K.I Rathnasekara, S.A.D.H. Namali Suraweera, M.R.K.N. Yatigammana University of Kelaniya, Sri Lanka | GARI Publisher | e-learning | Volume: 04 | Issue: 02 Article ID: IN/GARI/ICEDL/2018/118 | Pages: 21-60 (39) ISSN 2424-6492 | ISBN 978-955-7153-00-1 Edit: GARI Editorial Team | Received: 18.05.2018 | Publish: 15.06.2018

CONCEPTUALIZATION OF EMPLOYEE COMPETENCY DEVELOPMENT THROUGH E-LEARNING IN BANKING SECTOR IN SRI LANKA

¹K.I Rathnasekara, ²S.A.D.H. Namali Suraweera, ³M.R.K.N. Yatigammana ¹Training. Sampath Bank PLC, Colombo 02, ^{2,3}University of Kelaniya, Sri Lanka ¹kushanrathnasekara@sampath.lk

ABSTRACT

The introduction of information technology in learning processes, commonly referred as elearning, opens new dimensions in developing competent employees over traditional forms of training and development functions. E-Learning is highly cost effective to the organization, convenient to the learners and saving learning time by quicker delivery cycles. Therefore, many organizations, including banks have introduced e-learning to their employees with the intention of bridging the competency gaps in a more effective and efficient way. However, there is a claim and statistically proven evidence that the expected effectiveness cannot be achieved due to low e-learning engagement of employees. Therefore, the purpose of this ongoing PhD research is to examine contextual issues affect the introduction and use of e-learning for developing competencies among employees in banking sector in Sri-Lanka. This study will mainly use a quantitative methodology grounded in the previously reviewed literature to identify contextual issues and when further clarification is required qualitative exploratory studies may also be carried out. This paper focuses on a theoretical foundation for examination of contextual issues which have an impact on the introduction and effective use of e-learning, which derived from Literature Review. Social cognitive theory will be the theoretical foundation for this study as it is a widely accepted and empirically validated model of individual behavior. One of major Social Cognitive Theory's dimensions - Self-Efficacy - will be particularly concerned as it is fundamental to examine the e-Learning self-efficacy level of employees because this might reveal some indications towards their effective engagement of e-learning. Keywords: e-Learning, Contextual Issues, Competency Developments, Effectiveness, Self – Efficacy

INTRODUCTION

The essence of developing competencies of employees

There is no doubt that the Human Resource is the greatest asset and the key to success of any organization (Gabčanová, 2011). The profit and the growth of an organization is mainly based on the creating and/or identifying the customer needs, providing solutions to satisfy their needs and ensuring customer satisfaction (Hassan, 2012). Simply the Human Resources – Employees – are the live layer who link customer needs to solution and solution to their satisfaction. If an organization fails to maintain this loop, customers will move to another which will make the end of the story of the organization. Therefore, employees are a definite competitive advantage of any organization (Mathur, 2015). Further, these employees should be well equipped with knowledge, skills & attitude Competenciesto ensure highest performance and steady growth of an organization. Employees with the right skills, talent, and knowledge have the biggest impact on enhancing organization's critical processes (Kaplan and Norton, 2004). The valued employees (their knowledge, expertise, abilities, skillsets, and experience) will gladly compete the business race, overtake the competitors, cross the finish line first, and stand with the organization's name held high on the medal stand (Jesal Shethina, 2017).

Therefore, competency development of employees is one of the major core objectives of any organization. To develop the desired knowledge, skills and attitude of the employees, to perform well on the job, requires effective training programs that may also effect employee motivation and commitment (Meyer and Smith, 2000).

Employee training competency development of employees has a significant impact on turnover and job satisfaction (Dardar, Jusoh and Rasli, 2012). The level of efficiency and effectiveness of the work of employees is drastically increase with the proper training (Terera and Ngirande, 2014). "Better-trained employees work harder, and in addition, they are willing to stay in one company longer, with lower turnover, employees are more likely to improve productivity profitability" (Becker, Newton and Sawang, 2013). Accordingly, competent employees, who have adequate knowledge, skills and attitude are the most critical factor for the success and growth of any organization as it creates an unmatched competitive advantage (Lockwood, 2007; Rastgoo, 2016).

The requirement of developing competencies among financial sector – banking- employees

When comparing to other organizations, financial sector - especially banks hold additional responsibilities in terms of ensuring their employees of all levels are fulfilled with required competencies. Banking business is basically depending on the customer base, in other words accruing new customers, retention of existing customers and satisfying their needs by exceeding their expectations (DeYoung and Rice, 2004). Therefore, banking employees should be highly trained by developing their soft skills such as telephone etiquette, customer relationship management & selling skills, professional customer service, personal effectiveness, communication skills, negotiating skills, etc. Customer's first interaction with the banks starts at by initiating the Banker -Customer relationship (Howcroft, Hewer and Durkin, 2003). From that point onwards bank employees are bound to give

true and accurate information to the customers (Gayathry, 2016). In order to ensure the soundness of the banking system banker customer stabilize the relationship, the Monetary Board of Central Bank of Sri Lanka has issued a Direction to all Licensed Banks to adopt a Code of Conduct in line with the Customer Charter. According to that, the customers have the right to receive factual information and understand the financial products/services offered by banks, right to access to and fully understand the terms and conditions relevant to each and every product or service they obtain from banks and right to know the details of the agents appointed for customer services by licensed banks (Customer Charter, 2011). Therefore, in order to operate the banking business in line with the legislations and regulations in forced and to satisfy customer requirements employees should be competent in all technical skills covering bank operations such as cash, accounts opening, pawning, credit, international operations, etc. To successfully defeat competition and ensure sustain growth in the industry they have to be equipped with current trends, market intelligence, risk elements, opportunities, etc. Leadership, decision making and problem-solving, team work, interpersonal skills are also highly essential to establish steady growth of organizations ('Preparing your organization for growth -McKinsey 2011').

Being the regulator of all licensed commercial banks, specialized banks and other financial institutions the Central Bank of Sri Lanka (CBSL) has to ensure smooth operations of the financial blood stream of the country. Therefore, it has imposed regulations such as all employees of financial institutions including banks should have the knowledge on key sensitive areas such as "Anti Fraud Policy and Procedures", Customer Charter, etc

(CBSL,2016). Further in addition to the CBSL directives, other key legislation arms such as Exchange Control Department (ECD), Financial Intelligence Unit (FIU) too imposed regulations such as ensuring sufficient knowledge on "Compliance", "Foreign Exchange Act" and "Anti Money Policy & Procedures" is a compulsory regulatory requirement.(FIU,2006). When a bank has failed to comply with such regulatory requirement, there can have penalties including banking cancellations(FEA,2017) . Therefore, it is the prime responsibility of any commercial bank to ensure required competency development of all employees.

Role of e-learning in Developing Competencies

E-learning has many advantages over traditional forms of training and development functions. Hall and LeCavalier (2000) summarized some firms' were able to receive high economic saving as a result of converting their traditional training delivery methods to elearning. In addition to economic benefits, other advantages such as convenience, standardized delivery, self-paced learning, and variety of available content, have made e-learning a high priority for many corporations (Strother 2002, Kuimova, Kiyanitsyna and Truntyagin, 2016). In corporate world some unique advantages of e-learning plays a vital role in moulding employees to more competent team players. e-learning has the potential to deliver tailor made learning to address the specific training need of individual or group of employees as stated by "just-intime and just-for-me learning" (Berge and Giles, 2008). e-Learning is more effective in addressing mass scale which is beneficial extremely in satisfying regulatory training requirements. "One of the characteristics of online learning that

initially caused a good deal of interest was its potential to teach large numbers of people" (Weller, 2000). The quality of the learning process and the information provided for learners can be enhanced as elearning material can be immediately updated to be "more accurate and useful for a longer period of time" (Kathawala and Wilgen, 2004). E-learning can be used to train employees for various scenarios and situations through virtual environments. Tynjala and Hakkinen (2005) also believe that learning quality can be enhanced in an e-learning environment where "technology has made it possible to create virtual environments that almost exactly mimic authentic ones". In some cases, it is even possible to create learning environments which are unable to create in a class room type training programmes.

Banks focuses more on e-learning solutions

Banks in nature concerns on financial gaining by income generation and/or cost reduction. As providing training to the employees carries various cost elements, the banks tend to invest more on the implementation of e-learning system with the intention of achieving both objectives, developing competencies of employees whilst reducing the training cost (Aydoğdu Karaaslan, 2013). In order to maintain higher profit per employee, banks usually operate its network by minimum staff carder. Therefore, granting duty leave for employees to participate in-house (class room type) training programmes has become a critical issue. Further, usually all

banks have their training centre at the head office or close proximately to it. When considering outstation employees the management has to grant 3 working days programme date and either side of datesincluding the traveling dates for such employees. On top of everything, as providing required training for all staff is a compulsory regulatory requirement, covering all employees through class room type training is not practical at all. Further, Central Bank of Sri Lanka, from it is directions issued to licensed commercial banks (2014 -2017), emphasized the importance moving of towards digitalization for reducing various cost factors and to passing that benefit towards their customers. As a result majority of banks introduced e-learning solutions by expecting high level of effectiveness in terms of cost and user engagement.

As such, developing competencies of the employees is a compulsory requirement of banks and therefore, banks have introduced e-learning solutions to their employees with the intention of bridge their competency gaps in more effectively and more cost saving way in long run.

Though banks expect high return for their e-learning investment by replacing class room based training sessions and covering major portion of their employees, there is a claim from the banks that the expected effectiveness of the e-learning cannot be achieved.

According to the statistics collected from major 3 private commercial banks it has been proven that

Rank		% of e-learn	ning
(In terms	Name of the	Contribution for	the Rate of Employee
of profits)	Bank	Overall Train	ning Engagement in e-
		Hours	learning

K.I Rathnasekara, S.A.D.H. Namali Suraweera, M.R.K.N. Yatigammana University of Kelaniya, Sri Lanka | GARI Publisher | e-learning | Volume: 04 | Issue: 02

Article ID: IN/GARI/ICEDL/2018/118 | Pages: 21-60 (39)

ISSN 2424-6492 | ISBN 978-955-7153-00-1

Edit: GARI Editorial Team | Received: 18.05.2018 | Publish: 15.06.2018

1	Bank A	1.40 %	3.89 %
2	Bank B	1.68 %	7.84 %
3	Bank C	1.98 %	8.07 %

Table 1 – e-learning utilization statistics of 3 major private commercial banks

In this context, it is obvious that there is a problem pertaining to user engagement of e-learning activities. This may be because of the lack of knowledge about what factors affect competency development through e-learning and what the barriers and enables might be, as well as lack of understanding of how to use e-learning effectively in the banking sector for developing competencies of its employees.

The problem addressed in this research are twofold: (1) there is no rigorous research that investigates what factors have an impact on the introduction and use of elearning for developing competencies among employees in banking sector in the Sri Lankan context, and (2) there is a lack of understanding of how these significant-contexual- factors affect the introduction and use of e-learning in banking sector in Sri-Lanka. This understanding would facilitate the bankers to plan and adopt e-

learning in order to increase effective learner engagement and to improve elearning in banking sector.

Purpose of the study

The purpose of this study is to investigate significant factors affect the introduction and use of e-learning for developing competencies among employees in banking sector in Sri-Lanka. This study also attempts to rank and determine the relationship of these issues - influencing factors- with the employees' motivation to engage in e-learning activities. significant managing the factors-by increasing positive factors and minimizing or eliminating negative factors, the effective usage of e-leaning is proposed to increase with the intention of developing employee competency through e-learning. Further, based on the findings, an effective e-learning model will be proposed, tested and implemented in a reputed licensed commercial bank.

LITERATURE REVIEW

This paper focuses on a theoretical foundation for examination of contextual issues which have an impact on the introduction and effective use of e-learning for developing competencies among employees, which derived from Literature Review.

So this section overlook the most prominent significant factors derived from critical review of literature including personal factors, technological factors, organizational factors, other related factors and selection of the theoretical foundation for examination of such contextual issues.

Contextual Issues

It is obvious that there is a problem pertaining to the user engagement of elearning activities. When referring to the past researches and studies, most significant contextual Issues can be categorized mainly in to 3 groups namely personal factors, technological factors and organizational factors.

Personal Factors

Personal Factors are mainly consists of (but not limited to) learner's perspective, willingness and motivation for learning and the learner's IT skills. In relation to the learner's perspective, the profile of the learner should be identified. As this study focuses on the employees of banks, the learner's profile is more towards to adult learners. Knowles (1988) defined adults as those who perform roles associated with adults by one's culture and perceive themselves to be responsible for their own lives. This would imply that learners would be self-motivated and induce in self-directed learning.

Learners' willingness and motivation to learn is another crucial factor. From studies of computer-based instruction, Malone (1980) contends that challenge, fantasy, and curiosity are major components of intrinsically motivating the learners. Pintrich and Schunk (1996) suggested extrinsic motivators (e.g., extrinsic structures, controls, and rewards) can also motivate human behaviors. Given the complex and multi-faceted nature of human behaviors, a full range of human cognition and emotions also needs to be investigated for an understanding of human motivation (Weiner, 1985). Learner's IT skills are required for effective usage of e-learning, and to enjoy their learning experience where it improves the user friendliness of the system and learners perceive as easy to (Shelomovska, Sorokina and Romanyukha, 2016).

Technological Factors

Any effective e-learning system must ensure accessibility and availability of hardware, software and high bandwidth on web based systems to all employees in the organization around the clock (Young 2001, Welsch 2002 and Hofmann 2003). From the Technology Acceptance Model (TAM) perceived ease of use and perceived usefulness of a technology are major determinants of the behavioral intention of employees to use the technology (Davis and Venkatesh 1996) User friendliness and usefulness of e-learning are the main elements in acceptance of the same in an organization (Sambrook 2005. Shelomovska, Sorokina and Romanyukha 2016). The ease of use could be facilitated by ensuring all employees have easy access for their personal computers with readily available intranet, extranet and internet which are backed by high bandwidth connection (Young 2001, Weaver 2002, Homan and Macpherson 2005).

Organizational Factors

Organizational cultural and policy limitations for training and development should be overcome for an effective elearning implementation (Homan Macpherson, 2005). Creating and promoting learning culture in a organizations motivates employees engage in learning activities (Armistead and Beamish 2001, Eddy and Tannenbaum 2003, Chiaburu and Tekleab 2005, Homan and Macpherson 2005). There might also common organizational policy limitations with related to financial resources to invest e-learning and mechanism reinforcing the employee relationship with training (Geisman 2001 and Sambrook

2003). Lack of leaner's immediate reporting authorities / management support could arise when the objectives of elearning and business strategy are not complying with each other, and the measuring difficulties in e-learning outcomes. (Webster, Walker and Barrett 2005). Further the support of subject experts / internal facilitators mainly in designing phase of e-learning lessons should also be considered (Muhametjanova, 2016). When designing e-learning lessons it should be emphasized that they should be less trainer centered and more learner centered which is a requirement for effectiveness of e-learning. (Welsch and Young 2002).

Based on the past researches and studies, most significant contextual Issues- nfluencing factors can be summarized as follows.

Influencers	Rogers, 2000	Berge, 2002	Brzycki & Dudt 2005	Muilenburg & Berge, 2005	Ali & Magalhaes, 2008				
Individual factors									
Attitudes to technology	x	X							
Capability/abilityto use technology	x	X		Х					
Social interaction/ quality concerns		X		Х					
Lack of motivation to use				X					
Lack of 'academic' (eg reading & writing)skills				Х					
Organisational/ external factors	•								
Lack of user support	x	X	X	X					
Lack of administrative support				Х					
Lack of training/ professional development for users	x								
Lack of management support					X				
Availability/ accessibility of technology	Х	Х	х	х					
Cost of technology	х			Х					
Time/workload	х	Х	Х	Х	X				
Lack of incentives to use		Х	Х						
Organisational culture / resistance to change	х	х	Х						
Problems with the technology				х	X				
Language barriers					X				
Evaluation/ effectivenessconcerns		Х							

Theoretical Foundation

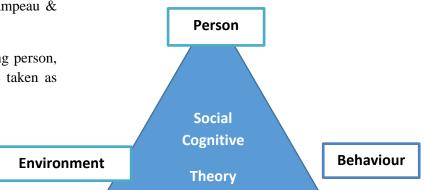
Social cognitive theory, which has been introduced by Albert Bandura in 1970, will

be the theoretical foundation for this study. This is a widely accepted and empirically validated model of individual behavior.

(Campeau & Higgins, 1995). This theory is based on the principle that there is a triadic reciprocity exists among: (a) The person (b) one's environment and (c) one's behavior. (Bandura, 1977, 1986, 1994; Campeau & Higgins, 1995).

The above Interconnection among person, behavior & environment can be taken as

the" Three Pillars" of successful learning as illustrated below.



Person

E-learners' cognitive skills (Learners need to have prerequisite knowledge & skills necessary to participate in e-learning, i.e., computer competency & time management skills) and Personal factors like demographics and personality

Environment

Influences such as social pressures, and situational characteristics where organizations must provide supportive culture, incentives, models, resources, & foster e-learning self-efficacy

Belief & behavior

Learners must have high e-learning selfefficacy & appropriate behavioral skills such as taking responsibility for learning.

Dimensions of Social Cognitive Theory

Social cognitive theory has many dimensions (Compeau and Higgins, 1995). One of the main dimensions - Self-Efficacy is the central facet of this Bandura's social cognitive theory (Eachus and Cassidy, 2006). Self-efficacy, in other words Self-Esteem or Self-Confidence, is one of the most enabling psychology models to have been adopted into positive psychology and

It is the optimistic self-belief in the individuals competence or chances of successfully accomplishing a task and producing a favourable outcome (Akhtar, 2008). Therefore, present research study will be particularly concerned about self-efficacy because self-efficacy influences activity (behavior), environment selection, level of effort, and persistence exerted in the face of contextual issues to the performance of those behaviors (Bandura, 1994a; Compeau and Higgins, 1995).

In this one's of context, level efficaciousness can pave the way for success or failure (Kreitner and Kinicki, 2007). Perceived self-efficacy is a judgment of one's capability to accomplish a certain level of performance (Bandura, 1997) or the belief in one's ability to successfully accomplish a specific task (Kreitner & Kinicki, 2001). Self-efficacy beliefs may contribute to the success with which a task is completed (Cassidy and Eachus, 2002). This is why it is important to measure an e-learners' self-efficacy, since such information could help to identify the relationship between an individual's e-learning self-efficacy and perceived contextual issues.

Self-Efficacy

"There is a growing body of knowledge that human accomplishments and positive well-being require an optimistic sense of personal efficacy. This is because ordinary social realities are strewn with difficulties. They are full of impediments, adversities, setbacks, frustrations, and inequities. People must have a robust sense of personal efficacy to sustain the perseverant effort needed to succeed. In pursuits strewn with obstacles, realists either forsake them, abort their efforts prematurely when difficulties arise or become cynical about the prospects of effecting significant changes." (Bandura, 1994).

"Self-efficacy is a form of self-evaluation that influence decisions about what behaviors to undertake, the amount of effort and persistence put forth when faced with issues, and finally, the mastery of the behavior. Self-efficacy is not a measure of skill; rather, it reflects what individuals believe they can do with the skills they

possess" (Eastin and LaRose, 2006).Selfefficacy beliefs may contribute to the success with which a task is completed (Cassidy and Eachus, 2002). Because psychological theories tend to focus on issues concerning knowledge acquisition or performance, the interrelationship between knowledge and action has been largely neglected (Bandura, 1986). Although knowledge, skills and attitude they are necessary, insufficient accomplished performances (Bandura, 1986). Self-referent thought (Self Efficacy) mediates between knowledge, action and outcome expectations (Bandura, 1986) as illustrated in Figure 2. That is why it is important to measure e-learners' selfefficacy. Awareness of their efficacy could help to bridge the gap between e-learners' knowledge, skills and attitude and to translate them into appropriate courses of action (in this case starting, continuing, and completing online training).



Figure 2: Interconnection between Skills, Actions Outcome Expectation and Self Efficacy

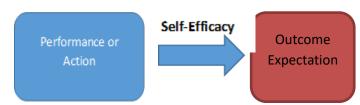
Sources of Self-Efficacy Beliefs (Self-Esteem or Confidence)

According to Bandura (1994), people's beliefs about their self-efficacy emerge from four sources of influence, namely:

Performance Outcome - Prior experiences / Mastery Experiences

Vicarious experiences

Social Persuasion/Verbal Persuasion



Psychological Feedback - Emotional & Physiological States

1. Performance Outcome - Prior experiences / Mastery Experiences

The first and foremost source of self-efficacy generated through Performance Outcome (prior/mastery experiences). This is the most powerful source of self-efficacy and the most effective way of creating a strong sense of self-efficacy (Bandura, 1994a; Compeau and Higgins, 1995; Eachus and Cassidy, 2006). Self-efficacy beliefs are deep convictions supported by

experiences of success or failure (Kreitner and Kinicki, 2007). While success builds self-efficacy, failures undermine it (Bandura, 1994). Experience overcoming obstacles through perseverant effort helps to build efficacy (Bandura, 1994). That means, having a success, for example in mastering a task or controlling an environment, will build self- belief in that area whereas an issue will undermine that efficacy belief.

2. Vicarious experiences

The next source of self-efficacy comes from our observation of people around us, people we consider as role models. Seeing people similar to ourselves succeed by their sustained effort raises our beliefs that we too possess the capabilities to master the activities needed for success in that area. Basically, vicarious experiences provided by social models is another way of creating and strengthening self-efficacy (Bandura, 1994).Self-efficacy emerges observing the success or failure of models (Bandura, 1994a; Compeau and Higgins, 1995; Eachus and Cassidy, Thereafter the perceived similarity between an individual and his/her model, the greater the impact of modeling on perceived selfefficacy, and the more persuasive are the models' successes or failures (Bandura, 1994). Success or failure of one's peers or models in doing similar tasks (in this case elearning) can strongly influence one's selfefficacy (Kreitner and Kinicki, 2007). Modeling influence is more effective when models possess the aspired competencies (Bandura, 1994). Competent models transmit their knowledge through their behavior or teach their observers strategies for managing the environmental demands (Bandura, 1994). Learning effective means of coping with environmental demands raises perceived self-efficacy (Bandura,1994).

3. Social Persuasion/Verbal Persuasion

Influential people in our lives such as parents, teachers, managers, leaders and/or coaches can strengthen our beliefs that we have what it takes to succeed. Being persuaded that we possess the capabilities to master certain activities means that we are more likely to put in the effort and sustain it when problems Accordingly, social persuasion can be used strengthen people's self-efficacy (Bandura, 1994) and it is determined by verbal persuasion from others such as peers, colleagues or relatives (Compeau and Higgins, 1995; Eachus and Cassidy, 2006).

4. Psychological Feedback - Emotional & Physiological States

The state, especially the mind set you are in will influence how you feel your selfefficacy. Accordingly to some extent, somatic and emotional arousal influences one's self-efficacy (Bandura, Compeau and Higgins, 1995; Eachus and Cassidy, 2006; Kreitner and Kinicki, 2007). Stress, tension, and depression are usually interpreted as signs of vulnerability to poor performance and are some of the affective characteristics of people with low selfefficacy (Bandura, 1994). Anxiety (Campeau and Higgins, 1995; Eachus and Cassidy, 2006), fatigue, pain, and aches are seen as signs of physical feebleness (Bandura, 1994), and could lead to negative frame of mind, which diminish selfefficacy (Bandura, 1994). Conversely, positive mood and/or emotions can boost perceived self-efficacy (Bandura, 1994). Therefore, reducing people's stress and altering negative dispositions can enhance self-efficacy (Bandura, 1994).

In addition to the above four sources of influence, Psychologist James Maddux has suggested a fifth route to self-efficacy through "imaginal experiences", the art of visualizing yourself be having effectively or successfully in a given situation (Snyder and Lopez, 2002).

Efficacy-Activated Processes

Self-efficacy beliefs affect four major psychological processes (Bandura, 1994), namely:

Cognitive processes

Motivational Processes

Affective Processes

Selection Processes

1. Cognitive Processes

Self-efficacy beliefs cognitive on (thinking) processes have a major impact, where those who have a high sense of efficacy, visualize success scenarios that provide positive guides and achieve high performance. Those who doubt their efficacy, visualize failure scenarios and reside on the many things that can go wrong. It is obvious that it is difficult to achieve much while fighting self-doubt. Therefore, they will show low performance.

Cognitive Accordingly, processes influence personal goal settings, which is in influenced by self-appraisal capabilities (Bandura, 1994). People with high self-efficacy, set challenging goals, have firm commitment to such goals, are task oriented, and are more likely to use good analytic thinking when faced with difficult environmental demands (Bandura, 1994). Thus a high sense of selfefficacy is essential in visualizing success, setting positive guides, and support for performance (Bandura, 1994). Further, strong self-efficacy requires one to remain task oriented when faced with obstacles or failure (Bandura, 1994) along the way. Through this ongoing research, such setbacks would entail the various forms of contextual issues.

2. Motivational Processes

The 2nd psychological process affected by self-efficacy beliefs is the motivation processes. Human motivate themselves and guide their actions expectant by the exercise of forethought. They form beliefs about what they can do. They anticipate probability of outcomes of prospective actions. They set goals for themselves and plan courses of action designed to achieved them (Bandura, 1994).

There are three different forms of cognitive motivators as Causal attributions, Outcome expectancies and Cognized goals, where Self-efficacy beliefs operate in each of these types. Causal attributions is based on Attribution Weiner's Theory Motivation. Self-efficacy beliefs influence causal attributions (Weiner, 2010). People who regard themselves as highly efficacious attribute their failures insufficient effort, those who regard themselves as inefficacious attribute their failures to low ability. Causal attributions motivation, performance affective reactions mainly through beliefs of self-efficacy.(Bandura, 1994b)

Outcome expectancies based on expectancy-value theory, where motivation is regulated by the expectation that a given course of behavior will produce certain outcomes and the value of those outcomes. But people act on their beliefs about what they can do, as well as on their beliefs about the likely outcomes of performance. The

motivating influence of outcome expectancies is directed by self-beliefs of efficacy. The predictiveness of expectancy-value theory is increased by the influence of perceived self- efficacy. (Wigfield, 1994)

The form of Cognized goals is based on the goal setting theory, where it emphasizes the important relationship between goals and performance. The most effective performance seems to result when goals are specific and challenging, when they are used to evaluate performance and linked to feedback on results, and create commitment and acceptance. The motivational impact of goals may be affected by moderators such as ability and self-efficacy. (Lunenburg, 2011)

Affective Processes

This can be defined as the general psychological state of an individual, including but not limited to emotions and mood, within a given situation. People's beliefs in their coping capabilities affect how much stress and depression they have to undergo in threatening or difficult situations, as well as their level of motivation. Perceived self-efficacy to exercise control over stressors plays a critical role in anxiety arousal. People who believe they can exercise control over threats do not conjure up disturbing thought patterns. But those who believe they cannot manage threats experience high anxiety arousal. As such people rely on somatic and emotional arousal to judge their capability (Bandura, 1994a; Compeau and Higgins, 1995; Eachus and Cassidy, 2006; Kreitner and Kinicki, 2007). Positive mood enhances perceived self-efficacy negative moods diminish (Bandura, 1994).

Selection Processes

Above efficacy-activated processes enable people to create beneficial environments and to exercise some control over those they encounter day in and day out. In addition to that, people are partly a product of their environment as well. Self-efficacy affects one's choice of activities and environments (Bandura, 1994) and "People avoid activities and situations they believe exceed their coping abilities."(Bandura, 1994, p.6). However, they readily undertake challenging activities and select situations they judge themselves capable of handling. By the choices they make, people cultivate different competencies, interests and social networks that determine life courses. Any factor that influences choice behavior can profoundly affect the direction of personal / career development. This is one example of how self-efficacy beliefs affect one's choices.(Gushue et al., 2006)

This study pertains to career development / competency development through e-learning, thus the relationship between contextual issues related to effective usage of e-learning and self-efficacy will be examined.

Dimensions of Self-efficacy

Self-efficacy judgments differ on three distinct, but interrelated dimensions: magnitude, strength, and generalizability.

Magnitude

The magnitude of self-efficacy focuses on whether an individual believes that he or she can complete the task (DeNoyelles, Hornik and Johnson, 2014). Individuals with a high magnitude of self-efficacy see themselves as being able to accomplish difficult tasks (Higgins and Compeau, 1995).

Strength

This reflects an individual's confidence at completing the various components of the task or at various levels of difficulty (DeNoyelles, Hornik and Johnson, 2014). Those with a weak sense of self-efficacy become more easily frustrated by obstacles to their performance and will respond by lowering their perceptions of their capability (Higgins and Compeau, 1995).

Generalizability

Generalizability is particularly important when understanding how self-efficacy estimates on one task generalize to other related tasks (Bong, 1999). While some individuals believe they can only perform some behavior under a particular set of circumstances, others might believe that they could execute some behavior under any circumstances and also perform behaviors that are slightly different(Higgins and Compeau, 1995).

Few More Characteristics of Self-Efficacy

Self-efficacy arises from the ongoing acquisition of complex cognitive, social, linguistic, and/or physical skills through experience (Kreitner and Kinicki, 2007) "Self-efficacy determines how people feel, think, motivate themselves, and behave." (Bandura, 1994, p.1). Self-efficacy has been shown to be related to task choice, motivation level, effort, perseverance (Bandura, 1994a; Cassidy and Eachus, 2002), performance (Joo, Lim and Kim, 2013) and ultimately success (Kreitner and Kinicki, 2007). One's cognitive evaluation of a situation yields a self-efficacy belief, which ranges from high to low expectations for success (Kreitner and Kinicki, 2007). The perception that one has the capability to perform a task wiII increase the likelihood of that task being successfully completed (Cassidy and Eachus, 2002).

The relationship between self-efficacy and performance is recurring. There is a strong relationship between high self-efficacy expectations and a selection of physical and mental activities (Mielenz *et al.*, 2013).

High self-efficacy leads to positive feedback, which translates into behavioral patterns such as being active, selecting best opportunities, managing a situation, avoiding or neutralizing obstacles, setting goals to establish standards, planning, preparing, practicing, trying hard, persevering, creatively solving problems, limiting stress, learning from setbacks, and visualizing success. These behavioral patterns lead to success (Kreitner and Kinicki, 2007).

On the other hand, people with low selfefficacy get negative feedback, which causes them to be passive, to avoid difficult tasks, to develop weak aspirations. Low self-efficacy also leads to low commitment, focusing on personal deficiencies, putting little effort or not trying at all, quitting or becoming discouraged by setbacks, blaming setbacks on ability or bad luck, worrying, experiencing stress, becoming depressed, and thinking of excuses for failing. Such negative feedback and behavioral patterns lead to failure. Looking at the characteristics of people with low self-efficacy clearly indicates how one's self-efficacy can result to a perception of contextual issues and behavioral patterns, which lead to failure. Positive or negative results subsequently become feedback for one's base of personal experience (Kreitner and Kinicki, 2007).

Why is self-efficacy important to consider in relation to e-Iearning?

Introducing e-learning opportunities to the employees influences one's self-efficacy beliefs. It is important that organizations and management nurture self-efficacy in their employees because there is a significant positive correlation between self-efficacy and job performance (Kreitner and Kinicki, 2007). Organizations offer e-Iearning as a competency development opportunity in order to increase job performance and obtain highest return on investment. Thus improving e-learning usage will be beneficial to organizations. Therefore, it was hypothesized that there would be a significant relationship between one's self-efficacy and contextual issues related to the effective usage of e-learning. E-Learning Self-Efficacy (ELSE) scale will be used to determine this relationship.

There is a difference between Internet literacy and computer literacy (Tsai and Tsai, 2003) and also there is a difference between Internet Self-Efficacy and Computer Self-Efficacy (Eastin and LaRose, 2006). Therefore, the "E-Learning Self Efficacy" will be used to refer the Computer Self-Efficacy and Internet Self-Efficacy as both will be applicable to this ongoing research.

Computer Self-Efficacy (CSE)

Campeau and Higgins (1995, p.192) define CSE as "a judgment of one's capability to use a computer." CSE is not concerned with what one has done in the past rather than with what could be done in the future (Campeau and Higgins, 1995). CSE does not refer to one's ability to undertake simple component subskills (such as saving a file) rather it refers to one's judgment of the ability to apply those skills to broader tasks (Campeau and Higgins, 1995). CSE can ultimately influence the success or failure of online instruction (Karsten, Mitra and Schmidt, 2012) and it will be a critical

factor that determining the success of Computer and Web-based instruction (SITZMANN et al., 2006). Computer Self Efficacy has been found to have a significant influence on frequency, intensity of computer use, and diversity of software packages used, (Thatcher et al., 2008), individuals' emotional reactions to computers such as their interest or anxiety; their expectations of the outcomes of using computers; and their actual computer use (Campeau and Higgins, 1995). Stronger computer confidence led to more positive attitudes towards computers and higher levels of computer related-knowledge (Levine and Donitsa-Schmidt, 1998). Encouragement by others at work and other people's use of computers positively influences one's CSE (Campeau and Higgins, 1995). "Thus self-efficacy represents an important individual trait, which moderates organizational influences (such as encouragement and support) (Campeau and Higgins, 1995,p.189). Once an individual's CSE level is identified, motivational and personal control issues can then be addressed (Cassidy and Eachus, 2002). Clearly, understanding CSE is essential in the understanding of contextual issues. When using computers for learning, one's CSE has implications to one's success in learning. "Self-efficacy beliefs have repeatedly been reported as a major factor in understanding the frequency and success with which individuals use computers" (Cassidy and Eachus, 2002). Individuals with high self-efficacy used computers more, enjoyed using computers more, and experienced less computer-related anxiety (Compeau and Higgins, 1995). One's level of enjoyment and anxiety are significant factors in computer use (Cassidy and Eachus, 2002).

"An appropriate measure of computer selfefficacy may enable learners 'at risk' to be

identified at an early stage" (Cassidy and Eachus, 2002, p.138). It is therefore important to measure learners' CSE because "low self-efficacy may be a significantly limiting factor for learners effective usage of e-learning.

Internet Self-Efficacy (ISE)

Internet Self Efficacy is the belief in one's capabilities to organize and execute Internet-related courses of actions in order to attain something (Eastin and LaRose, 2006).

Usually, new Internet users are less comfortable using the Internet and are less satisfied with their Internet skills and are more likely to encounter stress inducing situations (Torkzadeh and Van Dyke, 2002). New Internet users are faced with complexity, knowledge barriers to initial Internet adoption, discomfort, and dissatisfaction and these may be taken to indicate self-efficacy deficits (Eastin and LaRose, 2000). Novice Internet users face psychological as well as socio-economic, and racial (Hsu and Chiu, 2004). People who are uncomfortable or have little confidence in their ability to use the Internet can be said to have low ISE (Eastin and LaRose, 2000). According to Bandura's theory, people with low self-efficacy are usually less likely to perform related behaviors in the future.

Learners' attitudes and preconceptions towards media affect their learning outcomes (Park, Plass and Brünken, 2014). Since E-Iearning involves a lot of learner-technology interaction, it is imperative that a learners' comfort level with technology be known as this could determine his or her performance in utilizing the e-learning (Cooze and Barbour, 2007)

As stated, two aspects of self-efficacy will be addressed, namely computer self efficacy (CSE) and Internet self-efficacy (ISE). This study will be a synthesis of these two dimensions and therefore, respondents' self-efficacy in e-Iearning will be determined using the E-Iearning Self-Efficacy (ELSE) scale (Mungania, 2003) which is based on two instruments proposed by Eastin and LaRose(2000) and Cassidy and Eachus (2002).

Therefore, it is obvious that it is fundamental to examine the e-Iearning self-efficacy level of employees because this might reveal some indications towards their effective usage of e-learning with regard to their competency development.

METHODOLOGY

This study will mainly use a quantitative methodology grounded in the previously reviewed literature to identify contextual issues. However, if further clarification is required for quantitatively identified issues, qualitative exploratory studies may also be carried out. As human behavior and motivation are difficult to observe directly, such issues can be explored more deeply by using a qualitative approach, which enables more accurate findings. Accordingly, depending on the requirement of further investigation of basically identified issues, mix-methodology will be used.

SIGNIFICANCE OF STUDY

This study will contribute to get an understanding of contextual factors that affect employees motivation to start, continue and complete e-learning courses. By ranking and developing relationships of these factors and the learners' motivation, both positively and negatively contributing factors will be identified. By properly managing these influencing factors, this

study is expected to provide an empirical base for understanding the motivational needs of participants in banking sector in Sri Lanka.

The finding of this study will lead to the proposing, testing and implementing of an effective e-learning model in a reputed commercial bank. As a result, employees in banking and other financial sectors will benefit from experiencing e-learning which will be more engaging and enjoyable to them and thereby it creates an opportunity competencies. develop their Accordingly, organizations can achieve the expected results including Return On Investment (ROI) by promoting e-learning to their employees in a more effective way. Further, this study and the may guide other interested organizations to enhance their e-learning effectiveness and the usage among the employees.

As stated this study will guide other organizations to investigate contextual issues related to their e-learners in achieving expected effectiveness and they can use the proposed model as it is or with few adjustment to effectively develop competencies of their employees.

REFERENCES

- Annual Report. (2016). Commercial Bank PLC Annual Report. (2016). Hatton National Bank PLC
- Annual Report. (2016). Sampath Bank PLC
- Akhtar, M. (2008) 'What is Self-Efficacy?

 Bandura's 4 Sources of Efficacy
 Beliefs', Positive Psychology.

 Available at:
 http://positivepsychology.org.uk/selfefficacy-definition-bandura-meaning/
 (Accessed: 21 April 2018).

- Aydoğdu Karaaslan, I. (2013) 'The effect of banking personnel's access to Elearning opportunities on their professional achievement', *Turkish Online Journal of Educational Technology*, 12(2), pp. 269–280.
- Bandura, A. (1994a) 'Bandura Self-efficacy defined', *Encyclopedia of Human Behavior*, pp. 71–81. Available at: http://www.uky.edu/~eushe2/Bandura/BanEncy.html.
- Bandura, A. (1994b) 'Self-Efficacy. In V.S. Ramachaudran (Ed.)', *Encyclopedia of Human Behavior*. Available at: https://www.uky.edu/~eushe2/Bandur a/BanEncy.html.
- Bandura, A. (1997) 'Self-efficacy', *Harvard Mental Health Letter*, 13(9), p. 4. doi: 10.1007/SpringerReference_223312.
- Becker, K., Newton, C. and Sawang, S. (2013) 'A learner perspective on barriers to elearning', *Australian Journal of Adult Learning*, 53(2), pp. 211–233.
- Berge, Z. L. & Giles, L. (2008). 'Implementing and sustaining e-learning in the workplace', International Journal of Web Based Learning and Teaching Technologies, 3: 3, 44-53.
- Bong, M. (1999) 'Personal factors affecting the generality of academic self-efficacy judgments: Gender, ethnicity, and relative expertise', *Journal of Experimental Education*, 67(4), pp. 315–331. doi: 10.1080/00220979909598486.
- Cassidy, S. and Eachus, P. (2002) 'Developing the Computer User Self-Efficacy (Cuse) Scale: Investigating the Relationship between Computer Self-

- Efficacy, Gender and Experience with Computers', *Journal of Educational Computing Research*, 26(2), pp. 133–153. doi: 10.2190/JGJR-0KVL-HRF7-GCNV.
- CBSL, Bank supervision department.
 (2013,2016,2017). Directions,
 Determinations, and Circulars issued
 to Licensed Commercial Banks
- CBSL, Customer Charter (2016)
- CBSL, Foreign Exchange Act (2017)
- CBSL, Prevention of Money Laundering (Amendment) Act, FIU (2014)
- Compeau, D. R. and Higgins, C. A. (1995)

 'Computer Self Efficacy:

 Development of Measure and Initial

 Test', Management Information

 Systems Quarterly, 19(2). doi:

 10.2307/249688.
- Cooze, M. and Barbour, M. (2007) 'Learning Styles: A focus upon e-learning practices and their implications for successful instructional design',

 Journal of Applied Educational
 Technology, 4(1), pp. 7–20. doi:
 10.4324/9780203095959.
- Dardar, A. H. A., Jusoh, A. and Rasli, A. (2012)

 'The Impact of Job Training, job satisfaction and Alternative Job Opportunities on Job Turnover in Libyan Oil Companies', *Procedia Social and Behavioral Sciences*, 40, pp. 389–394. doi: 10.1016/j.sbspro.2012.03.205.
- DeNoyelles, A., Hornik, S. R. and Johnson, R. D. (2014) 'Exploring the Dimensions of Self-Efficacy in Virtual World Learning: Environment, Task, and Content', MERLOT Journal of Online

- Learning and Teaching, 10(2), pp. 255–271. Available at: http://jolt.merlot.org/vol10no2/denoy elles_0614.pdf.
- DeYoung, R. and Rice, T. N. (2004) 'How do banks make money? the fallacies of fee income', *Economic Perspectives*, pp. 34–51. doi: 10.1.1.556.8415&rep=rep.
- Eachus, P. and Cassidy, S. (2006)
 'Development of the Web Users SelfEfficacy scale (WUSE)', Issues in
 Informing Science and Information
 Technology, 3, pp. 199–209. Available
 at:
 http://proceedings.informingscience.o
- Eastin, M. S. and LaRose, R. (2006) 'Internet Self-Efficacy and the Psychology of the Digital Divide', *Journal of Computer-Mediated Communication*, 6(1), pp. 0–0. doi: 10.1111/j.1083-6101.2000.tb00110.x.
- eLearning Industry. (2017). The Adult Learning
 Theory Andragogy of Malcolm
 Knowles eLearning Industry.
 [online] Available at:
 https://elearningindustry.com/the-adult-learning-theory-andragogy-of-malcolm-knowles [Accessed 7 Sep. 2017].
- Gabčanová, I. (2011) 'the Employees the

 Most Important Asset in the

 Organizations', Human Resources

 Management & Ergonomics, V, pp. 1–

 12.
- Gayathry, S. (2016) 'Customer relationship management model for banks',

- Journal of Internet Banking and Commerce, 21(Special Issue 5).
- Geisman, J. (2001). 'If you build it, will they come? Overcoming human obstacles to elearning', Learning Circuits March.
- Gushue, G. V et al. (2006) 'Self-Efficacy ,
 Perceptions of Barriers , Vocational
 Identity , and the Career Exploration
 Behavior of Latino / a High School
 Students', Career Development
 Quarterly, 54(June), pp. 307–317. doi:
 10.1002/j.2161-0045.2006.tb00196.x.
- Hall, B., and LeCavalier J. (2000). E-Learning

 Across the Enterprise: The

 benchmarking study of best practices.
- Hassan, A. (2012) 'The Value Proposition Concept in Marketing: How Customers Perceive the Value Delivered by Firms- A Study of Customer Perspectives Supermarkets in Southampton in the Kingdom', International Journal of Marketing Studies, 4(3). doi: 10.5539/ijms.v4n3p68.
- Higgins, C. A. and Compeau, D. R. (1995)

 'Computer Self-Efficacy:

 Development Development of a

 Measure and Initial Test', MIS

 Quarterly, 19(2), pp. 189–211. doi:
 10.2307/249688.
- Hofmann, J. (2003). 'Technology's impact on E-learning', Learning Circuits.
- Howcroft, B., Hewer, P. and Durkin, M. (2003)

 'Banker-Customer Interactions in
 Financial Services', *Journal of Marketing Management*, 19(9–10), pp.

 1001–1020. doi:
 10.1080/0267257X.2003.9728248.

- Hsu, M. H. and Chiu, C. M. (2004) 'Internet self-efficacy and electronic service acceptance', *Decision Support Systems*, 38(3), pp. 369–381. doi: 10.1016/j.dss.2003.08.001.
- Jesal Shethina (2017) Why Are Employees The

 Most Valuable Intangible Assets? /

 edu CBA, May 6. Available at:

 https://www.educba.com/employeemost-valuable-intangible-assets/
 (Accessed: 22 April 2018).
- Joo, Y. J., Lim, K. Y. and Kim, J. (2013) 'Locus of control, self-efficacy, and task value as predictors of learning outcome in an online university context', *Computers and Education*, 62, pp. 149–158. doi: 10.1016/j.compedu.2012.10.027.
- Kaplan, R. S. and Norton, D. P. (2004)

 'Measuring the Strategic Readiness of
 Intangible Assets', *Harvard Business*Review. doi: Article.
- Karsten, R., Mitra, A. and Schmidt, D. (2012) 'Computer self-efficacy: A metaanalysis', *Journal of Organizational* and End User Computing, 24, pp. 54– 80. doi: 10.4018/joeuc.2012100104.
- Kathawala, Y. & Wilgen, A. (2004). 'Elearning: evaluation from an organization's perspective', Training & Management Development Methods, 18: 4, 501-506.
- Kreitner, R. and Kinicki, A. (2007) 'Organizational Determinants', in *Organizational Behavior*, p. 383.
- Kuimova, M., Kiyanitsyna, A. and Truntyagin,
 A. (2016). E-Learning as a Means to
 Improve the Quality of Higher
 Education. SHS Web of Conferences,
 28, p.01129.

- Levine, T. and Donitsa-Schmidt, S. (1998) 'Computer use, confidence, attitudes, and knowledge: A causal analysis', *Computers in Human Behavior*, 14(1), pp. 125–146. doi: 10.1016/S0747-5632(97)00036-8.
- Lockwood, N. R. (2007) 'Leveraging employee engagement for competitive advantage: HR's strategic role', *HR Magazine*, 52(3), p. 1. doi: 10.1109/HICSS.2007.324.
- Lunenburg, F. C. (2011) 'Goal-Setting Theory of Motivation', International Journal of Management, Business, and Administration, 15(1), pp. 1-6.Available at: http://www.nationalforum.com/Electr Journal Volumes/Lunenburg, Fred C. Goal-Setting Theoryof Motivation IJMBA V15 N1 2011.pdf.
- Malone, T. (1980). What makes things fun to learn? Palo Alto: Xerox, Palo Alto Research Center.
- Mathur, P. (2015) 'Achieving competitive advantage through Employees',

 Journal of arts, Humanities and

 Management studies, 01(9), pp. 66–
 71. doi: http://www.capco.com/capcoinstitute/capco-journal/.
- Meyer, J. P. and Smith, C. A. (2000) 'HRM practices and organizational commitment: Test of a mediation model', *Canadian Journal of Administrative Sciences*, 17(4), pp. 319–331. doi: Article.
- Mielenz, T. J. et al. (2013) 'Association of Self-Efficacy and Outcome Expectations with Physical Activity in Adults with

- Arthritis', *Arthritis*, 2013, pp. 1–8. doi: 10.1155/2013/621396.
- Mungania, P. (2003) 'The seven e-learning barriers facing employees', *E-learning*, (October), p. 3,49, 66.
- Park, B., Plass, J. L. and Brünken, R. (2014) 'Cognitive and affective processes in multimedia learning', *Learning and Instruction*, pp. 125–127. doi: 10.1016/j.learninstruc.2013.05.005.
- 'Preparing your organization for growth McKinsey 2011' (no date). Available
 at:
 https://www.mckinsey.com/businessfunctions/organization/ourinsights/preparing-your-organizationfor-growth (Accessed: 22 April 2018).
- Pintrich, P. & Schunk, D. (1996). Motivation in Education: Theory, Research & Applications. Englewood Cliffs, NJ: Prentice-Hall, 10(2), p 122-134.
- Rastgoo, P. (2016) 'The role of human resources competency in improving the manager performance', *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 64(1), pp. 341–350. doi: 10.11118/actaun201664010341.
- Sambrook, S. (2003). 'E-learning in small organisations', Education and Training 45(8/9): 506
- Sambrook, S. (2005). 'Factors influencing the context and process of work-related learning: Synthesizing findings from two research projects', Human Resource Development International 8(1): 101-19.
- Shelomovska, O., Sorokina, L. and Romanyukha, M. (2016). Advantages

- and Barriers to the Introduction of E-Learning Environment into Academic Teachers' Activities in Ukrainian Universities. International Journal of Information and Communication Technologies in Education, 5(3).
- SITZMANN, T. et al. (2006) 'THE COMPARATIVE EFFECTIVENESS OF WEB-BASED AND CLASSROOM INSTRUCTION: A META-ANALYSIS', Personnel Psychology, 59(3), pp. 623–664. doi: 10.1111/j.1744-6570.2006.00049.x.
- Snyder, C. R. E. and Lopez, S. J. E. (2002)

 Handbook of Positive Psychology
 (Oxford Library of Psychology),

 Handbook of Positive Psychology
 (Oxford Library of Psychology).

 Available at:
 https://books.google.ch/books?hl=fr&
 lr=&id=bLZI4fRofDwC&oi=fnd&pg
 =PA195&dq=Mihaly+Csikszentmihal
 yi,+Flow:+The+Psychology+of+Opti
 mal+Experience,+Harper+&+Row,+1
 99&ots=FBZweSw1b7&sig=evVUy9
 JGZpGbAaVoWJuFOUS1-
 - 1Q#v=onepage&q&f=false.
- Strother, J. (2002). An Assessment of the Effectiveness of e-learning in Corporate Training Programs. The International Review of Research in Open and Distributed Learning, 3(1).
- Terera, S. R. and Ngirande, H. (2014) 'The Impact of Training on Employee Job Satisfaction and Retention among Administrative Staff Members: A Case of a Selected Tertiary Institution', *J Soc Sci*, 39(1), pp. 43–

- 50. doi: 10.1080/09718923.2014.11893267.
- Thatcher, J. B. *et al.* (2008) 'Internal and external dimensions of computer self-efficacy: An empirical examination', *IEEE Transactions on Engineering Management*, 55(4), pp. 628–644. doi: 10.1109/TEM.2008.927825.
- Torkzadeh, G. and Van Dyke, T. P. (2002) 'Effects of training on Internet selfefficacy and computer user attitudes', *Computers in Human Behavior*, 18(5), pp. 479–494. doi: 10.1016/S0747-5632(02)00010-9.
- Tsai, M. J. and Tsai, C. C. (2003) 'Information searching strategies in Web-based science learning: The role of Internet self-efficacy', *Innovations in Education and Teaching International*, 40(1), pp. 43–50. doi: 10.1080/1355800032000038822.
- Tynjala, P. & Hakkinen, P. (2005). 'E-learning at work: theoretical underpinnings and pedagogical challenges', Journal of Workplace Learning, 17: 5/6, 318-336.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. Psychological Review, 92, 548-573.
- Weller, M. (2000). Creating a Large-scale,
 Third Generation, Distance Education
 Course. Open Learning: The Journal
 of Open and Distance Learning, 15(3),
 pp.243-252.
- Welsch, E. (2002). 'Cautious e-steps ahead', Meeting News 26(6): 36-8.
- Wigfield, A. (1994) 'Expectancy-value theory of achievement motivation: A developmental perspective',

K.I Rathnasekara, S.A.D.H. Namali Suraweera, M.R.K.N. Yatigammana
University of Kelaniya, Sri Lanka | GARI Publisher | e-learning | Volume: 04 | Issue: 02
Article ID: IN/GARI/ICEDL/2018/118 | Pages: 21-60 (39)
ISSN 2424-6492 | ISBN 978-955-7153-00-1
Edit: GARI Editorial Team | Received: 18.05.2018 | Publish: 15.06.2018

Educational Psychology Review, 6(1), pp. 49–78. doi: 10.1007/BF02209024.

Young, K. (2001). 'The effective deployment of e-learning', Industrial and Commercial Training 33(1): 5