Chapter 5
DISCUSSION

5.1 Tool to Arouse Interest
5.2 e-Learning as a Positive Initiative
5.3 e-Learning Efficacy and Proficiency
5.4 Dependability, Adaptability and Inclusiveness
This chapter is an attempt to discuss the findings of the present study in the light of the available literature. The knowledge generated by the study has been merged with the available literature for meaningful understanding of the results.

The studies on e-Learning have identified diverse factors of e-Learning. Most of the studies have identified the factors of e-Learning from the students’ perspective, whereas very few studies have identified the factors from the viewpoint of faculty. Yang (2001) proposed seven potential factors of online service quality that should be applied while designing contents for e-Learning. The factors are Reliability, Responsiveness, Access, Ease of use, Attentiveness, Credibility and Security. Torresa et al (2008) contended that there are 16 factors of e-Learning i.e., Use, Intention of use, Perceived usefulness, Ease of use, Methodology, Accessibility, Reliability, Enjoyment, User adaptation, Communicativeness, Interactivity, Feedback, Format, Diffusion and User tools. The factors like Reliable, Accessible, Simple, Attentiveness, Usefulness, User adaptation and Interactivity have been identified in the present study also.

5.1 A Tool to Arouse Interest

A study by Aliasa et al (2011) showed that there are 10 elements to ensure success of e-Learning which are Ease of use, Appearance, Linkage, Structure and layout, Information, Reliability, Efficiency, Support, Communication and security. It is understood that these elements are very important elements in ensuring success of e-Learning in higher learning institutions. Ellis (2008) identified four underlying factors described as e-Teaching, Design, Workload and Interactivity. The factors Interactivity, Efficiency and Reliability have been identified by the current study as well.

The success of e-Learning depends on the perception of students who are central users of the system. However, it was reported by Yuen and Ma (2008) that unless the distinct factors of teachers and students are deliberated upon, the potential of e-Learning cannot be completely recognized. Developing countries like India which are in the initial stages of e-Learning implementation cannot afford to fail in this endeavour. Hence, it is essential to take the perception of both the users (teachers and
students) into account while finding out the factors of technology-enhanced learning environment.

The present study revealed seven common factors between faculty members and students. The factors being: E-learning efficacy, Flexibility, Empowering, Culturally fair, Easy to learn, Interactive and Effective. However, the exclusive factors perceived by faculty members were Valuable tool, Enabling, Contemporary, Outlook dependence, Autonomous, Exciting, Participative, Appealing, Proficient, Stimulating, Insightful, Efficient, Reliable, Lucid, Simple and Capturing. Similarly, the exclusive factors perceived by students were Comprehensive, Engaging, User friendly, Suitable, Feasible, Worthwhile, Accessible, Challenging, Technical competence, Workable and Convenient. This difference in perception could be attributed to the difference in the level of education and experience between the faculty members and students.

The studies have identified various dimensions of e-Learning. Elango et al (2008) in their research paper investigated the issues related to the quality dimensions of e-Learning in Arab region. From this study a total of 11 dimensions of e-Learning quality emerged i.e., Relevance of course contents and delivery related dimension, Effectiveness of delivery mode related dimension, Instructor support and students’ commitment related dimension, Web-usage and online interaction related dimension, Course compliance and confidence in the system related dimension, Relevance of testing instruments and grading related dimension. The dimensions like Pertinent, Facilitating and Reliable have been identified in the present study also.

Jung (2011) in a study on 299 learners in higher education institutes in South Korea found that there are seven quality dimensions of e-Learning. These dimensions are Interaction, Staff support, Institutional quality assurance mechanism, Institutional credibility, Learner support, Information and publicity and Learning tasks. Phillips (2004) has estimated a set of four design dimensions of e-Learning which could be considered when designing e-Learning applications. These dimensions are Student-student interaction, Student resource interaction, Student trainer interaction and Student computer interaction. The dimensions like Staff support, Learner support and Assurance mechanism have been identified in the present study as well.
In the present study, the faculty members and students perceived only one common dimension i.e., Equitable. Dimensions perceived exclusively by faculty members are Reflective, Exquisite, Meticulous, Facilitating, Responsive, Perceptive, Absorbing, Simple and Reliable, whereas dimensions perceived exclusively by students are Viable, Dependable, Adaptable, Inclusive, Power, Pertinent and Challenging. The difference in perception could be attributed to the fact that faculty members are involved in the development and delivery of the course, whereas the students are only involved in the learning from the course. Therefore, as there is a difference between the type of involvement amongst the faculty members and the students with respect to e-Learning, their perception also varies.

Interactivity factor is perceived to be higher by the faculty members and students of traditional stream. Definition of interactivity in the higher education literature is that it refers to the activity amongst learners and between a student and a computer/program. Barretto et al (2003) provided a general definition of the term ‘interactivity’ as an activity or action between individuals and/or machines. Software that provides education is considered to be interactive and interactivity here occurs between the computer program and the user. Specifically, it is possible to describe four types of interaction: learner-content, learner-instructor, learner-learner and learner-interface.

Most of the research papers have identified Interactive as a predominant factor of e-Learning. Thomas (2000) reported that sufficient level of human interaction is a vital factor in the success of technology-based learning. Urdan and Weggen (2000) indicated that e-Learning provides more teamwork and better communication with peers and experts as compared to traditional instructions. Reeves (2002) contended that technology based learning provided interaction in various forms. It could be in the form of online quizzes, online discussion forums and self-tests. Also, simulation which is feasible in e-Learning is evidently an interactive form of activity.

Although researchers have emphasized that e-Learning is an interactive medium of learning, there are a few studies that argue that it is not always correct. O’Connell (2002) reported that introvert students will still be excluded from virtual discussions, as there will always be students who will dominate even online conversations. Also, controlling extrovert students is extremely difficult in e-Learning environments when compared to face to face lectures (Shaba, 2002).

Capturing factor is perceived to be higher by the faculty members and students of traditional stream. Oxford dictionary meaning of capturing with respect to online
learning is the action or process of gathering data, especially from an automatic device, control system, or sensor. Various studies reveal that brain tends to pay more attention to anything that is new or different. A picture, as it is said, is worth a thousand words. Learners are obviously inclined to pay attention to images and videos since they are easier and faster to understand than large blocks of text. So, it is easier to initially capture the learner’s attention. However, in contrast to other modes of education, it is more difficult to uphold the learner’s attention in e-Learning since the internet is full of distractions.

The results of the present study reveal that faculty members of traditional stream perceive e-Learning to be higher in terms of two factors out of twenty three factors. On the other hand, students of traditional stream perceive e-Learning to be higher in 16 factors out of 18 factors. Swan (2001) contended that most of the students perceive that 70-90 percent of the faculty members of their respective institutions have hesitation towards adopting new methodology. According to them, the teachers have a preference for traditional classroom teaching and classify e-Learning as a tool for research rather than teaching.

Comprehensive is a factor associated with e-Learning. Kartin (2005) reported that e-Learning is an affordable and comprehensive learning method. It should be effectively implemented so as to achieve its objective as a qualitative and effective learning method. Online learning has flexibility as a factor. Ally (2004) reported that while online learning allows for flexibility of access from anywhere and anytime, the learning material must be designed properly to engage the learner and promote learning. Engaging and empowering factors of e-Learning make the students more involved and motivated as a consequence. The traditional learning environment is a teacher-centered environment, whereas the online learning mode is a student-centered environment. Therefore, e-Learning gives power to the learner as he/she has control over the time, place and method of learning.

The e-Learning lessons are graphics based having audios, videos, pictures as well as text. Thus, user friendly factor has been associated with the online learning environment. The online study material is useful for the learner and faculty both. Thus, associating suitability factor with e-Learning. Through the use of advanced technology, students who have previously not had access to higher education now have the opportunity to study at the location that best suits their needs (Smith and
Hardaker, 2000). The online method of education is culturally fair as it eliminates the cultural barriers and provides a fair assessment of all students globally. The fair assessment is one in which students are given equitable opportunities to demonstrate what they know (Lam, 1995).

The e-Learning has feasible and worthwhile factors. Learners can learn easily if they have the basic skills in computers. The online learners perceive e-Learning as worthy of the time and money spent on it. Efficacy as a factor of e-Learning refers to the evaluation of competence to use e-Learning. According to the self-efficacy theory (Bandura, 1982; Ford, 1992), perceived ease of use influences intrinsic motivation. It implies that students having high degree of self-competence would perceive it as easy to use. Also, they would more likely have an enjoyable feeling towards using it.

Research also suggests that students need to have technological confidence; just having access to the technology is not enough. The students should also have the necessary computer skills and feel confident in using computers. Lack of experience with computers can be a major hindrance for learning especially for students who are entirely new to computers. Patricia (2009) contended that experience in computer use is another success factor in adopting e-Learning along with experience in using software, good technical skills, and abilities regarding time management and communication. Martocchio (1994) and Gist et al (1989) suggested that learners with lower level of computer self-efficacy were related to lower learning outcomes and had difficulty in using computer as a learning tool.

Kahiigi (2007) has broadly outlined the benefits of e-Learning. In his opinion, e-Learning programs are easier to monitor than traditional classroom based courses. Interactivity factor of e-Learning has emerged prominently in number of research studies. Online learners are given the opportunity to interact with faculty members and other learners via electronic mail. Elango et al (2008) found that students are of the opinion that they are getting all the support they need, similar to the regular classroom environment. The faculty members perceive accessibility as a factor of e-Learning. Hemsley (2002) expresses the view that full time and part time students can now take up their chosen courses from any location, including people who travel or who are relocated, as it is a convenient and easily accessible learning resource. In spite of these advantages, most of the Indian universities continue to use only traditional teaching methods with no other supplementary support. Wang (2014)
considered the online courses as simply a replica of the traditional classroom teaching, as the teaching content was basically the same.

Online learning method is perceived to have challenging and easy to learn factors. Although e-Learning provides number of benefits, it also poses some challenges. The student needs to possess a computer with fast internet access. He/she needs to be computer literate to effectively and efficiently learn through e-Learning mode. But at the same time it is easy to learn the usage of e-Learning. Holley (2002) found that students with no computers at home are perhaps disadvantaged in e-Learning environments. In addition, as a major consequence of an increased participation in higher education, a large number of students originate from low income backgrounds and have little disposable income to purchase computers (Nell, 2002).

Online learning has workable and convenient as factors. It is feasible as well as convenient mode of learning, consequently the students become more involved and motivated. In addition, the students have more liberty to choose their learning time and pace (French et al, 1999). Singh et al (2005) contended that the role of e-Learning is predominant in the successful delivery of networked learning initiatives as lecturers have the power to remove students’ technical frustrations, make them feel empowered and encourage them to interact with one another. In spite of these key benefits, some studies have shown that e-Learning programs are not suitable for everybody. According to Kearsley (2002), most of the students who perform well in the traditional system of education, which encourages face to face instructor-student interaction, are likely to experience some serious difficulties with online based learning and vice versa is also true.

The needs of a learner represent the gap between what the learner wants to get out of the learning experience and his or her current state of knowledge, skills and enthusiasm (Noessel, 2003). In his study, Minderhout (2008) has assessed that learners experience four learning needs i.e., cognitive, social, affective and psychomotor. These needs include managing time and tasks, interacting while solving problems, communicating with peers and giving and receiving support. It is apparent from the results that needs of the faculty and students of traditional stream are not fulfilled and hence they perceive e-Learning in terms of the factors like Interactive and Capturing in the case of faculty and Comprehensive, Flexible, Engaging, Empowering, User friendly, Suitable, Culturally fair, Feasible, Worthwhile, E-Learning efficacy, Interactive, Accessible, Challenging, Easy to learn, Workable and
Convenient in the case of students. On the other hand, the students of professional stream, who are already exposed to online learning, perceive it in a different light since they can compare between the traditional classroom teaching and e-Learning.

Faculty members and students of traditional stream in India are generally not exposed to e-Learning environment. Their perception is that e-Learning will increase interaction between students and also between students and faculty. They consider e-Learning as a tool to arouse the interest of students in learning and break the monotony of traditional methods of teaching. On the other hand, faculty members and students of professional stream who are already exposed to e-Learning perceive e-Learning to be less interactive. This might be so because the level of interaction which they are looking for may not be there in e-Learning. Faculty members perceive e-Learning to be less capturing because they might be perceiving it to be embedded with distractions. Elango et al (2008) contended that graphics and animations did not ignite learning.

Meticulous and absorbing are the two dimensions of e-Learning perceived higher by faculty members of traditional stream. Online learning provides an efficient method of learning. The use of enormous integrated set of computer and internet tools and resources allow the learner to achieve more efficient, interactive and effective training. This makes e-Learning a meticulous mode of learning. The faculty members of traditional stream, who are not exposed to e-Learning contemplate it to be Meticulous since they believe that it is an efficient teaching and learning aid. Hall (2000) found that compared to traditional classroom instructions, a multimedia based e-Learning course reduces the time required to learn by 50 percent. This fact was supported by Webster (2001) who reported that e-Learners had a 60 percent faster learning curve as compared to their classroom counterparts. The faculty members of professional stream are already exposed to e-Learning and they are aware of its limitations also.

5.2 e-Learning as a Positive Initiative

Online learning permits the learners to view and share data, information, images and videos which enhance learning. All these features of e-Learning make it an absorbing mode of learning. Online learning is a medium of education which generates interest in learners. The faculty members of traditional stream perceive e-Learning to be an
absorbing medium. This could be so because they have been teaching the technology obsessed present day students without the aid of technology. They perceive that e-Learning will capture the interest of the students which they might be finding difficult to do. Cook and Cook (1998) reported that rapidly changing environments had made text books and articles outdated. Therefore, there was need for a medium which could keep the employees of the education sector updated. e-Learning was a better training medium as it took them a step ahead of other learners in terms of knowledge by providing them with fast, absorbing and first-hand information.

Viable is a dimension which is combination of two factors - Feasible and Engaging. Feasible refers to the ability of online learning method to fit into busy schedule. Since e-Learning is an online learning method, the student has the flexibility to learn at his/her own time and pace, which implies that e-Learning is feasible. Thomas (2001) revealed that five out of six online students were employed and were unable to attend traditional classes. It was also observed that there was a steady increase in the number of full-time employees seeking higher education. It is interesting to note that prospective students cannot afford to leave their current jobs for a full-time or on-campus program enrollment (Mangan, 2001). Thus, the number of students who enroll for e-Learning is increasing significantly. Devi (2002) contended that the rapid pace of technological changes made it necessary for adults to continuously upgrade their knowledge and skills so as to stay competitive in the job market. Thus, the online education market created a larger geographic market for students, particularly for smaller universities (Smith, 2001).

The dependable dimension of e-Learning is a combination of two factors - e-Learning efficacy and user friendly. Online learning is a dependable method of teaching-learning since it produces the results desired by the learners and at the same time the learner can easily use it. Researchers have found that when online courses are well-designed and implemented, the participants report them to be valuable and enjoyable learning experiences that impact both knowledge and professional practice. Students find e-Learning dependable and may therefore be more involved and motivated as a consequence. Torresa (2008) contended that difficult or dull subjects can be made more interesting, easier and more appealing by e-Learning.
Students perceive that e-Learning has adaptable dimension as they can have access to unlimited storehouse of information at any hour and from any place. e-Learning can facilitate the learner with access to best faculty and quality study material. Also, faculty availability is not restricted by geography or even time because of recorded classrooms (Nelasco et al, 2007). Inclusive dimension of e-Learning provides maximum range of learning styles, preferences and needs. Advanced learners are allowed to speed through or bypass instructions that are redundant while novices slow their own progress through contents and eliminating their own frustrations. Power dimension of e-Learning empowers the students as they can complete courses at their convenience and gives them the opportunity to apply knowledge in contemporary situations (Teare, 2000).

Pertinent dimension of e-Learning makes it suitable for all types of learners. Online learning is the only method of learning, where three different learning styles of auditory learners, visual learners, and kinesthetic learners are included. And by using learning style tests, e-Learning can locate and target individual learning preferences. Online learning is also associated with challenging dimension. While initial use (acceptance) of the e-Learning service is the first step towards realising e-Learning success. An eventual e-Learning success further depends on its continued use in contrast to its initial use or acceptance. Chiu et al (2005) reported that user’s intention to continue using an e-Learning service is considered as a major determinant of e-Learning success. Clearly, understanding the various challenges faced by learners is important for e-Learning success. Also, identifying the factors influencing the user’s intention to continue using the e-Learning service is a critical issue for researchers and practitioners.

Equitable dimension of e-Learning provides easy access to all types of learners i.e., those working part time or students on parental leave and even handicapped students. Online learning provides students access to higher education that they would not have otherwise because of geographic or time constraints (Huynh et al, 2003; Kabassi and Virvou, 2004). Sambrook (2003) listed the benefits of e-Learning as providing consistent worldwide training, increased learner convenience and easy to learn. On the other hand, some studies suggested that cultural difference has an influence over the acceptance of e-Learning. Triandis et al
(1988) contended that countries with individualistic culture have higher acceptability of e-Learning as compared to the countries with collectivistic culture.

The faculty members of traditional stream perceived e-Learning to be higher in only two dimensions, whereas the students of traditional stream perceived e-Learning to be higher in all the eight dimensions. This indicates that students generally hold more positive attitudes toward technology than their teachers. The same result was indicated by Huynh et al. (2003), who reported that resistance from faculty is another important concern for institutions. Many faculty members firmly believe that e-Learning is inferior to face-to-face instructions. The faculty members and students of traditional stream are teaching and learning in an environment which lacks in technical exposure when compared to students of professional stream. Therefore, the faculty members and students of traditional stream are deprived of infrastructural requirements that are required for online education. Since they have this deprivation in their mind, they perceive e-Learning to be an effective tool which provides an excellent opportunity for learning.

Online learning is associated with comprehensive factor as it has the capability of improving the theoretical as well as practical knowledge of the student. The flexibility factor of e-Learning allows the user to learn at his/her own speed. The engaging factor associated with e-Learning makes e-Learning an active and stress-free experience. It has been found that even difficult or boring subjects can be made interesting, easier and more appealing through e-Learning. The empowering factor of e-Learning helps students to take control of their own learning which leads to better performance. The user friendly factor of e-Learning allows the students to use it, even when they are having only basic computer knowledge. The online material is useful, so the students associate suitable factor with it. Online learning is even suitable for the working professionals who want to further upgrade their knowledge, as it can easily fit into their busy schedule. So, the thrust of e-Learning is not just on having learners but it is on having life-long learners.

Culturally fair factor of online learning eliminates all the cultural barriers in education. Anyone and everyone can have access to e-Learning if he/she has access to a computer with internet connection. The feasibility factor of e-Learning makes it viable. Online learning is associated with worthwhile factor since it is easy to learn, feasible, accessible and convenient mode of education. It has been observed that
better results cannot be achieved in the learning and educational process without integrating new information and communication technologies in the education system. Students perceive that e-Learning produces desired results and so have associated efficacy factor with it. The use of enormous integrated set of computer and internet tools and resources allow students to achieve more efficient and effective training.

The interactive and effective factors of e-Learning make it an efficient learning tool. The students are no longer passive consumers of the educational programs and services, but are active participants in the educational process. Rice (2000), Volery (2000) and Rosenbaum (2001) suggested that online method facilitates more effective education and offers significant advantages over traditional teaching methods. Due to the accessibility factor of e-Learning, education can easily and conveniently reach any part of the globe. Also, teaching methods, such as virtual lectures sustain group interaction and broaden the flexibility of communication between students, indicating that e-Learning teaching methods enhance student interaction and offer a flexible alternative to traditional time and place constraints (Holley, 2000).

The challenging factor of e-Learning makes it more exciting to use. Online learning though having number of benefits can also be challenging since a learner needs to be disciplined and motivated enough to learn from this autonomous learning method. The easy to learn and technical competence factors of e-Learning go along with each other. A technically competent learner can definitely benefit from e-Learning and a technically incompetent learner can easily learn to use it. The workable and convenient factors of e-Learning make e-Learning effective and easy to use.

The viable dimension of e-Learning makes it practicable. It allows sharing of knowledge, experience, infrastructure and technology. It also enhances the effective and efficient utilization of available resources. Students can have an access to unlimited storehouse of information at any hour and from any place. Online learning has adaptable dimension associated with it. This learning method is considered to be an alternative to the traditional classroom approach and has encouraged the development of teaching-learning towards a dynamic learning process (Wang et al, 2008). The inclusive dimension of online learning helps in engaging the students to learn and understand better in class due to adoption of technology, such as multimedia elements in the classroom.
The power dimension of e-Learning empowers the learner to take charge of learning and to access online library resources. On-demand availability in e-Learning makes it adaptable and gives power to the learner. The pertinent dimension of e-Learning makes it relevant for all types of learners since the playback of recorded sessions is possible, absentees can learn the lessons when they are back and slow learners can listen to it more than once. The challenging dimension of online learning arouses curiosity in the students and they are motivated to use it. Since e-Learning is fair and impartial, it also has equitable dimension. When used well, ICT enriches learning and enhances teaching without any cultural bias.

It has been observed that as the level of education increases, the attitude of the students towards learning becomes more positive. Generally at under graduate level, the students pursue lectures only because they have to and possibly for the sole reason of increasing their social contacts. At post graduate level, the students are more keen and enthusiastic towards learning and this attitude towards learning makes them perceive e-Learning to be effective on number of factors and dimensions as compared to the under graduate students. Oblinger and Hawkins (2005) argue that the students want more technology may not be valid, especially younger students who are less satisfied with complete online learning than older students. The reason appears to be related to their expectation of being in a face-to-face social environment.

5.3 e-Learning Efficacy and Proficiency

Online learning mode of education has engaging and empowering factors as the learner is more involved, feels powerful and motivated. Also, students have more choices of and control over their learning time and pace (French et al, 1999). User friendly factor of e-Learning makes it easy to use. It also makes it easier to get access to the knowledge of other users. The online material in any form, text, picture, audio or video is useful for all the users. Therefore, making suitability a factor of e-Learning.

Worthwhile has been identified as a factor of e-Learning. Russell et al (2003) reported that effectiveness of distance learning was not different from learning in traditional classroom. Wilmot (2001) concluded that multimedia was as good as traditional
classroom instructions, if not better, because students were more actively engaged with the material. The combination of multimedia characteristics increases the chances of showing experiments which would be difficult to carry out without using simulations, videos, animations, among others. Online learning mode of education is worthwhile. A technology for learning would be worthwhile if the learner is self-motivated enough to use it (intrinsic motivation) or others motivate him/her to use it (extrinsic motivation). Saade et al (2007) in their study contended that when students’ intrinsic motivation is stronger, their willingness to use e-Learning will be higher. Highly motivated students perform well in most cases, whereas non-motivated students tend to drop out.

Interactivity, a factor of e-Learning is recognized as one of the key ways to capture affordances of e-Learning to increase the learner’s knowledge (Laurillard, 2002; Sabry and Baldwin, 2003). Online learning helps in making interactions easier and faster. The most important contribution teachers make is their interaction with learners. These interactions include feedback, guidance and support. They are more likely to be effective because they are timely, relevant and personalised. This can help increase learners’ motivation and engagement. Ozturk and Ozcinar (2013) reported that students who perceive high levels of interaction in e-Learning also perceive high levels of learning. Research indicates that majority of the students have found technology useful in their learning. Although using mass media and internet media are challenging and time consuming if the learner is not having exposure to computers but it provides the students with creative and practical ideas. Thus, a person should be technically competent to take full advantage of e-Learning.

Online learning has effective factor associated with it. An effective method of learning proves that it is a valuable tool. Costley and Lange (2016) reported that e-Learning provides a beneficial outcome in the form of perceived learning and if instructors want to increase it, they should design e-Learning to be more instructor-controlled environment. The challenging factor of e-Learning signifies that online learning is not free from challenges and learners have to be ready to face the challenges. Technical competence has been identified as a factor of e-Learning. In order to face the challenges associated with e-Learning, the learner should have technical competence. Lofstram and Nevgi (2007) reported that students’ knowledge and skills in computer applications can be a drive in the use of technology in learning.
while deficiency makes it difficult for them to learn. The workable factor of e-Learning shows that it can be used effectively.

Many educational psychologists also accept that a learner’s motivation positively influences his/her behaviour and enhances his/her persistence in learning activities (Woolfolk, 2007; Stipek, 1998). In addition, his/her motivation may have influenced his/her efforts and as these efforts prove successful, his sense of self-efficacy increases, and this in turn, improves his/her motivation (Elliott et al, 2000). The convenience factor of online learning provides the learner with the opportunity to learn as well as practice at his own will.

Comprehensive factor of e-Learning signifies that it covers all the theoretical as well as practical part of the subject. Culturally fair factor of e-Learning makes it a bias-free and hence stress-free learning environment. Feasibility as a factor of e-Learning means it is practical and possible to learn through it. Studies have revealed that e-Learning provides a useful and timely feedback to the learner (Jung, 2008; Raaij and Schepers, 2008).

Students of traditional post graduate programs are more mature and experienced than the students of traditional under graduate programs. Moyer (2001) suggested that the learner’s success in an online environment was a function of age. Mature learners had more life experience and motivation, and hence were far better in non-traditional settings. Therefore, the traditional post graduate students perceived e-Learning to be higher than their under graduate counterparts. Also, students of traditional post graduate programs perceive e-Learning to be higher than the students of professional post graduate programs since they want to break free from the monotonous classroom teaching and are attracted to the computer enabled teaching.

Online learning has comprehensive factor associated with it. A comprehensive learning environment contains all instructional sources and tools, such as virtual classes and simulations. The students feel empowered while using this technology driven learning method. Flexibility factor of e-Learning includes the different styles of learning. e-Learning is flexible as it can locate and target individual learning preferences. It is inclusive of a maximum range of learning styles, preferences and needs. Advanced learners are allowed to speed through or bypass instructions that are
redundant while novices slow their own progress through content, eliminating their own frustrations (Nelasco et al, 2007).

The engaging factor of e-Learning appeals the students and makes them independent learners. The empowering factor of e-Learning makes it useful and efficient learning tool. Since e-Learning is associated with user friendly factor, it is accessible and easy to use/learn. Petra (2006) contemplated that e-Learning at its best can be seen as a convenience and at its worst as a distraction.

The culturally fair factor of e-Learning provides educational justice to the learners globally. Online learning has feasible factor associated with it. Learners do not feel stressed since they can learn at their own convenience and time which is not possible in traditional learning environment. According to Sun et al (2008), students are more satisfied when they are not constrained by time. Worthwhile factor of e-Learning signifies that it is beneficial to spend money on it. Students perceive e-Learning to be worthwhile as it is their teachers and friends who motivate them to learn through it. The e-Learning efficacy and interactive factors of e-Learning help to create an effective and comprehensive environment.

The accessibility factor of e-Learning signifies its easy reach. E-learning tools provide students with a new channel to learn (Catchpole, 1993). Through its use, students may learn in a self-paced and interactive way, feeling more playful and challenging (Atkinson and Kydd, 1997). Challenging is a factor identified in e-Learning. Studies have shown that the main challenges of e-Learning are technical incompetence and lack of confidence in using these applications (Baker, 2003). Online learning by its very nature requires a certain level of technical sophistication. This becomes less of an issue over time as computer literacy increases.

Workable factor of e-Learning signifies that e-Learning can be used effectively. Online learning provides a workable educational platform for the students. Additionally, through an online chat room and discussion board, students can interact with others through pro-social relationships (Bagozzi and Lee, 2002; Lee et al, 2005). Romiszowski (2004) argued that it is vital to consider effectiveness in terms of learning outcomes. An e-Learning exercise can only be considered effective if learning takes place.
Convenience factor of e-Learning signifies the comfort of the learner. Online learning provides a convenient learning environment as the learner can learn even from the comforts of his/her home. Effective and easy to learn are the factors identified in the study. The effectiveness and easy to learn features of e-Learning enable all students to become empowered, confident and self-directed learners. Technical competence factor with respect to the study means able to use computers and internet confidently. A technically competent learner can gain well from e-Learning sessions.

The students of traditional undergraduate programs perceived e-Learning to be more effective as compared to the students of both professional undergraduate programs and the students of professional post graduate programs. This could be attributed to the fact that the students of traditional undergraduate programs are not exposed to the technology driven learning and they feel that ‘grass is greener’ on the other side. On the other hand, the students of both professional undergraduate programs and the students of professional post graduate programs are already exposed to the technology and are in a position to understand the positive and negative effects of using technology in education.

The literature gives a mixed insight on the factor ‘Easy to learn’. There are some studies which suggest that e-Learning is easy to use, whereas other studies indicate that it is not so. Milani (2007) suggested that e-Learning is a useful and convenient tool for slow learners as it is easy to use. However, Wu et al (2008) contended that e-Learners and e-Instructors often need to learn new skills including those associated with internet technology, its processes and mechanisms.

Comprehensive factor of e-Learning provides complete learning solution for the e-Learners. Arbaugh (2002) contended that e-Learning course flexibility factor played an important role in the perceived satisfaction of e-Learners. In contrast to traditional classroom learning, e-Learning is not constrained by space, time and location; therefore, students have a high degree of flexibility and many self-paced learning opportunities. From an operational viewpoint, the opportunity is given to students so that they could effectively balance their jobs, family, and work-related activities with e-Learning is the first priority when considering such an education.
Engaging and empowering have been identified as factors of e-Learning. Students find e-Learning as an engaging learning tool since it captures their attention and makes them independent learners due to which they feel empowered. User friendly and suitable factors of e-Learning signify that it is easy to use, the learners feel motivated and it suits their learning needs. Culturally fair factor implies that all the students, however culturally dispersed they might be, can equally benefit from it. Feasibility and worthwhile factors of e-Learning make it an excellent learning tool.

Dwyers et al (1995) have explained the advantages of student-centered teaching approach which provides round the clock accessibility to course material for the students. For the faculty, it offers just-in-time methods to assess and evaluate students’ progress. One of the major benefits for e-Learners is the improvement in their written work and communication that result from being located in an accessible environment where they can easily revise them (Harasim, 1990; Levinson, 1990; Mason and Kaye, 1990; Ownston, 1997).

The factor e-Learning efficacy means experience in computer use. It is another success factor in adopting e-Learning. Proficiency in using software, good technical skills, abilities regarding time management and communication are required for proper learning through e-Learning. Interactivity is one of the important factors of e-Learning. Online learning is an interactive medium as learner can easily interact with other learners online. Lim et al (2014) reported that the design aspects of e-Learning such as the content of the class, the feedback given to learners, task structure and the organization of the online learning environment should be controlled so that there is increase in the satisfaction and interaction level of the learners. The effective factor of e-Learning signifies that it is successful in producing desired results. Accessibility is a factor of e-Learning, because learners can have access to e-Learning lessons anywhere and everywhere provided they have a computer with internet access.

Online learning has challenging and technical competence factors. It challenges and empowers the inquisitive learners who wish to take some responsibility for what they know and how they come to know it. Online learning is associated with workable and convenient factors. The learners in online learning are themselves controlling the pace of learning. They can skip the part of lesson which is simple or slow down while
studying difficult part. Professional post graduate students are technically competent than the traditional post graduate students. Therefore, they perceive e-Learning higher in terms of Easy to use factor. Brown (2001) suggested that those with more computer experience tend to do better in e-Learning environments. Professional post graduate students are more mature and experienced than the professional under graduate students so they perceived e-Learning to be higher in all the factors identified in the study.

5.4 Dependability, Adaptability and Inclusiveness

Online learning is perceived to have comprehensive and flexibility factors but problems can arise when learners are new to it. Engaging and empowering are the factors of e-Learning which make it appealing. The user friendly and suitable factors of e-Learning are also important factors since a learner will continue using it only if it is easy to use and satisfies his/her learning needs. Although e-Learning is user friendly, but the learners who are used to traditional delivery method feel challenged by the more learner-centred approach of e-Learning. The additional demands can lead to decreased engagement and lower levels of achievement and, in some cases, even withdrawal from the course. Mungania (2003) contended that learners still face some situational, organizational and technical barriers to e-Learning. They take time to get accustomed to the software and the technology being used to provide training.

Online learning has culturally fair factor which the traditional learning method does not have. The feasible factor of e-Learning allows students to have the opportunity to study at the place and time that best suits them. Worthwhile and efficacy factors of e-Learning make it an important tool for teaching-learning. Interactivity factor of e-Learning allows learners to actively participate in this virtual classroom. Online learning is interactive as technology allows greater participation for those who may feel constrained in face-to-face environments (Owen, 1993; Dutton et al, 2002).

The effective and accessible factors of e-Learning improve the performance of learners. Challenging is a factor identified in e-Learning. Some e-Learners may find the learning method as challenging and they are generally those learners who are not well versed with the usage of computers. Although online learning is flexible and user friendly, but prior experience in e-Learning is essential because learners with partial or no experience often struggle to adapt to the extra demands imposed by an e-
Learning environment. Technical competence factor of e-Learning makes the learners feel less challenged. Since e-Learning has workable and convenient factors associated with it, the learner can learn well even within the boundaries of his/her home.

Viable dimension of e-Learning signifies that it is able to work as intended. It is intended that e-Learning will appeal the user, motivate him/her and improve his/her performance.

Online learning has inclusive and pertinent dimensions as it is comprehensive as well as relevant. Also, e-Learning has a culturally fair factor and thus provides an equitable dimension of learning.

The amount and type of feedback students require will vary depending upon student needs and level of engagement with the learning material. Carey and Carey (2005) reported that post graduate students usually ask for feedback as required and may initiate online contact with other post graduate students regarding issues relating to their enquiry. On the other hand, under graduate students require feedback relating to the subject matter and, more likely, assignment requirements. The feedback requirement of under graduate students can easily be fulfilled by the faculty in the classroom itself. Therefore, traditional post graduate students considered e-Learning a better learning option than professional under graduate and traditional under graduate students.

Online learning carries viability as a dimension of learning environment since it works as intended. It has also the dimension of dependability as it gives stable and consistent performance. e-Learning has adaptability as a dimension resulting in flexibility to learn, update and present the content of the training program according to the learner’s requirements. An adaptive environment modifies according to the characteristics of learner. Cranton (1989) found that individualized methods of learning are based on the assumption that people learn at different rates.

Online learning has inclusiveness as a dimension of learning environment since it is a comprehensive resource for learning, teaching and research. Although e-Learning is an inclusive learning environment still the dropout rates are high. Elango et al (2008) has expressed concern over the high dropout rates experienced in e-Learning systems as compared to traditional education systems. In addition, he also contended that an e-
Learning educational system may not provide an adequate balance between intellectual learning skills and team building community skills.

Since online learning empowers the students, it has power dimension associated with it. Challenging as a dimension of e-Learning signifies that some learners perceive e-Learning as a challenging environment to learn. Wahid et al (2011) contended that although using internet media is challenging and time consuming, it provides teacher and students with creative and practical ideas. The culturally fair factor of e-Learning implies that it is an equitable learning environment. Pertinent as a dimension signifies that e-Learning provides relevant information equally to all learners. The e-Learning mode of education is pertinent and empowers the learners since it allows the learner to learn effectively.

According to Maslow (1943), all human beings have five basic needs which are represented in hierarchical levels within a pyramid. They are physiological, safety, belongingness, esteem and self-actualization. When a person’s lower order need is fulfilled then only does he/she feel motivated enough to fulfill the next higher order need. The esteem need represents the typical human desire to be accepted and valued by others. People often engage in a profession or hobby to gain recognition. These activities give the person a sense of contribution or value. Students of traditional undergraduate programs perhaps perceive the students of professional programs more modern and successful since they are receiving technology enabled education. Also, perhaps the esteem need of traditional students has not been fulfilled so they perceive e-Learning to be a means of fulfilling that need. Therefore, the students of traditional undergraduate programs perceive e-Learning effective on number of dimensions. On the other hand, the students of professional undergraduate and professional post graduate programs have already been exposed to the technology enabled learning and are aware of its benefits as well as limitations.

In the context of this study, pertinent dimension refers to suitability of e-Learning to the students. Online learning has shifted the focus from teacher-centred to student-centred education. The present generation of students enjoy this type of education as it makes them feel empowered. Studies indicate that e-Learners are satisfied with the educational content and quality provided in e-Learning. They are also contented with the knowledge and interaction with e-Instructors. Mangan (2001) suggested that e-
Learners were satisfied with the knowledge level of the instructors and further stated that e-books and e-journals are useful.

Students learn in a self-paced and interactive way through e-Learning. Thus, students perceive e-Learning having viability as a dimension. Students also perceive dependable and adaptable dimensions in it. Every learner has characteristics which make him/her mentally different, and emphasize upon the need of having e-Learning as less complex, but more flexible learning environment (Nguyen and Do, 2008). Online learning empowers the learner to take charge of his/her learning and also provides bias-free learning, thereby reducing stress. Also, a considerable percent of e-Learners are happy with the courses and their contents. Thus, making e-Learning to have power and inclusive dimensions as a way of learning.

Huynh et al (2003) contended that in electronic courses, the students are much more independent than in the traditional classroom settings. This requires the e-Learners to be highly motivated and committed towards learning which makes e-Learning to contain the dimension of being challenging. Also, students in online courses tend to perform at par with the students in classrooms, but there is higher incidence of withdrawal or incomplete grades (Zhang et al, 2006). The challenge that e-Learning comes with could be taken in a positive manner and that could pave way for improved opportunities of learning. Online learning is associated with equitable dimension which makes it suitable for all types of users with their varied learning styles and needs.

Post graduate students report higher levels of academic motivation and exhibit more adaptive self-regulated learning behaviours than their under graduate counterparts (Pintrich, 1999; Wolters, 2003). Also, post graduate students tend to have better learning outcomes (Schunk and Zimmerman, 2008). Therefore, professional post graduate students perceive e-Learning to be higher than the students of traditional under graduate programs in terms of Pertinent dimension.

Online learning is associated with viability dimension. In this mode of learning, learner can learn when he/she has time and it thus fits easily into the hectic schedule of learners who are also working. It has dependability as a dimension since it helps in learning and produces the desired results. Khan (2009) found that those who use
computers more often feel more engaged in their learning and believe that computers aided their learning and interaction with faculty and students. Adaptable dimension makes online learning a flexible mode of learning. Inclusive and power dimensions of e-Learning provide a comprehensive learning environment which empowers the learner. Pertinent dimension covers number of learning styles and needs of learners.

Online learning has challenging as a dimension, since there might be learners who are not accustomed to computers. Prior experience in e-Learning is essential because learners with partial or no experience often struggle to adapt to the extra demands imposed by an e-Learning environment. These demands comprise of extra cognitive load and need for digital information literacy skills and capabilities (Gulney, 2012). Thompson et al (2000) carried out a study in Canada and United States and contended that the users need more information and skills for using learning technologies. Although e-Learning is an appealing, efficient and effective method of learning but problems arise when learners are new to it. The learners, who are used to traditional delivery method feel challenged by the more learner-centred and flexible method provided by e-Learning.

In contrast to the findings of the present study, Scheuermann and Reich (2002) reported that the online learning material is not user friendly, besides being unsatisfying on cost and contents. Lack of IT skills can prove problematic for students on distance learning courses and if the requirement for training is not addressed, students will not experience the full benefits of the e-Learning environment (Holley, 2002). Furthermore, a lack of IT skills is one of the main reasons for student non-participation in e-Learning courses (Wilson, 2001). Online learning has number of dimensions including equitability as it provides educational justice to all types of learners in any part of the world. On the contrary, some studies have suggested that cultural differences have influence over the acceptance of e-Learning.

The students of traditional post graduate programs who have throughout received education in a traditional classroom setting, wherein a teacher delivers lecture and the students note down points, seem to be excited about the new learning paradigm. They perceive e-Learning to be a better mode of education which would let them learn at their own convenience and could be adapted to their own personal learning needs. On the other hand, the students of professional stream are already exposed to e-
Learning and they might be aware of the fact that the students will benefit from e-Learning only when they are able to handle the technology well and do not get carried away or distracted by the internet.