishment</b>	<b>No. of respondents</b>	<b>Per cent</b>
5 years and below (3 to 5 years)	58	41.13
6 – 10 years	14	9.93
11 – 15 years	48	34.04
Above 15 years	21	14.90
<b>Total</b>	<b>141</b>	<b>100.0</b>

General belief that institutions in infancy characteristically devote their time towards establishing themselves, acquiring adequate infrastructure, recruiting and stabilising faculty, standardising admissions and administrative procedures and fulfilling the statutory academic requirements and those with longer history undertake to restructure their pedagogy with a view to provide features intended to enrich the usefulness of the programmes has been contradicted in this study. The younger institutions that claim only less than five years of existence have attempted real changes in their pedagogy with appropriate and more composite pedagogy that offer additional value so that they are able to attract students and are able to survive. Older institutions, on the other hand, have become complacent probably thinking that they have carved out a niche for themselves by gaining an identity in the state. They behave as if they need not have to perceive trends in the larger society and respond to such changes.

#### **4.4 Personality profile of teacher mentors**

Literature on mentoring indicates that effective mentors (those highly rated in student surveys) possess specific personality characteristics and interpersonal traits (Blackburn et al., 1981; Gilbert, 1985; Sanders and Wong,

1985; Cronan-Hillix et al., 1986 and Clark et al., 2000). In terms of personality, desirable mentors are intelligent, caring, and appropriately humorous. They are flexible, empathic, and patient. Like good psychotherapists, good mentors are interpersonally supportive, encouraging, and poised. They appear to exude “emotional intelligence” (Goleman, 1995). In addition to demonstrating these qualities, highly rated mentors are ethical (Kitchener, 1992), psychologically well adjusted (Cronan-Hillix et al., 1986), intentional role models (Gilbert, 1985), and well-known as scholars and professionals (Blackburn et al., 1981 and Sanders and Wong, 1985). In essence, excellent mentors are kind, healthy, and competent. The five-factor model of personality has become widely accepted by personality and industrial psychology researchers. “The five-factor model offers a universal and comprehensive framework for the description of individual differences in personality” (McCrae and Costa, 1986). It includes traits of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Costa and McCrae, 1992 and Digman, 1990).

Open individuals are willing to entertain novel ideas and unconventional values and they experience both positive and negative emotions more keenly than do closed individuals. Men and women who score low on openness tend to be more conventional in behavior and conservative in outlook. This facet of the personality profile is measured using NEO-FFI scale and the statements have been presented in Inventory I [ Items 3, 8, 13, 18, 23, 28, 33, 38, 43, 48, 53, and 58].

Conscientiousness is associated with academic and occupational achievement. Digman and Takemoto–Chock (1981) refer to this domain as the will to achieve. Individuals high on conscientiousness are meticulous, prompt and consistent. Those with Low scores are not necessarily lacking in moral



principles, but are less rigorous in applying them. On the negative side, it may lead to annoying precision, compulsive neatness or workaholic behavior. This facet of the personality profile is measured using NEO-FFI scale and the statements have been presented in Inventory I (Items 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, and 60).

Extraverts are sociable, confident, active and talkative. They like enthusiasm and inspiration and tend to be cheerful in character. They are upbeat, energetic, and optimistic. This facet of the personality profile is measured using NEO-FFI scale and the statements have been presented in Inventory I (Items 2, 7, 12, 17, 22, 27, 32, 37, 42, 47, 52, and 57).

Agreeableness is primarily a dimension of interpersonal tendencies. The agreeable person is basically selfless and is sympathetic to others, willing to help them and believes that others will be equally helpful in return. By contrast the disagreeable or antagonistic person is selfish, doubtful of others' intentions and aggressive rather than supportive. This facet of the personality profile is measured using NEO-FFI scale and the statements have been presented in Inventory I [Items: 4, 9, 14, 19, 24, 29, 34, 39, 44, 49, 54, and 59].

A person high on this domain generally experience negative affects such that they panic, are sad, embarrassed, angry, and guilty. Disgust is the core of neuroticism domain. Men and women high on neuroticism are irrational and not able to control their impulses or cope with stress. Individuals who score low on neuroticism are psychologically steady. This facet of the personality profile is measured using NEO-FFI scale and the statements have been presented in Inventory I [Items: 1, 6, 11, 16, 21, 26, 31, 36, 41, 46, 51, 56].

The Neo-FFI scale was used to gather data regarding the big-five personality attributes of teachers. The raw scores obtained from the personality

scale for each respondent was converted into standardized scores according to the instructions in the manual. Modified standard scores called 't'- scores computed as per the formula,  $t' = 50 + 10 * [(raw\ score - mean) / standard\ deviation]$  have been used to depict and represent the typology of personality and understand the nature of personality profile of teachers classified as low, average and high on each of the attributes.

The raw score is the score of an individual arrived from the scale, mean is the mean for that reference norm, and standard deviation is the standard deviation for that reference norm. Since mean and standard deviation of normative population are not available, these have been substituted with the mean and standard deviation of the raw scores of the sample studied for personality scales. The raw score values cannot be fitted into these ranges as low, average or high for Personality scales. Moreover, the advantage of 't' scores is that these scores can be compared across dimensions since these are expressed in standardized form.

The norms for interpreting the personality profile of individuals, into low, average, and high classifications are depicted below. The norms have been certified to be culture free by the authors and hence were adopted as such for the study.

**Exhibit 4.0 Norms for interpretation**

<b>Range of 't' score</b>	<b>Quality of attribute</b>
(< = 44)	Low
(45 - 55)	Average
(> = 56)	High

Source: Costa and McCrae (1992).

Research, however, has only begun to explore the impact of the five factor model on the mentoring process, opines Niehoff (2006). The present study is an attempt in this direction.

Personality profile of the faculty was considered as an independent variable. The study tries to find if the personality profile of the teacher influences the effectiveness of mentoring through the mentoring activities initiated by them. The data below depicts the personality profile of permanent teachers in B-schools.

#### **4.4.1 Personality profile of teachers in B-Schools**

The personality, not the intellect, of mentors is the prime determinant of their desirability and by personality we do not mean a set of immutable personal qualities like caring and fairness, which may well be subject to cognitive control (Cronan-Hillix et al., 1986).

The personality profile of teachers is classified according to big-five personality facets and is depicted in Table 4.19. It reveals that 56.03 per cent (79 respondents) of the teachers were average in their scores of openness, 24.11 per cent were high and 19.86 per cent of the respondents were found to be low on openness.

It was observed 44.68 per cent of the respondents were average in their scores of conscientiousness and 27.66 per cent of the respondents were high and an equal percentage of the respondents low in their scores of conscientiousness.

Majority of the teachers (43.97%) were average on extraversion scores, 28.37 per cent were high on extraversion and 27.66 per cent were low on extraversion scores.

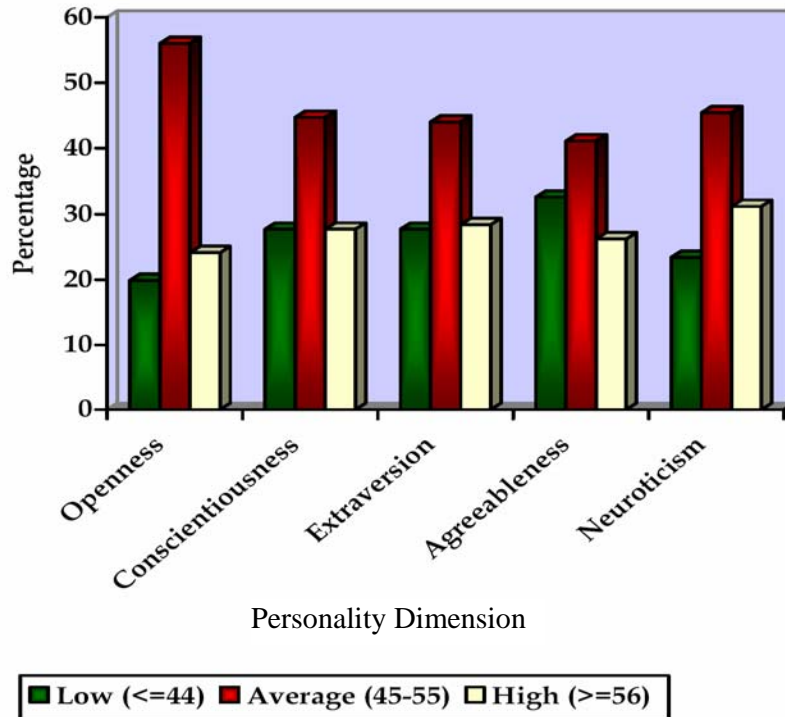
**Table 4.8 Personality profile of teachers in B-schools**

Dimension	Respondents	T Scores			Total
		Low ( $\leq 44$ )	Average (44 – 55)	High ( $\geq 56$ )	
Openness	No.	28	79	34	141
	Per cent	19.86	56.03	24.11	100
Conscientiousness	No.	39	63	39	141
	Per cent	27.66	44.68	27.66	100
Extraversion	No.	39	62	40	141
	Per cent	27.66	43.97	28.37	100
Agreeableness	No.	46	58	37	141
	Per cent	32.62	41.14	26.24	100
Neuroticism	No.	33	64	44	141
	Per cent	23.40	45.39	31.21	100

It can be inferred that 41.1 of the respondents were average in their scores of agreeableness, while 32.62 per cent were found to be low and 26.24 per cent were high on agreeableness.

Most (64) of the respondents (45.39%) were average in the neuroticism scores while 31.21 per cent were high on neuroticism and 23.4 per cent respondents were low on neuroticism scores. The data have also been depicted in figure 4.4. to project the variations of the quality levels of each personality trait among the respondents

**Figure 4.4 Personality profile of teachers in B-schools**



The present study reveals that the teachers are average in their personality profiles, It is found that teachers average in openness value both new and conventional ideas and have an average degree of sensitivity to inner feelings. They are willing to consider new ideas occasionally, but they do not seek out novelty for its own sake. Teacher's average in conscientiousness has a normal level of achievement. They are able to set work aside in pursuit of pleasure or recreation. They are moderately well organised and fairly reliable and have an average amount of self-discipline. The study also reveals that teachers are neither extraverts nor introverts. They are generally sociable and sometimes refrain from being in large gathering and are neither too optimistic nor pessimistic and are rational in their approach. Teachers in the B-schools

were found to be average in their scores of agreeableness which means they are good natured, sympathetic and sometimes firm. They are trust worthy ready to compete and willing to cooperate with others but not gullible. Finally it has been observed that teachers in B-schools in Kerala are average in terms of their neuroticism or emotional stability. They experience a normal amount of psychological distress and have a typical balance of satisfaction and dissatisfaction in life. They are neither low nor high in self-esteem. Their ability to deal with stress is as good as the average person.

#### **4.4.2 Personality profile of teachers and type of institution**

The natural curiosity of the researcher to see if the teacher vary in terms of their personality orientations as among the two predominant categorization of management institutes in this study (mentoring and non-mentoring) resulted in the cross tabulation of the two sets of data pertaining to the institutional type as the row variable and personality attributes as the column variable. It was observed that there is a slight variation in the mean scores of neuroticism, extraversion, openness, agreeableness and conscientiousness between the type of institution (mentoring or non-mentoring) where the teachers works. Teachers working in non-mentoring institutions were found to be slightly high on neuroticism while the teachers working in mentoring institutions were found to be high on extraversion, openness, agreeableness and conscientiousness as shown in table 4.9.

**Table 4.9 Comparison of personality profile of teachers with type of institution**

Sl.No.	Institution	Personality Profile									
		Neuroticism		Extraversion		Openness		Agreeableness		Conscientiousness	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N=83) Mentoring	29.72	7.50	41.71	6.09	38.17	5.30	41.57	5.07	46.12	6.91
2	(N=58) Non Mentoring	31.55	5.95	41.10	6.05	37.78	5.31	41.24	4.94	44.81	5.89
<b>'t' Value</b>		1.547		0.584		.433		.379		1.176	
<b>Table 't' (0.05)</b>		1.977		1.977		1.977		1.977		1.977	
<b>P Value</b>		.124		.560		.666		.706		.240	
<b>Level of Significance</b>		NS		NS		NS		NS		NS	

NS = Not significant.

't' test was applied to find whether the average scores of personality profiles, differed between teachers working in mentoring and non-mentoring institutions. The results indicated that the average scores of personality factors do not vary significantly between teachers working in mentoring and non-mentoring institutions, neuroticism ( $t = 1.547$  ;  $p > 0.05$ ) ; similarly for extraversion ( $t = 0.584$  ;  $p > 0.05$ ) ; openness ( $t = 0.433$  ;  $p > 0.05$  ; agreeableness ( $t = 0.379$  ;  $p > 0.05$ ) ; and conscientiousness ( $t = 1.176$  ;  $p > 0.05$ ).

According to the present study the personality profile of teachers does not vary significantly between the type of institution namely, mentoring or non mentoring institutions. Philips and Gibson (1957) says

as that the normal adult gains self confidence, assurance, skill and social poise and his personality only becomes polished with the passage of time, but he is not likely to develop a totally different personality from that of his adolescent years. The researcher thus concludes that the personality profile of teachers is not attestably influenced by the type of institution in which he or she is working. Though there is no statistically significant difference in the average score of personality facets, teachers in non-mentoring institutions were found to be displaying lower emotional stability in absolute terms as compared to their counter parts in mentoring institutions.

The researcher has been successful in portraying the results and discussion relevant to the independent variable ‘faculty environment ‘covering formalization of mentoring, socio-demographic background and personality profile of teachers who were primarily instrumental in implementing the mentoring activities in the B-schools/management institution. The forthcoming chapter presents the analyses, results and discussions about the nature and extent of mentoring activities initiated by the faculty in B-schools, the implications of the socio-demographic variables and personality profile of teachers on the mentoring activities.

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## Mentoring Activities

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- 5.1 Classification of mentoring activities
  - 5.2 Nature and extent of mentoring activities initiated
  - 5.3. Mentoring activities and socio-demographic factors
  - 5.4 Personality profile of teachers and mentoring activities
  - 5.5 Mentoring activities across institutional type
- 

Mentoring in B-schools involves a constellation of educational, interpersonal and professional activities that comprise a variety of ways for assisting and supporting protégés (students) through their life span as a student and beyond. It goes beyond advising or guiding a student through a project. A [teacher] mentor provides knowledge, advice, challenge, counsel, and support in the protégés' pursuit of becoming a fuller member of a profession (Clarke et al., 2000 and Johnson et al., 2000). Therefore, the image of a successful mentor is that of someone who not only encourages a protégé to become a more reflective, inquiring professional (Howey, 1988) but also as a person who takes responsibilities with a deep sense of wanting to serve others and to provide expertise to professionals (Daresh and Playko, 1991).

According to Alleman and Clarke (2002) mentoring includes behaviour focused on teaching, coaching, managing politics, influencing and show casing. An attempt to measure mentoring activities must be made for distinguishing the mentoring behavior of the superior from his or her routine and work related command behaviors and ascertain the frequency of contact,

the amount and quality of such contacts. Alleman's mentoring activity scale comprises three subscales on the factors of guiding (teach the job, provide challenge, and teach politics), helping (career-help, protect and sponsor) and encouraging activities (career-counseling, protect and trust). Each of the activities measured have been detailed below.

### **Teach the job**

This reflects in the amount and value of mentor behaviors that help a protégé learn how to perform job related tasks and accomplish work related goals and improve interpersonal skills. Mentor teaches by example, explanation and discussion, providing helpful information and giving feedback and act as a role model.

### **Provide challenge**

This activity is reflected in the mentor behaviours that delegate and give responsibility to protégés, encourage protégés to take risks and assume initiative, and assign (or encourage protégés to take on) tasks.

### **Teach politics**

This reflects in the amount and value of mentor behaviours that help the protégés to understand the behaviour of others, use and abuse of power, how to avoid pitfalls, and how to use the informal system to accomplish goals. They do this by example, explanation, discussion and giving feedback.

### **Career help**

This is reflected in the mentor behaviours that showcase the protégés and help the protégés achieve career goals by providing visibility, introductions and recommendations.

### **Protect**

This activity is reflected in the amount and value of mentor behaviors that show the mentor is willing to provide a ‘safe place’ for the protégés to try out new ideas without fear of penalty, is willing to bend rules for the protégés and is prepared to defend the protégés when necessary.

### **Sponsor**

This is reflected in mentor behaviours that support the protégés initiatives and moves, show professional support for the protégés, and publicly acknowledge accomplishments of the protégé and endorse activities and provide visibility.

### **Career counseling**

This activity is represented by mentor behaviours that provide clarifications, support, advice and insights for the protégé, encourage the protégés to develop a career plan, contribute to the protégés personal development, and act as a resource for the protégés when problems arise.

### **Friendship**

This activity is brought out by mentor behaviours that show liking for each other, association in non-work situations, and concerns for each other’s personal welfare.

### **Trust**

This is reflected in the verbal expressions of confidence in the protégés, seeking the protégés opinion, and acts such as revealing sensitive or confidential information to the protégé and helps the protégés learn when to trust others.

'Mentoring activities' considered as a significant variable in the conceptual framework for this research was precisely defined and observed by the researcher as primary in nature and data were collected using the Allemans' mentoring activity questionnaire. Scores obtained by the respondents were summarised and categorized to reflect the intensity of each of the identified activities on the basis of its functionality, as non-mentoring, limited, typical and high mentoring, based on the norms provided by the author. The raw score values could not be fitted into the ranges classified as non-mentoring, limited mentoring, typical mentoring, and high mentoring as per the norms of the tool. Therefore raw scores - scores of an individual respondent against a statement item on the scale - were converted into standardized 'z' scores. As the mean and standard deviation of normative population were not available for the calculation of standard scores, these have been substituted with the mean and standard deviation computed of the raw scores of the sample studied.

The norms for interpreting the nature of mentoring activities initiated by teachers into non-mentoring, limited, typical, and high mentoring categories are depicted below. The given norms have been certified to be culture free by the authors and hence were adopted as such for the study

**Exhibit 5.0 Norms for allemans mentoring activities questionnaire**

<b>Range of Z-scores</b>	<b>Category</b>
(< = 29)	Non-Mentoring
(30-40)	Limited Mentoring
( 40-60)	Typical Mentoring
(> 60)	High Mentoring

**Source:** (Alleman and Clarke, 2002)

## 5.1 Classification of mentoring activities

The way mentoring occurs for mentors and protégés is idiosyncratic. Mentoring for one pair is different from the way mentoring occurs for other pairs (Mary Ann and Nancy Sindelar, 1992). Mentors may use a set of specific activities broadly classified as Guiding, Helping and Encouraging activities. Table 5.1 represents the three broad classification of mentoring activities reported by the teacher respondents under this study. Data reveals that 72.3 per cent (102) of the teachers acknowledges guiding activity (teach the job, provide challenge and teach politics) to be the typical mentoring activity in their institutions, 14.9 per cent (21) feels it to be the most prevalent (high) mentoring activity, while 9.2 per cent (13) rates guiding to be prevalent only to a limited extent and 3.5 per cent (5) categorize it as non-existent as a mentoring input in their institutions.

**Table 5.1 Three broad classification of mentoring activities**

Activities	Respondents	Non-mentoring	Limited mentoring	Typical mentoring	High mentoring	Total
Guiding activities	No	5	13	102	21	141
	Per cent	3.5	9.2	72.3	14.9	100
Helping activities	No	4	15	100	22	141
	Per cent	2.8	10.6	70.9	15.6	100
Encouraging activities	No	4	18	98	21	141
	Per cent	2.8	12.8	69.5	14.9	100

70.9 per cent (100) teachers has expressed that helping activity (career help, protect and sponsor), is the typical mentoring activity, 15.6 per cent (22) considers it as the mostly used (high) mentoring activity, while according to 10.6 per cent (15) of the respondents, it is only limited in usage and 2.8 per cent (4) takes it as non-mentoring in nature.

As regards the encouraging activity (career counseling, friendship and trust), 69.5 per cent (98) teachers treat it to be a typical mentoring activity used in their professional life, 14.9 per cent (21) feels encouraging to be the most highly useful in nature, while 12.8 per cent (18) feels it to be of only limited application and 2.8 per cent (4) fails to recognise it as a mentoring activity.

## **5.2 Nature and extent of mentoring activities initiated**

Mentoring activities, having been considered as the intervening variable in the theoretical framework of the present study, detailed attention was devoted to bring out the perception of teacher mentors with respect to each of the constituent activities that make up the broader conceptions of guiding, helping and encouraging activities.

Table 5.2 presents the data on the prevalence of elementary mentoring activities among teachers in B-schools in the state. It reveals that 72.34 per cent (102) of the teachers in B-schools use teaching the job as the typical mentoring activity, followed by 17.02 per cent (24) who try teach the job as the ideal mentoring input, 7.8 per cent (11) appreciate it only as limited in scope and for 2.84 per cent (4) of teachers, teaching the job is not at a mentoring activity at all.

For 79.43 per cent (112) of the respondents providing challenge is the typical mentoring activity, followed by 9.93 per cent (14) who perceive provide challenge as high mentoring in functional value, 11 respondents (7.8%) accept only limited usefulness for providing challenge as a mentoring activity and 2.84 per cent (4) refuse to accept the said activity as mentoring tool.

The data reveals that 69.5 per cent (98 teachers) utilise teaching politics as the typical mentoring activity, followed by 15.6 per cent (22) who teach

politics as highly useful mentoring activity, 13.48 per cent (19) respondents provide teach politics as a limited activity and 1.42 per cent (2) categorize the activity as non-mentoring.

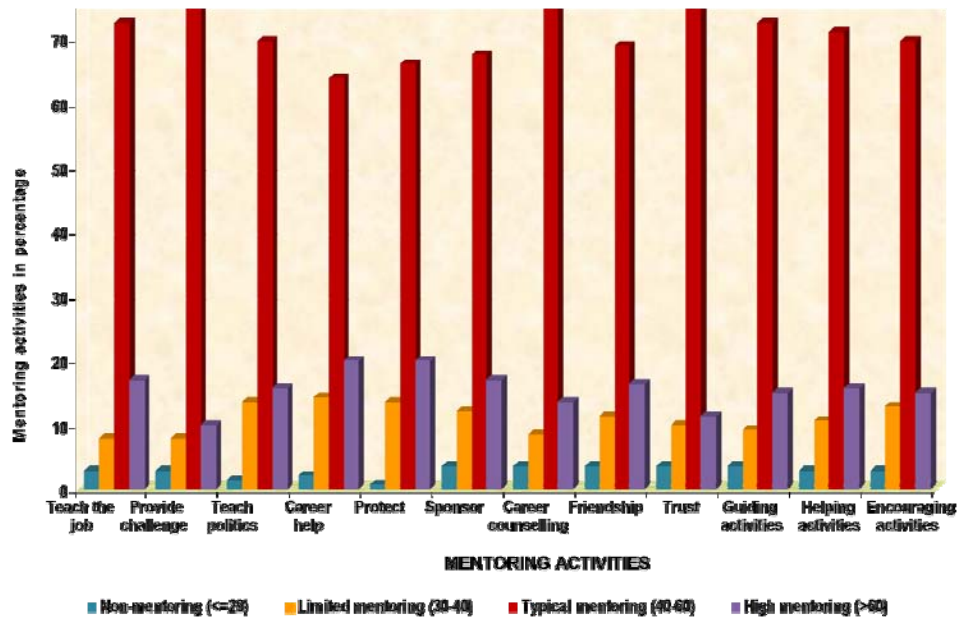
**Table 5.2 Nature and extent of mentoring activities initiated by the teacher in B-schools**

Activity	Respondents	Non-mentoring	Limited mentoring	Typical mentoring	High mentoring	Total
Teach the job	No.	4	11	102	24	141
	Per cent	2.84	7.80	72.34	17.02	100
Provide challenge	No	4	11	112	14	141
	Per cent	2.84	7.80	79.43	9.93	100
Teach politics	No	2	19	98	22	141
	Per cent	1.42	13.48	69.50	15.60	100
Career help	No	3	20	90	28	141
	Per cent	2.13	14.18	63.83	19.86	100
Protect	No	1	19	93	28	141
	Per cent	0.71	13.47	65.96	19.86	100
Sponsor	No	5	17	95	24	141
	Per cent	3.55	12.06	67.37	17.02	100
Career counseling	No	5	12	105	19	141
	Per cent	3.55	8.51	74.47	13.47	100
Friendship	No	5	16	97	23	141
	Per cent	3.55	11.35	68.79	16.31	100
Trust	No	5	14	106	16	141
	Per cent	3.55	9.93	75.18	11.34	100
Overall mentoring activities	No	4	16	103	18	141
	Per cent	2.84	11.35	73.05	12.76	100

The appreciation for other typical mentoring activities belonging to the broader classifications of helping and encouraging natures also reveal very

similar pattern in the sense that substantially large proportions of the respondents attribute a ‘typical status’ to each activity from the mentoring perspective with a lesser number of them appreciating the activity as ‘highly useful’ followed by a still lesser number of them ascribing the activity a ‘limited usefulness’, and a very few of the respondents holding an activity as ‘non-mentoring’ in nature. Figure 5.1 show the predominant pattern of acknowledgement of mentoring Activities by teachers in B-school.

**Figure 5.1 Mentoring activities acknowledged by teachers**



The overall scores on mentoring activities shown in table 5.2 follow the same trend and pattern as mentioned in the preceding paragraphs that have also brought out by the diagrammatic presentation. The overall pattern suggests that teachers, though restricted by their characteristic reservation to appreciate anything in superlatives, mostly agree with the typical instrumental value of each of the mentoring activities and their broader categorizations.



### **5.3 Mentoring activities and socio-demographic factors**

One-way ANOVA was applied to test whether the mean scores of the respective mentoring activities (teach the job, provide challenge, teach politics, career help, protect, sponsor, career counselling, friendship, and trust) vary significantly with the socio-demographic variables (age, gender, educational qualification, designation, teaching experience and industrial experience. Post hoc analysis was done subsequently to identify which two groups differ significantly in their mean values, among various categories of variables. ‘t’ test was applied to find if there was a significant difference between the gender of the respondents and type of institutions, both were tested at 5 per cent and 1 per cent level of significance.

#### **5.3.1 Mentoring activities across the age group of teachers**

Literature on mentoring reveals, age diversity in mentoring relationship is not given much important, most likely, because the very notion of a mentor has been almost exclusively associated with being senior in age as well as experience. In spite of this the researcher was curious of observing if mentoring activities are initiated by teachers vary significantly across their age group. Table 5.3 clearly reports that there is no significant difference in the average scores of mentoring activities across the age group of teachers. But a closer look revealed slight variation across the age groups. Teachers belonging to the category of above 50 years gave equal importance to guiding, helping and encouraging activities. Teachers between the age group of 41 to 50 years considered sponsoring to be the most important activity. The 31 to 40 years category appreciated providing challenge as a prime activity while teachers less than 30 years emphasised teaching the job as most important.

Table 5.3 Comparison of mentoring activities across age group of teachers

Sl. No.	Age Group	Mentoring Activities																	
		Teach the job		Provide challenge		Teach politics		Career help		Protect		Sponsor		Career counseling		Friendship		Trust	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N = 36 ) upto 30 years	31.19	3.84	30.92	5.48	26.81	5.33	27.53	4.68	25.44	5.40	27.89	6.21	31.08	6.53	24.89	6.23	28.25	5.82
2	(N = 57) 31-40 years	31.14	5.74	31.86	6.21	27.11	5.88	30.23	6.01	25.98	5.41	29.40	6.42	31.07	6.11	25.49	6.65	29.05	5.83
3.	(N = 24) 41-50 years	30.21	4.37	31.25	5.05	26.50	6.75	29.38	5.21	25.79	5.18	31.71	5.67	31.42	6.30	25.50	6.50	30.33	6.18
4	(N = 24) Above 50 years	32.42	3.63	31.67	4.46	28.08	5.41	30.38	5.18	27.83	5.27	31.25	4.56	32.38	4.60	25.96	7.17	30.46	4.94
	'F' value	.872		.233		.343		2.132		1.057		2.599		.296		.134		1.018	
	Table 'F' (0.05)	2.671		2.671		2.671		2.671		2.671		2.671		2.671		2.671		2.671	
	P value	.457		.873		.794		.099		.370		.055		.828		.940		.387	
	Level of significance	NS		NS		NS		NS		NS		NS		NS		NS		NS	

NS=Not Significant

One-way ANOVA was applied to test whether the mean scores of mentoring activities vary significantly among the different age group of teachers. The results indicated that the mean score of mentoring activities do not differ significantly among the age group of teachers, teach the job ( $F = 0.872$  ;  $p > 0.05$ ) ; provide challenge ( $F = 0.233$  ;  $p > 0.05$ ) ; teach politics ( $F = 0.343$  ;  $p > 0.05$ ) ; career help ( $F = 2.132$  ;  $P > 0.05$ ) ; protect ( $F = 1.057$  ;  $p > 0.05$ ) ; sponsor ( $F = 2.599$  ;  $p > 0.05$ ) ; career counseling ( $F = 0.296$  ;  $p > 0.05$ ) ; friendship ( $F = 0.134$  ;  $p > 0.05$ ) ; and trust ( $F = 1.018$  ;  $p > 0.05$ ) .

Levinson et al. (1978) argued that ideally a mentor should be approximately half a generation older (i.e. 8 to 15 years) than a protégé. If the mentor is much older, the relationship may take on qualities of a parent and child relationship, and if the mentor is too close in age to the protégé, the pair may become more like friends or peers.

According to Fagenson-Eland (2005), as age difference grows, there is likely to be less agreement between the mentoring partners about mentoring activities within the relationship. Kram (1985) is of the opinion that individual may feel challenged stimulated and creative in providing mentoring functions as they become senior adult's with wisdom to share ; alternatively, they may feel rivalrous and threatened by a younger adults growth and advancement. The current study reveals that there is no significant difference between the average score of mentoring activities initiated and age group of teachers. However the study also revealed that the teachers belonging to up to 30 years age category concentrated on teaching the job (31.19) followed by career counseling (31.08) and providing challenge (30.92). Teachers between 31-40 years age concentrated on providing challenge (31.86) followed by teaching the job (31.14) and career counseling (31.07). The teachers between 41-50 years concentrated on sponsoring (31.71) followed by career counseling

(31.42) and providing challenge (31.25) and teachers above 50 years age were high on teaching the job followed by career counseling (32.38) and providing challenge (31.67).

### **5.3.2 Mentoring activities and gender**

Studies of gender differences in management and entrepreneurship for example have shown that difference between men and women are reduced when they are called upon to play similar roles in the work environment (Schein and Mueller, 1992). Recent reviews of mentoring research revealed that protégés receive the same type of mentoring from both male and female mentors (O'Neill, 2002). A close look at Table 5.4 reveals that teachers irrespective of their gender seem to appreciate equally the value of each mentoring activity, except for helping activity (sponsoring). It was specifically observed that women were high in sponsoring (helping activity) and generally had better appreciation for the guiding, helping and encouraging activity, compared to men.

The t-test was applied to find whether the average scores of mentoring activities, differ significantly between male and female respondents. The results revealed that the average score of the mentoring activity 'sponsor' differs significantly between the genders, ( $t = 1.981$  ;  $p = 0.05$ ). It was found that female respondents were high on sponsoring activity, while the average scores of other mentoring activities like teach the job ( $t = 1.349$  ;  $p > 0.05$ ) ; provide challenge ( $t = 0.742$  ;  $p > 0.05$ ) ; teach politics( $t = 1.428$  ;  $p > 0.05$ ) ; career help ( $t = 1.900$  ;  $p > 0.05$ ) ; protect ( $t = 1.476$  ;  $p > 0.05$ ) ; career counseling ( $t = 0.414$  ;  $p > 0.05$ ) ; friendship ( $t = 1.429$  ;  $p > 0.05$ ) and trust ( $t = 1.860$  ;  $p > 0.05$ ) do not differ significantly between the male and female respondents.

Table 5.4 Comparison of Mentoring activities between the gender of teachers

Sl. No	Age Group	Mentoring Activities																	
		Teach the job		Provide challenge		Teach politics		Career help		Protect		Sponsor		Career counseling		Friendship		Trust	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N = 109) Male	30.22	5.98	30.84	5.72	25.81	6.53	27.81	6.00	24.91	6.16	27.88	7.07	30.97	6.56	23.97	6.97	27.66	6.97
2	(N = 32) Female	31.50	4.32	31.67	5.48	27.47	5.53	29.89	5.26	26.49	5.06	30.27	5.66	31.47	5.83	25.84	6.39	29.79	5.28
<b>'t' value</b>		1.349		0.742		1.428		1.900		1.476		1.981		0.414		1.429		1.860	
<b>Table 't' (0.05)</b>		1.977		1.977		1.977		1.977		1.977		1.977		1.977		1.977		1.977	
<b>P value</b>		.179		.459		.156		.059		.142		.050		.680		.155		.065	
<b>Level of significance</b>		NS		NS		NS		NS		NS		*		NS		NS		NS	

\* Denotes Significance at 5% level      NS=Not Significant

Though there is no statistical significance, there is some difference in the mean values of mentoring initiated between male and female teachers. The results indicate that female respondents are high on all mentoring activities. The study also revealed that the male teachers were high on career counseling (30.97) followed by providing challenge (30.84) and teach the job (30.22). While the female teachers concentrated in providing challenge (31.67) followed by career counseling (31.47) and teaching the job (31.50)

The social psychology literature suggests that women are more likely than men to provide emotional support and informal counseling (Eagly and Crowley, 1986 and Eisenberg of Fabes, 1991). According to social rule theory (Bem, 1974) the Feminine gender role encourages women to be caring and nurturing. Women tend to have greater intimacy, as it is consonant with their self-concept. On the other hand, the instrumental focus of career related mentoring is associated more with men and the perception that men hold greater power within organizations (as cited by Allen and Eby, 2004).

In addition to Ragins Theory concerning diversified mentorships (Ragins, 1997), several other theoretical perspectives suggest that men may be more apt to provide career mentoring whereas women may be more appropriate to provide psychosocial mentoring. Specifically the social psychology literature suggests that women are more likely to provide emotional support and informal counseling than men.

Traditionally mentoring was a male dominated phenomenon, but more recently women have initiated relationships. Dreher and Ash (1990) describe no gender difference with regard to the mentoring activities and gender did not moderate mentoring outcome and relationships. A number of researchers have reported distinct difference between men and women as mentors and the

amount and type of support provided (Luna and Cullen, 1990; Burke, 1994; Struthers, 1995 and Burke and McKeen, 1996). Burke and Mckeena (1990) found that female mentors provided more psychosocial support, while male mentors provided career function. The finding of Kram (1985) says men provide more of career function while women are involved in psychosocial functions.

The present study revealed significant difference in the average score of ‘sponsoring’ (mentoring activity) between male and female teachers. Here again it can be observed that women teachers in B-schools exhibit more sponsorship than their male counterparts. The finding implies that women teachers are high in supporting the initiatives and moves taken by the student protégé and publicly acknowledge their accomplishments, endorse activities and provide visibility.

### **5.3.3 Mentoring activities and educational qualification**

Review of literature revealed that mentorship is typically identified with professional or educational growth of mentors. Protégés can be benefited from relationship with adults who were successful in their area of interest. It can be inferred from Table 5.5 that mentoring activities do not vary across their level of education. On close scrutiny of the table it was observed that those teachers with Ph.D as education qualification focused their attention on helping activity (career help and sponsoring) and encouraging activity (career counseling and trust). Teachers with M.phil as their educational qualification consider guiding activity (teaching politics) and encouraging activity (friendship) as the most important activities. While teachers with only post graduation as their qualification focus their attention on guiding activity (teaching the job, providing challenge) and helping activity (protection).

**Table 5.5 Comparison of mentoring activities of teachers across their educational qualification**

SI.No.	Educational qualification	Mentoring Activities																	
		Teach the job		Provide challenge		Teach politics		Career help		Protect		Sponsor		Career counseling		Friendship		Trust	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1.	(N=73) Post graduation	31.90	4.31	31.95	5.94	27.05	5.89	29.15	5.06	26.11	5.25	28.88	5.89	30.68	5.92	25.08	6.27	28.82	5.71
2.	(N=21) M.Phil	29.71	6.88	30.10	5.97	27.67	5.85	29.57	7.41	25.86	6.64	28.90	7.38	31.33	7.91	26.19	7.40	28.43	6.65
3.	(N=47) PhD	30.81	4.14	31.38	4.58	26.89	5.71	29.77	5.25	26.28	4.97	31.40	5.44	32.40	5.01	25.60	6.69	30.45	5.32
'F' value		2.014		.924		.131		.187		.045		2.775		1.183		.257		1.436	
Table 'F' (0.05)		3.062		3.062		3.062		3.062		3.062		3.062		3.062		3.062		3.062	
P value		.137		.399		.877		.830		.956		.066		.310		.774		.241	
Level of significance		NS		NS		NS		NS		NS		NS		NS		NS		NS	

NS=Not Significant



One-way ANOVA was applied to test whether the mean scores of mentoring activities vary significantly among the educational qualification of teachers. The results indicated that the mean score of mentoring activities do not differ significantly with the educational qualification of teachers, teach the job ( $F=2.014$ ;  $p>0.05$ ); provide challenge ( $F=0.924$ ;  $p>0.05$ ); teach politics ( $F=0.131$ ;  $p>0.05$ ); career help ( $F=0.187$ ;  $P>0.05$ ); protect ( $F=0.045$ ;  $p>0.05$ ); sponsor ( $F=2.775$ ;  $p>0.05$ ); career counseling ( $F=1.183$ ;  $p>0.05$ ); friendship ( $F=0.257$ ;  $p>0.05$ ); trust ( $F=1.436$ ;  $p>0.05$ ). The study also reveals that the teachers with only post graduation as qualification concentrated on providing challenge (31.95) followed by teaching the job (31.90) and career counseling (30.68). Teachers with M.Phil as their qualification concentrated on career counseling (31.33) followed by providing challenge (30.10) and teaching the job (29.71) and teachers with Ph.D were high on career counseling (32.40) followed by sponsoring (31.40) and providing challenge (41.38). The relative importance reported for various mentoring activities may have other explanations beyond the educational achievements and academic experiences of the teachers. (Levesque et al., 2005). Heterogeneity with respect to educational level has also been found to have an effect on group functioning. Individuals who are the most dissimilar from the work group in terms of education have been found to be the least well integrated (Kirchemeyer, 1995).

#### **5.3.4 Mentoring activities and designation**

The present study tried to examine if mentoring activities initiated by teachers vary among those with different designation and this has been reflected in Table 5.6. The table reveals that lecturers and senior lecturers spend most of their time in teaching the job and protecting the protégé. Associate professors and readers appreciate guiding (providing challenge and teaching the job) and encouraging activities (career counseling). It was found that professors extended equal importance to encouraging (career counseling) and guiding (providing challenge) activities.

Table 5.6 Comparison of Mentoring activities of teachers across their designation

Sl No	Designation	Mentoring Activities																	
		Teach the job		Provide challenge		Teach politics		Career help		protect		Sponsor		Career counseling		Friendship		trust	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N=70) Lecturer / Senior Lecturer	31.90	3.89	32.04	5.63	27.51	5.55	29.76	4.99	25.96	5.34	29.06	6.08	31.47	5.89	25.44	6.62	29.27	5.70
2	(N=40) Associate Professor /Reader	29.58	6.39	29.75	6.11	25.68	5.91	28.08	6.41	26.63	5.26	28.55	6.48	29.13	6.58	24.33	6.31	27.90	6.25
3	(N=31) Professor / Director / Head of the Department /Principal	31.77	3.55	32.45	3.91	27.67	6.02	30.39	5.11	25.87	5.62	32.74	4.46	33.97	4.19	26.77	6.63	31.19	4.75
<b>'F' value</b>		3.437		2.876		1.758		1.836		.242		5.317		6.166		1.226		2.945	
<b>Table 'F' (0.05)</b>		3.062		3.062		3.062		3.062		3.062		4.762		4.762		3.062		3.062	
<b>P value</b>		.035		.060		.176		.163		.786		.006		.003		.297		.056	
<b>Level of significance</b>		*		NS		NS		NS		NS		**		**		NS		NS	

\* Denotes Significance at 5% level \*\* Denotes Significance at 1% level NS=Not Significant

One –way ANOVA was applied to test whether the mean scores of mentoring activities vary significantly among different designation of teachers. The results indicate that the mean scores of mentoring activities teach the job (F=3.437; P=0.035); sponsor (F=5.317; p=0.006) and career counseling (F=6.166; p=0.003) differ significantly among different designations of teachers, while provide challenge (F=2.876; p>0.05) ; teach politics (F=1.758; p>0.05); career help (F=1.836; P>0.05); protect (F=0.242; p>0.05); sponsor (F=5.317; p>0.05); friendship (F=1.226; p>0.05); and trust (F=2.945; p>0.05) do not differ significantly among the different designations of teachers .

#### Post hoc tests-LSD for Teach the job

The post hoc tests-LSD was conducted and tested at 5% level of significance following the significant results in teaching the job and is depicted in the Table 5.7.

**Table 5.7 Post hoc tests-LSD for teach the job**

(I) Designation	(J) Designation	Mean Difference (I-J)	Std. Error	P Value
Lecturer /Senior Lecturer	Associate Professor /Reader	2.3250(*)	.9262	.013
	Professor / Director / Head of the Department / Principal	.1258	1.0082	.901
Associate Professor /Reader	Lecturer /Senior Lecturer	-2.3250(*)	.9262	.013
	Professor / Director / Head of the Department / Principal	-2.1992	1.1182	.051
Professor / Director / Head of the Department / Principal	Lecturer / Senior Lecturer	-.1258	1.0082	.901
	Associate Professor / Reader	2.1992	1.1182	.051

It can be inferred from the above table that the mean scores of lecturers and senior lecturers differ significantly with the mean score of associate professors and reader and not with professor/director/ head of the department /Principal.

The mean score of associate professors and reader do not significantly differ with the mean scores of professor/director/ head of the department /principal.

### Post hoc tests-LSD for Sponsor

The Post hoc tests-LSD was conducted and tested at 5 per cent level of significance, and is depicted in the Table 5.8.

**Table 5.8 Post hoc tests – LSD for sponsor**

(I) Designation	(J) Designation	Mean Difference (I-J)	Std. Error	P Value
Lecturer / Senior Lecturer	Associate Professor / Reader	.5071	1.1670	.665
	Professor / Director / Head of the Department /Principal	-3.6848(*)	1.2702	.004
Associate Professor /Reader	Lecturer /Senior Lecturer	-.5071	1.1670	.665
	Professor / Director / Head of the Department / Principal	-4.1919(*)	1.4088	.003
Professor / Director / Head of the Department / Principal	Lecturer / Senior Lecturer	3.6848(*)	1.2702	.004
	Associate Professor / Reader	4.1919(*)	1.4088	.003

It can be inferred from the above table that the mean scores of lecturers and senior lecturers differ significantly with the mean scores of professor/director/head of the department/principal, and not with the mean scores of associate professors and readers.

The mean scores of associate professors and readers differ significantly with the mean score of professor/director/head of the department/principal.

#### Post hoc tests-LSD for career counselling

The calculated F-ratio 6.166 is greater than the table value of  $F(2,138)=4.762$ ,  $P<.01$ . The post hoc tests-LSD was conducted and tested at 5% level of significance, and the results are depicted in the Table 5.9.

**Table 5.9 Post hoc tests-LSD for Career counselling**

(I) Designation	(J) Designation	Mean Difference (I-J)	Std. Error	P Value
Lecturer / Senior Lecturer	Associate Professor / Reader	2.3464(*)	1.1449	.042
	Professor / Director / Head of the Department / Principal	-2.4963(*)	1.2462	.047
Associate Professor / Reader	Lecturer / Senior Lecturer	-2.3464(*)	1.1449	.042
	Professor / Director / Head of the Department / Principal	-4.8427(*)	1.3822	.001
Professor / Director / Head of the Department / Principal	Lecturer / Senior Lecturer	2.4963(*)	1.2462	.047
	Associate Professor / Reader	4.8427(*)	1.3822	.001

It can be inferred from the above table that the mean scores of lecturers and senior lecturers differ significantly with the mean scores of professor/director/head of the department/principal, and the mean score of associate professor and reader.

The mean scores of associate professors and readers differ significantly with the mean scores of professor/director/head of the department/principal and the mean score lecturers and senior lecturers.

The study reveals that the average score of 'sponsor', and 'career counselling' differ significantly with the designation of Teacher ( $P < .01$ ), and it is found to be high among professor/director/head of the department and principal. Similarly 'teach the job' differs significantly with the designation of teacher, ( $p < .05$ ) and it is found to be high among lecturers and senior lecturers. The study also reveals that lecturers and senior lecturers concentrated on providing challenge (32.04) followed by teaching the job (39.90) and career counseling (31.47). The associate professors and readers concentrated on providing challenge (29.75) followed by teaching the job (29.58) and career counseling (29.13) and the professors/directors/head of the department/principals concentrated providing career counseling (33.97) followed by sponsoring (32.74) and providing challenge (32.45).

The researcher has not come across studies that have employed designation as a variable. The exposure gained throughout the career span, professional contacts and varied experience gained, may have improved the teacher's attitude, knowledge, skills, and level of confidence along with change in position and acquisition of power. The senior teacher (professor /heads of the department/principal) are in a better position tending to sponsor, career counsel and provide challenging assignments to the students. While it is

very true that a novice teacher is in a exploring phase for the first five years and tries to learn more about the system prevailing and tries to acquire more knowledge by acquiring higher degree of education. A young teacher work in a structured pattern and are more involved in classroom demonstrations and lecture and hence is involved in teaching the job and with the passage of time they are likely to acquire the qualities of the experienced.

Levinson et al. (1978) reported that many of the difficulties found in the mentoring relationship were connected to the behavior of mentors. As role models, mentors are responsible for modeling professional and ethical behavior because they hold the position or power. Mentors who model ethical and professional behavior empower their protégés. As Peck (1999) stated, "Consciously or unconsciously, good mentors know that it is far more their task to empower than to teach".

### **5.3.5 Mentoring activities and teaching experience**

Mentors are traditionally defined as individuals who possess advanced experience and knowledge and are committed to providing developmental assistance to their experienced protégés. The present study tried to examine if mentoring activities initiated differ among older and experienced teachers. Table 5.10 and 5.12 depicts the comparison of mentoring activities across the teaching and industrial experience of the mentors. It was observed that teachers with above 15 years of experience were involved in helping activity (sponsoring), respondents with 10 to 15 years teaching experience focused on guiding(providing challenge) and teachers with 5 to 10 years and less than 5 years of teaching experience consider guiding(teach the job) as a prime activity.

**Table 5.10 Comparison of Mentoring activities of teachers across their teaching experience**

SI	Teaching No experience	Mentoring Activities																	
		Teach the job		Provide challenge		Teach politics		Career help		Protect		Sponsor		Career counseling		Friendship		Trust	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N=64) Upto 5 years	31.34	3.84	31.20	5.08	26.67	5.09	28.48	4.79	25.27	4.79	28.36	5.86	30.83	5.76	24.73	6.37	28.63	5.50
2	(N=31) 5-10 years	31.52	5.72	31.65	7.00	26.77	6.17	30.10	5.75	27.10	5.67	29.97	6.25	30.77	6.17	25.48	6.78	28.97	5.26
3	(N=22) 10-15 years	30.45	6.81	32.05	6.19	26.77	7.10	29.82	7.29	25.18	5.53	30.50	7.06	31.86	7.52	25.23	6.91	29.64	6.99
4	(N = 24) Above 15 years	31.17	3.37	31.50	3.97	28.92	5.76	30.67	4.90	28.04	5.77	32.33	4.55	33.04	4.61	27.33	6.44	31.25	5.69
<b>'F' value</b>		.242		.137		.960		1.235		2.203		2.800		.950		.922		1.280	
<b>Table 'F' (0.05)</b>		2.671		2.671		2.671		2.671		2.671		2.671		2.671		2.671		2.671	
<b>P value</b>		.867		.938		.414		.300		.091		.042		.419		.432		.284	
<b>Level of significance</b>		NS		NS		NS		NS		NS		*		NS		NS		NS	

\* Denotes Significance at 5% level NS=Not Significant



One –way ANOVA was applied to test whether the mean scores of mentoring activities vary significantly with the teaching experience of teachers. The results indicate that the mean score of mentoring activity ‘sponsor’ ( $F = 2.800$  ;  $p = 0.042$ ) differs significantly with the teaching experience of teachers, while teach the job ( $F = 0.242$  ;  $p > 0.05$ ) ; provide challenge ( $F = 0.137$  ;  $p > 0.05$ ) ; teach politics ( $F = 0.960$  ;  $p > 0.05$ ) ; career help ( $F = 1.235$  ;  $P > 0.05$ ) ; protect ( $F = 2.203$  ;  $p > 0.05$ ) ; career counseling ( $F = 0.950$  ;  $p > 0.05$ ) ; friendship ( $F = 0.922$  ;  $p > 0.05$ ) ; trust ( $F = 1.280$   $p > 0.05$ ) do not vary significantly with the teaching experience of teachers.

#### **Post hoc tests-LSD for sponsor**

ANOVA was applied to test whether the mean scores of mentoring activity ‘sponsor’ and teaching experience vary significantly and results showed significant results for sponsoring and the post hoc tests-LSD conducted and tested at 5 per cent level of significance and depicted in the Table 5.11.

The mean score of teachers with upto 5 years teaching experience varies significantly with teachers with more than 15 years experience and does not vary with teachers having 5-10 years and 10-15 years teaching experience.

The mean score of teachers with 5-10 years teaching experience does not vary with the mean score of teachers with 10-15 years and more than 15 years experience.

The mean score of teachers with 10-15 years teaching experience vary significantly with teachers having more than 15 years experience.

**Table 5.11 Post hoc tests-LSD for sponsor**

<b>(I) Teaching Experience</b>	<b>(J) Teaching Experience</b>	<b>Mean Difference (I-J)</b>	<b>Std. Error</b>	<b>P Value</b>
Upto 5 years	5-10 years	-1.6084	1.3026	.219
	10-15 years	-2.1406	1.4712	.148
	Above 15 years	-3.9740*	1.4248	.006
5-10 years	Upto 5 years	1.6084	1.3026	.219
	10-15 years	-.5323	1.6594	.749
	Above 15 years	-2.3656	1.6185	.146
10-15 years	Upto 5 years	2.1406	1.4712	.148
	5-10 years	.5323	1.6594	.749
	Above 15 years	-1.8333	1.7570	.299
Above 15 years	Upto 5 years	3.9740*	1.4248	.006
	5-10 years	2.3656	1.6185	.146
	10-15 years	1.8333	1.7570	.299

Kram (1985) says career function (sponsorship, exposure and visibility, coaching, protection, and challenging assignments) depends on the senior managers organizational rank, tenure and experience, while Psycho-social function (role model acceptance, confirmation, friendship, and counselling depends on the degree of trust, mutuality and intimacy that characterize the relationship.

Studies exploring the effect of tenure diversity within groups have generally found that heterogeneity with respect to tenure has resulted in compromised functioning and higher levels of turnover (Wagner et al., 1984 ; O'Reilly et al., 1989 and Jackson et al., 1991).

The present study replicates the idea of Kram that the average score of 'sponsoring activity' differ significantly with the teaching experience and it is found to be high among teachers with more than 15 years teaching experience. The study also reveals that the teachers with up to 5 years teaching experience concentrated in teaching the job (31.34) followed by providing challenge (31.20) and career counseling (30.83). Teachers with 5-10 years teaching experience were high on providing challenge (31.65) followed by teaching the job (31.52) and career counseling (30.77). Teachers with 10-15 years teaching experience concentrated on providing challenge (32.05) followed by career counseling (31.86) and sponsoring (30.50) and teachers with above 15 years teaching experience concentrated in career counseling (33.04) followed by sponsoring (32.33) and providing challenge (31.50).

### **5.3.6 Mentoring activities and industrial experience**

Comparison of mentoring activities of teachers with their industrial experience are presented in the Table 5.12.

One-way ANOVA was applied to test whether the mean scores of mentoring activities vary significantly with the Industrial experience of teachers. The results indicated that the mean score of mentoring activity teach politics ( $F = 3.335$  ;  $p = 0.039$ ) differs significantly with the Industrial experience of teachers, while teach the job ( $F = 1.687$  ;  $p > 0.05$ ) ; provide challenge ( $F = 1.239$  ;  $p > 0.05$ ) ; career help ( $F = 1.666$  ;  $P > 0.05$ ) ; protect ( $F = 2.818$  ;  $p > 0.05$ ) ; sponsor ( $F = 1.814$  ;  $p > 0.05$ ) ; career counseling ( $F = 0.267$  ;  $p > 0.05$ ) ; friendship ( $F = 1.603$  ;  $p > 0.05$ ) ; trust ( $F = 1.516$  ;  $p > 0.05$ ) do not vary significantly with the Industrial experience of teachers.

Table 5.12 Comparison of Mentoring activities of teachers across their industrial experience

Sl No	Industrial experience	Mentoring Activities																	
		Teach the job		Provide challenge		Teach politics		Career help		protect		Sponsor		Career counseling		Friendship		trust	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N=38) No experience	30.92	4.92	30.55	5.52	26.21	5.79	28.34	5.43	26.08	4.67	29.95	5.94	31.37	6.04	25.08	5.67	28.39	5.56
2	(N=39) 1-2 years	30.26	5.53	31.13	6.89	25.74	5.50	29.03	5.99	24.56	5.57	28.21	7.41	30.79	6.97	24.10	6.27	28.69	7.06
3	(N=64) Above 2 years	31.97	4.05	32.25	4.49	28.44	5.76	30.30	5.14	27.11	5.43	30.52	5.08	31.69	5.35	26.42	7.11	30.22	4.87
<b>'F' ratio value</b>		1.687		1.239		3.335		1.666		2.818		1.814		.267		1.603		1.516	
<b>Table 'F' value</b>		3.062		3.062		3.062		3.062		3.062		3.062		3.062		3.062		3.062	
<b>P value</b>		.189		.293		.039		.193		.063		.167		.766		.205		.223	
<b>Level of significance</b>		NS		NS		*		NS		NS		NS		NS		NS		NS	

\* Denotes Significance at 5% level NS=Not Significant

### Post hoc tests, Teach Politics and Industrial Experience

Post hoc tests – LSD for teach politics are presented in the Table 5.13. ANOVA was applied to test whether the mean scores of ‘teach politics’ and industrial experience vary significantly. The result showed the average score of sponsoring activity varies along with the Industrial experience. Hence the post hoc-LSD was conducted at 5 per cent level of significance.

**Table 5.13 Post hoc tests-LSD for teach politics**

(I) Industrial Experience	(J) Industrial Experience	Mean Difference (I-J)	Std. Error	P Value
No Experience	1 – 2 years	.4669	1.2981	.720
	Above 2 years	-2.2270	1.1663	.058
1-2 years	No experience	-.4669	1.2981	.720
	Above 2 years	-2.6939*	1.1569	.021
Above 2 years	No Experience	2.2270	1.1663	.058
	1 – 2 years	2.6939*	1.1569	.021

The mean score of teachers with ‘no experience’ do not differ significantly with teachers having ‘1 to 2’ years experience and above 2 years industrial experience. The mean score of teachers with ‘1-2’ years industrial experience differs with the mean score of teachers having above 2 years industrial experience and not with the mean score of teachers with ‘no experience’.

Mentoring is generally defined as an activity in which an individual with advanced knowledge or experience actively provides assistance and support to

enhance the career development of an individual with less knowledge and experience (Kram, 1985).

Fagenson-Eland et al. (1997) found that more experienced mentors (i.e., mentors involved in a greater number of mentorship) reported providing a greater degree of career related mentoring than did mentors with less experience. Cascio (1998) a mentor is a teacher advisors & a sponsor and a confidant. They understand dynamic of power and politics in the organization and are also be willing to share this knowledge with one or more hires. The mentor role is to be a culture carrier.

The average scores of the activity 'teach politics' differs significantly with the Industrial Experience of mentors and it is found to be high among teachers who had above 2 years industrial experience. It reflects mentor behaviors that help protégés understand the behavior of others, and how to avoid pitfalls. An individual with prior experience in the industry would have come across similar situation and may be the right person to teach politics. The study also revealed that teachers with no industrial experience concentrated in career counseling (31.37) followed by teaching the job (30.92) and providing challenge (30.55). Teachers with 1-2 years industrial exposures concentrated in providing challenge (31.13) followed by career counseling (30.79) and teaching the job (30.26). Teachers with above 2 years industrial experience concentrated in providing challenge (32.25) followed by teaching the job (31.97) and career counseling (31.69). Mentoring relationship vary in terms of the amount of mentoring experience possessed by the mentor, the length of the relationship and perceived similarity between mentor and protégé(Allenand Eby, 2004 ).

Further correlation among each of the nine mentoring activities (teach the job, provide challenge, teach politics, career help, protect, sponsor, career

counselling, friendship, and trust) with the overall scores of mentoring activities is depicted in Table 5.14. This values help identify which mentoring activity contributes the most towards overall scores of mentoring activities.

**Table 5.14 Relative contributions of the nine mentoring activities**

	<b>Overall Mentoring Activities Score</b>
Teach the job	.803**
Provide Challenge	.789**
Teach Politics	.742**
Career help	.827**
Protect	.646**
Sponsor	.844**
Career Counselling	.825**
Friendship	.716**
Trust	.854**

\*\* Correlation is significant at 0.01 level.

The data reveals that every mentoring activity has significant positive correlation with the overall scores of mentoring activities. The highest correlation is between trust ( $r=0.854$ ,  $p<0.01$ ) and overall mentoring activities and the least correlation is with protect ( $r=0.646$ ,  $p<0.01$ ).

#### **5.4 Personality profile of teachers and mentoring activities**

Only few studies have examined personality predictors of the willingness to mentor. According to Allen (2003) personality profile of the mentor influences the mentoring activities initiated. This segment seeks to understand the correlation between personality dimensions (neuroticism, extraversion, agreeableness, openness to experience, conscientiousness) and mentoring activities (teach the job, provide challenge, teach politics, career help, protect, sponsor, career counselling, friendship and trust). Personality dimensions and mentoring activities are depicted horizontally

and vertically along with its statistical and corresponding coefficients depicted in matrix 5.15. The correlation co-efficient reveals that personality facets like agreeableness, extraversion, conscientiousness and openness positively influence the overall mentoring activities initiated by teachers, while neuroticism negatively influences the mentoring activities initiated. The correlation between the personality facet and overall mentoring activities reveal that the highest correlation is between the personality facet extraversion and overall mentoring activities ( $r=0.381$ ;  $p=0.00$ ) followed by conscientiousness and overall mentoring activities ( $r= 0.346$ ;  $p=0.000$ ).

Significant positive correlation was detected between personality factors and subscales of mentoring activities. The highest correlation is found between agreeableness and sponsor ( $r=0.402$ ;  $p=0.000$ ); similarly between extraversion and teach the job ( $r=0.387$ ;  $p=0.000$ ) followed by extraversion and sponsor ( $r=0.380$ ;  $p=0.000$ ). The correlation between conscientiousness and career counseling was ( $r=0.374$ ;  $p=0.000$ ), followed by conscientiousness and teach the job ( $r=0.366$ ;  $p=0.000$ ). It was observed that there existed a positive correlation between openness and provide challenge ( $r=0.304$ ;  $p=0.000$ ) followed by openness and career counseling ( $r=0.291$ ;  $p=0.000$ ). Negative correlation was found between personality facet neuroticism and mentoring activities, the highest negative correlation was found to exist between neuroticism and sponsor ( $r=-0.319$ ;  $p=0.000$ ) followed by neuroticism and teach the job ( $r=-0.288$ ;  $p=0.001$ ).



**Table 5.15** Correlation between Personality dimension and Mentoring Activities

	Teach the job	Provide Challenge	Teach Politics	Career help	Protect	Sponsor	Career Counselling	Friendship	Trust	Overall Mentoring Activities Score
Neuroticism	-.288**	-.276**	-.140	-.223**	-.087	-.319**	-.271**	-.202*	-.256**	-.293**
Extroversion	.387**	.350**	.226**	.229**	.144	.380**	.300**	.341**	.316**	.381**
Openness	.183*	.304**	.154	.206*	.185*	.234**	.291**	.169*	.289**	.286**
Agreeableness	.278**	.255**	.074	.178*	.029	.402**	.299**	.128	.338**	.282**
Conscientiousness	.366**	.287**	.284**	.312**	.124	.349**	.374**	.136	.224**	.346**

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Judge et al. (2002) found that extraversion, conscientiousness, and openness to experience were strong predictors of leadership effectiveness, while neuroticism had a negative relationship. Niehoff (2006) explored the degree of correlation between dimensions of personality and the individual's voluntary participation as a mentor and the findings suggested that those who often participate as mentors are likely to be extraverted, conscientious and open to new experience. His study also found a negative correlation with neuroticism, which was marginally significant ( $P < 0.10$ ) but not significant at a more rigid statistical threshold.

Lima (2004) says people who are high on openness to experience (characterized by curiosity imagination, creativity and originality) may provide better ideas to improve protégés' career, and those high on neuroticism (anxiety, nervousness and insecurity) may be less confident in interacting with their protégé. Hence he says people high on openness and low on neuroticism prove to be effective mentors.

Extraverts are generally positive, social, energetic, joyful and interested in other people (Costa and McCrae, 1992) and Ryan (1995) is of the opinion that extraverted individuals tend to engage in these type of behaviour due to a desire to help others or have altruistic tendencies. Lima (2004) perceives that mentors who are high on openness to experience or its facets may be more open-minded with regard to exploring new ideas with their protégé and will share a broader spectrum of experience with their protégé than would those who are low on this trait. According to Le Pine and Van Dyne (2001) highly conscientious people were hardworking, achievement oriented and perseverant and they tend to do what needs to be done to accomplish work. Many studies reveal that people high on conscientiousness tend to be more successful at a variety of tasks due to their persistence, self discipline and achievement orientation.

One of the major objectives of the present study was to bring out the implications of the personal profile (socio-demographic background and personality facets) of teachers on the mentoring activities. An hypothesis was proposed as an answer to the objective and is as follows:

H1 Personal profile attributes of teacher mentors correlate with and influence significantly the extent of mentoring activities carried out in B-schools.

The proposed hypothesis was accepted and it reveals that teaching the job ( $p < .035$ ), sponsoring ( $p < .006$ ), and career counselling ( $p < .003$ ) vary significantly among designation of teachers (refer table 5.6, pg 166). Similarly sponsoring ( $p < .042$ ) (mentoring activity) vary significantly across the teaching experience of teachers (refer table 5.10, pg 172) and teaching politics ( $P < .039$ ) mentoring activity varies significantly across the industrial experience of teachers. The study also revealed that personality facets like agreeableness, extraversion, conscientiousness and openness positively influence the mentoring activities initiated. While neuroticism negatively influences the mentoring activities initiated (refer matrix 5.15, pg 181).

A stepwise linear regression was further carried out to find the exact effect of several socio-demographic variables of age, sex, education, designation, teaching experience, industrial experience, formalisation of mentoring (mentoring and non-mentoring) and personality dimensions of neuroticism, extraversion, openness, agreeableness, conscientiousness on the mentoring activities (dependent variable), and the results are furnished below.

The stepwise approach starts with estimating coefficients of each of the predictor variables (independent variables) by first including the variable which had the maximum correlation with the dependent variable (mentoring activities). This is also based on a selection criteria to include it in the model.

Usually the F-ratio of 3.84 with an associated probability of F-to enter into the equation is kept as 0.05 or less for inclusion criteria. Once the variable is included then again it is considered for removal from the equation to avoid multi collinearity problems (correlation between independent variables). Here the removal criterion is set as  $F = 2.71$  and probability of F to remove is 0.10. This level is maintained so that all the variables that are included are not again considered for removal. Once the variable enters and remains in the equation then the next variable with the highest positive/negative partial correlation with the dependent variable is selected and considered for entry into the equation which satisfied the inclusion criteria. Then the variable added to the equation is also checked for removal. This process continues until among the selected variables those variables which satisfy the entry and removal are included in the equation. None of the socio-demographic variable was accepted by the regression procedure for want of adequate F ratio value. Finally a reduced set of independent variable were included in the regression model and the results are depicted in Table 5.16.

**Table 5.16 Regression analysis on overall mentoring activities score**

	<b>Regression Coefficients (B)</b>	<b>Std. Error</b>	<b>t</b>	<b>Sig.</b>	<b>P Value</b>	<b>Partial Correlation</b>
(Constant)	34.493	32.411				
Extraversion	1.592	.531	2.998	**	.003	.248
Openness	2.164	.564	3.838	**	.000	.312
Conscientiousness	1.720	.493	3.492	**	.001	.286

<b>R</b>	<b>R Square</b>	<b>F</b>	<b>Sig.</b>	<b>P Value</b>
.519	.270	16.876	**	0.001

It is seen that the regression coefficients of the (predictor variables) extraversion, openness and conscientiousness included in the model have positive effect on the mentoring activities, with a significance level of  $P < 0.05$  or  $P < 0.01$ . For example, on an average the mentoring activity score increases by about 1.592 percent when the extraversion score increases by 1 per cent, significant at  $P = 0.003$ . Similarly, the mentoring activities scores increase by 2.164 percent when the score of openness increases by 1 per cent,  $P = 0.000$  and the mentoring activities score increases by 1.720 percent when the conscientiousness score increases by 1 per cent,  $P = 0.001$ . The regression model indicates that these three variables significantly contribute to mentoring activities positively.

The R-squared value explains the goodness of fit of the model, the value 0.270 indicates that 27 per cent of variation in the mentoring activities scores are influenced by the combined effect of the three variables. Multiple Correlation Coefficient is found to be significant at ( $P = 0.001$ ) as tested by the F-ratio value of 16.876.

The results obtained from the present study by using step wise regression reveals that extraversion, openness and conscientiousness contribute positively towards the mentoring activities initiated by the teachers. It is similar to the findings observed by Niehoff (2006). It can be inferred from the findings that teachers in management institutions in Kerala are generally enthusiastic, interested in helping their protege (student) develop open mindedness and willing to explore the challenges in the business environment. They assign challenging assignments to the students and are willing to work alongside their protégé towards accomplishing these challenging assignments. The results are convincing and reveal the ideal personality traits required of a teacher mentor in a management institution.

## **5.5 Mentoring activities across institutional type**

Comparison of the pattern of appreciation towards mentoring activities across teachers belonging to mentoring and non-mentoring institutions were resorted to bring out the variations, if any, that might prevail among the two categories. Data were cross tabulated to bring forth the relative differences and test the second hypothesis suggested as part of the research problem and is cited as follows:

H2. The nature and extent of mentoring activities vary among B-schools as they vary in formalisation of mentoring.

Teachers, notwithstanding differences in their institutional approach towards mentoring, seem to be equally aware and appreciative of the value of each of the mentoring activities. They are almost similar, in average, terms as regards their appreciation towards the activities. A closer perusal of Table 5.17 reveals that teachers in mentoring institutions are more appreciative of all the guiding activities as compared to those from the non-mentoring institutions. Similar is the position with regard to career help and career counseling.

But teachers from non-mentoring institutions displayed greater appreciation in average values than those belonging to the mentoring institutions in cases of two guiding activities and three encouraging activities. The extent of these greater or lesser appreciations among the two categories of teachers with respect to each of the mentoring activities was only marginal and not substantial.

**Table 5.17** Comparison of Mentoring activities of teachers across type of institution

SI No	Type of institution	Mentoring Activities																	
		Teach the job		Provide challenge		Teach politics		Career help		Protect		Sponsor		Career counseling		Friendship		Trust	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N=83) Mentoring	31.72	4.97	32.39	5.60	27.31	6.39	29.77	5.62	25.86	5.43	29.59	5.92	31.49	6.33	24.88	6.73	28.82	5.87
2	(N=58) Non Mentoring	30.48	4.36	30.19	5.21	26.78	4.83	28.91	5.30	26.52	5.26	29.91	6.31	31.16	5.50	26.19	6.26	30.00	5.55
<b>'t' value</b>		1.532		2.359		.541		.912		.722		.311		.330		1.170		1.201	
<b>Table 't' (0.05)</b>		1.977		1.977		1.977		1.977		1.977		1.977		1.977		1.977		1.977	
<b>P value</b>		0.128		0.020		0.589		0.363		0.472		0.757		0.742		0.244		0.232	
<b>Level of significance</b>		NS		*		NS		NS		NS		NS		NS		NS		NS	

\* Denotes Significance at 5% level; NS=Not Significant

t-test was applied to find whether the average scores of mentoring activities differ significantly between mentoring and non-mentoring institutions. The results indicated that the average scores of mentoring activity, provide challenge ( $t = 2.359$ ;  $p = 0.020$ ) was the only activity that varied significantly between teachers working in mentoring and non-mentoring institutions. The average score of mentoring activity, teach the job ( $t = 1.532$ ;  $p > 0.05$ ) does not vary significantly between teachers working in mentoring and non-mentoring institutions. Similarly the average scores of mentoring activities teach politics ( $t = 0.541$  ;  $p > 0.05$ ) ; career help ( $t = 0.912$  ;  $p > 0.05$ ) ; protect ( $t = 0.722$  ;  $p > 0.05$ ) ; sponsor ( $t = 0.311$  ;  $p > 0.05$ ) ; career counseling ( $t = 0.330$  ;  $p > 0.05$ ) ; friendship ( $t = 1.170$  ;  $p > 0.05$ ) and trust ( $t = 1.201$  ;  $p > 0.05$ ) do not vary between teachers working in mentoring and non-mentoring institutions.

Hence it can be concluded that the hypothesis ‘the nature and extent of mentoring activities vary among B-schools as they vary in the formalisation of mentoring,’ resulted in partial acceptance and was true with statistical significance only in case of ‘provide challenge’. The average score of ‘Provide challenge’ differs significantly with the type of institution and is significantly high among mentoring institutions. This implies that teachers in mentoring institutions delegate and give responsibility to protégés, encourage protégé to take risks, assume initiative, and take up challenging tasks. Convincingly teachers in mentoring institutions were found to be better providers of challenging assignments which may help their protégés cope up with real time business problems. At the same time though not scientifically significant it was also noticed that the average score of mentoring activities teach the job, teach politics, career help, and career counseling was slightly higher when compared to the average score of non-mentoring institutions.



Inferences from data analysis and their discussions so far have led to interesting insights into socio-demographic variables and personality profile of teachers on the nature and extent of mentoring activities initiated by the teacher mentors. The task that now remains to be explored is the relationship between mentoring activities initiated by the teachers and effectiveness of mentoring. Having finished the initial stage, the research agenda now unfolds into its fuller and more promising realms.

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## Effectiveness of Mentoring

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<b>C</b> <b>a</b> <b>n</b> <b>t</b> <b>e</b> <b>n</b> <b>t</b> <b>s</b>	6.1 Assessment of mentoring effectiveness
	6.2 Effectiveness of Mentoring
	6.3 Evaluation of the dimensions of effective mentoring
	6.4 Mentoring Activities and Effectiveness of Mentoring
	6.5 Effectiveness of mentoring and type of institution

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Cohen (1993) is of the opinion that protégé mentoring programs in higher education have been evaluated considerably, while the professional obligation of faculty mentors to evaluate their own adult mentoring competencies needs to be fulfilled to reveal faculty mentor effectiveness in mentoring relationships in higher education. Allen and Poteet (1999) reveal that qualities of trust, open communication, setting standards and expectations mostly influenced the effectiveness of mentoring. Research is further required to examine and determine the important factors or variables that influence effectiveness of mentoring based on mentor and protégé reports. This could be assessed by measuring the overall quality and outcomes associated with the relationship.

The principles of Adult mentoring scale was developed by Norman H. Cohen in 1993 for assessing the behavioral mentoring functions, advocated by prominent adult education scholars to be of significance, in the relationship between mentors and their protégés.

## **6.1 Assessment of mentoring effectiveness**

The instrument that included six behavioral subscales (Galbraith and Cohen, 1995) comprising 1) relationship emphasis, 2) information emphasis, 3) confrontive focus, 4) facilitative focus, 5) mentor model, and 6) student vision is described below along with the norms for classification.

### **Relationship emphasis**

This function involves active empathetic listening, a genuine understanding and acceptance of protégés feelings which creates trust between the mentors and protégés. The statements representing relationship emphasis is reflected in Inventory III [Items: 1, 5, 7, 12, 13, 23, 42, 44, 47, 53].

### **Informative emphasis**

This function is involved in gathering detailed information and better understanding of the strength and weakness of the protégé which helps the mentor offer appropriate advice and suggestions required for protégés advancement in career. The statements representing information emphasis is reflected in Inventory III [Items: 3, 4, 6, 9, 10, 11, 19, 24, 40, 52].

### **Facilitative focus**

This function involves in – depth exploration of the protégé interests, abilities, ideas and beliefs. The purpose is to assist protégés in considering alternatives and options while reaching their own decisions about attainable personal, academic and career objectives. The statements representing facilitative focus is reflected in Inventory III [Items: 14, 22, 25, 34, 39, 49].

### **Confrontive focus**

This function involves respectfully challenging protégés explanations for or avoidance of decisions and actions relevant to their development as adult

learners. This is to help protégés attain insight into unproductive strategies, behavior and to evaluate their need and capacity to change. The statements representing confrontive focus is reflected in Inventory III [Items: 8, 16, 18, 21, 27, 31, 33, 37, 43, 46, 48, 51].

### **Mentor model**

The mentor reveals his own life experiences and feelings as a role model to the protégés in order to personalize and enrich the relationship. The purpose is to motivate protégés to take necessary risks and to overcome difficulties in their own journeys towards educational and career goals. The statements representing mentor model is reflected in Inventory III [Items: 2, 28, 29, 32, 36, 41].

### **Student vision**

The mentor stimulates the protégés to critically think about the future career, help understand his latent and potential skills. The purpose is to inculcate initiative in managing their transitions through life events as independent adult learners. The statements representing students vision is revealed in Inventory III [Items: 14, 17, 20, 26, 30, 35, 38, 45, 50, 54, 55]

The norms for interpreting the mentor role competencies into not effective, less effective, effective, very effective and highly effective categories are depicted below. The given norms have been certified to be culture free by the authors and hence were adopted as such for the study.

**Exhibit 6.0 Norms for mentor role competencies**

Overall Scores				
55-190	191-205	206-219	220-234	235-275
Not Effective	Less Effective	Effective	Very Effective	Highly Effective
Relationship Emphasis				
10-35	36-38	39-41	42-41	45-50
Not Effective	Less Effective	Effective	Very Effective	Highly Effective
Information Emphasis				
10-33	34-36	37-39	40-42	43-50
Not Effective	Less Effective	Effective	Very Effective	Highly Effective
Facilitative Focus				
6-18	19-20	21-22	23-24	25-30
Not Effective	Less Effective	Effective	Very Effective	Highly Effective
Confrontive Focus				
12-39	40-43	44-46	47-50	51-60
Not Effective	Less Effective	Effective	Very Effective	Highly Effective
Mentor Model				
6-18	19-21	22-23	24-25	26-30
Not Effective	Less Effective	Effective	Very Effective	Highly Effective
Student Vision				
11-37	38-41	42-44	45-47	48-55
Not Effective	Less Effective	Effective	Very Effective	Highly Effective

**Source:** Cohen (1995).

## **6.2 Effectiveness of mentoring**

One of the major objectives of the present study is to ascertain the effectiveness of teachers initiated student mentoring in B- schools. The mentoring model of learning is usually initiated to increase the mentees in development of competences and options (Cohen, 1999). The mentor assumes responsibility that is similar to the traditional profile of the fully engaged adult educator. A successful mentor employs six behavioural dimensions that contribute to the effectiveness of mentoring. Effectiveness of mentoring is explained in terms of relationship emphasis, informative emphasis, facilitative focus, confrontive focus, mentor model and student vision.

The Table 6.1 reveals the classification of teacher mentors into varying categories based on the degree of their mentoring effectiveness drawn from the their self-appraisals as well as the inverted appraisals of the protégés. The overall mean score of 209.17 offered by the teachers about their own effectiveness of mentoring reveals that the teachers generally evaluated themselves as falling on to the positive side of the continuum of mentoring effectiveness, based on the [culture free] norms of interpretation provided by the author. On amplification, it can be seen from the table that 59.6 per cent of teachers evaluated themselves as effective while 40.4 per cent accepted themselves to be less effective. A striking anomaly becomes evident when the comparative scores offered by the student mentees are considered. The students granted only a lower overall score of 170.25 thereby pulling down the teachers generally into the ‘not effective’ side of the mentoring effectiveness scale. 85.6 per cent of the students in B-schools were not prepared to accept teaches to be effective mentors. Only 14.4 per cent of the students consider their teachers to be effective as their mentors.

**Table 6.1 Teacher-students' evaluation of overall effectiveness of mentoring**

Overall score on Effectiveness of Mentoring	Teacher			Student		
	No.	Per cent	Mean	No.	Per cent	Mean
Range						
Not Effective (55-190)	34	24.1	209.17	246	77.4	170.25
Less Effective (190 - 205)	23	16.3		26	8.2	
Effective (206 - 219)	30	21.3		24	7.5	
Very Effective (219 - 234)	24	17.0		12	3.8	
Highly Effective (234 - 275)	30	21.3		10	3.1	
Total	141	100.0		318	100.0	

In a study conducted by Jadwick (1997), it was reported that the perception of faculty mentors and student protégé varied in their mean score on all the dimensions of effectiveness of mentoring and it was generally inferred that the faculty were effective, while the present study reveals that the faculty mentors and student protégé drastically differ in their mean score on all the dimensions ( relationship emphasis, information emphasis, facilitative focus, confrontive focus, mentor model and student vision) of effectiveness of mentoring. The perception difference could have occurred because the students were not in a position to understand the initiatives taken by the faculty due to lack of awareness. The researcher also observed that none of the institutions which had formal mentoring programme had proper orientation or training for the faculty or the students.

### **6.3 Evaluation of the dimensions of effective mentoring**

One of the strongest desires that MBA students express, regardless of race gender, age, socio economic background, or specialization is to obtain more effective learning that brings about their personal and professional

development. In the present study effectiveness of mentoring was measured using principles of adult mentoring scale. Data were collected from both teachers and students using separate versions of the instrument namely, Mentor Version for teachers and Protégé Version for students. Two comparable data sets were generated to fulfill the purpose of cross verification. The table below depicts the data elicited through teachers' self – evaluation as against students' inverted perception for all the six behavioral dimensions (relationship emphasis, information emphasis, confrontive focus, facilitative focus, mentor model and student vision).

### **6.3.1 Relationship emphasis**

Mentoring is a journey mentors and protégés embark on together and it gets started with the initial groundwork of building relationship between the mentor teachers and the student protégé. This is an exploration phase where the mentor through active and empathetic listening develops genuine understanding of the protégés expectation and interest. Together they identify their mutual interest and expectation. This phase ends up, building trust between the mentor and protégé.

The Table 6.2 reveals the data related to teacher's self-evaluation on relationship dimension and the student perception of the relationship dimension. It can be inferred that 57.4 per cent [effective (25.5%) + very effective (12.8%) + highly effective(19.1%)] of the teacher mentors in the B-schools were found to be more than effective in providing relationship dimension while 42.5 per cent [less-effective (24.1%) + not-effective (18.4%)] were found to be less effective. The students perceived 82.7 per cent [less effective (8.8%) + not effective (73.9%)] of the teacher mentors were not effective in the relationship dimension, while 17.3 per cent students [effective



(10.4%) + very effective (4.7%) + highly effective (2.2%)] found the teachers to be effective on the dimension.

**Table 6.2 Relationship emphasis as perceived by teachers and students**

Relationship Emphasis	Teacher			Student		
	Range	No.	Per cent	Mean	No	Per cent
Not Effective (10-35)	26	18.4	39.16	235	73.9	31.61
Less Effective (35 - 38)	34	24.1		28	8.8	
Effective (38 - 41)	36	25.5		33	10.4	
Very Effective (41 - 44)	18	12.8		15	4.7	
Highly Effective (44 - 50)	27	19.1		7	2.2	
Total	141	100.0		318	100.0	

The faculty mentors' mean score (39.16) reveals that the teachers considered themselves to be effective and the protégés' mean score (31.61), indicates that students perceive their teachers as not effective. The teachers' rating has been commented in accordance with Cohen's mentor role competency score range of 38-41 considered to be adequate to deem effectiveness for the relationship emphasis.

Jadwick (1997) reported in a similar study that the faculty mentors and protégés had similar perceptions and both the perceptions fell within Cohen's competency score range of 39-41 considered to be the reflection of effectiveness. The students had in fact rated their faculty better than the mentors' self ratings.

The present study reveals that the students varied in their perception in the sense that they under rated their faculty and thus the results were contradictory to the findings of Jadwick on the dimension under discussion.

The extent to which the mentor and protégé communicate with one another is an important aspect of the relationship dimension as both mentors and protégés tend to use their relationship as a safe haven for gathering information (Hunt and Micheal, 1983; Ostroff and Kozlowski, 1993; Mullen, 1994; Ensher and Murphy, 1997 and Lankau and Scandura, 2002).

### **6.3.2 Information emphasis**

In the second phase of an effective mentoring relationship mentors were involved in gathering in depth information from the protégés. This enables the mentor understand the goals and desires of the protégé and provide suitable suggestions and alternatives for accomplishing his personal, educational and career goals.

The Table 6.3 reveals that the data related to teacher's self-evaluation on information emphasis and perception of students towards teacher's information emphasis. It can be inferred that 63.1 per cent of the teacher mentors in B-schools were found to be more than effective in providing information emphasis, while 36.9 per cent were found to be less effective. The student perceived that 83.9 per cent of their teacher mentors in B-schools were not effective in providing information emphasis, while 10.7 per cent of the students found teachers to be more than effective. The faculty mentors mean score is 37.84 and the student protégés' mean score is 30.92.

The findings of the present study revealed that the faculty mentors mean score and the protégé mean score differed widely. The faculty mentors mean score (37.84) is considered as effective according to Norman Cohen's mentor role competency norm range (36-39) considered to be effective score range for information emphasis. The student protégés' mean score was 30.92 and it can be inferred that students perceived their teachers as not effective.

**Table 6.3 Information emphasis as perceived by teachers and students**

Information Emphasis Range	Teacher			Student		
	No.	Per cent	Mean	No.	Per cent	Mean
Not Effective (10-33)	30	21.3	37.84	217	68.2	30.92
Less Effective (33-36)	22	15.6		50	15.7	
Effective (36-39)	25	17.7		25	7.9	
Very Effective (39-42)	33	23.4		11	3.5	
Highly Effective (42-50)	31	22.0		15	4.7	
Total	141	100.0		318	100.0	

The results of the study conducted by Jadwick (1997) in her study found that the faculty mean score is 35.06 and the protégé mean score (39.23) revealed varied perceptions, however the faculty mentor mean score was considered effective, while the protégé perception is considered as less effective mean score when compared with Cohen's mentor role competency range (37-39). It can be inferred that the results of the present study is not in agreement with the findings of the previous study.

### 6.3.3 Facilitative focus

The term facilitation in mentoring primarily refers to the exploration of a mentees personal and professional interest, abilities, and beliefs. The mentors suggest suitable alternatives and allow the protégés to examine alternatives and take their own decisions. Mentees are essentially asked to move out of their comfort zone and explore new challenges.

The Table 6.4 reveals the data related to teacher's self-evaluation on facilitative focus and the students perception towards teachers facilitative

focus. It can be observed that 75.9 per cent of the teacher mentors in B-schools were found to be more than effective in providing facilitative focus, while 24.1 per cent were found to be less effective. 69.8 per cent of the students perceived teacher mentors in B-schools to be not effective in providing facilitative focus, while 30.2 per cent of the students found their teachers to be effective.

Jadwick (1997) in her study reveal that the faculty mean score for facilitative focus was 21.65 and the protégé mean score was 21.91. The scores fell within Cohen's mentor role competency score range (21-22) considered as effective. The present study revealed that the faculty mentor's mean score (22.64) is considered as very effective according to Cohen's competency ranges for the facilitative focus. The student protégés mean score (18.29) reveals that students perceive their teachers as not effective on facilitative focus. The findings of the present study were not in parity with the study of Jadwick.

**Table 6.4 Facilitative focus as perceived by teachers and students**

Facilitative Focus Range	Teacher			Student		
	No.	Per cent	Mean	No	Per cent	Mean
Not Effective (6-18)	18	12.8	22.64	161	50.6	18.29
Less Effective (18 - 20)	16	11.3		61	19.2	
Effective (20 - 22)	28	19.9		44	13.8	
Very Effective (22 - 24)	33	23.4		32	10.1	
Highly Effective (24 - 30)	46	32.6		20	6.3	
Total	141	100.0		318	100.0	

### 6.3.4 Confrontive focus

In this phase the mentor is involved in providing insights into unproductive strategies and behaviour elicited by the protégé. The mentor ‘confronts’ by guiding and supporting the protégé in the critical act of self- reflection and respectfully challenges explanation for or avoidance of decision and action relevant to their development as adult learners.

The Table 6.5 reveals the data related to teacher’s self evaluation on confrontive focus and the student perception towards teachers confrontive focus. The results revealed that 56.7 per cent of the teacher mentors in the B-schools were found to be more effective in providing information emphasis, while 43.3 per cent were found to be less effective. 84.3 per cent of the students perceived the teacher mentors in B-schools were not effective in providing confrontive focus, while 15.7 per cent found their teachers to be effective.

**Table 6.5 Confrontive focus as perceived by teachers and students**

Confrontive Focus Range	Teacher			Student		
	No.	Per cent	Mean	No.	Per cent	Mean
Not Effective (12-39)	35	24.8	44.33	221	69.5	35.93
Less Effective (39 - 43)	26	18.4		47	14.8	
Effective (44 - 46)	23	16.3		25	7.9	
Very Effective (46 - 50)	25	17.7		15	4.7	
Highly Effective (50 - 60)	32	22.7		10	3.1	
Total	141	100.0		318	100.0	

According to a study conducted by Stoner (1996) concerning behaviour of adult educators from continuing education, higher education, business and industry showed scores for less effective, respectively 42.15 and (43.09) in the confrontive focus behaviour. This was similar in case of the study reported by Jadwick (1997), the faculty mean score 43.06 and the protégé mean score 43.18 revealed very similar perceptions. The scores fell below Cohen's mentor model competency range. The present study revealed that the faculty mentors mean score is 44.33 and student protégés mean score is 35.93. The teachers self-evaluation rating is considered as effective according to Cohen's mentor role competency norm (44-46) considered to be effective score range for confrontive focus while the student rating was much lower the norms. The study contradicts the results of both the previous researchers. According to Cohen (1995) an acceptable confrontive score may sometimes suggest that a mentor has a tendency to remain in the comfort zone of adequate confrontational behaviour and avoid the discomfort often associated with the upper ranges of appropriately confrontive mentor-mentee interactions. Cohen (1993) adds that confrontive focus principle respectfully challenges the student explanation for or avoidance of decisions and actions relevant to development as adult learners. According to Galbraith (1991) a true adult learning transactional process engenders three types of risk- taking: the risk of commitment, the risk of confrontation, and the risk of independence.

### **6.3.5 Mentor model**

This idea of mentor model refers to the capacity of a mentor seen as traditional role model. In the phase the mentor shares his/ her life experiences and feelings as role model to protégé in order to personalise and enrich the relationship.

The Table 6.6 reveals the data related to teacher's self-evaluation of mentor model and the students perception towards teachers role as a mentor model. It is evident that 73.8 per cent of the teacher mentors in B-schools evaluated themselves as more than effective in being mentor model, while 26.2 per cent were found to be less effective. The students perceived that 67.6 per cent of the teacher mentors in B-schools were not effective mentor models, while 32.4 per cent students found teachers to be effective.

**Table 6.6 Mentor model as perceived by teachers and students**

Mentor Model Range	Teacher			Student		
	No.	Per cent	Mean	No	Per cent	Mean
Not Effective (6-18)	18	12.8	23.18	138	43.4	19.34
Less Effective (18 - 21)	19	13.5		77	24.2	
Effective (21 - 23)	34	24.1		46	14.5	
Very Effective (23 - 25)	30	21.3		34	10.7	
Highly Effective (25 - 30)	40	28.4		23	7.2	
Total	141	100.0		318	100.0	

Jadwick (1997) from her study revealed that mentor mean score (22.94) and the protégé mean score (24.18) revealed similar perception resulting in a very effective mean score when compared with the mentor role competency score range (22-23) considered to be effective for mentor model. According to the present study faculty mentors mean score (23.18) was considered as effective according to Norman Cohen's mentor role competency range (22-23) considered to be an effective score range for mentor model. While the protégé mean score (19.34) was much lower than the range prescribed by Cohen. This clearly indicates that the study contradicts with the findings of Jadwick.

**6.3.6 Student vision**

Student vision usually associated with the final phase of mentor- protégé involvement. It is the act of stimulating the protégés critical thinking with regard to envisioning their own future and developing their personal and professional potential.

The Table 6.7 reveals the data related to teacher's self-evaluation of student vision and the students perception towards teacher's student vision. It can also be inferred that 56.8 per cent of the teacher mentors in B-schools were found to be more than effective in providing student vision while 43.3 per cent were found to be less effective. The students perceived that 83.1 per cent of the teacher mentors in B-schools were found to be not effective in providing student vision, while 16.9 per cent found teachers to be effective. The student protégés mean score was 34.17, this predicts that the students underrated their faculty and perceived their teachers to be not effective.

**Table 6.7 Student vision as perceived by teachers and students**

Student Vision Range	Teacher			Student		
	No.	Per cent	Mean	No	Per cent	Mean
Not Effective (11-37)	32	22.7	42.03	219	68.9	34.17
Less Effective (37 - 41)	29	20.6		45	14.2	
Effective (41 - 44)	30	21.3		29	9.1	
Very Effective (44 - 47)	22	15.6		14	4.4	
Highly Effective (47 - 55)	28	19.9		11	3.5	
Total	141	100.0		318	100.0	

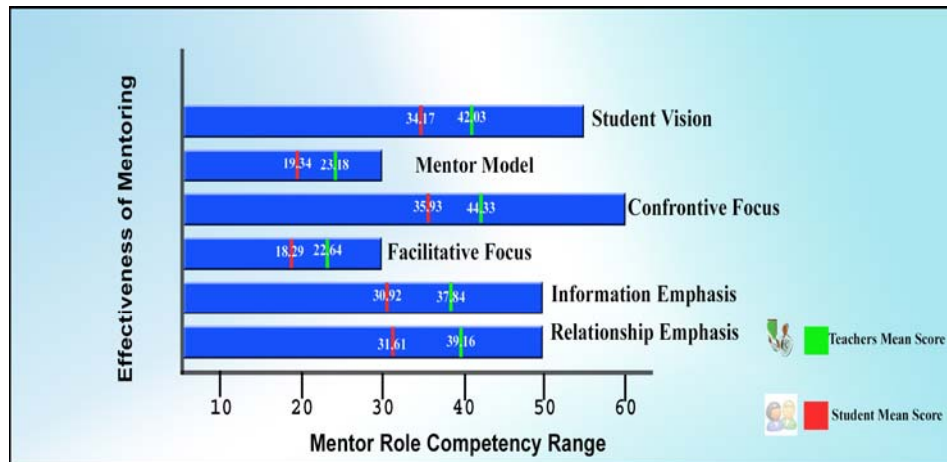
According to the findings of Jadwick (1997) the faculty mentor mean score (41.06) and the protégé mean score (43.09), revealed similar



perceptions. The results of the present study seemingly disagree with the findings of Jadwick. The present study revealed that faculty mentors mean score (42.03) was considered to be an effective score according to Norman Cohen’s mentor role competency range (41-44). The student protégés mean score (34.17) varied widely from that of the teachers and implies that the students perceived them as not effective.

Further, it was also obvious in the earlier section that the mean scores of faculty mentors and student protégés diverged to a great extent indicating an upward (probably a self serving) bias in the ratings of the faculty as against a discernible underrating by the students. This divergence in the evaluations is illustrated in the pictorial graph.

**Figure 6.1 Divergence in the evaluations on effectiveness of mentoring**



Student’s scores on effectiveness of mentoring were much lower than that of teachers. The upward bias in faculty self evaluations was eliminated by way of a correctional factor for all the 141 teachers and the corrected scores were used for all the further analyses. The formula for arriving at the corrected scores is explained in the exhibit below.

**Exhibit 7.0 Formula for Corrected scores for effective mentoring**

For every dimension, the corrected score =  $X_i/Y_i$  \* raw score where  $X_i/Y_i$  is the correction factor for each institution.

$X_i$  is the student mean score of the  $i^{th}$  institution ( $i = 1, 2 \dots 19$ ) for each dimension;

$Y_i$  is the faculty mean score of the  $i^{th}$  institution ( $i = 1, 2 \dots 19$ ) for each dimension.

Raw score is the actual response score marked by the respondent teacher against each statement item in PAMS (Teacher version).

*For example,*

The actual score (raw score) of a faculty in Relationship Dimension for the first institution = **46**,

The mean score of Relationship Dimension for the first institution for students = **35.13** ( $X_i$ )

The mean score of Relationship Dimension for the first institution for faculty = **38.20** ( $Y_i$ )

**Corrected score** =  $(35.13/38.20) * 46 = 42.30$ .

The correlations of each of the six dimensions of effectiveness of mentoring with the overall scores of effectiveness to indicate their criterion value is depicted in table 6.8. The values help identify the extent of effectiveness borne out by each of the dimensions.

**Table 6.8 Relative contributions of the dimensions of effective mentoring**

Dimensions	Overall score on Effectiveness of mentoring
Relationship Dimension	.945**
Information Emphasis	.916**
Facilitative Focus	.917**
Confrontive Focus	.955**
Mentor Model	.895**
Student Vision	.969**

\*\* Correlation is significant at the 0.01 level.

It can be inferred from the above table that there is a very strong correlation between the independent scores of each of the six dimensions and the overall score of effectiveness of mentoring. The highest correlation is between student vision ( $r = 0.969$ ,  $p < 0.01$ ) and overall score of effectiveness of mentoring and the low correlation is between mentor model ( $r = 0.895$ ,  $p < 0.01$ ) and overall effectiveness of mentoring.

#### **6.4 Mentoring activities and effectiveness of mentoring**

Teacher mentors initiate mentoring activities within the given context of the faculty environment in order to contribute to the students' personal and professional development. Regardless of the formalisation of mentoring in the school, it is important to have a mix of activities that support the cherished goals and encourage the interventions. Alleman and Clarke (2002) hold that mentors use a set of specific, identifiable and measurable activities that are multi-faceted, containing three primary human processing activity categories of guiding, helping and encouraging. These activities have been taken to constitute the throughput component in the conceptual system canvass adopted for the study. The perspective makes it necessary to explore and locate the possible linkage between the mentoring activities and the output variable of effectiveness of mentoring.

This part of the analysis seeks to understand the correlation between mentoring activities (teach the job, provide challenge, teach politics, career help, protect, sponsor, career counselling, friendship and Trust) and Effectiveness of mentoring (relationship dimension, information dimension, facilitative focus, confrontative focus, mentor model and student vision). Results of the correlation analysis and the corresponding significant levels of the correlation coefficients have been depicted in the table 6.9. The correlation matrix with its statistical contents was

drawn up primarily to test the third research hypothesis suggested as part of the research study. The cited hypothesis reads thus:

**H3** The mentoring activities, severally and collectively, correlate positively and significantly with the effectiveness of mentoring

**Table 6.9 Correlation between mentoring activities and effectiveness of mentoring**

	Relationship Dimension	Information Emphasis	Facilitative Focus	Confrontative Focus	Mentor Model	Student Vision	Overall score on Effectiveness of Mentoring
Teach the job	.524**	.545**	.485**	.504**	.497**	.518**	.549**
Provide Challenge	.514**	.510**	.534**	.542**	.513**	.520**	.556**
Teach Politics	.290**	.304**	.318**	.304**	.338**	.293**	.326**
Career help	.396**	.430**	.437**	.450**	.435**	.460**	.464**
Protect	.261**	.276**	.221**	.336**	.282**	.277**	.300**
Sponsor	.416**	.418**	.446**	.379**	.397**	.440**	.442**
Career Counselling	.524**	.499**	.586**	.486**	.540**	.565**	.563**
Friendship	.256**	.272**	.185*	.231**	.272**	.246**	.263**
Trust	.491**	.460**	.531**	.453**	.540**	.502**	.522**
Overall Mentoring Activities Score	.517**	.522**	.527**	.517**	.538**	.538**	.561**

\*\* Correlation is significant at the 0.01 level.

\* Correlation is significant at the 0.05 level.

It can be very clearly understood from the above table that the correlation between overall mentoring activities and overall effectiveness of

mentoring is found to be significant and positive ( $r = .561$ ;  $p < 0.000$ ). Similarly the mentoring activity of career counseling is positively correlated with the overall mentoring effectiveness score and was found to have the highest correlation ( $r = 0.563$ ;  $p = 0.000$ ) followed by 'provide challenge' and overall effectiveness of mentoring ( $r = 0.556$ ;  $p = 0.000$ ), and teach the job and overall effectiveness of mentoring ( $r = 0.549$ ;  $p = 0.000$ ).

Yet another closer look at the table reveals that the correlations between the sub scales of mentoring activities and dimensions of effectiveness of mentoring were positive and found to be the highest between 'career counseling' and facilitative focus ( $r = 0.586$ ;  $p = 0.000$ ); followed by 'teach the job' and information emphasis ( $r = 0.545$ ;  $p = 0.000$ ); 'provide challenge' and confrontive focus ( $r = 0.542$ ;  $p = 0.000$ ); trust and mentor model ( $r = 0.540$ ;  $p = 0.000$ ); career help and student vision ( $r = 0.460$ ;  $p = 0.000$ ); sponsor and facilitative focus ( $r = 0.446$ ;  $p = 0.000$ ); protect and confrontive focus ( $r = 0.336$ ;  $p = 0.000$ ). The least, yet positive, correlation was found between friendship and facilitative focus ( $r = 0.185$ ;  $p = 0.028$ ) followed by friendship and confrontive focus ( $r = 0.231$ ;  $p = 0.006$ ).

The results, collectively evaluated, substantiate the proposed hypothesis that 'mentoring activities, severally, and collectively, correlate positively and significantly with the effectiveness of mentoring' was proved and accepted. The study reveals that there exist significantly high correlation between each of the mentoring activities and each of the dimensions envisaged as constituting effectiveness of mentoring. The mentoring activities do positively correlate with the overall effectiveness of mentoring with the highest correlation coefficient value noted for career counseling, followed by provide challenge and teach the job.

According to Cohen (1995) mentor model means that faculty mentors are paying attention towards motivating protégés to take necessary risks and overcome difficulties in their journey towards educational and career goals. The findings of the present study, reveals that there is correlation between career counseling and mentor model.

Mentors stimulate the protégés critical thinking with regard to envisioning their own future and to develop their personal and professional potential (Cohen, 1995). The study reveals that there is positive moderate correlation between ‘career counseling’ and student vision. The mentor requests detailed information from and offers specific suggestions to protégés about their current plans and progress in achieving personal, educational and career goals (Cohen, 1995). The study reveals there is moderate correlation between ‘teach the job’ and information emphasis.

The detailed relationships discussed above have been bundled up to depict the relationship between the three broad classifications of mentoring activities and the effectiveness of mentoring and shown in table 6.10. There is significant and high correlation between mentoring activities and overall effectiveness of mentoring. Guiding activity as group is statistically significant and correlated with the mentor-model and information emphasis, confrontative focus, facilitative focus, student vision and relationship dimension. Encouraging activity has moderate correlation with all the six dimensions of mentoring, the highest being with mentor-model. The helping activity has moderate correlation with all the six dimensions of effectiveness of mentoring, the highest being with student vision. There is a positive correlation between overall mentoring activities and overall effectiveness of mentoring ( $r=0.561$ ;  $p=0.000$ ).

**Table 6.10 Three broad classification of mentoring activities and effectiveness of mentoring**

	Relationship Dimension	Information Emphasis	Facilitative Focus	Confrontative Focus	Mentor Model	Student Vision	Overall score on Effectiveness of Mentoring
Guiding Activities	.507**	.518**	.513**	.517**	.518**	.509**	.548**
Helping Activities	.432**	.452**	.446**	.466**	.447**	.473**	.485**
Encouraging Activities	.488**	.473**	.496**	.449**	.518**	.503**	.517**
Overall Mentoring Activities Score	.517**	.522**	.527**	.517**	.538**	.538**	.561**

\*\* Correlation is significant at the 0.01 level.

\*Correlation is significant at the .05 level

The correlation for the overall score for mentoring activities and the dimensions of effectiveness of mentoring may also be noted. Correlation with student vision is the highest ( $r = 0.538$ ;  $p = 0.000$ ), for mentor-model it is  $0.538$ ;  $p = 0.000$ ; for facilitative focus it is  $0.527$ ;  $p = 0.000$ ; for information emphasis it is  $0.522$ ;  $p = 0.000$ ; for relationship dimension it is  $r = 0.517$ ;  $p = 0.000$  and for confrontive focus it is  $r = 0.517$ ;  $p = 0.000$ .

The researcher has not come across similar studies which have inferred the relationship between mentoring activities and effectiveness of mentoring. The present study has considered effectiveness of mentoring as the dependant variable and mentoring activities as the intervening variable in the overall theoretical model. The results prove that there is significant relationship between the three broad classifications of mentoring activities and

effectiveness of mentoring. It can also be inferred that mentoring activities initiated by teachers ensure development of trust, practical help in career advancement, developing confidence and competence of the protégé. At the same time the mentor provides appropriate advice and alternatives for improvement and advancement in career, offer challenge and motivates the protégé to take up initiatives and develop perseverance to accomplish challenges.

This part of the analysis seeks to address how do ‘low effective mentors’ differ from ‘high effective mentors’? Do the factors of mentoring activities, teach the job, provide challenge, teach politics, career help, protect, sponsor, career counseling, friendship and trust significantly discriminate between these two groups?

Discriminant function analysis was employed to find out the differences between effective and not effective mentors (median value of overall mentoring effectiveness score is used for grouping) in terms of mentoring activities. This analysis was attempted in three stages namely : 1. Construction of discriminant function, 2. Classification and 3. Interpretation.

Analysis was carried out among 1) all management institutions and 2) mentoring institutions. Table 6.11 depicts the discriminating factors of highly effective and low effective mentors.

The study reveals that trust was the maximum discriminating variable between highly effective mentors and low effective mentors and friendship were the least discriminating variable in all management institution. While in mentoring institution the maximum discriminating variable between high and low effective mentors were teaching the job followed by providing challenge and trust and the least discriminating variable was providing protection.



**Table 6.11 Discriminating factors of high and low effective mentors**

Analysis	groups	Goodness of fit of DFA	Accuracy of DFA (Validity of model)	Variables most discriminated between groups in that order and its contribution in discrimination (%)								
				Trust	Provide Challenge	Career help	Career Counselling	Teach the job	Protect	Sponsor	Teach Politics	Friendship
I	Low Effective and High Effective mentors	27.8%	76.6%	59.4	58.8	57.3	54.9	51.8	45.8	41.6	39.7	29.4
				Teach the job	Provide Challenge	Trust	Sponsor	Career help	Career Counselling	Protect	Friendship	Teach Politics
II	Low Effective and High Effective mentors (Mentoring Institutions only)	33.4%	79.4%	79.4	73.8	63.4	57.6	42.5	37.0	32.4	22.4	21.7
				Teach the job	Provide Challenge	Trust	Sponsor	Career help	Career Counselling	Protect	Friendship	Teach Politics

The first stage of Discriminant Function Analysis is shown in table 6.12. This table shows the group means and standard deviations for each of the independent variables (nine mentoring activities) based on the sample size of 141 teachers. Among these respondents sample size of only high and low effective mentors (111respondents) were discriminated accurately, and the moderate mentors (30) were not included in this analysis.

**Table 6.12 Group statistics**

<b>Overall score on Effectiveness of Mentoring</b>		<b>Mean</b>	<b>Standard Deviation</b>
Low Effective mentors	Teach the job	29.0714	4.6470
	Provide Challenge	28.6964	5.0124
	Teach Politics	24.6250	4.8638
	Career help	26.6071	5.1546
	Protect	23.6429	4.8671
	Sponsor	26.8929	6.2251
	Career Counselling	28.5536	6.2229
	Friendship	22.8393	6.3925
	Trust	26.6607	5.4114
High Effective mentors	Teach the job	33.1636	4.6098
	Provide Challenge	33.7273	5.6616
	Teach Politics	28.7818	5.8427
	Career help	31.2182	4.7597
	Protect	27.6545	4.7889
	Sponsor	31.6909	5.8906
	Career Counselling	33.8545	5.3935
	Friendship	27.0727	6.3358
	Trust	31.8545	5.5625
Total	Teach the job	31.0991	5.0452
	Provide Challenge	31.1892	5.8891
	Teach Politics	26.6847	5.7398
	Career help	28.8919	5.4562
	Protect	25.6306	5.2117
	Sponsor	29.2703	6.4975
	Career Counselling	31.1802	6.3821
	Friendship	24.9369	6.6828
	Trust	29.2342	6.0527

Table 6.13 shows the One-way Anova /Wilks' Lambda used to assess the significance between the means of the two groups (high effective and low effective), for each of the nine mentoring activities (independent variables). It is seen that all the nine mentoring activities (variables) differ significantly between 'low Effective' and 'high Effective' mentors.

**Table 6.13 Tests of equality of group means**

	Wilks' Lambda	F	df1	df2	Sig.	P value
Teach the job	.834	21.689	1	109	**	0.000
Provide Challenge	.816	24.592	1	109	**	0.000
Teach Politics	.868	16.620	1	109	**	0.000
Career help	.820	23.952	1	109	**	0.000
Protect	.851	19.154	1	109	**	0.000
Sponsor	.862	17.385	1	109	**	0.000
Career Counselling	.826	22.966	1	109	**	0.000
Friendship	.899	12.277	1	109	**	0.000
Trust	.814	24.864	1	109	**	0.000

Since the objective is to determine the variables which discriminate most efficiently between 'low effective' and 'high effective' mentors, the stepwise approach was used and all selected variables were retained for the Discriminant Function analysis. The result of the discriminant function analysis is given along with the values of discriminant function co-efficients for each of the discriminating variable. Table 6.14 represents the canonical discriminant function coefficients.

**Table 6.14 Canonical Discriminant Function Coefficients**

	<b>Function</b>
Teach the job	.035
Provide Challenge	.056
Teach Politics	.015
Career help	.017
Protect	.099
Sponsor	-.047
Career Counselling	.041
Friendship	-.018
Trust	.066
(Constant)	-7.691

Using the values given in table 6.14 the discriminant function (Z) for the problem under study can be written as,

$$Z = -7.691 + 0.035 X_1 + 0.056 \text{ Provide } X_2 + 0.015 X_3 + 0.017 X_4 + 0.099 X_5 - 0.047 X_6 + 0.041 X_7 - 0.018 X_8 + 0.066 X_9 \text{ -----(A)}$$

- where,
- X<sub>1</sub> = Teach the job
  - X<sub>2</sub> = Provide Challenge
  - X<sub>3</sub> = Teach Politics
  - X<sub>4</sub> = Career help
  - X<sub>5</sub> = Protect
  - X<sub>6</sub> = Sponsor
  - X<sub>7</sub> = Career Counselling
  - X<sub>8</sub> = Friendship
  - X<sub>9</sub> = Trust

The discriminant function is significant at 1 per cent level (Wilk's lambda and chi-square test values given in the table indicate that the model is significant

at 1% level) and displays a correlation of 0.527 and an  $r^2$  value of 0.278 with the meaning that 27.8 per cent of the variation between the two groups of teacher mentors based on dependent variable types ('low effective' and 'highly effective') may be accounted for by all the discriminating variables included in the model.

#### 6.4.1 Classification results

Once the Discriminant Function is arrived at, the efficiency of the function as to, how accurately it predicts the teachers into the respective groups must be assessed. For this a classification matrix was developed for using actual and 'predicted' group membership of the teachers. Table 6.15 represents classification matrix using the nine mentoring activities found to be significantly contributing towards the discrimination between high effective and low effective teachers. The discriminant function has predicted that 78.2 per cent (43) teachers were classified in the 'highly effective' group and 75 per cent (42) teachers in the 'low effective group'. On the whole it can be observed that 76.6% of original grouped cases were correctly classified.

**Table 6.15 Classification results**

		Predicted Group Membership		Total	
		Low effective mentors	High effective mentors		
Overall score on Effectiveness of Mentoring					
Original	Count	Low effective mentors	42	14	56
		High effective mentors	12	43	55
	Per cent	Low effective mentors	75.0	25.0	100.0
		High effective mentors	21.8	78.2	100.0

Note : Ungrouped cases (30) are the moderate mentors who were not included in this analysis.

76.6% of original grouped cases were correctly classified.

By examining the Discriminant Function the relative importance of each discriminating variable in the Discriminant function were determined between the two groups. Table 6.16 gives the structural correlations which measure the simple linear correlations between each independent variable and the Discriminant Function.

**Table 6.16 Structure matrix**

	<b>Function ( R )</b>	<b>R<sup>2</sup> %</b>
Trust	.771	59.4
Provide Challenge	.767	58.8
Career help	.757	57.3
Career Counselling	.741	54.9
Teach the job	.720	51.8
Protect	.677	45.8
Sponsor	.645	41.6
Teach Politics	.630	39.7
Friendship	.542	29.4

The R<sup>2</sup> per cent gives the percent contribution of each variable to Discriminant Function. By looking at the structure matrix it is seen that ‘Trust’ is the maximum discriminating variable (R<sup>2</sup>% = 59.4) between ‘low effective’ and ‘high effective’ mentors, followed by ‘Provide challenge’, ‘career help’, ‘career counselling’ in that order. ‘Friendship’ is the least discriminating variable and its contribution in discriminating between ‘low effective’ and ‘high effective’ mentors is 29.4 per cent.

Trust is the very foundation for any relationship to thrive on and this has been revealed in the above analysis. Allen and Poteet (1999) revealed that three qualities trust, open communication, setting standards and expectations

mostly influenced effectiveness of mentoring. Levesque and O'Neill (2005) Friendship function was rated as one of the least important behaviours. It is possible the M.B.A. experience developed them into confident, skilled workers less in need of friendship from mentors than colleagues who may have a lower sense of self efficiency.

#### **6.4.2 Discriminant analysis for mentoring institutions**

Discriminant Function Analysis was conducted separately for mentoring institutions to find the dimensions between high effective and low effective mentors in terms of mentoring activities initiated in mentoring institutions. The first stage of Discriminant Function Analysis is shown in table 6.17 which shows the group means and standard deviations for each of the independent variables (nine mentoring activities) based on the sample size of 83 respondents from mentoring institution. Among these, respondents sample size of only high and low effective mentors (63) were discriminated accurately and the moderate mentors (20) were excluded from the analysis.

**Table 6.17 Group Statistics**

<b>Overall score on Effectiveness of Mentoring</b>		<b>Mean</b>	<b>Std. Deviation</b>
Low Effective mentors	Teach the job	28.8667	5.2767
	Provide challenge	28.9667	5.3851
	Teach politics	24.9667	5.6720
	Career help	26.8333	5.6084
	Protect	23.5333	5.4122
	Sponsor	25.9333	6.5016
	Career counselling	28.6333	7.4855
	Friendship	21.1667	7.1055
	Trust	25.4333	5.5066
High Effective mentors	Teach the job	34.4242	3.5710
	Provide challenge	35.1515	4.9315
	Teach politics	28.9697	6.3957
	Career help	31.4242	4.4584
	Protect	26.7879	4.5877
	Sponsor	31.8485	4.5902
	Career counselling	33.9697	4.9402
	Friendship	26.2727	5.7352
	Trust	31.4242	5.2739
Total	Teach the job	31.7778	5.2377
	Provide challenge	32.2063	5.9843
	Teach politics	27.0635	6.3421
	Career help	29.2381	5.5058
	Protect	25.2381	5.2200
	Sponsor	29.0317	6.2861
	Career counselling	31.4286	6.7840
	Friendship	23.8413	6.8702
	Trust	28.5714	6.1348



Table 6.18 shows the One-way Anova /Wilks' Lambda used to assess the significance between the means of the two groups, (low effective and high effective mentors) for each of the nine mentoring activities (variables). It is seen that all the selected variables differ significantly between 'low effective' and 'high effective' mentors. Table 6.18 shows the tests of equality of group means.

**Table 6.18 Tests of equality of group means**

	Wilks' Lambda	F	df1	df2	Sig.	P value
Teach the job	.715	24.357	1	61	**	.000
Provide challenge	.729	22.645	1	61	**	.000
Teach politics	.899	6.851	1	61	**	.011
Career help	.824	13.049	1	61	**	.001
Protect	.901	6.667	1	61	**	.012
Sponsor	.776	17.651	1	61	**	.000
Career counselling	.843	11.346	1	61	**	.001
Friendship	.860	9.930	1	61	**	.003
Trust	.758	19.444	1	61	**	.000

Since the objective is to determine the variables which discriminate most efficiently between 'low effective' and 'high effective' mentors, the stepwise approach was used and all selected variables were retained for the Discriminant Function analysis. The results of the discriminant function analysis are given in Table 6.19 with the values of discriminant function coefficient for each of the discriminating variable.

**Table 6.19 Canonical Discriminant Function Coefficients**

	<b>Function</b>
Teach the job	.112
Provide challenge	.048
Teach politics	-.014
Career help	.032
Protect	-.011
Sponsor	.013
Career counselling	-.030
Friendship	.025
Trust	.062
(Constant)	-7.223

The discriminant function is significant at 1 per cent level (Wilks lambda and chi-square test values given in the table indicate that the model is significant at 1 per cent level) and displays a correlation of 0.578 and an  $r^2$  value of 0.334. This may be interpreted as, 33.40 per cent of the variation between the two groups of teacher mentor is based on dependent variable types ('low effective'/'high effective') may be explained by all the discriminating variables included in the model as presented in table 6.20.

**Table 6.20 Canonical Discriminant Function**

<b>Canonical Correlation</b>	<b>Wilks' Lambda</b>	<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
.578	.665	23.010	9	**

### 6.4.2.1 Classification Results

Classification is a separate activity of the discriminant function which is used to predict how many of the teachers were correctly classified into the high effective and low effective groups. Table 6.21 gives the Classification Matrix showing how many of the teachers were correctly classified into the respective groups and the overall correct classification percentage. This activity could classify 63 teachers from a total of 83 respondents belonging to mentoring institutions. This matrix clarifies that 84.8 per cent (28) teachers were correctly classified in the 'high effective' group and 73.3 per cent (22) of the teachers in the 'low effective' group. On the whole 79.4 per cent of the cases were classified correctly.

**Table 6.21 Classification results**

Overall score on Effectiveness of Mentoring			Predicted Group Membership		Total
			Low Effective mentors	High Effective mentors	
Original	Count	Low effective mentors	22	8	30
		High effective mentors	5	28	33
	Per cent	Low effective mentors	73.3	26.7	100.0
		High effective mentors	15.2	84.8	100.0

Note : Ungrouped cases(20) are the moderate mentors who were not included in the analysis.

79.4% of original grouped cases correctly classified.

By examining the Discriminant Function it helps determine the relative importance of each discriminating variable in the Discriminant Functions between the two groups. Table 6.22 gives the structural correlations which

measure the simple linear correlations between each independent variable and the Discriminant Function.

**Table 6.22 Structure matrix**

	<b>Function “R”</b>	<b>R<sup>2</sup> %</b>
Teach the job	.891	79.38
Provide Challenge	.859	73.78
Trust	.796	63.36
Sponsor	.759	57.60
Career help	.652	42.51
Career Counselling	.608	36.96
Friendship	.569	32.37
Teach Politics	.473	22.37
Protect	.466	21.71

The R<sup>2</sup> per cent gives the percentage contribution of each variable to Discriminant Function. By looking at the structure matrix it is seen that ‘teach the job’ is the maximum discriminating variable (R<sup>2</sup>% = 79.38%) between ‘low effective’ and ‘high effective’, followed by provide challenge (R<sup>2</sup>%=73.8 per cent) and trust (R<sup>2</sup>%=63.36 per cent), while the least discriminating variable is protect (R<sup>2</sup>%=21.71 per cent). The ultimate role of teachers in a management institution is to equip and endow students with personal and professional skills to compete in this turbulent global business environment and this has been aptly revealed in the present study.

## **6.5 Effectiveness of mentoring and type of institution**

Formal mentoring seeks to replicate some aspects of this natural mentoring. It aims to provide young people with support and guidance through planned relationships which are purposeful in that they focus on young people’s social and learning development and the purpose of formal mentoring varies with the needs of the students and status in life that they are prepared for.

The t-test was applied to find whether the average scores of the dimensions of effectiveness of mentoring differ significantly between mentoring and non-mentoring institutions is shown in Table. 6.23.

**Table 6.23 Comparison of effectiveness of mentoring with type of institution**

Sl. No	Institution	Effectiveness of mentoring										Student Vision	
		Relationship Emphasis		Information Emphasis		Facilitative Focus		Confrontive Focus		Mentor Model		Mean	SD
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
1	(N=83) Mentoring	31.90	6.13	31.91	6.99	18.64	4.01	36.76	7.78	19.13	3.84	34.63	7.10
2	(N=58) Non -mentoring	32.01	6.08	30.58	5.29	18.73	3.37	35.89	7.19	19.80	4.18	34.65	6.37
<b>t' Value</b>		0.105		1.224		0.143		0.680		0.985		0.014	
<b>Table 't' (0.05)</b>		1.977		1.977		1.977		1.977		1.977		1.977	
<b>P Value</b>		.960		.223		.887		.497		.326		.989	
<b>Level of Significance</b>		NS		NS		NS		NS		NS		NS	

### NS – Not Significant

The results indicated that the average score of effectiveness of mentoring do not vary significantly between teachers working in mentoring and non-mentoring institutions. The average score of relationship emphasis ( $t = 0.105$  ;  $p > 0.05$ ), do not vary amidst mentoring and non-mentoring institutions ; similarly for information emphasis it is ( $t = 1.224$  ;  $p > 0.05$ ) ; facilitative focus ( $t = 0.143$  ;  $p > 0.05$ ) ; confrontive focus ( $t = 0.680$  ;  $p > 0.05$ ) ; mentor model ( $t = 0.985$  ;  $p > 0.05$ ) ; and student vision ( $t = 0.014$  ;  $p > 0.05$ ) also do not vary significantly between mentoring and non-mentoring institutions.

According to Allen and Eby (2003) mentorship type was not directly related to mentorship effectiveness, but it did interact with mentorship

duration. The present study reveals similar findings that the average score of effectiveness of mentoring do not vary significantly between teachers working in mentoring and non-mentoring institutions. Though not statistically significant it can be noticed that there is a slight difference in the average score between mentoring and non-mentoring institutions, the average score is slightly higher in terms of information emphasis and confrontive focus in the case of mentoring institutions and the non-mentoring institution are found to be high in relationship emphasis, Facilitative focus, mentor model and student vision. Thus it can be inferred that the success of any intervention implemented in the educational institution totally depends on the contribution of the faculty rather than the institution itself.

Discussions so far presented in this chapter provide the answer vividly to the study objective that sought to explain effectiveness of mentoring as affected by mentoring activities. Teachers were evaluated for their effectiveness as mentors in terms of their abilities for building and maintaining relationships with their mentees, providing information to mentees, facilitation, confrontation, being a model for the mentees and offering the students their vision for life.

Results show that while 59.6 per cent of teachers considered themselves as effective mentors and 40.4 per cent treated themselves to be less effective, students were relatively reserved in giving a similar appreciation to their teachers. Vast majority of students (85.6%) considered their teachers as less effective mentors with only a small proportion of 14.4 per cent considering teachers as effective in mentoring.

More effective and less effective teacher mentors were statistically discriminated using mentoring activities as the discriminant variables.

‘Building trust’ was found to be the most discriminating variable followed by ‘providing challenge,’ career help, career counseling, teaching the job, protecting, sponsoring, teaching politics and friendship in that order when teacher mentors from all the schools were considered. But when the teacher mentors from mentoring institutions alone were considered, the relative significance for each of the mentor activities was different. ‘Teaching the job’ emerged as the highest ranking activity with protecting being classified as the least discriminating variable. The results have served not only to establish the relationship between each of the mentoring activities and effectiveness levels, but to show the difference in the relative significance of the mentoring activities in determining the effectiveness levels of teacher mentors as well

Having offered the explanation of all the prominent variables making up the theoretical framework for this study, attention is now being turned towards validating the model that was made mandatory as per the sixth specific objective of the study.

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## *Validation of the Conceptual Model for Mentoring in B-schools*

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- 7.1 Structural equation model
  - 7.2 Execution of the research model by visual PLS
  - 7.3 Proposed model
  - 7.4 Operational model
  - 7.5 Validated structural equation model
  - 7.6 AVE and reliability
  - 7.7 Direct and indirect effects
  - 7.8 Construct paths in the validated model
  - 7.9 Conclusion
- 

This chapter deals with statistical validation of an empirical model that explains effectiveness of formal teacher initiated student mentoring in terms of socio demographic factors, personality profile and mentoring activities as applicable to B-Schools. It offers a predictive analysis of the data resulting in a theoretical confirmation that was conceived as the conceptual framework of the study by employing the structural equation model using the partial least square technique. Very little research has been done in India on the effectiveness of mentoring and there is hardly any research aimed at building and validating theoretical models related to effectiveness of formal teacher initiated student mentoring in B-schools.



## **7.1 Structural equation model**

Over three decades ago, the concept of Partial Least Squares (PLS) was introduced by Hermann Wold in his paper Principal Component Analysis (Wold, 1966). The first PLS models with latent variables was published by Wold in 1979. PLS path modeling is a soft modeling technique with no assumptions about the distribution of the data variables and requires relatively small samples to carry out (Chin, 1998 and Chin and Newstead, 1999). This is opposed to the heavy modeling proposed by Joreskog which requires precise assumptions about the distribution of the data variables and large sample sizes. Covariance based methods are undoubtedly the most well known methods to estimate structural equation models. The popular PLS software available are PLS Graph, Smart PLS, Visual PLS, SPADPLS and PLS GUI. Among these softwares, the easiest and quickest to use is Visual PLS because of its highly user friendly interface.

Several authors (Chin, 1998 and Fornell and Bookstein, 1982) argue that PLS presents several advantages when compared to covariance based methods. It is a convenient and powerful technique that is appropriate for many research situations, such as complex research models with sample sizes that would be too small for covariance based SEM techniques (Goodhue et al., 2006). PLS is considered a very general and flexible technique for predictive inferences and it involves testing a measurement model and a structural model. However, unlike SEM, these two models are tested simultaneously (Goodhue and Vandenbosch, 1999). The main goal of PLS is to determine values of latent variables for predictive purposes (Chin, 1998). PLS regression is a recent technique that generalizes and combines features from principal component analysis and multiple regressions. It is particularly useful when we need to predict a set of dependent variables from a (very) large set of

independent variables (i.e., predictors). PLS regression is becoming a tool of choice in the social sciences as a multivariate technique for non-experimental and experimental data alike.

PLS model is a combination of confirmatory factor analysis and path analysis. The main aim is to analyse the interdependent relationships between factors and the unidimensionality of factors in one analysis algorithm. It consists of two stages, initially, the assessment of a proposed structural model and subsequently, measurement of the model. The structural model is assessed by using the techniques of  $R^2$ , path co-efficients, bootstrapping, direct and indirect effect and moderating effect. Measurement of the model is effected using loadings, weights, composite reliability, average variance extracted and cross loadings. The following paragraphs provide brief and relevant descriptions of the techniques employed.

$R^2$  is an important measure to assess the predictive ability of the model (goodness of fit) and is equivalent to the regression  $R^2$ .

Factors/dimensions/latent variables are simply the constructs used as predictor variables in a conceptual model measured using other component variables. The value of these constructs is derived from the measurements of their component variables. Constructs generally form the basic building blocks of a theory in Social Science.

An indicator is a variable that is actually operationally measured in a research study. It is known as a manifest variable or an observed variable. Every construct is measured in terms of indicators. The indicators can be reflective or formative. In the case of reflective indicators, the constructs are being reflected in the indicators, while in the case of formative indicators, the indicators form the construct.

In structural equation model, the path co-efficients indicate the strength of relationship between constructs and are expressed in standardised form to permit comparison of the relative strength (Yue, 2004). To assess the significance of path co-efficients, bootstrapping techniques is used.

The basic premise of any theory is to examine the interrelationships between the underlying constructs being studied. Each relationship is considered hypothetical and is to be tested. Being a non-parametric method, the hypothesis cannot be directly tested. Testing is done by means of two re-sampling methods namely bootstrap or jack knife, either of which are used for estimating the precision of the PLS estimates. In the bootstrap technique, samples are taken from the observed data such that each sample consists of randomly sampled cases from the original data set. The size of each sample equals the number of samples collected in the study. Bootstrap is then performed by collecting a large number of such re-samples and using their means to test the hypothesis using the t-test. For a good stable result, the number of re-samples should not exceed 500. (Chin, 2006e as cited by Savanid, 2007). The cut off value for 't' co-efficients depends on the assumed significance level. A commonly assumed significance level in a two tailed test at 5% level of significance is indicated by  $t > 1.65$  ;  $P < 0.05$  and if  $t > 2$  ;  $p < 0.01$ , and applied to assess the significance level (Yue, 2004). If the computed value of t-statistics happens to be higher than it implies, then the path considered is significant.

Direct and indirect effects of the latent variables in the SEM are assessed by evaluating the relationships between these variables. The direct effect is the relation between an independent variable and a dependent variable, while the indirect effect is the result of the relationship between the independent variable on a dependant variable through a set of intervening or moderator variables (Hoyle, 1995).

Loadings and weights are obtained from the bootstrapping procedure. Loadings are used to measure how well the indicators reflect their LVs like factor analysis loadings. The weights score indicates its contribution to the development of relevant construct.

Composite reliability shows the internal consistency of the constructs used. It is similar to one of the most popular measures of reliability, Cronbach alpha. A construct is said to have sufficient reliability if the value of alpha is more than 0.7 and a newly proposed construct is said to be reliable if the value of alpha is more than 0.5. Chin (1998) says composite reliability of the component should be greater than .7. It can be obtained using the bootstrapping procedure.

The convergent validity of each construct is checked by examining the Average Variance Extracted (AVE) values. Constructs having an AVE value greater than 0.5 are said to have convergent validity or unidimensionality (Chin, 1995; Chin et al., 2003; Chin and Newstead, 1999; Chin, 1998; Barclay et al., 1995 and Anderson and Gerbing, 1988). AVEs may be used to measure the discriminant validity and reliability of the constructs as well. AVEs of each of the latent variables, if greater than the square of the correlations between any two latent variables together considered at any point of time, will indicate that the constructs are more discriminated from each other and that the formative indicators within each construct are more correlated.

Cross loadings is another test of discriminant validity. It is obtained by finding the correlation between latent variable component score and other observed variables (indicators). When the correlations load is higher on the respective latent variables than other latent variables, it means that the latent variable predicts each variable in its construct better than the other constructs.

## **7.2 Execution of the research model by visual PLS**

The population of the present study comprises all the permanent employed teachers and the regular students enrolled in the management programmes in B-schools in Kerala. More specifically, the population covers teachers and students in B-schools who belong to the departments of the Universities in Kerala state and the colleges affiliated to the universities in the state offering a full time program including the national level Institute (IIM-K).

The respondent groups of the study covered 141 permanent teachers (83 respondents belonging to management institutions with mentoring as part of their pedagogy, and 58 belonging to non-mentoring institutions); 327 first semester students (167 students from mentoring institutions and 160 from non-mentoring institutions) and 318 second year (fourth semester) students (groups of 172 and 146 students respectively from mentoring and non-mentoring institutions in that order). As the model validation contemplates only the situation and factors active in a mentoring context, the data pertaining to only the eighty three (83) teacher respondents belonging to the nine management institutions with formal mentoring programme were considered valid, analysed and tested against the proposed model using structural equations modeling with visual PLS.

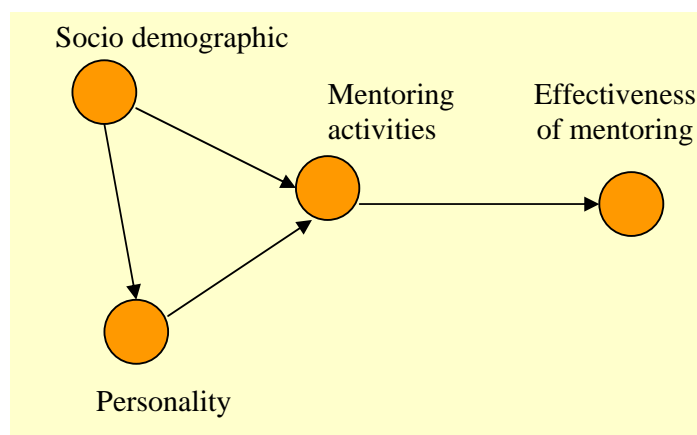
The operational model used for evaluating and validating the model on 'effectiveness of mentoring' as envisaged in this research is depicted in the figure below. This research has employed four latent variables and their formative indicators, (1) Socio-demographic background subsuming the formative indicators of age, gender, designation, educational qualification, teaching experience and industrial experience (2) Personality profile of teachers having openness, conscientiousness, extraversion, agreeableness and neuroticism within its fold (3) Mentoring activities with teach the job, provide

challenge, teach politics career help, protect, sponsor, career counseling, friendship and trust as its components and (4) Effectiveness of mentoring covering relationship emphasis, informative emphasis, facilitative focus, confrontive focus, mentor model, and student vision. A fair description of the constructs is discussed in the conceptual framework (Chapter 3, pp 91 - 124).

### 7.3 Proposed model

Fig. 7.1 depicts the proposed operational model positing as the socio-demographic background of the teacher influencing the personality profile of teachers; socio-demographic variables influencing the mentoring activities; personality profile of teachers influencing the mentoring activities and mentoring activities influencing effectiveness of mentoring.

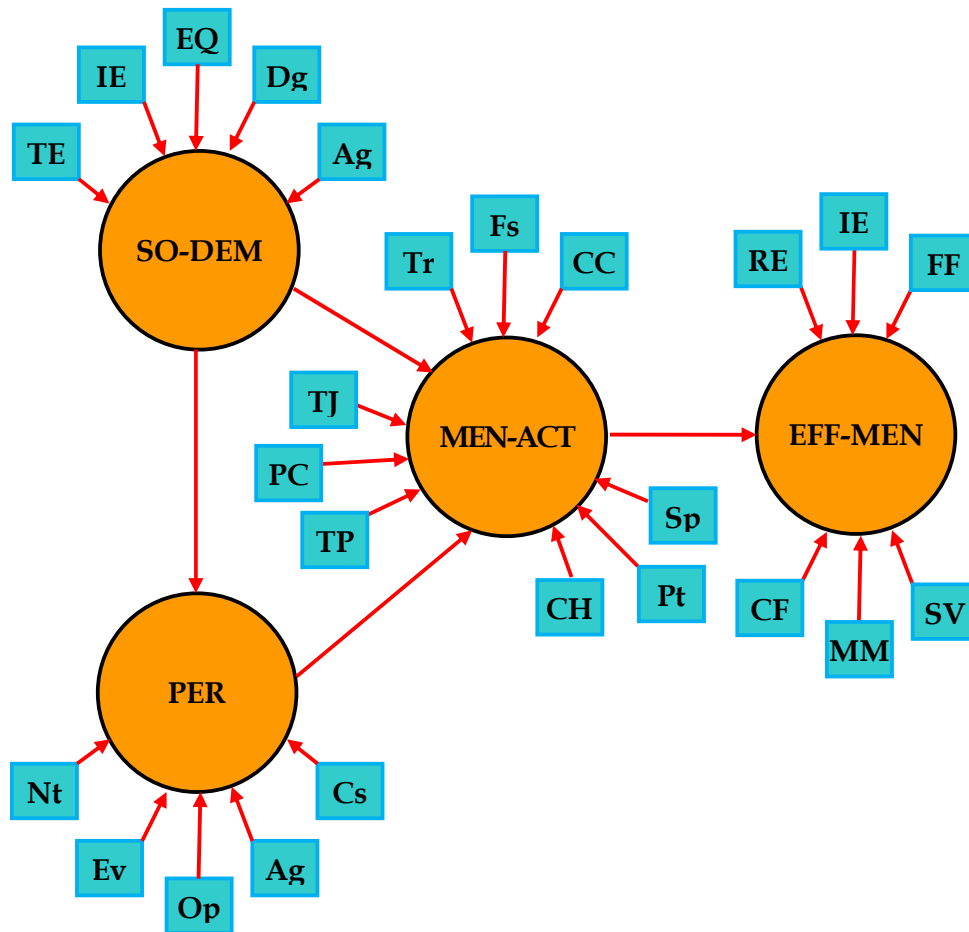
**Figure 7.1 Proposed model**



### 7.4 Operational model

The operational model is depicted in Fig. 7.2. The figure amplifies every latent variable, given in the proposed model, explicating the formative indicators that make up each of them. Expanded names of each of the formative indicators have been separately shown.

**Figure 7.2 Diagrammatic representation of formative indicators and latent variables in the proposed model**



**Latent Variables and the formative indicators**

Socio-Demographic Variables	Personality Dimension	Mentoring Activities	Effectiveness of Mentoring
Ag – Age	Nt – Neuroticism	TJ – Teach the Job	RE – Relationship Emphasis
Dg – Designation	Ev – Extraversion	PC – Provide Challenge	IE – Information Emphasis
EQ – Educational Qualification	Op – Openness	TP – Teach Politics	FF – Facilitative Focus
IE – Industrial Experience	Ag – Agreeableness	CH – Career Help	CF – Confrontive Focus
TE – Teaching Experience	Cs – Conscientiousness	PT – Protect	MM – Mentor Model
		SP – Sponsor	SV – Student Vision
		CC – Career Counseling	
		FS – Friendship	
		Tr – Trust	

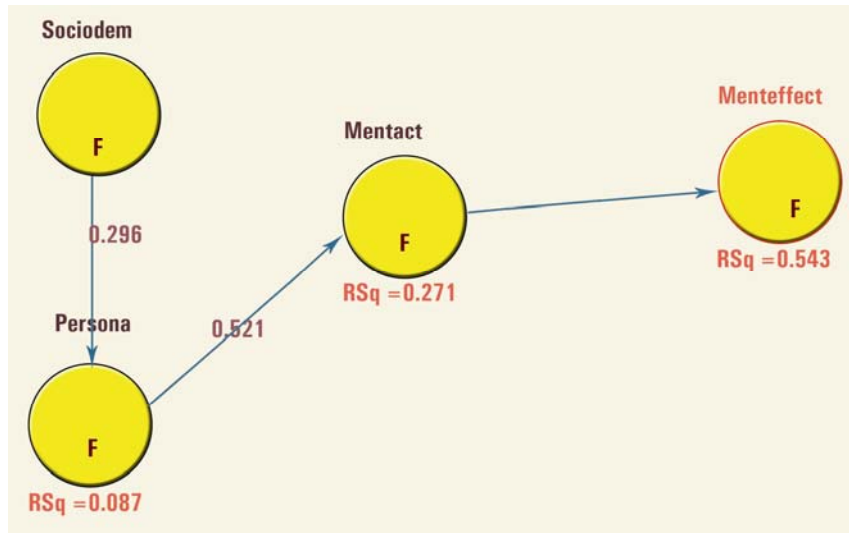
## **7.5 Validated structural equation model**

The proposed operational model was estimated and validated using structural equation modeling with partial least square technique. Figure 7.3 depicts the validated model of effectiveness of mentoring. Validation of the Model resulted in the refinement of the latent variables. From among the formative indicators of age, designation, educational qualification, teaching experience and industrial experience, only age and teaching experience were retained as the defining elements of Socio-demographic background of the teacher mentors. As regards the personality profile, only three facets of extraversion, agreeableness and conscientiousness were accepted by the model as important. Among the indicators of mentoring activities, validation procedure retained teaching the job, providing challenge, teaching politics, career help, sponsoring, career counseling and trust thereby rejecting protect and friendship. Unlike in the cases of other latent variables, the validation procedure retained all the indicators included in the original set under the dependent variable of the effectiveness of mentoring namely, relationship emphasis, informative emphasis, facilitative focus, confrontive focus, mentor model and student vision.

The validated model also explains the indirect influence of the latent variables on the effectiveness of mentoring and can be stated as follows. The socio-demographic attributes of age and teaching experience of the teachers influence the personality properties they exude in their official role as mentors which in turn influence the mentoring activities they initiate in the B-school, which ultimately affect the effectiveness of their mentoring initiatives.



**Figure 7.3 Validated model of effectiveness of mentoring**



**Legend of the terms used in model**

- Sociodem : Socio-Demographic
- Persona : Personality Facets
- Mentact : Mentoring Activities
- Menteffect : Effectiveness of mentoring

**7.6 AVE and reliability**

The composite reliability, average variance extracted (AVE), and Cronbach alpha values of socio-demographic background, personality profile mentoring activities and effectiveness of mentoring are depicted in the Table 7.1 and it reveals that all the four latent variables employed in the estimation are reliable and valid. Composite reliability calculated by PLS is similar to Cronbach alpha without the assumption that all indicators are equally weighed. Chin (1998) recommends that the composite reliability should be more than 0.7.

**Table 7.1 AVE and reliability of latent variables in the validated model**

<b>AVE and Reliability</b>			
<b>Construct</b>	<b>Composite Reliability</b>	<b>AVE</b>	<b>Cronbach Alpha</b>
Socio-demographic	0.897958	0.815143	0.766836
Personality	0.775561	0.538367	0.592722
Mentoring activity	0.906389	0.589480	0.925834
Effectiveness of mentoring	0.951494	0.766221	0.963893

The composite reliability values of the latent variables in the validated model vary between 0.77 and 0.95. Socio-demographic background has a composite reliability value of 0.90 inclusive of that of age and teaching experience of the mentors; Personality profile has a reliability value of 0.77 covering that of extraversion, agreeableness and conscientiousness; Mentoring activities has a reliability of 0.90 enveloping teach the job, provide challenge, teach politics, career help, sponsor, career counseling, and trust, and Effectiveness of mentoring has a composite reliability of 0.95 comprising the facets of relationship emphasis, informative emphasis, facilitative focus, confrontive focus, mentor model and student vision. The findings reveal that the constructs are all reliable. The AVEs of the latent variables are: socio-demographic background (0.81) personality profile (0.54); mentoring activities (0.59) and effectiveness of mentoring (0.76) showing acceptable levels of convergent validities for these constructs. Cronbach alpha values show the internal consistency of the constructs that varies between 0.6 and 0.96 in the validated model. Thus the present validated model exhibits acceptable levels of reliability and validity measures for the constructs.

Average Variance Extracted (AVE), as already indicated, may also be used to infer on the discriminant validity among the latent variables or constructs. A measure of discriminant validity sheds light on the potential problem of one

construct overlapping another in a conceptual model. Fornell and Larcker (1981) suggested that this can be evaluated by comparing the AVEs of the latent variables and the correlations that exist between any two latent variables. In the present study AVE of the latent variables (socio-demographic, personality profile, mentoring activities and effectiveness of mentoring) should be greater than the square of the correlations between a pair of any two latent variables or the square root of AVE for every latent variable should be greater than the correlations between any two latent variables compared.

The Table 7.2 below clearly displays the discriminant validities for each the four constructs namely, socio-demographic background, personality profile, mentoring activities and effectiveness of mentoring employed in the study.

**Table 7.2 Discriminant validity of the latent variables**

Constructs	AVE (1)	AVE (2)	r	r <sup>2</sup>	(AVE 1 > r <sup>2</sup> )	(AVE 2 > r <sup>2</sup> )	Discriminant Validity
Socio-Demographic and Personality	0.815143	0.538367	-.296	0.087616	*	*	**
Socio-Demographic and Mentoring activity	0.815143	0.589480	-.140	0.0196	*	*	**
Socio-Demographic and Effectiveness of mentoring	0.815143	0.766221	-.029	0.000841	*	*	**
Personality and Mentoring activity	0.538367	0.589480	.521	0.271441	*	*	**
Personality and Effectiveness of mentoring	0.538367	0.766221	.316	0.099856	*	*	**
Mentoring activities and Effectiveness of mentoring	0.589480	0.766221	.737	0.543169	*	*	**

Note : \* Items marked in the table by a single star denotes that the AVE of the latent variable (construct) is greater than the square of the correlation of any two latent variables compared.

\* Items marked by double stars indicate that there is discriminant validity the constructs.

From the above table it can be understood that as the AVE of the socio-demographic background of the teacher mentors is greater than the square of the correlation of the socio-demographic background with their personality, mentoring activities and the effectiveness of mentoring (see table 7.3). Similarly the AVE of the personality profile is greater than the square of the correlation of that latent variable with mentoring activities and the effectiveness of mentoring.

**Table 7.3 Correlation between latent variables**

Correlation of Latent Variables				
	Socio - demographic	Personality	Mentoring activities	Effectiveness of mentoring
Socio - demographic	1.000			
Personality	-0.296	1.000		
Mentoring activities	-0.140	0.521	1.000	
Effectiveness of mentoring	-0.029	0.316	0.737	1.000

Same is the case with the AVE of the mentoring activities. AVE of the mentoring activities is greater than the square of its correlation with the effectiveness of mentoring. These values establish the discriminant validity among the latent variables in that they do not statistically overlap each other and are free from the problem of multicollinearity.

### **7.7 Direct and indirect effects**

The direct and indirect effects of independent constructs (socio-demographic background, personality profile and mentoring activities) on the dependant construct (effectiveness of mentoring) were also explored. PLS did not validate any direct effects of socio-demographic and

personality dimensions on effectiveness of mentoring. The indirect effects of socio-demographic constructs on effectiveness of mentoring could be estimated by multiplying the path co-efficients of socio-demographic variable  $\rightarrow$  personality, personality dimensions  $\rightarrow$  mentoring activities, and mentoring activities  $\rightarrow$  effectiveness of mentoring. These indirect effects indicate that mentoring activities and personality constructs have more indirect effect on effectiveness of mentoring than the socio-demographic variables. The predictiveness of the above model is assessed by the  $R^2$  values for the dependant variables. From the above figure it is seen that the constructs socio-demographic variable and personality profile have an  $R^2$  value of 0.087, personality and mentoring activities have an  $R^2$  of .271, whereas effectiveness of mentoring as explained by the socio-demographic variables, personality profile of teachers along with mentoring activities is attested by an  $R^2$  value of 0.543 that stands for a 54.3% variation.

### **7.8 Construct paths in the validated model**

Table 7.4 gives the path co-efficient values and the related 't' statistics which test the significance of the path co-efficients and the extent of relationships between constructs. The inferences under the table have been indicated by  $t > 1.65$ ;  $P < 0.05$  and if  $t > 2$ ;  $p < 0.01$ .

Results indicate that the path co-efficients of Socio-demographic variables on personality is (beta = 0.296,  $t = 2.3325$ ,  $p < 0.01$  and  $R^2$  value is 0.087) implicating that the requisite mentor-personality properties of extraversion, agreeableness and conscientiousness are considerably influenced by selected socio-demographic variables of age, and teaching experience.

**Table 7.4 Structural model—boot strap**

Correlation of Latent Variables						
	Entire Sample estimate	Mean of Subsamples	Standard error	T-Statistic	R <sup>2</sup>	Result
Socio-demographic> Personality	0.2960	0.3259	0.1269	2.3325	0.087	**
Personality> Mentoring activity	0.5210	0.5553	0.1290	4.0379	0.271	**
Mentoring activities > Effectiveness of mentoring	0.7370	0.7562	0.0739	9,9743	0.543	**

Note: A single star denotes  $p < 0.05$   
 Double star denotes  $p < 0.01$

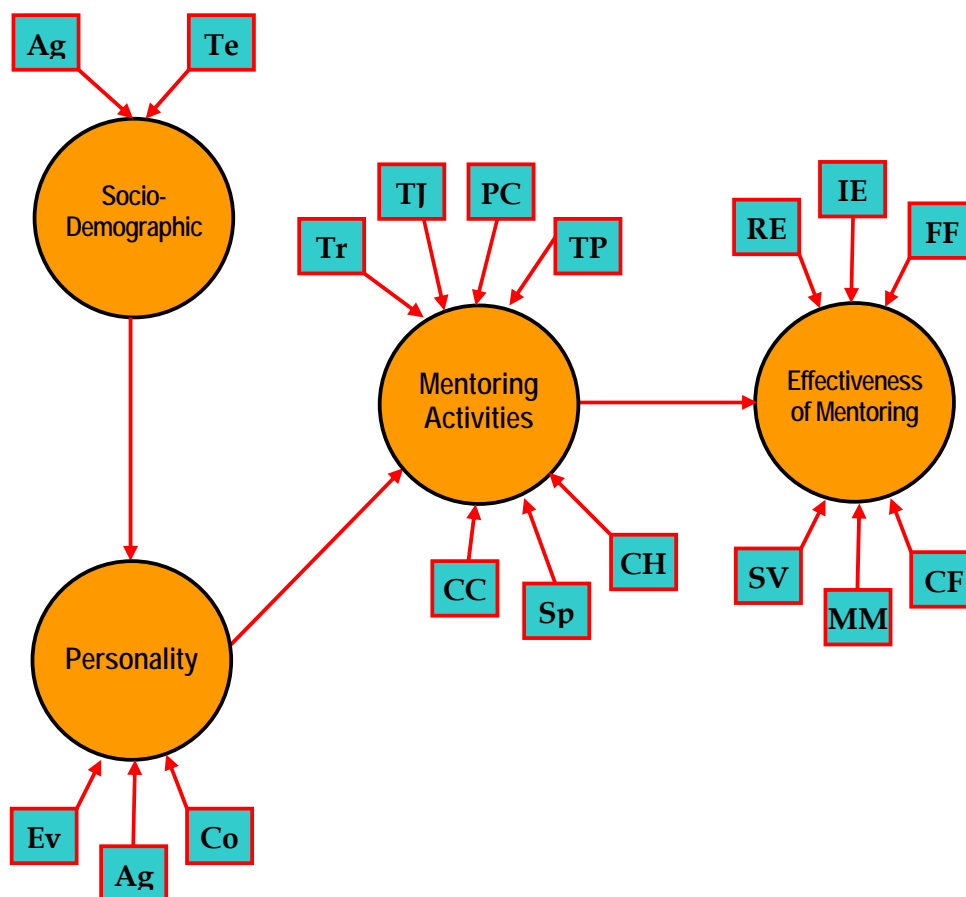
The path co-efficients between personality profile of teachers and mentoring activities are  $\beta = 0.521$ ,  $t = 4.0379$ ,  $p < 0.01$  and the  $R^2$  value is 0.271. This indicates that there is significant correlation between personality constructs (extraversion, agreeableness and conscientiousness) and mentoring activities. The path co-efficients between mentoring activities initiated and effectiveness of mentoring ( $\beta = 0.737$ ,  $t = 9.9743$ ,  $p < 0.01$  and the  $R^2$  value is 0.543), are sufficiently high indicating significant correlation between mentoring activities (teach the job, provide challenge, teach politics, career help, sponsor, career counseling and trust) and the effectiveness of mentoring (borne out by relationship emphasis, informative emphasis, facilitative focus, confrontive focus, mentor model, and student vision) at  $p < 0.01$ .

From the model validated in the present study it can be reasonably concluded that the socio demographic variables of age and teaching experience provides for the predominant expression of personality qualities of higher degrees of extraversion, agreeableness and conscientiousness by the teachers who play the

role of mentors. Results obtained from the structural equation model was further diagnosed using one-way ANOVA procedures to see if the varying age groups and teaching experiences of the teachers accounted for the differing mean scores indicative of levels of their personality dimensions. This enables us to identify and employ the right kind of people as teacher mentors and make the programme more effective. The results of the one-way ANOVA indicated that the mean scores of agreeableness ( $F=6.686$ ;  $p= 0.000$ ) and conscientiousness ( $F=3.447$ ;  $p=0.019$ ) vary significantly across the age group of teachers. It was found that teachers between the age groups of 41- 50 years and above 50 years were found to be high on agreeableness, while teachers between 31-40 years of age were the least agreeable. It was also observed that teachers above 50 years of age were high on conscientiousness, followed by 41 to 50 years age group and those between 31 to 40 years. It was also found that teachers up to 30 years of age were low in conscientiousness.

The analysis also revealed that the mean score of agreeableness ( $F = 4.886$  ;  $p = 0.01$ ), conscientiousness ( $F = 5.585$  ;  $p = 0.003$ ), and neuroticism ( $F = 3.640$  ;  $p = 0.014$ ) differ significantly with their teaching experience. But the other personality facets like extraversion ( $F = 0.923$  ;  $p > 0.05$ ) and openness ( $F = 1.195$  ;  $p > 0.05$ ) do not vary significantly with the teaching experience. This clearly depicts that the average score of agreeableness and conscientiousness varies significantly with teaching experience at  $P < .01$ . The average score of agreeableness and conscientiousness is found to be the highest among teachers with 10-15 years experience. It also revealed that the average score of neuroticism is found to be highest among teachers with up to 5 years experience and the least among teachers with 10-15 years experience (tables available in appendix -V).

Figure 7.4 Diagrammatic representation of formative indicators and latent variables in the validated structural model



**List of variables and subscales**

<u>Socio Demographic Variable</u>	<u>Personality Dimension</u>	<u>Mentoring Activities</u>	<u>Effectiveness Of Mentoring</u>
Ag – Age	Ev – Extraversion	TJ –Teach the Job	RE –Relationship Emphasis
TE- Teaching Experience	Ag – Agreeableness	PC– Provide Challenge	IE – Information Emphasis
	Co - Conscientiousness	TP –Teach Politics	FF – Facilitative Focus
		CH –Career Help	CF – Confrontive Focus
		Sp – Sponsor	MM –Mentor Model
		CC– Career Counselling	SV – Student Vision
		Tr – Trust	



Previous research had clearly suggested an increase in agreeableness and conscientiousness with age (Goldberg et al. 1998; Mc Crae et al. 1999; Caspi et al. 2005). Costa et al. 1992 observed that older individuals tend to be slightly lower in neuroticism, extraversion and openness and slightly higher on agreeableness and conscientiousness. The findings of the present study are similar to the findings of Costa et al. Though not statistically significant at  $P < .05$ , there is perceivable decrease in neuroticism, extraversion and openness of teachers as they advance in age and agreeableness, and conscientiousness increase with the age advancements.

Structural equation model has shown that personality profile of teacher mentors influence the mentoring activities initiated by them. It may be recalled here that analyses of data in the chapter five has established that personality of mentors affect their mentoring activities. The personality quality of extraversion was shown to maintain attestable correlations with almost all the mentoring activities except protecting. Similarly agreeableness correlated very highly with the mentoring activities of teaching the job, providing challenge, career help, sponsoring, career counseling and building trust. The correlation between conscientiousness and mentoring activities was observed to be high excluding protection and friendship. Openness seemed to have significant correlation among every mentoring activity but for teaching the job. It was also found that there existed negative correlation between personality feature of neuroticism and mentoring activities. Judge et al. (2002) found that extroversion, conscientiousness, and openness to experience to be strong predictors of leadership effectiveness and emergence across different situations. He also found a negative relationship between neuroticism and leadership emergence. Niehoff (2006) explored the degree of correlation between

dimensions of personality and the individual's voluntary participation as a mentor and the findings suggested that those who often participate as mentors are likely to be extraverted, conscientious and open to new experience. This study also found strong negative correlation between neuroticism and almost all the mentoring activities except in cases of protecting and teaching politics ( $P < 0.01$ ) at a rigid statistical threshold.

The path co-efficient between mentoring activities and effectiveness of mentoring is found to be sufficiently high indicating significant correlation between the seven mentoring activities and the six dimensions of effective mentoring. The results obtained by the structural equation model, can be supplemented by the correlation results portrayed in chapter six between the mentoring activities and the effectiveness of mentoring. It was seen that mentoring activities, severally, collectively and significantly correlated positively with the effectiveness of mentoring. A closer look at the correlation table reveals highest degree of correlation between the mentoring activity of career counseling and the facilitative dimension under mentoring effectiveness. Likewise, the correlation between the mentoring activity of career counseling and student vision under effectiveness of mentoring was also found to be noticeably higher. Similarly there was significant correlation between the mentoring activity of teaching the job and effectiveness of mentoring (information emphasis). According to Cohen (1995) mentor model means that faculty mentors are paying attention towards motivating protégés to take necessary risks and overcome difficulties in their journey towards educational and career goals. The findings of the present study, reveals that there is correlation between career counseling and mentor model. Mentors stimulate the protégés critical thinking with regard to envisioning their own future and to develop their personal and professional potential. The study

reveals that there is positive and reliable correlation between career counseling and student vision.

The mentor requests detailed information from and offers specific suggestions to protégés about their current plans and progress in achieving personal, educational and career goals. The study reveals there is significant correlation between 'teach the job' and information emphasis. The mentor guides protégés through a reasonably in-depth review of an exploration of their interests, abilities, ideas, and beliefs. The least correlation is between friendship and facilitative focus ( $r=0.185^*$ ,  $P < .05$ ).

This validated model sufficiently explains effectiveness of formal teacher initiated student mentoring in B-schools and confirms a general fact that teachers have a crucial role in making an intervention successful and in building up the society at large. Hence while selecting the teacher mentors due consideration should be given to the identified latent variables and its formative indicators that may lead to enhanced effectiveness of mentoring.

## **7.9 Conclusion**

The operational model of effectiveness of mentoring comprised of four latent variables namely, Socio-demographic variable (with 6 formative indicators), Personality dimension (with 5 indicators), Mentoring Activities (with 9 indicators) and Effectiveness of mentoring (with 6 indicators). Finally the PLS procedure arrived at a validated model retaining all the 4 latent variables with revised sets of formative indicators associated with each of the latent variables: 1 Socio-Demographic Variable (age, and teaching experience), 2 Personality (extraversion, agreeableness and conscientiousness), 3 Mentoring activities (teach the job, provide challenge, teach politics, career help, sponsor, career counseling

and trust) and 4 Effectiveness of mentoring (relationship emphasis, informative emphasis, facilitative focus, confrontive focus, mentor model, and student vision). The final model revealed that socio-demographic variables, personality, and mentoring activities influence the effectiveness of mentoring. The path co-efficients revealed that mentoring activities are influenced mostly by the personality profile and effectiveness of mentoring is highly influenced by mentoring activities. It is observed that all the three path co-efficients are statistically significant with  $p < 0.01$ .

The researcher has not come across similar studies in the field of management studies, hence this research could be indicative for future researchers in engaging constructs like mentoring activities and effectiveness of mentoring evaluated. The present study has also brought out insights that are instructive to teachers and administrators of management and other institutes where personal and professional transformations of students are considered important.

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## Protégé maturity as the Illustrative Outcome

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- 8.1 Protégé maturity of students
  - 8.2 Protégé maturity in mentoring institutions
  - 8.3 Protégé maturity in non-mentoring institutions
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Mentoring is expected to help students in a B-school to achieve and maximize growth and development – academically, professionally, and otherwise. The goal of teacher who initiates student mentoring is to help students gain the skills and confidence to be responsible for their own future. It is a common observation that youth, left to themselves, fail to develop qualities, attitudes, habits and patterns of behaviour widely recognised as essential to their effectively assuming and successfully acting in adult roles. The mentor provides consistent support, guidance and concrete help to a student who is in need of a positive role model. Successful mentoring programs may also help students deal with the intricacies of the institution they are attending (Mayo et al., 1995 and Tinto, 1993).

The American Assembly of Collegiate Schools of Business (AACSB) recently adopted a philosophy requiring business schools to measure the outcomes of their curriculum (AACSB, 1996). Very few schools of business in India have conducted outcome studies which compare their outgoing graduates to the newly admitted students.

Based on the reviews available, one can assume that mentoring outcomes for learners can be expected to manifest themselves as changes in knowledge, attitudes and skills. Mentoring can have outcomes related to learning accomplishments, development of the psychosocial aspects of the person and the development of their career skills referred to as protégé maturity in the context of the present study.

This section deals with Protégé maturity (development of psychosocial qualities) considered as illustrative outcome of effectiveness of mentoring.

Protégé maturity as the outcome was ascertained by measuring the psycho-social qualities of efficacy, perseverance, planfulness, responsibility, individualism and cooperativeness that help individuals adopt roles which later in life would facilitate competency and effective performance as an adult. These were measured using the Stanford scale of transition from adolescents to adulthood (1991). Psychosocial mentoring functions operate at an interpersonal level and can assist protégés in developing healthy self-images of their academic and nonacademic selves.

Efficacy relate to the conviction that one can successfully implement the activities required to produce desired results. The items representing efficacy [Items: 4, 8, 13, 14, 17, 20, 30, 43, 45, 50, 54], [Reverse scored items: 4, 8, 50] have been shown in student inventory I.

Cooperativeness is one's ability to work hand in hand with others towards achieving group goals in a relatively impersonal organizational framework. The items representing cooperativeness is shown in student inventory I [Items: 5, 12, 18, 23, 28, 32, 36, 40, 42, 47, 57, 58, 63], [Reverse scored items: 36, 40].

Individualism essentially means being autonomous without being uncooperative to others. Being autonomous includes belief in the centrality of one's personal development, expression and goals as contrasted to the submergence of self in deference to family and clan needs. The items representing individualism are shown in student inventory I in terms of Items: 2, 6, 11, 19, 24, 41, 44, 46, 49, 53, 55, 59, 60, 61, 62, 64; Reverse scored items are: 2, 19, 53, 55, 59, 60, 62.

Perseverance refers to pursuing a course of action in spite of difficulties or oppositions. The items representing perseverance [Items: 9, 10, 16, 22, 27, 29, 31, 35, 37, 39, 48, 56], [Reverse Scored items: 22, 31, 35] are shown in student inventory I.

Planfulness in essence is planning carefully the short term and the long term goals and examining the means to achieve stated goals. The items representing planfulness are: 3, 15, 21, 25, 26, 34, 38, 52; reverse scored items are 21, 25, 26, 34 that are shown in student inventory I.

Responsibility is acceptance of the belief that an individual is accountable for his or her actions. The items representing responsibility [Items 1, 7, 33, 51], [Reverse Scored items: 7, 33] are shown in student inventory I.

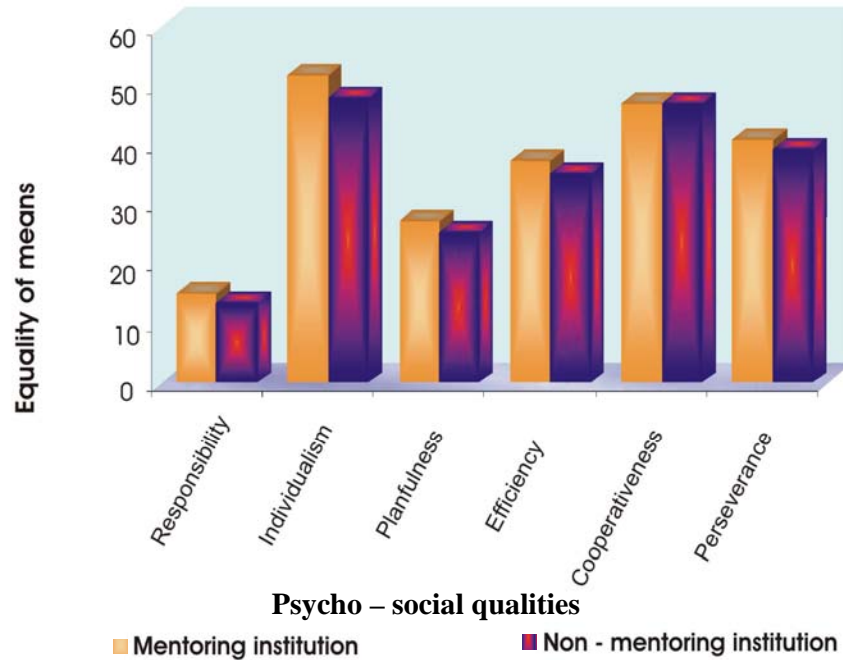
## **8.1 Protégé maturity of students**

Generally, management education focuses its attention on a holistic development of the students. They claim that they are generally successful in bringing about personal and professional development of the students. This being the situation, data was collected from the students in the B-schools to portray the psycho-social differences between the fourth semester students and the fresh MBA students who were not exposed to any of the activities at the schools.

Kram (1983) differentiated mentoring outcomes into career related and psycho-social in content. Career functions are typically focused on career development and include aspects of the mentorship that enhance ‘learning the ropes’ and preparing for advancement in career. Career functions include sponsorship, exposure and visibility, coaching, protection, provision of challenging assignments, and transmission of applied professional ethics (Kitchener, 1992 and Kram, 1985). Empirical studies reveal that psychosocial functions may be more important than the career-related functions for students. Psychosocial functions include role modelling, acceptance, confirmation, counselling, and friendship (mutuality). This distinction in mentor outcomes has received considerable theoretical and empirical support (Levinson et al., 1978; Kram, 1985; Swerdlick and Bardon, 1988 and Wilde and Schau, 1991) and skillful mentors seamlessly blend these functions in work with protégés (Clark and Johnson, 2000 and Kram, 1985). Ugbag and Williams (1989) opined that students felt that most important functions provided by their mentors was offering encouragement, increasing their self-confidence, and serving as positive role models. Psychosocial functions thus seem to enhance protégé’s sense of competence, identity, and work-role effectiveness. It may therefore be expected that graduates from management institutions that have incorporated mentoring programme as a part of their pedagogy differ significantly from those of non-mentoring institutions. Figure 8.1 represents comparison of assessed protégé maturity of second year students from mentoring and non-mentoring institutions. Second year students were found to differ on aspects like responsibility, individualism, planfulness, efficacy, and perseverance, while it was found that the students do not differ in their average scores of cooperativeness.



**Figure 8.1 Comparison of Protégé Maturity of Students in mentoring and non-mentoring institutions**



The findings on protégé maturity levels reveal that mentoring is an effective tool to improve the psycho social qualities of protégés.

## **8.2 Protégé maturity in mentoring institutions**

One of the objectives of the present study was to depict protégé maturity acquired by students in B-schools as the illustrative effect of mentoring process. t- test was applied to see whether the mean scores of the protégé maturity dimensions vary significantly between first year and second year students in mentoring institutions. Table 8.1 depicts comparison of mean scores of students in mentoring institutions between the freshers and the final semesters.

**Table 8.1 Mean scores of students in mentoring institution**

	YEAR						t	df	P value	Sig.
	I year			II year						
	Mean	Std Deviation	No.	Mean	Std Deviation	No.				
Responsibility	11.87	1.76	167	14.87	2.33	172	13.322	337	.000	**
Individualism	43.81	6.20	167	51.85	4.33	172	13.898	337	.000	**
Planfulness	25.40	2.84	167	27.04	3.80	172	4.502	337	.000	**
Efficacy	34.28	3.53	167	37.32	4.37	172	7.034	337	.000	**
Coperativeness	47.88	4.44	167	46.99	6.99	172	1.398	337	.163	Ns
Perseverance	39.30	3.63	167	40.83	5.09	172	3.172	337	.002	**
Overall score	202.54	11.47	167	218.90	19.28	172	9.458	337	.000	**

The results indicated that the mean score of responsibility ( $t = 13.322$ ;  $p = 0.000$ ), individualism ( $t = 13.898$ ;  $p = 0.000$ ), planfulness ( $t = 4.502$ ;  $p = 0.000$ ), efficacy ( $t = 7.034$ ;  $p = 0.000$ ), and perseverance ( $t = 3.172$ ;  $p = 0.002$ ) vary significantly among the first year and second year students. But these comparative groups do not differ significantly vis-à-vis their mean scores of cooperativeness ( $t = 1.398$ ;  $p > 0.05$ ). To summarise, it was observed that the overall mean scores of protégé maturity vary significantly between first year and second year students ( $t = 9.458$ ;  $p = .000$ ) in institutions with formal mentoring.

### 8.3 Protégé maturity in non-mentoring institutions

t-test was applied to see whether protégé maturity dimensions vary significantly between first year and second year students in non-mentoring

institutions. Results indicated that the mean scores of responsibility ( $t = 6.168$ ;  $p = 0.000$ ), individualism ( $t = 6.152$ ;  $p = 0.000$ ), efficacy ( $t = 2.629$ ;  $p = 0.000$ ) vary significantly among the first year and second year students and the student groups do not differ significantly on the mean score of planfulness ( $t = 0.461$ ;  $p > 0.05$ ), cooperativeness ( $t = 0.639$ ;  $p > 0.5$ ) and perseverance ( $t = 0.598$ ;  $p > 0.5$ ). Table 8.2 shows the comparison of mean scores of students in non-mentoring institutions. To sum up for those from the non-mentoring institutions, while the second year students differ on aspects like responsibility, individualism, and efficacy, they do not differ in their average scores of planfulness, perseverance and cooperativeness.

**Table 8.2 Comparison of mean scores of students in non-mentoring institutions**

	YEAR						t	df	P Value	Sig.
	I year			II year						
	Mean	Std Deviation	No.	Mean	Std Deviation	No.				
Responsibility	12.14	1.59	160	13.34	1.81	146	6.168	304	.000	**
Individualism	44.60	5.27	160	48.03	4.40	146	6.152	304	.000	**
Planfulness	25.35	2.84	160	25.17	3.90	146	0.461	304	.645	Ns
Efficacy	34.14	3.41	160	35.20	3.65	146	2.629	304	.009	**
Coperativeness	47.39	4.71	160	46.99	6.22	146	0.639	304	.523	Ns
Perseverance	39.56	3.22	160	39.30	5.10	146	0.527	304	.598	Ns
Overall score	203.18	10.60	160	208.03	17.68	146	2.945	304	.003	**

The MBA curriculum and pedagogy is generally designed in such a way that students are exposed to various developmental activities. Some of the activities are event management, field survey, personality development

programs, community development programs, organization trainings, guest lectures from experts in the industry. The exposure the final year students would have gained throughout the MBA program and the inputs provided by the teachers could have led them to develop psycho-social qualities of responsibility, individualism and efficacy. Inputs given under the umbrella of mentoring are definitely instrumental in developing these very same qualities that are further augmented by higher degrees of perseverance and planning which in turn could have increased the rate of maturity of students in mentoring institutions.

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## *Findings, Conclusions, Recommendations and Implications*

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- 9.1 Formalisation of mentoring
  - 9.2 Socio-demographic and personality profiles of teacher mentors
  - 9.3 Mentoring activities
  - 9.4 Effectiveness of mentoring
  - 9.5 Protégé maturity
  - 9.6 Implications of the study on theory and practice
  - 9.7 Recommendation
  - 9.8 Suggestions for Future research
  - 9.9 Final Wrap-up
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The primary purpose of this study were to evaluate the effectiveness of formal and teacher initiated student mentoring in B-schools in Kerala, and to demonstrate the psycho-social changes and development among the students (protégé maturity) across their life in the schools and to establish these as outcomes of faculty related antecedents and to examine the contributions of mentoring activities towards teachers' effectiveness as mentors.

The findings of the study are presented under (a) faculty environment inclusive of formalisation of mentoring in the school, socio-demographic and personality profiles of teacher mentors, (b) mentoring activities, (c) effectiveness of mentoring and (d) protégé maturity.

## **9.1 Formalisation of mentoring**

Among the 19 institutions that lived up to the inclusion criteria, just nine (9) B-schools had formalised mentoring programme as part of their curriculum while ten (10) institutions did not consider mentoring as a part of their pedagogy.

## **9.2 Socio-demographic and personality profiles of teacher mentors**

The analysis revealed that the majority of the teacher respondents had their age ranging from 31 to 40 years. The teaching population of B- schools in Kerala is dominated by male teachers and most of the faculty members were having only post graduation as their educational qualification. Majority of the faculty was Lecturers and Senior Lecturers by designation and had 5 years of teaching experience and 2 years of industrial experience to their personal credit. This implies that most of the teachers in management institutions in Kerala were relatively young.

Personality make up of teachers, considered as an independent variable in this study, was found to be varying significantly among the respondents. They represented traits like openness, conscientiousness, agreeableness, extraversion, and neuroticism. It was observed that the faculty members in B-schools were all average in their personality properties and failed to represent any trait as noticeably predominant.

Teachers working in formal mentoring environments displayed consistently higher degrees of all the personality facets (extraversion, openness, agreeableness and conscientiousness) except neuroticism. The present study reinforces other research findings that teachers scoring high on the above mentioned parameters (openness, agreeableness, extraversion and

conscientiousness) were able to establish good mentor protégé relationship and proved to be effective mentors. The present study also implies that the teachers in management institutions in Kerala could probably make/become better mentors.

### **9.3 Mentoring activities**

The present study reveals that all teachers were in the know of and utilised all the mentoring activities of guiding, helping and encouraging types considered to be important and relevant in this research framework. They make use of all the mentoring initiatives more or less equally well.

Female mentors were found to be better sponsors of their protégés than male teachers. These female teachers, by definition, take special attention to acknowledge accomplishments of their protégés endorse their growth oriented attempts and provide visibility to the student mentees. Male mentors tend to refrain from publicly acknowledging and appreciating the protégé's accomplishments (refer chapter 5).

Academic qualification did not appear to affect the intensity of mentoring activities employed. It has been observed that formal authority does influence the mentoring activities used. Teachers in low formal positions (Lecturers and Senior Lecturers) tend to teach the students in a structured way with prepared course material, while Professors and teachers in higher formal positions are better sponsors of protégé achievement and provide better career counseling and guidance.

The mentoring activity of 'sponsoring' differs with teaching experience and it was found to be high among teachers with more years of experience. Teachers with more than 2 years of industrial experience were high on utilizing 'teaching politics' as a useful mentoring technique, probably due to

their appreciation of the importance of playing politics in the real-life situations in the employed life, based on their personal and direct experience. Teachers employed in mentoring institutions were found to be remarkably high on 'providing challenge' as a distinctive mentoring activity.

Extraversion and conscientiousness positively and significantly influenced the mentoring activities initiated by teachers, while neuroticism seemed to have negative correlation with mentoring activities. Relatively high correlation was found between agreeableness and the mentoring activity of 'sponsoring'. Only minimal and insignificant yet noticeably inverse correlation was discerned between neuroticism and 'protecting'. The present study revealed that personality facets of extraversion, openness and conscientiousness influenced the mentoring activities initiated by the teachers ( $R^2 = 0.27$ ).

#### **9.4 Effectiveness of mentoring**

The overall mean score of teachers about their own effectiveness of mentoring reveals that the teachers generally evaluated themselves as falling on to the positive side of mentoring effectiveness. On amplification, it was found that 59.6 per cent of teachers evaluated themselves as effective while 40.4 per cent accepted themselves to be less effective. An anomaly was also brought out when the comparative scores offered by the students were considered. The students acceded only a lower overall score thereby classifying teachers as generally 'not effective' in mentoring effectiveness. 85.6 per cent of the students in B-schools were not prepared to accept teachers to be effective mentors. Only 14.4 per cent of the students consider their teachers to be effective as their mentors.



Formalisation of mentoring in a B-school was found to lead to higher levels of mentoring effectiveness. The activities of career counseling, building trust, providing challenge and teaching the job are the activities positively correlated to the effective mentoring. Offering friendship and protection to protégés do not contribute to the effectiveness of mentoring.

The study reveals that three major variables ‘teach the job’ ‘provide challenge’, and ‘trust’ effectively discriminated the highly effective mentors from less effective mentors. Though the difference among these variables was significant in case of all institutions surveyed, the single major factor which distinguished the high effective and low effective mentor is ‘providing challenge’. Teacher mentors in mentoring institutions delegate tasks to the protégé to a great extent and thereby inculcate the spirit of initiation and innovation in protégés that makes them to be rated as more effective mentors.

Structural Equation Modeling (PLS) has been instrumental in proposing and validating a conceptual model in terms of selected socio-demographic variables, personality facets, mentoring activities and effectiveness of mentoring. It was found that age and teaching experience were the socio-demographic variables and, extraversion agreeableness and conscientiousness were the personality dimensions that impacted effectiveness of mentoring. Seven mentoring activities ‘teaching the job’, providing challenge’, ‘teaching politics’, ‘career help’, ‘sponsoring’, ‘career counseling’, and ‘building trust’ contributed significantly to the effectiveness of mentoring measured in terms of relationship dimension, information dimension, facilitative focus, confrontive focus, mentor model, and student vision. The statistical analysis revealed a high degree of composite reliability and average variance for the proposed model.

## 9.5 Protégé maturity

Protégé maturity instilled in and gained by the students through mentoring experiences in B-schools considered as essential for a smooth transition to the real world of adulthood, measured in terms of qualities like responsibility, individualism, efficacy, planfulness, perseverance and cooperativeness, were explored, analysed and presented as the illustrative outcome of the mentoring process. The senior students in mentoring institutions were found to have improved convincingly in aspects of responsibility, individualism, planfulness, efficacy and perseverance whereas the comparables in non-mentoring institutions differed in aspects like responsibility, individualism and efficacy. Though incremental advantage was noticed in all the parameters in the case of senior students in mentoring institutions vis-à-vis their counterparts in non-mentoring institutions, planfulness and perseverance in chosen activities were the two important dimensions that distinguish decisively the final year students in the two categories of B-schools.

## 9.6 Implications of the study on theory and practice

This session deals with the theoretical and social implications of the present study.

### 9.6.1 Theoretical implications

The present study progressed with three hypotheses:

**H1.** Personal profile attributes of teacher mentors correlate with and influence significantly the extent of mentoring activities carried out in B-schools.

The data analysis and statistical tests employed did corroborate H1 establishing that the frequency and the commitment with which the teachers

initiated various mentoring activities as part of their pedagogy was clearly influenced by the predominant personality traits of the concerned teacher mentors (refer chapter 5, p 183).

**H2.** The nature and extent of mentoring activities vary among B-schools as they vary in formalisation of mentoring.

The data collected and the analyses resulted only in partial acceptance of H2 in that the same was true with statistical significance only in case of provide challenge as a mentoring (guiding) activity (refer chapter 5, p 186).

**H3.** The mentoring activities, severally and collectively, correlate positively and significantly with the effectiveness of mentoring.

The hypothesis H3 was accepted and proved. The study reveals that there exist significantly high correlation between each of the mentoring activities and each of the dimensions envisaged as constituting effectiveness of mentoring. The hypothesis was found to be true in the cases of combined scores as well thereby proving the hypothesis in its entirety (refer chapter 6, p 209).

Structural equation modeling procedure was employed to validate the proposed model in terms of selected socio-demographic background variables, personality facets, mentoring activities initiated and effectiveness of mentoring. It was found that only two socio-demographic variables of age and teaching experience of the teacher mentors have some [indirect] effect on the effectiveness of mentoring. Similarly all the personality traits considered for testing did not have decisive influence on the effectiveness scores. Extraversion, agreeableness and conscientiousness were the personality dimensions found to impact effectiveness of mentoring. Seven mentoring activities 'teach the job', provide challenge', teach politics, career help,

sponsor, career counseling, and trust, contributed significantly to the effectiveness of mentoring measured in terms of relationship dimension, informative dimension, facilitative focus, confrontive focus, mentor model and student vision. This study could achieve high degree of composite reliability and average variance for the proposed model (refer chapter 7, p 237).

The present research has proposed a mentoring model and has validated the same using the structural equation modeling using the Visual PLS. Though the technique was developed three decades ago, not many researchers in India have employed this technique thinking it is complex.

It is an alternative and new way of modeling data in social sciences. PLS is well suited to explaining complex relationships, such as causal-predictive analysis in situations of low theoretical confirmation. The fact that the current research has successfully employed visual PLS technique to arrive at better and more reliable conclusions and generalisations would hopefully serve to motivate future researchers in social-science to follow suit.

### **9.6.2 Implication for B-schools**

The researcher is of the opinion that implementation of a mentoring programme will be beneficial to the student community at large, specifically teachers and students in management institutions, and organisations engaged in training and others in the industrial parlance.

It has been observed that significant improvement is achieved by the second year students in institutions where mentoring has been formalized by the time they complete their tenure. They tend to improve on certain qualities like responsibility, individualism, planfulness, perseverance and efficacy which is very essential for their future transition into the work place.

According to Wynn nine categories of life skills have been identified as crucial to effective life transition and the dimensions of student learning are emotional Intelligence, healthy lifestyles, effective communication, intuition, creativity, conflict resolution, critical thinking, managing change, self responsibility, self management, and teamwork. A good mentor (teacher) and protégé (student) relationship is sure to enhance all these qualities. Future researches covering the notions and concepts of emotional intelligence, lifestyles, communication, intuition, creativity, conflict resolution, critical thinking, self responsibility and self management and teamwork would be rewarding and worthwhile.

Faculty members involved in mentoring endeavours are more likely to have opportunities to develop professionally (career orientation) and personally (psycho-social) over time. Mentors often get satisfaction and confirmation through helping less experienced individuals in their development. Mentoring is an ideal training and development tool which helps individuals develop both professionally and personally. Future research may be undertaken to evaluate the professional and personal developments and achievements of mentors.

This study will be an eye-opener to management institutions which have not incorporated mentoring as part of their pedagogy. Management institutions, being the seat for the holistic development of the students, should be able to create a learning environment rather than a teaching environment. Business schools must be able to bring forth changes in the curriculum, so as to ensure that students are provided with adequate knowledge, attitudes, skills and abilities that are needed for success in this turbulent social environment. The various benefits that the institutions stand to accrue as a result of implementing a mentoring programme are improved students quality, reduced

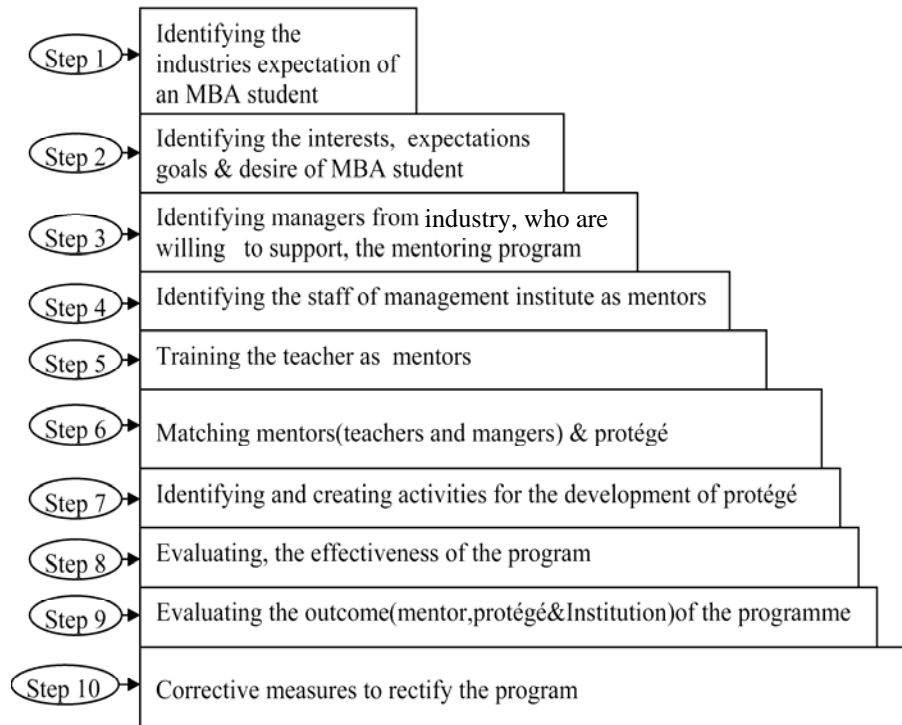
absenteeism, improved student retention, academic excellence, effective student placements, satisfaction of parents, their goodwill and reputation for the school. Future research can also consider evaluating the benefits to the institution as a result of implementing mentoring.

Students who have been exposed to mentoring programme will later on tend to become mentors and will contribute towards improving the effectiveness and efficiency of their prospective organizations. Thus an automatic transition of mentoring occurs from educational institution to industry. If most of the organizations become effective and efficient, it will result in the progress and prosperity of the nation. Finally the society will be benefited with socially responsible managers. Future research may be involved in identifying if the mentored youth from management institution are able to cater to the expectation of the industry (industry fit).

### **9.7 Recommendation**

The researcher in the light of the lessons learnt in the course of the study recommends a mentoring procedure for management institutions. The B-schools could employ a trained mentor coordinator to organise the mentoring programme. Given below is the diagrammatic representation of the procedure.

### **Mentoring procedure for management institutes**



#### **Step 1 : Identifying the industries' expectation of an MBA student**

In order to develop and make the students industry fit, it is highly essential that educational institutions become aware of the current practice and trends and know the expectations of the industry regarding a prospective manager. The mentor coordinator may identify the expectations of the industry, by gathering information through an interface with the industry. For the successful implementation of the programme this is an important phase.

**Step 2: Identifying the interest's expectations goals and desire of an MBA student**

The second phase involves identifying the strengths, weaknesses, expectations, goals and desires of the students.

**Step 3: Identifying managers from industry**

The third phase involves identifying managers from industry, who are willing to support, and be a part of the mentoring programme in a management institution.

**Step 4: Identifying the staff of management institute as mentors**

Senior teachers with rich experience, skills, knowledge and willingness to be mentors may be identified as a part of the mentoring programme .

**Step 5: Training the teachers as mentors and creating awareness among students**

The teachers who are willing to be part of the mentoring programme should be trained so that the programme is conducted systematically and ensures the desired outcome. Similarly the students ought to be made aware of the mentoring programme and its prospects so as to ensure better participation.

**Step 6: Matching mentors (teachers and managers) & protégé**

The mentor teachers and protégés are matched based on similar personality, goals and interest. The right industry mentor is also linked based on the area of specialisation. A process of telementoring (interaction through email) may be initiated between industry mentor and the protégé.

**Step 7: Identifying and creating activities for the development of protégé**

The mentor teachers in joint consultation with the industry mentor may identify the right mentoring activities to develop the protégé both personally and professionally.



**Step 8: Evaluating, the effectiveness of the program**

A systematic mechanism may be used in order to evaluate the effectiveness of the programme.

**Step 9: Evaluating the outcome (mentor, protégé & institution) of the programme**

The outcome of the mentoring programme in terms of benefits accrued to the mentor, protégé and institution ought to be evaluated and appraised regularly.

**Step 10: Corrective measures to rectify the program**

Based on the outcome of the evaluation, corrective measures ought to be taken. If the results are positive the system may continue, if not corrective measures should be taken based on the requirement.

**9.8 Suggestions for future research**

The theoretical positions and empirical analyses focused in this study provides insight into the effectiveness of formal and teacher initiated student mentoring in B-schools. Future research can be extended in a number of ways and some of the possibilities are enumerated below.

- The review of literature says that there is dearth in documented empirical evidence regarding the effectiveness of mentoring in management education. Hence future researchers could attempt at a longitudinal study in the field of management education involving specific faculty and protégé dyads involved in the mentoring process. This would become a meaningful contribution to the growing field of knowledge.
- The current model can be further enhanced by including variables like organisation culture, organisation climate, and training provided as independent variables.

- A comparative study could be conducted between the mentoring carried out by teachers in management education and practicing managers.
- An analysis of the mentor's role across various professional disciplines could give an insight into the differences in mentoring provided by various professions (Management studies, medicine, nursing, engineering, legal studies). By comparing mentoring in different professional contexts, it becomes easy to understand the unique requirements of each profession.
- The present study evaluated the effectiveness of teacher initiated student mentoring and presented only psycho-social qualities as the indicator of protégé maturity. Future researcher could go further and evaluate the effectiveness in terms of career related outcomes of the protégé or measure the psycho-social dispositions of a teachers as well (satisfaction, self-esteem etc.).
- A training module aimed at developing and enhancing the capabilities of a mentor could be designed.

## **9.9 Final wrap-up**

The present study proposed a mentoring process model and validated it using Structural Equations Model (PLS) and the results indicated that the variables included in the present study contributed towards the effectiveness of mentoring. The study revealed that 48 per cent of the Management institutes had implemented mentoring programme as part of their pedagogy. The findings reveal that the formal mentoring programme was effective and was influenced by selected personality facets of mentors (extraversion, agreeableness and conscientiousness) which positively influence the

mentoring activities initiated by teachers and Neuroticism had negative correlation with mentoring activities. While the mentoring activities initiated discriminated between high effective and low effective mentors, the results revealed that teaching the job is the maximum discriminating variable followed by providing challenge and building trust in institutions where mentoring has been formalised. Building trust has emerged as the most discriminating variable for highly effective and low effective mentors considering all B-schools notwithstanding their differences in formalising mentoring in their pedagogy. This study establishes the need and significance of implementing a formal mentoring programme in management education.

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## **APPENDICES**

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## *Appendix –I*

### **CHECKLIST FOR PILOT STUDY**

#### **Institutional Details**

1. Name of the institute :
2. Year of establishment :
3. Permanent Teaching Staff :
4. Students Strength :

#### **To explore Mentoring as a part of pedagogy**

1. Are you aware of mentoring

Yes       No

Do you, have a mentoring program in your institute Yes No

If yes, since how many years are you implementing this program

- a. 3 years – 4 years
  - b. 4 years – 5 years
  - c. > 5 years
2. What type of mentoring program do you practice?
    - a. Formal: Formally prescribed and recognized as a definite component in the pedagogical structural ad administrative stipulation
    - b. Informal: On a personal level, though the institute does not formally describe.

*Checklist for Pilot Study*

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3. What is the primary goal of the mentoring program.

Career function : Sponsorship, Exposure, Visibility, Coaching,  
Protection and challenging assignment.

Psychosocial function : Role modeling friendship, counseling,  
acceptance, and confirmation.

4. Do you have system to evaluate the teacher as a mentor

Yes  No

If yes say how

5. Do you have system to evaluate the student as a protégé.

Yes  No

If yes say how

6. Is the outcome of the program worth the time and resource invested.

Yes  No

If yes say how

**INVENTORY -II**

**Instruction to respondents**

This section of the questionnaire seeks to collect information about your activities and inputs while you interact with your students. There could be a relationship that could be between you and your student in which you would attempt to teach, counsel, guide, and help your student to develop professionally and personally.

Directions: You may respond to each item below by putting a tick [√] mark against the rating scale at the most appropriate place that most describe your activities. There is no right or wrong answer. **If some of the statements do not apply to your interactions with your student, answer should be based on how you would probably interact if the specific situation were to arise with your student.**

	Very frequently or very likely	Frequently or likely	Sometimes or possible	Seldom or unlikely	Never or very unlikely
1. Provide informal feedback.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Help turn failures into learning experiences.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Model effective problem solving.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Point out and encourage the study of a variety of successful work styles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Provide clear, specific, accurate information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Give important information when it is needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<b>Very frequently or very likely</b>				
	<b>Frequently or likely</b>			<b>Sometimes or possible</b>	
	<b>Seldom or unlikely</b>		<b>Never or very unlikely</b>		
7. Coach in sidestepping entanglements and avoiding trouble.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Teach ways around obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Allow or expect to work out solutions to problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Consult whether assignments are challenging enough.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Encourage to take initiative and seek greater responsibility.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Encourage to take on project with wide scope.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Provide more challenge and opportunity for the protégé than for others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Encourage to try risky situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Give (or encourage taking) a tough job that is something the protégé needs to learn professionally.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Give (or encourage to take) a tough job that will increase the self-confidence and contribute to personal development.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Explain how actions and strategies fit with real business objectives.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Alleman's Mentoring Activities Questionnaire (AMAQ)*

	<b>Very frequently or very likely</b>				
	<b>Frequently or likely</b>			<b>Sometimes or possible</b>	
	<b>Seldom or unlikely</b>		<b>Never or very unlikely</b>		
18. Discuss undercurrents, hidden agendas and body language after meetings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Instruct about potential political pitfalls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Help anticipate and allow for the reactions and responses of others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Provide key political tips that are clear, specific, and accurate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Warn of and suggest ways for dealing with pending political risk.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Discuss "What if..." situations and various possible scenarios.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Teach strategies for dealing with ineffective or hostile superiors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Use available power and resources to help the protégé reach career goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Recommend to a friend who is considering hiring someone with the protégés qualifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Contact friends in a position to offer the protégé an advantageous position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Very frequently or very likely				
	Frequently or likely			Sometimes or possible	
	Seldom or unlikely		Never or very unlikely		
28. Recommend the protégé for a scholarship, higher education in a foreign land or a reputed job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Give effective, well timed help in making career moves that are appropriate for the level of competence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Help make career moves that are in the right direction and advise what "dead end positions" to avoid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Use available power and resources to help accomplish key tasks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Help seek assignments outside the area of specialty to gain broader experience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Defend the protégé when criticized by the mentor's own superiors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Deviate from policy or bend the rules for the protégé when necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Take personal risks to defend/protect the protégé in work related matters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Provide an opportunity to defend ideas, try them out, and evaluate results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Defend the protégé when criticized by the mentor's colleagues and peers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Alleman's Mentoring Activities Questionnaire (AMAQ)*

	<b>Very frequently or very likely</b>				
	<b>Frequently or likely</b>		<b>Sometimes or possible</b>		
	<b>Seldom or unlikely</b>	<b>Never or very unlikely</b>			
38. Provide a safe, protected environment for development of new and potentially controversial ideas, carefully timing exposure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Provide protection that does not restrict the chance to learn from mistakes, but prevents disasters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Give appropriate, effective protection when needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. Support actions, plans, ideas to higher levels in the organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. Offer to participate jointly in organization activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Co-author articles or make joint presentations at professional meetings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. Recommend as a speaker for a seminar or meeting outside the organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. Recommend for key committees, special projects, community assignments, or professional organizations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. Send documentation of accomplishments to personnel file and bring to the knowledge of the head of the institution and the management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Very frequently or very likely				
	Frequently or likely		Sometimes or possible		
	Seldom or unlikely	Never or very unlikely			
47. Encourage to write articles for professional journals or present papers at professional meetings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. Effectively showcase potential or accomplishments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. Help define personal career goals and develop strategies to reach them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. Help recognize probable future directions of own and related fields.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. Help assess the value of learning experiences and how they fit with the real world.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. Help understand risk and its relationship to growth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. Engage in informal counseling on an ongoing basis.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. Show clear understanding of the protégés situation when counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. Help to develop self understanding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. Help to understand how career development works in the particular organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. Choose for a close friend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. Invite the protégé to the mentor's home.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Alleman's Mentoring Activities Questionnaire (AMMQ)*

	<b>Very frequently or very likely</b>				
	<b>Frequently or likely</b>		<b>Sometimes or possible</b>		
	<b>Seldom or unlikely</b>	<b>Never or very unlikely</b>			
59. Have occasional lunch, dinner, coffee, or drink with the protégé only.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. Help with personal needs such as locating housing or finding financial assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61. Invite to a social, cultural, or recreational event.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62. Value the friendship.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63. Show friendship that is warm and strong.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64. Form a bond of friendship that is personal as well as professional.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65. Consciously try to make the protégé feel like a valued member of the organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66. Verbally express confidence in the protégé.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67. Believe statements of and use information provided by the protégé.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68. Relax around the protégé.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69. Trust the protégé.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70. Increase the protégé's self-confidence by showing trust and confidence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71. Inspire to deserve the trust shown towards the protégé.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
72. By example, help learn when to trust others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix - II.C

### INVENTORY -III

**Directions:** You may respond to each item below by putting a tick [✓] mark against one of the following choices for each of the 55 statements that is most representative of your actual behavior as a mentor. **If some of the statements do not apply to your interactions with your student, answer should be based on how you would probably interact if the specific situation were to arise with your student.**

A Never  B Infrequently  C Sometimes  D Frequently  E Always

1. I encourage students to express their honest feelings (positive and negative) about their academic and social experiences as adult learners in college.  A  B  C  D  E
2. I discuss with students who are distressed (due to poor scholastic performance or other difficulties) the importance of developing a realistic view of learning that can include both success and disappointment (mentioning other students who have been frustrated as learners but have continued their education).  A  B  C  D  E
3. I ask students for detailed information about their academic progress.  A  B  C  D  E
4. I refer students to other staff members and departments to obtain information they need about academic and career plans.  A  B  C  D  E
5. I attempt to be verbally supportive when students are emotionally upset.  A  B  C  D  E
6. I suggest to students that we establish a regular time schedule for meetings.  A  B  C  D  E
7. I make a good deal of eye contact with students.  A  B  C  D  E

A Never  B Infrequently  C Sometimes  D Frequently  E Always

8. I suggest that students who indicate concerns about serious emotional or psychological problems meet a college counselor.  A  B  C  D  E
9. I ask students to explain (in detail) the reasons for their college plans and career choices.  A  B  C  D  E
10. I encourage students to provide a good deal of background information about their academic preparation, success, and problems in college.  A  B  C  D  E
11. I inquire in some depth about students' study strategies and (if necessary) offer practical suggestions and/or refer them for help to improve their academic performance.  A  B  C  D  E
12. I explain to students that I really want to know what they as individuals honestly think about issues (such as balancing college commitments and outside responsibilities) so that I can offer advice specific to them.  A  B  C  D  E
13. I arrange my meetings (when possible) with students at times when I will probably not be interrupted very much by telephone calls or other people.  A  B  C  D  E
14. I explain the need to explore degree and career options to students who have insufficient information (such as adult learners in transition between job fields or facing long-term commitments to fulfill degree requirements).  A  B  C  D  E
15. I encourage students to consider nontraditional (such as television-based) courses as well as more formal educational opportunities they have not yet explored to develop their personal interests.  A  B  C  D  E

A Never  B Infrequently  C Sometimes  D Frequently  E Always

16. I point out inconsistencies (rationalizations) in students' explanations of why their academic goals were not achieved if I believe my comments will help them develop better coping strategies to deal with their problem.  A  B  C  D  E
17. I try to stimulate students to do more rigorous critical thinking about the long-range implications (time commitments, lifestyle changes) their academic choices may have for increasing the complexity of their lives.  A  B  C  D  E
18. I explain to students why they should discuss (even with someone else) significant academic problems they are presently confronted with even if they prefer not to deal with these issues.  A  B  C  D  E
19. I offer recommendations to students about their personal academic learning needs (from remedial to honors courses, tutoring, course loads) based on specific information provided by them (as well as placement tests and academic records, if available) during our meetings.  A  B  C  D  E
20. I follow-up on students' decisions to develop better personal strategies (study habits, getting accurate information, making realistic decisions) by asking questions (and offering comments, if appropriate) about their actual progress at later meetings.  A  B  C  D  E
21. I tell students when I think their ideas about career or academic concerns (such as job entry or degree requirements) are very clearly based on incomplete or inaccurate information.  A  B  C  D  E

A Never  B Infrequently  C Sometimes  D Frequently  E Always

22. I attempt to guide students in exploring their own personal commitment to career or academic interests by posing alternative views for them to consider.  A  B  C  D  E
23. I verbally communicate my concerns to students when their negative attitudes and emotions are expressed to me through such nonverbal behaviors as eye contact, facial expression, and voice tone.  A  B  C  D  E
24. I discuss students' general reasons for not attending college and then focus on helping them identify concrete educational objectives, degrees, curricula, and courses.  A  B  C  D  E
25. I provide a reasonable amount of guidance in our discussions so that students will explore realistic options and attainable academic and career objectives.  A  B  C  D  E
26. I ask students to review their strategies for managing the changes in their lives (such as impact of increased time pressures on personal relationships or ability to handle current job) while they pursue their "dreams" regarding educational goals.  A  B  C  D  E
27. I guide students through a review of the personal experiences and specific facts they are using to base their important ideas and beliefs on (such as career options and the purpose of education).  A  B  C  D  E
28. I discuss my own work-related experience as a way of helping students think about and carefully examine their career options  A  B  C  D  E
29. I share with students personal examples of difficulties I have overcome in my own individual and professional growth if these experiences might provide insights for them.  A  B  C  D  E

A Never  B Infrequently  C Sometimes  D Frequently  E Always

30. I engage students in discussions which require them to reflect on the new competencies they will need to achieve their future goals.  A  B  C  D  E
31. I point out (using personal examples as well as stories about students) that achievement in college is primarily based on personal commitment (rather than just "luck") to students who are having problems completing the work but appear unrealistic about the amount of discipline and energy needed to cope with the pressures of an academic workload.  A  B  C  D  E
32. I express my personal confidence in the ability of students to succeed if they persevere in the pursuit of their academic goals.  A  B  C  D  E
33. I confront students with the reality of continued or probable negative consequences in a direct (but supportive) manner when they repeatedly do not follow-through on their stated intentions to deal with serious academic problems.  A  B  C  D  E
34. I encourage students to use me as a sounding board to explore their hopes, ideas, feelings, and plans.  A  B  C  D  E
35. I engage students in discussions aimed at motivating them to develop a positive view of their ability to function now and in the future as independent, competent adult learners.  A  B  C  D  E
36. I use my own experience (personal as well as references to other students I have advised) to explain how college courses or activities students believe will be boring, too demanding, or not relevant could be valuable learning experiences for them.  A  B  C  D  E

**(A) Never (B) Infrequently (C) Sometimes (D) Frequently (E) Always**

37. I offer students constructive criticism if I believe their avoidance of problems and decisions is clearly limiting their growth as adult learners. **(A) (B) (C) (D) (E)**
38. I encourage students to make well-informed personal choices as they plan their own educational and career goals. **(A) (B) (C) (D) (E)**
39. I explore with students who express a lack of confidence in themselves the ways in which their own life experience might be a valuable resource to help them devise strategies to succeed within the college environment. **(A) (B) (C) (D) (E)**
40. I assist students in using facts to carefully map out realistic, step-by-step strategies to achieve their academic and career goals. **(A) (B) (C) (D) (E)**
41. I share my own views and feelings when they are relevant to the college-related situations and issues I am discussing with students. **(A) (B) (C) (D) (E)**
42. I listen to criticism from students about college policies, regulations, requirements, and even colleagues without immediately attempting to offer justifications. **(A) (B) (C) (D) (E)**
43. I offer comments to students about their inappropriate behavior (in college) if I have a reasonable expectation that they are prepared to work on positive change and will most likely experience some success as a result. **(A) (B) (C) (D) (E)**
44. I inform students that they can discuss "negative" emotions such as anxiety, self-doubt, fear, and anger in our meetings. **(A) (B) (C) (D) (E)**



**(A) Never (B) Infrequently (C) Sometimes (D) Frequently (E) Always**

45. I express confidence in students' abilities to achieve their educational goals, especially when they are having personal difficulties in fulfilling their academic responsibilities due to outside pressures (work, family, relationships). **(A) (B) (C) (D) (E)**
46. I question students' decisions and actions regarding college related issues and problems when they do not appear to be appropriate solutions. **(A) (B) (C) (D) (E)**
47. I discuss the positive and negative feelings students have about their abilities to succeed as adult learners. **(A) (B) (C) (D) (E)**
48. I offer as few carefully chosen criticisms as possible when I try to get students to understand the (often difficult to accept) connection between their own self-limiting (defeating) behaviors and their inability to solve a particular problem. **(A) (B) (C) (D) (E)**
49. I ask probing questions that require more than a "yes" or "no" answer so that students will explain (in some detail) their views regarding their academic progress and plans. **(A) (B) (C) (D) (E)**
50. I explore with students the extent of their commitment (such as willingness to spend time and energy) as adult learners in achieving their educational goals. **(A) (B) (C) (D) (E)**
51. I base the timing of my "confrontive" questions and comments to students on my knowledge of their individual readiness (often related to the stage of our relationship) to benefit from discussions about clearly sensitive issues. **(A) (B) (C) (D) (E)**

A Never  B Infrequently  C Sometimes  D Frequently  E Always

52. I discuss my role as a mentor with students so that their individual expectations of me are appropriate and realistic.  A  B  C  D  E
53. I try to clarify the problems students explain to me by verbally expressing my understanding of their feelings and then asking if my views are accurate.  A  B  C  D  E
54. I ask students to reflect on the resources available (college, family, community) to help them manage their lives effectively while they pursue their educational and career goals.  A  B  C  D  E
55. I emphasize students, especially those who appear uncertain about what to expect from our meetings, that one of my important goals is to assist them in reaching their own decisions about personal, academic, and career goals.  A  B  C  D  E

*Thank You Very much*

*Appendix - III*

**EFFECTIVENESS OF MENTORING INITIATIVE  
FOR STUDENTS IN B-SCHOOLS**

*TEST BOOKLET*

*FOR STUDENT PROTEGE*

**“WISDOM IS SUPREME, THEREFORE MAKE A FULL  
EFFORT TO GET WISDOM; ESTEEM HER AND SHE  
WILL EXALT YOU; EMBRACE HER AND SHE WILL  
HONOUR YOU.”**

**PROVERBS 4:7-8**

## Appendix – III-A

### INVENTORY -I

This section of the questionnaire seeks to gather information regarding transition to adulthood among adolescents. The present study attempts to explore if students are able to develop certain qualities like attitudes, habits and patterns of behaviour which are widely recognized as essential to their later effectively assuming and successfully acting in adult roles.

**Directions:** Read each statement carefully and respond by putting [✓] mark against the rating scale that best represents your opinion. Please note there is no correct or wrong answer.

The following section deals with issues at:

#### COLLEGE

SD *Strongly Disagree*  D *Disagree*  MF *Mixed feeling*  A *Agree*  SA *Strongly Agree*

1. I take responsibility for the grades I get, good or bad.  SD  D  MF  A  SA
2. I can't get anyone to help me with problems at college.  SD  D  MF  A  SA
3. When I have collegework to do, I usually plan out how I'm going to get it done.  SD  D  MF  A  SA
4. If I don't understand something pretty quickly, I usually drop it and go on to something else.  SD  D  MF  A  SA

*Stanford Scale of Transition from Adolescence to Adulthood*

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SD *Strongly Disagree*  D *Disagree*  MF *Mixed feeling*  A *Agree*  SA *Strongly Agree*

5. In order to get things done at college, I have to work with others.  SD  D  MF  A  SA
6. I believe students should work on their own.  SD  D  MF  A  SA
7. I don't think it's that important to get my homework done on time.  SD  D  MF  A  SA
8. I can't get teachers and friends to help me when I get stuck with my collegework.  SD  D  MF  A  SA
9. I do my college-work whenever I get around to it.  SD  D  MF  A  SA
10. When things get hard at college, I don't give up, I just work harder.  SD  D  MF  A  SA
11. I prefer to be on my own as far as college is concerned  SD  D  MF  A  SA
12. I can learn more if I am part of a team than if I work alone  SD  D  MF  A  SA
13. It is up to me to keep out of trouble at college.  SD  D  MF  A  SA
14. I can get college staff (principal, secretaries, and counselors) to help me with problems at college.  SD  D  MF  A  SA
15. I plan my time so I can do both my college work and my extracurricular activities.  SD  D  MF  A  SA
16. At college, I go back and do things over until I get them right.  SD  D  MF  A  SA

SD Strongly Disagree  D Disagree  MF Mixed feeling  A Agree  SA Strongly Agree

17. Students should mind their own business at college and leave others alone.  SD  D  MF  A  SA

18. I try to get others to work together in order to make college a better place.  SD  D  MF  A  SA

19. Teachers are usually the problem in my college, not me.  SD  D  MF  A  SA

20. Even when things get tough at college, I can get my collegework done.  SD  D  MF  A  SA

21. I don't think about next year's courses until next year comes around.  SD  D  MF  A  SA

22. When I meet a difficult problem at college, I generally avoid trying to solve it.  SD  D  MF  A  SA

23. Students should be concerned about their fellow classmates at college.  SD  D  MF  A  SA

24. It is up to my teachers to make college interesting and fun. I just do my "own thing."  SD  D  MF  A  SA

**WORK**

25. I seldom get my work done on time.  SD  D  MF  A  SA

26. I don't think it makes sense to plan things out; things always seem to change anyway.  SD  D  MF  A  SA

27. When I start a job, I always finish it.  SD  D  MF  A  SA

28. When I have a choice, I prefer to work in a team rather than alone.  SD  D  MF  A  SA

*Stanford Scale of Transition from Adolescence to Adulthood*

---

SD *Strongly Disagree*  D *Disagree*  MF *Mixed feeling*  A *Agree*  SA *Strongly Agree*

29. Even when I 'm not enjoying my work, I do a good job.  SD  D  MF  A  SA
30. I know the job I want and am preparing for it.  SD  D  MF  A  SA
31. If something is too hard in my job. I lose interest.  SD  D  MF  A  SA
32. I can get more things done if I am part of a team than if I work by myself.  SD  D  MF  A  SA
33. When I mess up at work, it's usually someone else's fault.  SD  D  MF  A  SA
34. I don't find planning ahead helps me with my work.  SD  D  MF  A  SA
35. I usually give up at work when the job gets too tough.  SD  D  MF  A  SA
36. Working alone means I can really be sure it's correct.  SD  D  MF  A  SA
37. I usually give a little extra to make sure the job is done right.  SD  D  MF  A  SA
38. In order to move up at work, I plan ahead by learning about the job.  SD  D  MF  A  SA
39. At work, I go back and do things over until I get them right.  SD  D  MF  A  SA
40. It's a waste of time to try to get others to work with you.  SD  D  MF  A  SA

**PEERS**

41. If my friends don't get along with me, its their problem.  SD  D  MF  A  SA
42. When I have to make a decision, I follow the advice of my friends.  SD  D  MF  A  SA

*Appendix - III.A*

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SD *Strongly Disagree*  D *Disagree*  MF *Mixed feeling*  A *Agree*  SA *Strongly Agree*

43. Although I like my friends, I prefer to be on my own.  SD  D  MF  A  SA
44. Keeping friends depends on what I do.  SD  D  MF  A  SA
45. If I want something from my friends, I can usually get it.  SD  D  MF  A  SA
46. I try to figure out how to meet people who share my interests.  SD  D  MF  A  SA
47. I take my friend's ideas into account deciding on what we do together.  SD  D  MF  A  SA
48. I don't give up on my friends, even when we aren't getting along.  SD  D  MF  A  SA
49. It's important for me to be different from my friends.  SD  D  MF  A  SA
50. When students of my own age aren't friendly to me, I don't know how to handle it.  SD  D  MF  A  SA
51. I take responsibility for how I get along with friends.  SD  D  MF  A  SA
52. I plan my daily activities so I can spend time with my friends.  SD  D  MF  A  SA
53. If my friendships become a problem, I simply give up.  SD  D  MF  A  SA
54. I can get students of my own age to admire me.  SD  D  MF  A  SA
55. Friendship just happens; there isn't much you can do about it.  SD  D  MF  A  SA



*Stanford Scale of Transition from Adolescence to Adulthood*

---

SD Strongly Disagree  D Disagree  MF Mixed feeling  A Agree  SA Strongly Agree

56. I go ahead on my own, even if my friends don't agree with me.  SD  D  MF  A  SA
57. I try to stay close to my friends through the good times and the bad.  SD  D  MF  A  SA
58. It is important to me to have the support of my friends rather than to do my "own thing."  SD  D  MF  A  SA
59. It's not all that important to keep promises made to friends.  SD  D  MF  A  SA
60. I can't deal with the harassment other students put on me.  SD  D  MF  A  SA
61. I don't think much about trying to please my friends.  SD  D  MF  A  SA
62. When my friends move away, I don't try to keep my old friendships going.  SD  D  MF  A  SA
63. What my friends think is important to me.  SD  D  MF  A  SA
64. Although I respect my friend's opinion, I generally do my own things.  SD  D  MF  A  SA

## Appendix –III.B

### INVENTORY - II

**Directions:** You may respond to each item below by putting a tick [✓] mark against one of the following choices for each of the 55 statements that is most representative of the actual behavior of your teacher mentor. If some of the statements do not apply to you, your answers should be based on how you believe your mentor would probably interact with you.

A Never  B infrequently  C Sometimes  D Frequently  E Always

1. My mentor encourages me to express my honest feelings (positive and negative) about my academic and social experiences as an adult learner in college.  A  B  C  D  E
2. If I am discouraged (due to poor scholastic performance or experienced other difficulties), my mentor stresses the importance of developing a realistic view of learning that can include both success and disappointment (my mentor mentions other students who have been frustrated as learners but have continued their education).  A  B  C  D  E
3. My mentor asks me for detailed information about my academic progress.  A  B  C  D  E
4. My mentor refers me to other staff members and departments to obtain information I need about academic and career plans.  A  B  C  D  E
5. My mentor attempts to be verbally supportive when I am emotionally upset.  A  B  C  D  E
6. My mentor suggests that we establish a regular schedule of meeting times.  A  B  C  D  E

**(A) Never (B) infrequently (C) Sometimes (D) Frequently (E) Always**

7. My mentor makes a good deal of eye contact with me. (A) (B) (C) (D) (E)
8. If I indicate concerns about serious emotional or psychological problems, my mentor suggests I meet a college counselor. (A) (B) (C) (D) (E)
9. My mentor asks me to explain (in some detail) the reasons for my college plans and career choices. (A) (B) (C) (D) (E)
10. My mentor encourages me to provide a good deal of background information about my academic preparation, success, and problems in college. (A) (B) (C) (D) (E)
11. My mentor inquires in some depth about my study strategies and (if necessary) offers practical suggestions and/or refers me for help to improve my academic performance. (A) (B) (C) (D) (E)
12. My mentor explains to me that (s)he really wants to know what I as an individual honestly think about issues (such as balancing college commitments and outside responsibilities) so that (s)he could offer advice to me. (A) (B) (C) (D) (E)
13. My mentor arranges meetings (when possible) with me at times when (s)he will probably not be interrupted very much by telephone calls or other people. (A) (B) (C) (D) (E)
14. My mentor explains the need to explore degree and career options if I have insufficient information (such as being in transition between job fields or facing long-term commitments to fulfil degree requirements). (A) (B) (C) (D) (E)

A Never  B infrequently  C Sometimes  D Frequently  E Always

15. My mentor encourages me to consider  A  B  C  D  E nontraditional (such as television –based) courses as well as more formal educational opportunities that have not yet been explored to develop my personal interest .
16. My mentor points out inconsistencies (rationalization)  A  B  C  D  E in my explanations of why my academic goals were not achieved to help me develop better coping strategies to deal with my problem .
17. My mentor tries to stimulate me to do more  A  B  C  D  E rigorous critical thinking about the long range implications (time commitments, lifestyles changes) my academic choices may have for increasing the complexity of my life.
18. My mentor explains to me why I should discuss  A  B  C  D  E (even with someone else) my significant academic problems I am presently confronted with even if I prefer not to deal with these issues.
19. My mentor offers recommendations to me about  A  B  C  D  E my personal academic learning needs (from remedial courses, tutoring ,course loads ) based on specific information provided by me (as well as placement tests and academic records, if available ) during our meetings.
20. My mentor follows–up on my decisions to  A  B  C  D  E develop better personal strategies (study habits, getting accurate information, making realistic decisions)by asking questions (and offering comments, if appropriate)about my actual progress at their meetings.

A Never  B infrequently  C Sometimes  D Frequently  E Always

21. My mentor tells me when (s)he thinks my ideas about career or academic concerns (such as job entry or degree requirements) are very clearly based on incomplete or inaccurate information.  A  B  C  D  E
22. My mentor guides me in exploring my own personal commitment to career or academic interests by posing alternative views for me to consider.  A  B  C  D  E
23. My mentor verbally communicates his or her concerns to me when my negative attitudes and emotions are expressed to him or her through such nonverbal behaviors as eye contact, facial expression, and voice tone.  A  B  C  D  E
24. My mentor discusses my general reasons for attending college then focuses on helping me identify concrete educational objectives, degrees, curricula, and courses.  A  B  C  D  E
25. My mentor provides a reasonable amount of guidance in our discussions so that I will explore realistic options and attainable academic and career objectives.  A  B  C  D  E
26. My mentor asks me to review my strategies for managing the changes in my life (such as impact of increased time pressures on personal relationships or ability to handle my current job) while I pursue my "dreams" regarding educational goals.  A  B  C  D  E
27. My mentor guides me through a review of the personal experiences and specific facts I am using to base my important ideas and beliefs (such things about career options and the purpose of education).  A  B  C  D  E

**(A) Never (B) infrequently (C) Sometimes (D) Frequently (E) Always**

28. My mentor discusses his or her own work related experiences as a way of helping me think about and carefully examine my career options. **(A) (B) (C) (D) (E)**
29. My mentor shares with me personal examples of difficulties (s)he has overcome in his or her own individual and professional growth (if these experiences might provide insight for me). **(A) (B) (C) (D) (E)**
30. My mentor engages me in discussions which required me to reflect on the new competencies I will need to achieve my future goals. **(A) (B) (C) (D) (E)**
31. My mentor points out (using personal examples as well as stories about students) that achievement in college is primarily based on personal commitment (rather than just "luck") if I am having problems completing the work but appear unrealistic about the amount of discipline and energy needed to cope with the pressures of an academic workload. **(A) (B) (C) (D) (E)**
32. My mentor expresses his/her personal confidence in my ability to succeed if I persevere in pursuit of my academic goals. **(A) (B) (C) (D) (E)**
33. My mentor confronts me with the reality of continued or probable negative consequences in a direct (but supportive) manner when I repeatedly do not follow-through on my stated intentions to deal with serious academic problems. **(A) (B) (C) (D) (E)**
34. My mentor encourages me to use him/her as a sounding board to explore my hopes, ideas, feelings, and plans. **(A) (B) (C) (D) (E)**

A Never  B infrequently  C Sometimes  D Frequently  E Always

35. My mentor engages me in discussions aimed at motivating me to develop a positive view of my ability to function now and in the future as an independent, competent adult learner.  A  B  C  D  E
36. My mentor uses personal experiences (as well as references to other students my mentor has advised) to explain how college courses or activities I believe will be boring, too demanding, or not relevant could be valuable learning experiences for me.  A  B  C  D  E
37. My mentor offers me constructive criticism if my mentor believes my avoidance of problems and decisions is clearly limiting my growth as an adult learner.  A  B  C  D  E
38. My mentor encourages me to make well-informed personal choices as I plan my educational and career goals.  A  B  C  D  E
39. If I express a lack of confidence in myself my mentor explores with me the ways in which my own life experiences might be a valuable resource to help me devise strategies to succeed within the college environment.  A  B  C  D  E
40. My mentor assists me in using facts to carefully map out realistic, step-by-step strategies to achieve my academic and career goals.  A  B  C  D  E
41. My mentor shares his/her own views and feelings when they are relevant to the college - related situations and issues (s) he is discussing with me.  A  B  C  D  E

A Never  B infrequently  C Sometimes  D Frequently  E Always

42. My mentor listens to me about criticism concerning college policies, regulations, requirements, and even colleagues without immediately attempting to offer justifications.  A  B  C  D  E
43. My mentor offers comments to me about inappropriate behavior (in college) if there is reasonable expectation that I am prepared to work on positive change and will most likely experience some success as a result.  A  B  C  D  E
44. My mentor informs me that I can discuss "negative" emotions such as anxiety, self-doubt, fear, and anger in our meetings.  A  B  C  D  E
45. My mentor expresses confidence in my ability to achieve my educational goals, especially when I am having personal difficulties in fulfilling my academic responsibilities due to outside pressures (work, family, relationships).  A  B  C  D  E
46. My mentor questions my decisions and actions regarding college-related issues and problems when they do not appear to be appropriate solutions.  A  B  C  D  E
47. My mentor discusses the positive and negative feelings I have about my abilities to succeed as an adult learner.  A  B  C  D  E
48. My mentor offers as few carefully chosen criticisms as possible when my mentor would try to get me to understand the (often difficult to accept) connection between my own self-limiting (defeating) behaviors and my inability to solve a particular problem.  A  B  C  D  E



**(A) Never (B) infrequently (C) Sometimes (D) Frequently (E) Always**

49. My mentor asks probing questions that require more than a "yes" or "no" answer so that I will explain (in some detail) my views regarding my academic progress and plans. (A) (B) (C) (D) (E)
50. My mentor explores with me the extent of my commitment (such as my willingness to spend time and energy) as an adult learner in achieving my educational goals. (A) (B) (C) (D) (E)
51. My mentor bases the timing of his or her "confrontive" questions and comments to me on his/her knowledge of my individual readiness often related to the stage of our relationship to benefit from discussions about clearly sensitive issues. (A) (B) (C) (D) (E)
52. My mentor discusses his/her role as a mentor with me so that my individual expectations of my mentor are appropriate and realistic. (A) (B) (C) (D) (E)
53. My mentor tries to clarify the problems I explain to him or her by verbally expressing his or her understanding of my feelings and then asks if his/her views are accurate. (A) (B) (C) (D) (E)
54. My mentor asks me to reflect on the resources available (college, family, community) to help me manage my life effectively while I am pursuing my educational and career goals. (A) (B) (C) (D) (E)
55. My mentor emphasizes, especially if I appear to be uncertain about what to expect from our meetings, that one of his or her important goals is to assist me in reaching my own decisions about personal academic and career goals. (A) (B) (C) (D) (E)

## *Appendix – IV*

### **CONCEPTUAL FOCUS AND METHODOLOGY**

The Table below depicts the list of management institutes, their year of establishment and if mentoring was implemented as a part of their pedagogy

#### **List of colleges included in the study**

S.No.	Name of the College	Year of establishment	Mentoring as part of Pedagogy
<b>National Level Institute</b>			
1	Indian Institute of Management, Kozhikode	1996	No
<b>University Departments in Kerala</b>			
1	School of Management Studies, Cochin University of Science and Technology, Cochin	1964	No
2	Department of Commerce and Management Studies, Calicut University, Calicut	1982	No
3	Institute of Management in Kerala, Trivandrum	1991	Yes
4	Department of Management Studies, Kannur University, Kannur	2000	Yes
<b>Management Institutes in Engineering / Arts and Science Colleges</b>			
1	Allama Iqbal Institute of Management, Peringamala	2003	No
2	Department of Business Administrative College of Engineering, Trivandrum	2000	Yes
3	Institute of Technology, Mayil	2002	No
4	Mar Athanasios College for Advanced Studies, Thiruvalla	2001	Yes
5	College of Business and Information Technology, MES, Marampally	2002	No

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6	Department of Management Science, MES, Kuttipuram	2003	No
7	Member, Sree Narayana Pillai Institute of Management and Technology, Chavara	2003	No
8	Rajagiri Institute of Management, Kakkanad	1994	Yes
9	St. Berchmans Institute of Management Studies, SB College, Changanacherry	1995	Yes
10	Sree Narayana Gurukulam College of Engineering, Kadairupu	2003	Yes
11	Department of Business Administration, Sree Narayana Guru Institute of Science and Technology, North Parur	2003	No
<b>Stand alone Institutes</b>			
1	Thangal Kunju Musaliar Institute of Management, Quilon	1995	No
2	DC School of Management and Technology, Vagamon.	2002	Yes
3	School of Communication and Management Studies, Kochi.	1992	Yes

**Sample of Students**

S.No.	Name of the institution	Year				Total	
		I year		II year		No.	Per cent
		No.	Per cent	No.	Per cent		
1	Allama Iqbal Institute of Management, Peringamala	12	3.7	12	3.8	24	3.7
2	Department of Business Administration College of Engineering, Trivandrum	8	2.4	8	2.5	16	2.5
3	Department of Commerce and Management Studies, Calicut University, Calicut	8	2.4	8	2.5	16	2.5
4	School of Management Studies, Cochin University of Science and Technology, Cochin	11	3.4	11	3.5	22	3.4
5	DC School of Management and Technology, Vagamon.	24	7.3	26	8.2	50	7.8
6	Indian Institute of Management, Kozhikode	39	11.9	36	11.3	75	11.6
7	Institute of Management in Kerala, Trivandrum	8	2.4	8	2.5	16	2.5
8	Institute of Technology, Mayil	12	3.7	13	4.1	25	3.9
9	Department of Management Studies, Kannur University, Kannur	8	2.4	8	2.5	16	2.5
10	Mar Athanasios College for Advanced Studies, Thiruvalla	12	3.7	12	3.8	24	3.7
11	College of Business and Information Technology, MES, Marampally	12	3.7	12	3.8	24	3.7

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12	Department of Management Science, MES, Kuttipuram	12	3.7	12	3.8	24	3.7
13	Member, Sree Narayana Pillai Institute of Management and Technology, Chavara	12	3.7	12	3.8	24	3.7
14	Rajagiri Institute of Management, Kakkanad	24	7.3	25	7.9	49	7.6
15	St. Berchmans Institute of Management Studies, SB College, Changanacherry	12	3.7	12	3.8	24	3.7
16	School of Communication and Management Studies, Kochi.	59	18.0	61	19.2	120	18.6
17	Sree Narayana Gurukulam College of Engineering, Kadairupu	12	3.7	12	3.8	24	3.7
18	Department of Business Administration, Sree Narayana Guru Institute of Science and Technology, North Parur	24	7.3	12	3.8	36	5.6
19	Thangal Kunju Musaliar Institute of Management, Quilon	18	5.5	18	5.7	36	5.6
	<b>TOTAL</b>	<b>327</b>	<b>100.0</b>	<b>318</b>	<b>100.0</b>	<b>645</b>	<b>100.0</b>

*Appendix – V*

**Validation of the Conceptual Model for Mentoring in B- School**

**Visual PLS ( Mentoring Institutions)**

**Result of Outer Boot Strap Estimate**

Measurement Mode(Loading)-BootStrap					
		Entire Sample estimate	Mean of Subsamples	Standard error	T-Statistic
Sociodem	AGE	0.9440	0.8546	0.2026	4.6600
	TEXP	0.8597	0.7719	0.2177	3.9491
persona	PI2	0.6150	0.5973	0.2570	2.3930
	PI4	0.7732	0.6468	0.2129	3.6320
	PI5	0.7994	0.6819	0.2423	3.2990
Mentact	MA1	0.8210	0.7578	0.1600	5.1302
	MA2	0.8251	0.7461	0.1466	5.6278
	MA3	0.4590	0.4163	0.1640	2.7990
	MA4	0.6134	0.5472	0.1594	3.8492
	MA6	0.7944	0.7037	0.1540	5.1598
	MA7	0.9065	0.8053	0.1393	6.5073
	MA9	0.8554	0.7807	0.1440	5.9412
Menteffect	EM1C	0.9079	0.8307	0.1535	5.9146
	EM2C	0.8014	0.7408	0.1666	4.8091
	EM3C	0.9082	0.8210	0.1444	6.2899
	EM4C	0.8251	0.7506	0.1594	5.1764
	EM5C	0.9079	0.8361	0.1471	6.1718
	EM6C	0.8948	0.8173	0.1599	5.5973
Measurement Mode(Weight)-BootStrap					
		Entire Sample estimate	Mean of Subsamples	Standard error	T-Statistic
Sociodem	AGE	0.6670	0.7249	0.3432	1.9434
	TEXP	0.4307	0.5215	0.3552	1.2124
persona	PI2	0.2358	0.4140	0.2962	0.7961
	PI4	0.5352	0.4479	0.2252	2.3769
	PI5	0.5519	0.5241	0.2689	2.0522
Mentact	MA1	0.3152	0.4092	0.2541	1.2405
	MA2	0.1992	0.2304	0.1730	1.1515
	MA3	-0.1270	-0.1763	0.1425	-0.8913
	MA4	-0.2191	-0.2621	0.1898	-1.1547
	MA6	-0.0816	-0.1994	0.1709	-0.4775
	MA7	0.5989	0.5075	0.2376	2.5202
	MA9	0.3408	0.4296	0.2805	1.2151
Menteffect	EM1C	0.5427	0.5401	0.3443	1.5762
	EM2C	-0.4083	-0.4100	0.3225	-1.2659
	EM3C	0.6461	0.6531	0.3588	1.8009
	EM4C	-0.5847	-0.6824	0.4520	-1.2934
	EM5C	0.5370	0.5864	0.2827	1.8997
	EM6C	0.2711	0.4871	0.4080	0.6645

### 1. Personality profile and age group of teachers

One-way ANOVA was applied to test whether the mean scores of personality facets vary significantly across the age group of teachers is shown in Table 4.20.

#### Comparison of personality profile of teachers across their age

Sl. No	Age Group	Personality Profile									
		Neuroticism		Extraversion		Openness		Agreeableness		Conscientiousness	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N=36) Upto 30 years	31.69	6.31	42.78	5.55	38.53	5.02	40.69	4.41	43.83	6.28
2	(N=57) 31-40 years	31.51	7.29	40.37	6.22	37.84	6.23	39.86	4.92	44.96	6.71
3	(N=24) 41-50 years	29.08	8.20	42.33	6.52	38.21	4.05	44.17	5.63	46.29	6.61
4	(N=24) Above 50 years	27.58	4.53	41.21	5.80	37.42	4.48	43.54	3.55	48.96	5.21
<b>'F' Value</b>		2.585		1.374		.242		6.686		3.447	
<b>Table 'F' (0.05)</b>		2.671		2.671		2.671		3.928		2.671	
<b>P Value</b>		.056		.253		.867		.000		.019	
<b>Level of Significance</b>		NS		NS		NS		**		*	

\* Denotes significance at 5% level    \*\* Denotes significance at 1% level  
NS=Not significant

The results indicated that the mean score of agreeableness ( $F = 6.686$  ;  $p = 0.000$ ) and conscientiousness ( $F = 3.447$  ;  $p = 0.019$ ) vary significantly across the age group of teachers. The mean score of extraversion ( $F = 1.374$  ;  $p > 0.05$ ),

does not differ significantly across the age group of teachers ; same is the case with openness ( $F = .242$  ;  $p > 0.05$ ) and neuroticism ( $F = 2.585$  ;  $p > 0.05$ ).

**Post hoc tests-LSD for agreeableness**

Post hoc tests-LSD (Least Significant Difference) was conducted because the ANOVA result showed significant difference between different age group of teachers. The mean difference along with the significant level was tested at 5 per cent level as given in the Table 4.21.

**Post-hoc test- LSD for Agreeableness**

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	P Value
Upto 30 years	31-40 years	.8348	1.0048	.408
	41-50 years	-3.4722*	1.2438	.006
	Above 50 years	-2.8472*	1.2438	.024
31-40 years	Upto 30 years	-.8348	1.0048	.408
	41-50 years	-4.3070*	1.1485	.000
	Above 50 years	-3.6820*	1.1485	.002
41-50 years	Upto 30 years	3.4722*	1.2438	.006
	31-40 years	4.3070*	1.1485	.000
	Above 50 years	.6250	1.3625	.647
Above 50 years	Upto 30 years	2.8472*	1.2438	.024
	31-40 years	3.6820*	1.1485	.002
	41-50 years	-.6250	1.3625	.647

It can be observed from the above table that the mean values of teachers upto 30 years of age differ significantly from that of the mean values of teachers between 41-50 years and above 50 years. The difference between the



mean values of teachers upto 30 years and between 31-40 years is not significant. The mean value of teachers between 31-40 years age group differ significantly from the mean value of those above 50 years and between 41-50 years. The mean value of teachers above 50 years do not differ significantly with mean value of teachers between 41-50 years.

**Post-hoc tests-LSD for conscientiousness**

Following significant results in the scores of conscientiousness. The post-hoc test – LSD was conducted and tested at 5 per cent level of significance and depicted in the Table 4.22.

**Post-hoc test- LSD for conscientiousness**

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error
Upto 30 years	31-40 years	-1.1316	1.3527
	41-50 years	-2.4583	1.6744
	Above 50 years	-5.1250*	1.6744
31-40 years	Upto 30 years	1.1316	1.3527
	41-50 years	-1.3268	1.5461
	Above 50 years	-3.9934*	1.5461
41-50 years	Upto 30 years	2.4583	1.6744
	31-40 years	1.3268	1.5461
	Above 50 years	-2.6667	1.8342
Above 50 years	Up to 30 years	5.1250*	1.6744
	31-40 years	3.9334*	1.5461
	41-50 years	2.664	1.8342

It can be observed from the above table that the mean values of teachers upto 30 years of age differs significantly with the mean value of teachers above

50 years age group and does not differ significantly with the mean value of teachers between 31-40 years and 41-50 years, the mean value of teachers between 31-40 years age group differ significantly from the mean value, of those above 50 years, the mean value of teachers above 50 years differ significantly with the mean value of teachers upto 30 years and between 31-40 years.

The data reveals that the average score of personality facet, agreeableness differs significantly with the age group of teachers. The teachers in the age group of 41 to 50 years are found to be high on agreeableness followed by teachers above 50 years. The respondents between 31 to 40 years are the least agreeable.

Rammsted (2007) identified an increase in agreeableness and conscientiousness scores with age .He also observed that extraversion decreases across the life span of the individual. Similarly the present study reveals that agreeableness and conscientiousness vary significantly across the age group of teachers. The teachers in the age group of 41 to 50 years were found to be high on agreeableness followed by those above 50 years, and those upto 30 years. It was found that teachers between 31 to 40 years were the least agreeable. It was also inferred that the teachers in the age group of above 50 years were found to be high on conscientiousness followed by those between 41 to 50 years and those between 31 to 40 years. It was found that teachers upto 30 years of age were the least in conscientiousness. Previous research clearly suggests an increase in agreeableness and conscientiousness with age (Goldberg et al., 1998 ; McCrae et al., 1999 and Caspi et al., 2005). According to Costa and McCrae (1992) it is observed that older individuals tend to be slightly lower in neuroticism, extraversion and openness and slightly higher on agreeableness and conscientiousness. The present study replicates the findings of Costa and McCrae (1992) Though not statistically significant at  $P < .05$ , there is decrease in neuroticism, extraversion and openness. There is significant difference in the

mean scores of agreeableness and conscientiousness across the age group of teachers. The study also reveals that teachers upto 30 years of age are high on conscientiousness (43.83) followed by extraversion (42.78) and agreeableness (40.69), similarly teachers between 31-40 years of age were high on conscientiousness (44.96) followed by extraversion (40.37) and agreeableness (39.86). While teachers between 41-50 years were high conscientiousness (46.29) followed by agreeableness (44.17) an extraversion (42.33), similarly teachers above 50 years were high on conscientiousness (48.96), followed by agreeableness (43.54) and extraversion (41.21).

### Personality profile of teachers and their teaching experience

One –way ANOVA was applied to test whether the mean scores of personality facets vary significantly with the teaching experience of teachers are presented in the Table 4.30.

#### Comparison of personality profile of teachers and their teaching experience

Sl. No	Teaching Experience	Personality Profile									
		Neuroticism		Extraversion		Openness		Agreeableness		Conscientiousness	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	(N=64) Upto 5 years	31.97	6.02	41.20	6.29	38.39	5.02	40.72	4.58	43.91	5.64
2	(N=31) 5-10 years	31.10	7.73	41.13	6.17	36.61	6.87	39.71	4.63	44.61	8.31
3	(N=22) 10-15 years	26.82	6.18	43.41	3.81	37.68	4.70	43.59	6.01	49.41	5.46
4	(N=24) Above 15 years	29.04	7.60	40.79	6.92	39.08	3.88	43.58	4.38	47.79	5.09
<b>'F' Value</b>		3.640		.923		1.195		4.886		5.585	
<b>Table 'F' (0.05)</b>		2.671		2.671		2.671		3.928		3.928	
<b>P Value</b>		0.014		0.431		0.341		.008		.003	
<b>Level of Significance</b>		*		NS		NS		**		**	

\* Denotes significance at 5% level \*\* Denotes significance at 1% level  
NS=Not significant.

The results indicated that the mean score of agreeableness ( $F = 4.886$  ;  $p = 0.01$ ), conscientiousness ( $F = 5.585$  ;  $p = .003$ ), and neuroticism ( $F = 3.640$  ;  $p = 0.014$ ) differ significantly with their teaching experience. But the other personality facets like extraversion ( $F = .923$  ;  $p > 0.05$ ) and openness ( $F = 1.195$  ;  $p > 0.05$ ) do not vary significantly with the teaching experience.

**Post hoc –LSD tests for neuroticism**

Following significant results in the neuroticism scores, the post hoc test-LSD was conducted and tested at 5 per cent level of significance, and the results are depicted in the Table 4.31.

**Post-hoc test for Neuroticism**

<b>(I) Teaching Experience</b>	<b>(J) Teaching Experience</b>	<b>Mean Difference (I-J)</b>	<b>Std Error</b>	<b>P Value</b>
Upto 5 years	5-10 years	.8720	1.4781	.556
	10-15 years	5.1506*	1.6694	.002
	Above 15 years	2.9271	1.6168	.072
5-10 years	Upto 5 years	-.8720	1.4781	.556
	10-15 years	4.2786*	1.8830	.025
	Above 15 years	2.0551	1.8366	.265
10-15 years	Upto 5 years	-5.1506*	1.6694	.002
	5-10 years	-4.2786*	1.8830	.025
	Above 15 years	-2.2235	1.9938	.267
Above 15 years	Upto 5 years	-2.9271	1.6168	.072
	5-10 years	-2.0551	1.8366	.265
	10-15 years	2.2235	1.9938	.267

The mean score of teachers upto 5 years experience vary significantly with the mean score of teachers with 10-15 years (5.1506\*) and does not differ significantly with the mean score of teachers with 5-10 years and above 15 years experience. The mean score of teachers with 5-10 years experience differs with the mean score of teachers with above 10-15 years experience and did not differ with the mean score of teachers with more than 15 years. The mean score of teachers with 10-15 years experience does not differ with the mean score of teachers with more than 15 years experience.

**Post hoc tests for Agreeableness**

The post hoc tests-LSD was conducted and tested at 5 per cent level and following significant results in the agreeableness scores are presented in the Table 4.32.

**Post-hoc test- LSD for Agreeableness**

(I) Teaching Experience	(J) Teaching Experience	Mean Difference (I-J)	Std. Error	P Value
Upto 5 years	5-10 years	1.0091	1.0510	.339
	10-15 years	-2.8722*	1.1870	.017
	Above 15 years	-2.8646*	1.1496	.014
5-10 years	Upto 5 years	-1.0091	1.0510	.339
	10-15 years	-3.8812*	1.3389	.004
	Above 15 years	-3.8737*	1.3059	.004
10-15 years	Upto 5 years	2.8722*	1.1870	.017
	5-10 years	3.8812*	1.3389	.004
	Above 15 years	.0076	1.4177	.996
Above 15 years	Upto 5 years	2.8646*	1.1496	.014
	5-10 years	3.8737*	1.3059	.004
	10-15 years	-.0076	1.4177	.996

The mean score of teachers experiences upto 5 years differ significantly with the mean score of teachers with 10-15 years experience and teachers with more than 15 years experience. The mean score of teachers with 5-10 years experience differs with the mean score of teachers with 10-15 years and with the mean score of teachers with more than 15 years. The mean score of teachers with 10-15 years experience differs with the mean score of teachers with upto 5 years and 5-10 years experience.

**Post hoc-LSD tests for conscientiousness**

The Post hoc tests-LSD was conducted and tested at 5 per cent level of significance, following significant results in the conscientiousness scores and the analysis is depicted in the Table 4.33.

**Post-hoc test- LSD for Conscientiousness**

<b>(I) Teaching Experience</b>	<b>(J) Teaching Experience</b>	<b>Mean Difference (I-J)</b>	<b>Std. Error</b>	<b>P Value</b>
Upto 5 years	5-10 years	-.7067	1.3610	.604
	10-15 years	-5.5028*	1.5372	.000
	Above 15 years	-3.8854*	1.4888	.010
5-10 years	Upto 5 years	.7067	1.3610	.604
	10-15 years	-4.7962*	1.7339	.006
	Above 15 years	-3.1788	1.6911	.062
10-15 years	Upto 5 years	5.5028*	1.5372	.000
	5-10 years	4.7962*	1.7339	.006
	Above 15 years	1.6174	1.8359	.380
Above 15 years	Upto 5 years	3.8854*	1.4888	.010
	5-10 years	3.1788	1.6911	.062
	10-15 years	-1.6174	1.8359	.380

The mean score of teachers with upto 5 years experience differ significantly with the mean score of teachers with 10-15 years and above 15 years. The mean score of teachers with 5-10 years experience differs with the mean score of teachers with 10-15 years and not with the mean score of teachers more than 15 years. The mean score of teachers with 10-15 years experience differs with the mean score of teachers with upto 5 years and 5-10 years experience.

This clearly depicts that the average score of agreeableness and conscientiousness varies significantly with teaching experience at  $P < .01$ . The average score of agreeableness and conscientiousness is found to be the highest among teachers with 10-15 years experience. It also revealed that the average score of neuroticism is found to be highest among teachers with up to 5 years experience and the least among teachers with 10-15 years experience. The study also reveals that the teachers with upto 5 years were high on conscientiousness (43.91), followed by extraversion (41.20) and agreeableness (40.72). Similarly the teachers with 5-10 years experience were also high on conscientiousness (44.61), followed by extraversion (41.13) and agreeableness (39.71). Teachers with 10-15 years experience were high on conscientiousness (49.41), followed by agreeableness (43.59) and extraversion (43.41). Similarly the teachers with above 15 years experience were also high on conscientiousness (47.79), followed by agreeableness (43.58) and extraversion (40.79).