

E-Learning for Career Development: The Case of Business Administration Graduates

Surajit Sarbabidya* and Mohammad Alam Shikdar**

The advent of rigorous information and communication technologies (ICT) has brought a breakthrough in the conventional mode of career development. From the findings of the prominent researchers a good number of factors of ICT based training or class sessions including technological competency and e-learning mindset of students and faculty members, IT infrastructure, teaching style, interactive collaboration, ease of access, etc., have been identified. However, they did not completely exhibit the role of proactive e-learning for career development. So, this indicates to the research problem since there is a research gap. This is the reason which motivated to endeavor the current study to investigate the role of e-learning on the career development of business administration graduates. To achieve this purpose of the study both primary and secondary data have been utilized in this study. The primary data have been collected through a recent survey during the month of November 2016 based on a Likert 5 scale structured questionnaire and random sampling from 100 sample respondents including students and faculty members of some universities in Bangladesh. The collected data have been analyzed through multiple regression. Finally, the paper recommends the training on e-learning for the students and faculty members, development of e-learning policies, infrastructures and facilities, etc.

Field of Research: Information Technology, Management

Keywords: E-Learning, Career Development, Business Administration Graduates

1. Introduction

Developing career with the vision of being efficient and competent workforce for employment is often a great challenge for the graduates of business administration in this highly competitive corporate world of the present day. However, this situation often gets complicated due to the paucity of educational and professional training institutes with good standard. Towards this end, e-learning acts as a viable solution to overcome the shortage of conventional academia. This is because the great advantages of e-learning include the ability to learn from the employee's desktop, the convenience of learning from home, the savings on traveling costs, allowing companies to have globally trained staff, the reduced overall training costs, the rapid dissemination and revision of training materials, the shortened training period, and the enhanced opportunities for career development through active learning (Chen, 2008). E-learning enables students to obtain their education in parallel with pursuing their personal goals and maintaining their own careers, without a need to attend classes and be subjected to a rigid schedule (Borstorff & Lowe, 2007). This has resulted to an increase in the number of online courses due to attained benefits for both university and learners (Kartha, 2006). E-learning has continuously played a vital

*Dr. Surajit Sarbabidya, Professor, Department of Business Administration, School of Business, Britannia University, Comilla, Bangladesh, Email: surajitsarbabidya@gmail.com

**Mohammad Alam Shikdar, Lecturer, Department of Business Administration, School of Business, Britannia University, Comilla, Bangladesh

Sarbabidya & Shikdar

contribution to the progress of academic staff and students, and the improvement in the quality of teaching method and learning management system which have resulted in increased popularity of education in different educational institutions and organizations (Basheer and Ibrahim, 2011). So, it is primarily evident that there are many factors of e-learning which may become strong foundation to facilitate career development of many graduates and service holders with professional mindset. But this mode of career development has so far not been utilized to a proper extent. The significance of e-learning for career development has been acted as the principal reason or motivation to pursue the current study from the perspectives of business administration graduates.

This study has been endeavored on the basis of intensive secondary and primary data which has fulfilled one dimensional studies of the earlier days. Moreover, the findings of the study suggest the significance of e-learning for career development with proven result from statistical analysis and the application of qualitative model on gap analysis given by Parsuraman et al. (1988).

But, the current study is not free from limitations. For example, most of the studies mentioned in the literature review did not solely focus on the assessment of the impact of e-learning on the career development. Again some studies only focused either one or some aspects other than the complete subject matter of the current study. So, it is clearly evident that there is a research gap and to mitigate this gap a rigorous research is yet to be systematically attempted. With this end in view, the present study investigates the research question: "Can e-learning ensure career development of Business Administration Graduates?" However, from the context of the current research question the following hypothesis has been developed to exhibit the appropriate answer:

H₀: E-learning cannot ensure career development of Business Administration Graduates.

H_a: E-learning can ensure career development of Business Administration Graduates.

From the light of the above hypothesis, the principal objective of this study is to examine the impact of e-learning on the career development of Business Administration Graduates.

Section 1 deals with introduction, Section 2 focuses on the background of the study, Section 3 contains the theoretical framework; Section 4 portrays the literature review, Section 5 defines the research problem, Section 6 goes with the methodology of the study with reliability and validity tests, Section 7 exhibits the rationale of the study, Section 8 deals with the gap analysis on the basis of perceptions and expectations of the respondents, and finally Section 9 draws a constructive conclusion with a reply to the research question and unique contribution and implications.

2. Background of the Study

E-learning was first introduced in Bangladesh in 1956 by a radio broadcasting program, and later on was expanded much by the establishment of Bangladesh Open University (BOU) in 1992 (Khaled Mahmud, 2010). BOU has been offering a variety of formal and non-formal academic programs from certificate to Masters levels using print, TV, audio broadcasts, audio-cassettes and face to face tutorials as the media of delivering its academic courses (Sadeq, 2003).

Sarbabidya & Shikdar

In Bangladesh, ICT is being incorporated in education through support from international organizations, like the Department of International Development, UK (Shohel & Power, 2010).

Research findings over the past two decades provide some evidence as to the positive effects of the use of information and communications technology (ICT) on pupils' learning (Mumtaz, 2000; Hattie, 2009). In their study, Shohel, Mahruf and Kirkwood (2012) found the positive impact of video and audio clips of good participatory classroom practice on the understanding of lessons by the students. Similarly, teachers are also influenced by the good teaching practice and classroom behaviors demonstrated in audio-visual materials on the iPod Touch.

Having the political agenda to digitize the country: to accelerate a "Digital Bangladesh" movement so as to achieve "Vision 2021" the Government of Bangladesh has emphasized the implementation of ICT in all sectors including education (Bhuiyan, 2011).

The growth of internet and mobile users has also increased the potentials of e-learning in Bangladesh. According to the BTRC, at the end of February, 2017 the total number of mobile phone and internet subscribers has reached 129.584 million and 67.245 million respectively.

3. Theoretical Framework

3.1 E-Learning

In general, e-learning refers to all types of teaching methods via electronic media, including the Internet, intranets and extranets, satellite broadcasts, audio/video, interactive TV and CD-ROMs (Chang & Tung, 2008). E-learning is the learning or acquisition of knowledge distributed, facilitated and supported through the utilization of information and communication technologies (Jenkins & Hanson, 2003). In their review, Liu & Wang (2009) found out that the characteristics of e-learning process was mainly based on the internet; information dissemination and knowledge flows in the form of network courses among others. Rossi (2009) referred e-learning as the use of information and communication technologies like Web 2.0 application tools to facilitate the access to online learning/teaching resources and to provide students with collaborative environments that positively affect career development. A good number of research studies found that e-learning is an approach to transfer digital materials to career oriented people via the Internet to help them continuously and autonomously engage in self-directed learning, receive training-related information, and participate in training activities (Broadbent, B, 2002, Kathawala, Y, and Wilgen, A, 2004; Wang, Y, Wang, H, and Shee, D, 2007). Though e-learning was found effective solution in the previous studies, one research study has also found an unreliable barrier of e-learning in Bangladesh. In this the finding of Khan and Hasan (2012) is noteworthy. They found that in Bangladesh, the key barriers to the use of ICT were found to be language and insufficient education and skills that facilitate the effective use of ICT. In Bangladesh, Bangla is the main spoken language, whereas English is the dominant language over the computer (software), internet and ICT supported tools.

3.2 Career Development

Career is the evolving sequence of a person's work experiences over time an individual career is procedural and evolutionary (Arthur, Khapova and Wilderom, 2005). Career is a sequence of attitudes, activities or behaviors associated with work roles of individuals during the course of their lifetime (Gerber et al., 2009). Hence, careers are increasingly concerned with self-fulfillment and satisfaction of oneself from his or her own career (Baruch, 2006). In the holistic perspective, careers are not limited to moving up the ladder (Carlson and Rotondo, 2001) and the work sphere alone but careers include a lifelong sequence of role-related experiences of individuals (Arnold and Cohen, 2008; Hall, 2002). Career development is seen as a formalized career planning activity to develop employees who are ready for movement to different jobs, to reduce absenteeism and turnover, to cultivate the realization of individual potential, to motivate employees to establish their own career objectives and act on them, to increase the management awareness of available talent within the organization or for the organizational preparation of long-term trends that might pose opportunities or threats (Rothwell & Kazanas, 2003). Career development is the positive psychological and work-related outcomes accumulated as a result of one's work experiences (Seibert and Kraimer, 2001). While traditionally career development was confined to advancing through organizational hierarchies, today it is more broadly applied and is commonly considered to be the lifelong sequence of role-related experiences of individuals (Arnold and Cohen, 2008; Hall, 2002). Dries, Pepermans and Carlier (2008) found career development as mostly concerned with observable, measurable and verifiable attainments such as pay, promotion and occupational status. Other research studies found career development as objective success including salary, salary growth, hierarchical status, or number of employees (Arnold and Cohen, 2008).

4. Literature Review

In this section, an attempt has been endeavored to identify the various factors of E-learning which have profound impact on the career development of Business Administration Graduates.

Gulbahar (2007) found that the learning process in the educational institutions can be enhanced with the technological competency through the effective use of ICT resources such as computers, printers, multimedia projectors, scanners and many others which help(s) in career development.

From the findings of the research study by Schiller (2003) it is seen that personal characteristics of instructors such as educational level, age, gender, educational experience, experience with the computer for educational purpose and attitude towards computers can influence the adoption of a technology. Among the factors that influence successful integration of ICT into teaching are teachers' attitudes and beliefs towards technology (Hew and Brush, 2007; Keengwe and Onchwari, 2008). Teachers' attitudes towards technology influence their acceptance of the usefulness of technology and its integration into teaching (Huang & Liaw, 2005). According to Jones (2004), teachers feel reluctant to use computer if they lack confidence. Research studies revealed that male teachers use more ICT in their teaching and learning processes than their female counterparts (Kay, 2006; Wozney et al., 2006). Teacher's belief about the usefulness of the innovation plays one of the main roles and it encourages changes in the curricula (Colorado & Eberle, 2009). It is well known that different beliefs about the value of e-

Sarbabidya & Shikdar

learning encourage teachers to apply e-learning technology on different levels (Renzi, 2008). Matuga (2001) stated that the successful design and teaching of any course hinges on the personality, educational philosophy and pedagogical style of the instructor. Webster and Hackley (1997) proposed three instructor characteristics that affect e-learning success: (1) IT competency; (2) teaching style; and (3) attitude and mindset.

According to the study conducted by Selim (2005), e learning success is based on students' characteristics such as computer competency, interactive collaboration and e learning course content design, etc.

Frydensberg (2002) found that distance learning, open learning, etc., in the form of e-learning relies on institutional commitment (technical infrastructure and technical support, technical training, etc.). According to Masoumi and Lindström (2012), effective implementation of e-learning is influenced by explicit institutional visions and goals (long-term aims that guide current practice) and a well-defined mission and strategy that describes technology's place in education. Keller (2009) proved that organizational culture has the strongest impact on elearning technology integration by academic teachers through the level of organizational learning, thus the expected effort and observability have stronger connection with the lower level of organizational learning, while social influence and facilitating circumstances relate to the higher level of organizational learning.

The research has found that workplace peer support from the co-workers is positively related to greater job satisfaction and training effectiveness, and the level of social support received from significant others, including top management, supervisors, peers, and subordinates, all have an influence on individuals career (Chen et al., 2007; Harris et al., 2007). Numerous studies have found proof that managerial support in e-learning as helpful interactions on the job from supervisors is positively associated with staff well-being (Chuo et al., 2011; Felman-Baruch and Schwartz, 2002; van Veldhoven, de Jonge, Broersen, Kompier, and Meijman, 2002; Way and MacNeil, 2006).

Research studies have also revealed the significant role of family support (parental and spousal) in motivating individual's participation in career development or continued professional education (Harvey, Sinclair, and Dowson, 2005; Maurer, Weiss, Barbeite, 2003),

In view of this, Bhattacharjee (2001) built a TAM integrated model to explain that users' intentions to continue using a particular technology are driven by their satisfaction with prior usage. Many other studies found empirical support for the causal relationship between e-learning and career development and have demonstrated that e-learner's with higher levels of satisfaction with a service or product will have higher subsequent use (Chiu, Sun, Sun, and Ju, 2007; Hsu et al., 2006; Roca, Chiu, and Martinez, 2006). Several studies in finding the drivers of a successful e-learning outcome have suggested that the TAM is appropriate for predicting learning satisfaction in e-learning and have shown that the constructs in the TAM (such as perceived usefulness) significantly affect learner satisfaction (Arbaugh, 2000; Sun, et al., 2008). As Arbaugh (2000) described in his study on the acceptance of web-based MBA courses, perceived usefulness and perceived ease of use of the delivery medium will influence students' attitudes towards their learning experience, enhance the experience and satisfaction with the experience, and, therefore, make them more likely to participate in other e-learning opportunities. Bhattacharjee, Perols, and Sandford's (2008) considered maximum users' satisfaction as important strategy in the process of implementing successful e-learning programs.

Sarbabidya & Shikdar

Recent studies indicate that an e-learner's computer self-efficacy directly affects his/her career through the continued use of the online learning systems (Chang and Tung, 2008; Hsu et al., 2012; Sun et al., 2008). Since self-efficacy is domain specific (Joo, Bong and Choi, 2000), the concept of e-learning self-efficacy (ELSE) is introduced, referring to the belief that one can be successful in e-learning activities. Recent studies also indicate that an e-learner's computer self-efficacy directly affects his/her perceived e-learning satisfaction and behavioural intentions to continually use the online learning systems (Chang and Tung, 2008; Hsu et al., 2012; Sun et al., 2008).

Nanayakkara and Whiddett (2005) found that capacity and reliability of an ICT infrastructure act as influencing factors for the e-learner's in planning their career. Venkatesh et al. (2003) found that an organizational and technical infrastructure support the use of the e-learning system.

Muheisen (2010) found e-learning as the distance, time, effort and cost effective to the improvement of the overall level of academic achievement, teacher-student assistance in providing an attractive learning environment, that does not depend on the place or time. Internet-based communication may provide information in either synchronous or asynchronous way (Zengin, Arikan and Dogan, 2011). Such communication has become one of the most important means to provide learning resources for students to share and obtain information (Richard and Haya, 2009). Over the past decade, the *World Wide Web* has become one of the most important means for providing learning resources for students to share and obtain information (Richard and Haya, 2009). More recently, a new wave of World Wide Web applications, web 2.0 emerged with a potential to further improve learning and sharing of information among the learners and teachers (Ferdig 2007; Pence 2007; Simões and eGouveia 2008). Wiki (Wikipedia, Seedwiki, Wetpaint), Blogs (Blogger, Wordpress), social bookmarking (Club penguin, Ning, facebook, Myspace), and video sharing sites (You-tube, U-Stream) are some examples of web 2.0 (Richard and Haya, 2009). The ease of use of e-learning system encourages the students to pursue the learning of their course modules (Davis, 1989).

Many researchers have documented the need of training and support as one of facilitating conditions in adopting e-learning management system. Vannatta and Fordham (2004) assert that the amount of technology training was one of the best predictors of technology use. Croxall and Cummings (2000) established that hours of training and availability of technology are significantly related to teacher's classroom usage of technology; use of technology in teaching increased as hours of training increased. They also contend that training should target the integration of technology in instruction so that skills of e-learners can be enhanced which will help them in their respective career development.

The aforementioned intensive review of literature identified a good number of factors of ICT based training or class sessions including technological competency and e-learning mindset of students and faculty members, IT infrastructure, teaching style, interactive collaboration, ease of access, etc. However, they did not completely exhibit the role of proactive e-learning for career development. In fact, the reviewed findings do not exactly answer to the principal research question of the current study to know whether e-learning can ensure career development of business administration graduates or not. For authentic answer to this question, the development of research hypothesis such as 'E-learning can ensure career development of Business Administration Graduates' has been necessitated. Now, this has to be statistically proved on the basis of the primary data.

5. Research Problem

The institutions involved in higher education are playing crucial role in the human resource development of the country. In this regard, the role of both public and private universities in Bangladesh is very significant since they help in the career development of the graduates. It is worthy to mention here that the Business Administration discipline with its most demanding Bachelor and Masters degree is quite popular among the prospective graduates who like to pursue a business oriented career. Hence, there is acute competition among the universities in one hand and graduates on the other hand. Now-a-days, e-learning has been quite effective and popular among both the universities and their graduates because through this platform many journals, e-books, past assignments, industry reports, government and non-government reliable statistics, etc., are available which act as vast resources for studying in business administration. One major benefit of this platform is that it is very cost effective for both the ends. Thus, e-learning has become a reliable and effective approach to adopt by the universities to help in career development of their business administration graduates. In this connection, e-learning may be an effective approach for career development of the business administration graduates.

6. Methodology of the Study

Table 1: E-Learning Factors that Affect Career Development

Code	Items	Sources
v1	<i>Technological competency</i>	<i>Gulbahar (2007)</i>
v2	<i>Instructor characteristics</i>	<i>Colorado & Eberle, 2009; Hew and Brush, 2007; Huang & Liaw, 2005; Jones, 2004; Kay, 2006; Keengwe and Onchwari, 2008; Matuga, 2001; Renzi, 2008; Schiller, 2003; Webster and Hackley, 1997; Wozney et al., 2006</i>
v3	<i>Students' characteristics</i>	<i>Selim, 2005</i>
v4	<i>Institutional commitment</i>	<i>Frydensberg, 2002; Keller, 2009; Masoumi and Lindström, 2012</i>
v5	<i>Peer support</i>	<i>Chen et al., 2007; Chuo et al., 2011; Felman-Baruch & Schwartz, 2002; Harris et al., 2007; Kompier, & Meijman, 2002; van Veldhoven, de Jonge, Broersen, Way & MacNeil, 2006</i>
v6	<i>Family support</i>	<i>Harvey, Sinclair, & Dowson, 2005; Maurer, Weiss, Barbeite, 2003</i>
v7	<i>e-learner's satisfaction</i>	<i>Arbaugh, 2000; Bhattacharjee, 2001; Bhattacharjee, Perols, and Sandford, 2008; Chiu, Sun, Sun, & Ju, 2007; Hsu et al., 2006; Roca, Chiu, & Martinez, 2006; Sun, et al., 2008</i>
v8	<i>e-learner's self-efficacy</i>	<i>Chang & Tung, 2008; Hsu et al., 2012; Joo, Bong, & Choi, 2000; Sun et al., 2008</i>
v9	<i>ICT Infrastructure</i>	<i>Nanayakkara & Whiddett, 2005; Venkatesh et al., 2003</i>
v10	<i>Effective communication</i>	<i>Ferdig, 2007; Muheisen, 2010; Pence, 2007; Richard and Haya, 2009; Simões and eGouveia, 2008; Zengin, Arikan & Dogan, 2011</i>
v11	<i>Ease of use and access</i>	<i>Davis 1989</i>
v12	<i>Training of Trainers</i>	<i>Croxall & Cummings, 2000; Vannatta & Fordham, 2004</i>

Table 2: Career Development through E-Learning

Code	Items	Sources
CD	<i>Career Development</i>	<i>Arnold and Cohen, 2008; Arthur, Khapova and Wilderom, 2005; Baruch, 2006; Carlson and Rotondo, 2001; Dries, Pepermans and Carlier, 2008; Gerber et al., 2009; Hall, 2002; Rothwell & Kazanas, 2003; Seibert and Kraimer, 2001</i>

Sarbabidya & Shikdar

The current study is the combination of both primary and secondary data collection and their analyses in which, the primary data have been collected from the sample size of 100 respondents including 42 female and 52 male students of the 3 public and 3 private universities during the month of November 2016 using random sampling method through a structured and self-administered questionnaire based extensive survey comprising of open-ended and non-forced, balanced and odd numbered non-comparative itemized questions using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The data collected through literature review are exhibited in the Table 1 and Table 2 have been analyzed through multiple regression.

The appropriateness, timeliness, construction and relevance of the study may be assessed through the following reliability and validity tests.

6.1 Reliability of the Study

The Cronbach's Alpha values of the expectations and perceptions of the e-learning respondents are .856 and .869 respectively which are greater than 0.5. This refers to the reliability of the current study.

6.2 Validity of the Study

The values of Kaiser-Meyer-Olkin (KMO) Measure in the **Table 3** show that the expectations and perceptions of the e-learning respondents are acceptable since they are greater than 0.50. This suggests the adequacy of the sample size for the research study. From the results of the Bartlett's Test of Sphericity, it is seen that the approximate chi-square statistics of expectations and perceptions of the e-learning respondents are significant since they are greater than the table value. So, it is clearly evident that the study is valid for both expected and perceived level of the respondents.

Table 3: Validity Analysis

	Expectations				Perceptions			
	KMO		Bartlett's Chi-Square	Sig.	KMO		Bartlett's Chi-Square	Sig.
	Value	Acceptable Status			Value	Acceptable Status		
E-Learning	.797	middling	554.396	.000	.835	meritorious	499.106	.000

7. Rationale of the Study

In today's competitive world, a graduate of business administration plans for a career which helps him/her with market ready profile having practical industry insights. Since the higher education institutes and universities provide e-learning facilities and resources like reports and reliable statistics on the trends of product and brand development, industrial growth, etc., this enriches the knowledge and practical exposures of their graduates which in turn enhances their career opportunities in various arenas of entrepreneurial and corporate affiliations. From this perspective, the current study is justified as it furthers academic understanding by extending the knowledge of both e-learning and career development theory and practice. Thus, the findings and implications of this research will contribute to the existing theories by empirically investigating the impact of the factors of e-learning on the career development of the graduates of business administration discipline.

8. Gap Analysis Results

Based on the survey data, the following section exhibits the analysis and findings of this study.

The mean scores from the sample are illustrated in **Table 4**.

Table 4: Mean scores for the E-Learning Perceptions and Expectations

S/L No.	Items	Perceptions (P)	Expectations (E)	Career Development Gap (CD)
		Mean	Mean	CD = P - E
1	Technological competency	4.2100	4.6800	-0.47
2	Instructor characteristics	4.1300	4.6500	-0.52
3	Students' characteristics	4.1800	4.7200	-0.54
4	Institutional commitment	4.1800	4.7400	-0.56
5	Peer support	4.1100	4.7200	-0.61
6	Family support	3.9200	4.6200	-0.70
7	e-learner's satisfaction	4.1500	4.7000	-0.55
8	e-learner's self-efficacy	4.2700	4.7400	-0.47
9	ICT Infrastructure	4.3000	4.7400	-0.44
10	Effective communication	4.2400	4.9400	-0.70
11	Ease of use and access	4.1600	4.6900	-0.53
12	Training of Trainers	4.1000	4.7000	-0.60
Totals		49.95	56.64	-6.69
Average		4.1625	4.72	-0.5575

For each statement the mean Expectation (E) and Perception (P) values, along with Career Development (CD) value from the formula are presented, $CD = P - E$ (Parasuraman *et al.*, 1988). The three columns provide summary results for the career development through e-learning in Bangladesh, where the gap ($P - E$) is negative. This refers to perceptions of the respondents falling short against their initial expectations, and the presence of Career Development gaps. The findings suggest a short fall on all the items measured. The expectation and perception items were measured using a five (5) point Likert scale, from 1 = strongly disagree, to 5 = strongly agree, with 3 serving as a mid-point/neutral opinion on the scale. Mean scores greater than 3 identify a tendency for respondents to agree with a particular statement, whereas means of less than 3 indicate disagreement.

8.1 Expectations (E)

It can be concluded from the Table data that twelve (12) Expectation (E) values among the respondents were higher (means ranging from 4.6200 to 4.9400). This suggests that respondents really have higher expectations in terms of need for all the items covering these 12 statements.

8.2 Perceptions (P)

It can be concluded from the Table data that all of the items exceeded midpoint 3 such as from 3.9200 to 4.3000 suggesting that the sample had a tendency to agree that sufficient items have given adequate perception among the respondents.

Sarbabidya & Shikdar

The total mean scores for career development through e-learning perceptions and expectation items were 49.95 and 56.64 respectively with a gap of -6.69. While the averages mean scores for career development through e-learning perceptions and expectation items were 4.1625 and 4.72 with a gap of -0.5575. This score indicates that there is gap in the career development through e-learning in Bangladesh.

8.3 Gaps between Perceptions and Expectations (P-E)

The gaps in the career development through e-learning in Bangladesh are demonstrated in the third column of Table 4. As each item has a negative value, respondents' perceptions of the career development through e-learning are falling short of their expectations.

From the gap analysis, it is evident that there are gaps in e-learning based career development of business administration graduates. Thus, the result of gap analysis rejects the null hypothesis (H_0) that "E-learning cannot ensure career development of Business Administration Graduates" and proves or accepts the alternative hypothesis (H_a) that "E-learning can ensure career development of Business Administration Graduates".

9. Conclusion

From the statistical evidence it is clear that there is a causal effect of effective e-learning and career development of business administration graduates.

The present paper is unique for its compliance with the reliability and validity test criterion. The uniqueness of this study is that it has adopted gap analysis to find the differences between the perceptions and expectations of the business administration graduates regarding the impact of e-learning on the career development. This form of analysis was not found in the previous studies mentioned in the literature review.

The new findings of this paper are that there is gap in the career development through e-learning in Bangladesh. This has been statistically proved in two ways in the present paper. Firstly, with a gap of -6.69 by deducting the total mean scores for career development through e-learning perception items 49.95 and expectation items 56.64. Secondly, with a gap of -0.5575 by deducting the averages mean scores for career development through e-learning perceptions and expectation items were 4.1625 and 4.72. This paper adds value to the area of research by suggesting the ways of mitigating the identified gaps in each of the 12 aspects of career development through e-learning the concerned educational entities need to pay much attention and take necessary measures so that they can ensure proper training on e-learning for the students and faculty members, development of e-learning policies, easy to use technologies, infrastructures and facilities, etc.

The current paper is very much significant from the results of higher reliability and validity scores. As there is gap in the men scores indicate that improvement requires to increase technological competency of the instructors and students, institutional commitment, peer and family support, good ICT Infrastructure and their ease of use and access, etc.

It is a matter of limitation of this study that the previous studies though were on e-learning, none of them was found directly related to the impact of e-learning on the career

Sarbabidya & Shikdar

development of the business administration graduates. Moreover, these studies focused either one or some aspects other than the complete subject matter of the current study. For example, the findings of the previous studies on the variables like v1 namely technological competency, v3 namely students' characteristics and v11 namely ease of use and access. This means that there are limited research findings on some of the identified factors. This is the reason to overcome the identified limitations a primary survey has been undertaken to examine the impact of e-learning on the career development of the business administration graduates.

The present study contributes to the career development through e-learning a systematic process of extensive literature review followed by the primary survey findings and analysis together with conclusive implications. Thus, the paper will enable the concerned educational entities with necessary course of actions which will enable the academia in developing its knowledge centric theory based on proven practice.

References

- Arbaugh, JB 2000, 'Virtual classroom characteristics and student satisfaction in internet-based MBA courses', *Journal of Management Education*, Volume 24, Number 1, pp. 32-54
- Arnold, J, and Cohen, L 2008, *The psychology of careers in industrial and organizational settings: A critical but appreciative analysis*, Wiley, New York.
- Arthur, MB, Khapova, SN, and Wilderom, CPM 2005, 'Career success in a boundaryless career world', *Journal of Organizational Behavior*, Volume 26, Number 2, pp. 8, 177–202
- Baruch, Y 2006, 'Career development in organizations and beyond: Balancing traditional and contemporary viewpoints', *Human Resource Management Review*, Volume 16, Number 2, pp. 125– 138
- Basheer, AA-a, & Ibrahim, AM 2011, 'Measuring the acceptance and adoption of E-learning by academic staff', *Knowledge Management & E-learning: An International Journal*, Volume 3, Number 2, pp. 201 -221
- Bhattacharjee, A 2001, 'Understanding information systems continuance: An expectation-confirmation model', *MIS Quarterly*, Volume 25, Number 3, pp. 351-370
- Bhattacharjee, A, Perols, J, & Sanford, C 2008, 'Information technology continuance: A theoretical extension and empirical test', *Journal of Computer Information Systems*, Volume 49, Number 1, pp. 17-26
- Bhuiyan, SH 2011, 'Modernizing Bangladesh public administration through e-governance: Benefits and challenges', *Government Information Quarterly*, Volume 28, Number 1, pp. 54-65
- Borstorff, PC, & Lowe, SL 2007, 'Students perceptions and opinions toward e-learning in the college environment', *Academy of Educational Leadership Journal*, Volume 11, Number 2, pp. 13 - 30
- Broadbent, B 2002, *ABCs of e-Learning*, Jossey-Bass, San Francisco.
- Carlson, DS, and Rotondo, DM 2001, 'Differences in promotion stress across career stage and orientation', *Human Resource Management*, Volume 40, Number 2, pp. 99–110
- Chang, SC, & Tung, FC 2008, 'An empirical investigation of students' behavioral intentions to use the online learning course websites', *British Journal of Educational Technology*, Volume 39, Number 1, pp. 71-83

Sarbabidya & Shikdar

- Chen, CY, Sok, P, & Sok, K 2007, 'Exploring potential factors leading to effective training: An exclusive study on commercial banks in Cambodia', *Journal of Management Development*, Volume 26, Number 9, pp. 843-856
- Chen, ET 2008, 'Successful e-learning in corporations', *Communications of the IIMA*, Volume 8, Number 2, pp. 45-54
- Chiu, CM, Sun, SY, Sun, PC, & Ju, TJ 2007, 'An empirical analysis of the antecedents of web-based learning continuance', *Computers & Education*, Volume 49, Number 4, pp. 1224-1245
- Chuo, YH, Tsai, CH, Lan, YL, & Tsai, CS 2011, 'The effect of organizational support, self-efficacy and computer anxiety on the usage intention of e-learning system in hospital', *African Journal of Business Management*, Volume 5, Number 14, pp. 5518-5523
- Colorado, J & Eberle J 2009, 'The Relationship of Student Demographics and Academic Performance in an Online Learning Environment', In T Bastiaens et al (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*, Chesapeake, VA: AACE, pp. 2469-2474
- Croxall, K, & Cummings, MN 2000, 'Computer usage in family and consumer sciences classrooms', *Journal of Family and Consumer Sciences Education*, Volume 18, Number 1, pp. 9-18
- Dries, N, Pepermans, R, and Carlier, O 2008, 'Career success: Constructing a multidimensional model', *Journal of Vocational Behavior*, Volume 73, Number 2, pp. 254-267
- Felman-Baruch, C, & Schwartz, J 2002, 'Sources of social support and burnout, job satisfaction, and productivity', *Journal of Occupational Health Psychology*, Volume 7, Number 1, pp. 84-93
- Ferdig, R 2007, 'Examining social software in teacher education', *Journal of technology and teacher Education*, Volume 15, Number 1, pp. 5-10
- Frydensberg, J 2002, 'Quality Standards: A matrix of Analysis', *International review of research in open and distance learning*, Volume 3, Number 2, pp. 1-12
- Gerber, M, Wittekind, A, Grote, G, and Staffelbach, B 2009, 'Exploring types of career orientation: A latent class analysis approach', *Journal of Vocational Behavior*, Volume 75, Number 3, pp. 303-318
- Gülbahar, Y 2007, 'Technology planning: A roadmap to successful technology integration in schools', *Computers & Education*, Volume 49, Number 4, pp. 943-956
- Hall, DT 2002, *Careers in and out of organizations*, Sage Publications, Thousand Oaks.
- Harris, JI, Winskowski, AM, & Engdahl, BE 2007, 'The types of workplace social support in the prediction of job satisfaction', *The Career Development Quarterly*, Volume 56, Number 2, pp. 150-156
- Hattie, J 2009, *Visible learning*, Routledge, Abingdon.
- Harvey, P, Sinclair, C & Dowson, M 2005, 'Teacher motivations for postgraduate study: Development of a psychometric scale for Christian higher education', *Christian Higher Education Journal*, Volume 4, Number 4, pp. 241-264
- Hew, KF & Brush, T 2007, 'Integrating technology into K-12 teaching and learning: current knowledge gaps and recommendations for future research', *Educational Technology Research and Development*, Volume 55, pp. 223-253
- Hsu, MH, Yen, CH, Chiu, CM, & Chang, CM 2006, 'A longitudinal investigation of continued online shopping behavior: An extension of the theory of planned behavior', *International Journal of Human-Computer Studies*, Volume 64, Number 9, pp. 889-904

Sarbabidya & Shikdar

- Hsu, YC, Ho, SN, Tsai, CC, Hwang, GJ, Chu, HC, & Wang, CY 2012, 'Research trends in technology-based learning from 2000 to 2009: A content analysis of publications in selected journals', *Educational Technology & Society*, Volume 15, Number 2, pp. 354-370
- Huang, HM, & Liaw, SS 2005, 'Exploring users' attitudes and intentions toward the Web as a survey tool', *Computers in Human Behavior*, Volume 21, Number 5, pp.729-743
- Jenkins, M, & Hanson, J 2003, *E-learning Series: A Guide for Senior Managers*, Learning and Teaching Support Network (LSTN) Generic Centre. United Kingdom
- Jones, A 2004, *A Review of the Research Literature on Barriers to the Uptake of ICT by Teachers*. British Educational Communications and Technology Agency.
Viewed May 20, 2010
<<http://www.becta.org.uk>>
- Joo, YJ, Bong, M, & Choi, HJ 2000, 'Self-efficacy for self-regulated learning, academic self-efficacy, and Internet self-efficacy in Web-based instruction', *Educational Technology Research and Development*, Volume 48, Number 2, pp. 5-17
- Kathawala, Y, and Wilgen, A 2004, 'E-learning: evaluation from an organization's perspective', *Training and Management Development Methods*. Volume 18, Number 4, p. 501
- Kartha, CP 2006, 'Learning business statistics vs traditional', *Business Review*, Volume 5, pp. 27 - 33
- Kay, R 2006, 'Addressing gender differences in computer ability, attitudes and use: The laptop effect', *Journal of Educational Computing Research*, Volume 34, Number 2, pp. 187-211
- Keller, C 2009, 'User Acceptance of Virtual Learning Environments: A Case Study from Three Northern European Universities', *Communications of the Association for Information Systems*, Volume 25, Article 38
- Keengwe, J, & Onchwari, G 2008, 'Computer technology integration and student learning: Barriers and promise', *Journal of Science Education and Technology*, Volume 17, Number 6, pp. 560–565
- Khaled Mahmud 2010, 'E-Learning for Tertiary Level Education in Least Developed Countries: Implementation Obstacles and Way Outs for Bangladesh', *International Journal of Computer Theory and Engineering*, Volume 2, Number 2, pp. 150-155
- Liu, Y, & Wang, H 2009, 'A comparative study on e-learning technologies and products: from East to the West. Systems Research & Behavioral Science', Volume 26, Number 2, pp. 191 - 209
- Masoumi, D, & Lindström, B 2011, 'Quality in e-learning: a framework for promoting and assuring quality in virtual institutions', *Journal of Computer Assisted Learning*, Volume 28, Number 1, pp. 27-41
- Matuga, JM 2001, 'Electronic pedagogical practice: The art and science of teaching and learning on-line', *Educational Technology & Society*, Volume 4, Number 3, pp. 77- 84
- Maurer, T, Weiss, E & Barbeite, F 2003, 'A model of involvement in work-related learning and development activity: The effects of individual, situational motivational, and age variables', *Journal of Applied Psychology*, Volume 88, Number 4, pp. 707-24
- Mumtaz, S 2000, 'Factors Affecting Teachers' Use of Information and Communications Technology: A review of the Literature', *Journal of Information Technology for Teacher Education*, Volume 9, Number 3, pp. 319-342
- Nanayakkara, C & Whiddett, D 2005, 'A model of user acceptance of e-learning technologies: A case study of a polytechnic in New Zealand', *Proceedings of 4th International Conference on Information Systems Technology and its application (ISTA 2005)*, New Zealand: Palmerston North.

Sarbabidya & Shikdar

- Pence, HE 2007, 'Preparing for the real web generation', *Journal of Educational Technology Systems*, Volume 35, Number 3, pp. 347-356
- Renzi, S 2008, 'Differences in University Teaching after Learning Management System Adoption: An Explanatory Model Based on Ajzen's Theory of Planned Behavior', PhD Thesis, University of Western Australia
- Richard, H and Haya, A 2009, 'Examining student decision to adopt web 2.0 technologies: theory and empirical tests', *Journal of computing in higher education*, Volume 21, Number 3, pp. 183-198
- Roca, JC, Chiu, CM, & Martinez, FJ 2006, 'Understanding e-learning continuance intention: An extension of the Technology Acceptance Model', *International Journal of Human-Computer Studies*, Volume 64, Number 8, pp. 683-696
- Rossi, PG 2009, 'Learning environment with artificial intelligence elements', *Journal of e-learning and knowledge society*, Volume 5, Number 1, pp. 67-75
- Rothwell, WJ & Kazanas, HC 2003, *The Strategic Development of Talent: A Framework for Using Talent to Support Your Organizational Strategy*, HRD. Press Inc. Amherst (MA)
- Sadeq, AM 2003, 'Cooperation and collaboration for ODE: The Case of Bangladesh', *Proceedings of 17th AAOU Annual Conference*, Thailand, November, 12-14
- Schiller, J 2003, 'Working with ICT Perceptions of Australian Principals', *Journal of Educational Administration*, Volume 41, Number 2, pp. 171-185
- Seibert, SE, and Kraimer, ML 2001, 'The Five-Factor Model of Personality and Career Success', *Journal of Vocational Behavior*, Volume 58, Number 1, pp. 1-21
- Selim, HM 2005, *Critical success factors for e-learning acceptance: Confirmatory factor models*, *Computers and Education*.
- Viewed December 30, 2007, <<http://www.elsevier.com/locate/compedu>>
- Khan, SH and Hasan, M 2012, 'Barriers to the introduction of ICT into education in developing countries: The Example of Bangladesh', *International Journal of Instruction*, Volume 5, Number 2, p. 70
- Shohel, M, Mahruf C and Kirkwood, Adrian 2012, 'Using technology for enhancing teaching and learning in Bangladesh: Challenges and consequences', *Learning, Media and Technology*, Volume 37, Number 4, pp. 414 -428
- Shohel, MMC & Power, T 2010, 'Introducing mobile technology for enhancing teaching and learning in Bangladesh: Teacher perspectives', *Open Learning: The Journal of Open, Distance and e-Learning*, Volume 25, Number 3, pp. 201-215
- Simões, L & Gouveia, L 2008, 'Web 2.0 and higher education: pedagogical implications. Higher education: New Challenges and Emerging Roles for human and social Development', *Proceedings of 4th International Barcelona Conference on Higher Education*, Technical University Catalonia (UPC)
- Sun, PC, Tsai, RJ, Finger, G, Chen, YY & Yeh, D 2008, 'What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction', *Computers & Education*, Volume 50, Number 4, pp. 1183-1202
- van Veldhoven, M, de Jonge, J, Broersen, S, Kompier, M, & Meijman, T 2002, 'Specific relationships between psychosocial job conditions and job-related stress: A three-level analytic approach', *Work & Stress*, Volume 16, Number 3, pp. 207-228
- Vannatta, RA & Fordham, N 2004, 'Teacher dispositions as predictors of classroom technology', *Journal of Research Technology in Education*, Volume 36, Number 3, pp. 253-272
- Vannatta, RA & O'Bannon, B 2002, 'Beginning to put the pieces together: A technology infusion model for teacher education', *Journal of Computing in Teacher Education*, Volume 18, Number 4, pp. 112-123

Sarbabidya & Shikdar

- Venkatesh, V, Morris, MG, Davis, GB, & Davis, FD 2003, 'User Acceptance of Information Technology: Toward a Unified View', *MIS Quarterly*, Volume 27, Number 3, pp. 425-478
- Wang, Y, Wang, H and Shee, D 2007, 'Measuring e-learning systems success in an organizational context: Scale development and validation', *Computers in Human Behavior*, Volume 23, Number 4, pp 1792-1808
- Way, M, & MacNeil, M 2006, 'Organizational characteristics and their effect on health', *Nursing Economics*, Volume 24, Number 2, pp. 67-77
- Webster, J, & Hackley, P 1997, 'Teaching eEffectiveness in technology-mediated distance learning', *Academy of Management Journal*, Volume 40, Number 6, pp. 1282–1309
- Wozney, L, Venkatesh, V & Abrami, PC 2006, 'Implementing computer technologies: Teachers' perceptions and practices', *Journal of Technology and teacher education*, Volume 14, Number 1, pp. 173-207
- Zengin, B, Arikan, A, Dogan, D 2011, 'Opinions of English Major Students about Their Departments' Websites', *Contemporary Educational Technology*, Volume 2, Number 4, pp. 294-307