

# Impact of Interactive Presence And Self-Efficacy on Learning Effectiveness

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## ABSTRACT

*Although many scholars have argued for a positive perception of learners towards online learning, there are some who have argued that some students, depending upon their demographic or cultural or psychological factors, will still prefer traditional face to face methods because such interaction is contextual and offer a different kind of social interaction. Studies from these scholars have attributed various causes like; lack of interactions with lecturers, co-learners, media, feeling isolated in online, lack of human touch, lost immediacy or spontaneity of actors, technical inability, low self-efficacy, and habit of using a platform for downloading uploading only. Thus, there is a need of research in the UK to establish clear antecedents of effective blended learning. Thus, this research will review 'Learners' perceptions on their motives, missing interactive presence & self-efficacy and their impact on perceived learning effectiveness in online learning environment moderated by cultural and other demographic factors'.*

*The research paper reviews a range of studies and proposes a range of assertions and a conceptual model of enhancing learning in the blended learning environment. The research has obvious theoretical and practical applications in a blended learning environment.*

Keywords: Blended Learning, Online Learning, Social Interaction, Social Presence, Self-Efficacy, E-Learning

## **INTRODUCTION**

E-learning platforms' use information technologies to create, foster, deliver, and facilitate student-centric learning, anytime and anywhere with many benefits and challenges' (Çiğdem, 2013). But its success and effectiveness are determined by learners' perceptions and attitudes on its usefulness, future intentions to use, satisfaction, success rate, and results after using the system (Liaw, 2008). Intention to use e-learning have been attributed to learning environmental characteristics, learner 's, kinds of learning activities and satisfaction with e-learning (Çiğdem, 2013; Liaw, 2008). Only a few researchers have measured the effectiveness of blended learning model. Blended learning integrates learning time into online activities and traditional face-to-face class activities (RIT, 2004). The usage trend of blended learning mode is on increasing all over the world: the UK (Bonk, Kim & Zing, 2006) the USA, Australia (Eklund, 2003), India, and Saudi Arabia (Alabamian, 2010). The previous studies have found that tutors and students face difficulty with the quality of experiences (Aycock, 2002, Alebaikan, 2010). The studies have attributed many reasons for lack of learning but there is dearth of comprehensive model that links antecedents of learners' perceptions on motive, missing in interactions, missing flow or spontaneity, personal and virtual self-efficacies, socio-cultural factors, and their consequences on effective learning: helping them study and giving them better study results (Hoffman, 2009). Like many other institutes, Universities in the UK are adopting centralized information technology (IT) departments that have main influence over the choices of e-learning platform and environment. The study on learner's perceptions on interactions and efficacy resulting in effective learning is needed because it has been already established that the learners' perceptions affect their intention to use and this, in turn, can affect the learning effectiveness (Jennings and Schmoller, 2005). Motivations of students demand to work on enhancing their ability and willingness to use the new system and such a support is possible via better learner interfaces, human actors, course materials and e-learning system (Jennings and Schmoller, 2005), (Leacock & Nesbit 2007). This study will also review the usage of Moodle, open-source software and a free Learning Management System tool (<http://moodle.org>). The researcher himself has been using Moodle since 2009. But personally, the researcher knows that there is low usage and the system may be less effective in learning for International students.

## **FOCUS OF THE ARTICLE**

### **Issues, Controversies, Problems**

The main aim of this research is to explore how higher educational international students perceive the effectiveness of blended learning environment in the UK. The research examines, what do the students miss the most in an online environment? How learner's perceptions, motivations, missing interactions/presence and self-efficacy effect their usage of online systems? To achieve this aim following research questions are proposed:

1. What is the relationship and effect of learners' perceived motivations, missing interactional presences and self-efficacy with learning effectiveness in case of International students?
2. How moderating variable related to learners; age, gender, language, ethnicity, and prior learning experience affect perceptions and relationships cited in the question 1?
3. How can higher education institutions improve features of online learning environments to improve learning effectiveness by considering learners' perceptions of motivation, missing interactional presences and self-efficacy?

By exploring the answer to the above questions, this research paper will advance theoretical knowledge and practical applications of improving Virtual Learning Environment (VLE) and blended learning environment.

### **Significance and Rationale of the Study**

If any higher educational institutions (HEIs) must effectively use blended learning and capture the benefits of cost, time, flexibility etc., then HEIs must manage challenges such as; learners' perceptions about motives, 'interaction & presentence' cognitive overload, self-efficacy, feeling of isolation etc. (Short Mickt, 2006).

There is a dearth of comprehensive theoretical models in the context of international students 'that examines the impact of variables like perceptions of motives, interactional presences, self-efficacy on effective e-

learning under International cultural and demographic context (Trinidad & Pearson, 2005, Chew 2011). As per Theories of behavior, if an e-learning course doesn't meet learners' expectations then it will lead to lower motivations and in turn low level of participation, low academic progress, lesser engagement in learning and low level of recommendation to other students (Çiğdem, 2013).

Hoffman, (2009) argued that social networking systems have afforded new ways of effective learning Although learners are using VLEs in the UK they are less motivated to use it due to various reasons related to learners' cultures, self-efficacy and triangular interactions (Hartshorne & Ajman, 2009). Peltier (2007) argued that the learners are missing elements of human touch during e-learning. A good e-learning demands 'humanising the machine environment' (McGuire, 2009). Further such social interactions are perceived as more affected due to socio-cultural backgrounds of the learners.

There are other authors who argue that effectiveness of e-learning depends upon the method of its design and usage (Chew Shiun Yee, 2011). Thus, the research paper will fill the gap in knowledge in a context of International students studying in the UK (Chew 2011, Wang 2007, McLaughlin, 1999, Chew, 2011).

Many of the UK universities and higher educational institutions (HEI) have quite many international student; who have different ethnic and cultural background, less developed countries with different educational pedagogy, low technology penetration. The HEIs are moving towards cost controls and so to the blended mode of teaching and learning. So practically the findings of the research will be useful to technical teams, lectures and curriculum designers etc. to assure adequate support to improve HEIs learning management system for international students.

## **BACKGROUND AND LITERATURE REVIEW**

### **Background**

A good learning environment should meet the needs of all stakeholder, address students learning styles, use learners' preferred pedagogy, and preferably follow Siemen's (2004) seven principles of E-learning. The

Literature (Hanrahan, 2009) also argue that a good e-learning must encourage exchange, interactive discussions privately as well as in group to develop a personal/emotional bond between student and tutor, but there is a challenge that is to be addressed (figure 2.1. Andersson, 2008)

**Figure 2.1. Inhibiting and facilitating factors for e-learning**

<b>Student</b>	<b>Teacher</b>
Motivation	Technological confidence
Conflicting priorities (time)	New learning style confidence
Academic confidence	Motivation and commitment
Technological confidence	Qualification and competence
Learning style	Time
Gender	
Age	<b>Course</b>
	Curriculum design
<b>Technology</b>	Pedagogical model
Access	Subject content
Software and interface design	Teaching & Learning Activities
Costs	Flexibility (delivery mode)
Localization	Localization
	Availability of educational resources
<b>Institution</b>	
Knowledge management	<b>Support</b>
Training of teachers and staff	Support for students from faculty
	Social support for students
<b>Costs</b>	Support from employer
Technology	Support for faculty
Access rates	
Tuition, course fees	<b>Society</b>
Books	Role of teacher and student
Institutional Economy and funding	Attitudes on e-learning and IT
	Rules and regulations

(Source: Andersson 2008).

## Online Learning Environments

The online learning can be fully in online environment or can have different portions of online dependencies or online supplementary inputs (Chew, 2011). The latter methods are a blended mix of f2f and E-mode (Klein, Noe, & Wang 2006 in (Chew, 2011)). The blended learning claims to be more effective as it uses benefits of both modes. However certain authors argue that blended mode doesn't commit to one so cannot draw fully all benefits. Main reasons can be that the E- mode misses on factors such as the learners' self-efficacy, motivations, feeling of missing interactions or human touches, and busy learner's schedules (Salmon, 2000 in Chew, 2011)

Although the online and blended mode permits learners to have more social interactions with other students or lecturers but forces them for student-centric learning that is not a preferred mode of International students (Chew 2011). It was found that only those learners who want to study at their own pace in their own time will modify their styles others may not as they are coming from another context of teacher-directed learning. However, it is a challenge to evaluate the effectiveness of blended learning. Chew (2011) argued that everyone; students, tutors, technical production team etc. should evaluate blended learning in terms of : effectiveness in achieving learning & behavior outcomes meeting students learning styles, satisfaction & motivation with memorable experiences , support, right level of workload & assessment, access to right content/ resources, usability & design, usage pattern, meta-cognition and technological parameters related to media richness, reliability, quality bandwidth etc. (Chew 2011). In actuality, all these expected improvements in the online environment are trying to address learners' perceptions about motivation, social interaction, self-efficacy etc. and ultimately learner's leaning. So effective learning could be achieved with a technological platform that enhances effective interaction, learners' motives and perceived self-efficacy and their impact on effective learning in blended learning environment under the context of International students.

### **Concept of Learning**

Learning is a process of acquiring, modification or change of cognitive, effective, behaviour and epistemic outcomes of an individual (Bloom 1956, Christofel, 1990). So, an effective learning requires an effect on all these four dimensions. Hence effective learning requires improvement in learners' motivations (cognitive, effective, and so epistemic need) teacher-student behaviour in form of immediacy (behaviour), self-efficacy etc. The following section review three main drivers of effective learning in a blended learning environment.

## **Learning Effectiveness**

The Oxford dictionary defines learning as ‘acquisition of knowledge and skills through, experience, studies, observations or being taught (Oxford Dictionary, 2014). It is about also quality of learning that is more important. Effective learning is perceived subjective judgment about one’s improved abilities or actual objective grades that measure knowledge and ability and measures academic progress .an effective learning will change one from a surface learner to in-depth learner (Saddler, 1999). One of the goals due to which learner’s buy learning programmes has been that it will help them meet the needs of various stakeholder (themselves, industry, tutors, society, quality agencies etc.) they demand good quality learning experiences that are fit for use, purpose, as per standards and meets expectations. In e-learning, learning quality contextualises learner’s experience and aid in meeting learning outcomes (Salmon, 2000). In the UK QAA, measure quality on national academic standards, quality of learners’ experience with opportunities and public (QAA, 2010) the overall process of learning includes expected- potential quality, process quality and outcome quality. Previous research has measured it via quality of knowledge, technical framework content and material, experience, innovation, perceived self-efficacy, usefulness, satisfaction and analysis (Baker, 1994) (Freedenberg Jia, 2002). an effective learning will be a quality learning that improves learner’s competency in functional, subject-specific, grades and student retentions According to Kirkpatrick (1959) that outcomes of effective learning should be measured as learner’s reaction (attitude, opinion etc.), learning (acquiring knowledge) change in behaviour (transferable skills to work) and results (workplace output). On similar lines (Jia, 2011) measured learning effectiveness on the ability to achieve learning outcomes and student’s grades. It means effective learning can be positive changes in capacities: cognitive, memory, task skills, affective capacities and actual or perceived task performance ability Kraiger et al. 1993). Also, effective e-learning should have similar good access, the satisfaction of learners and tutors, cost-effective and similar or higher perceived quality and actual grades. (Johnson et al 2000, cited in (Swan, 2003). In a related study, learning effectiveness was measured using student instruction report as the research had found the strong relationship of students’ actual exam grades with SIR, subject’s learning outcomes, and other transferable skills like inter and intrapersonal skills, critical thinking and so on (Centra, 2003). Thus, a perception based measure of effective learning is justified.

## **Main Antecedents of Learning Effectiveness in Blended Learning Environment**



### *Perceived Motivation*

To achieve effective blended learning learners must feel learning as a need and should be motivated to use this mode of learning (Kumarawadu, 2011). Motivation is ‘amount of, persistence and direction of effort through behaviour. It tells about their decisions about choices and corresponding efforts people make to achieve a goal or avoid unpleasant situations’ (Keller, 1983 cited in Kumarawadu, 2011). It involves learners’ energy, will or voluntariness, involvement, completion of tasks and so on (Christofel, 1990). Thus, to motivate learners, they must perceive that blended or online mode offers the students a solution to their core needs, such as the learning is useful, relevant, enhances self-confidence in their own abilities to access and use learning information and self-efficacy, flow experience of usage, and overall satisfaction with the system and learning goals. The learners must be deeply engaged and involved in the learning through the platform such that for them time flies off during this and experience is smooth and enjoyable – flow experience (Grabowski et al 1991). The Keller (1999) also argued for ARCS model [Attention- Relevant, confidence, and Satisfaction) to motivate learners. The achievement directed behaviour argues that as the effort increases outcome also increase. Thus, students’ perceptions of learning, environment, tasks and activities influence their learning and engagement in learning. Learners exert efforts if they perceive that they have self-efficacy and support to achieve their goals. They must demonstrate mastery of content, and continuously engage in learning to achieve learning goals: (mastery, performance and Ego goals) and hence effective learning (Ames, 1992). So, it can be asserted that: there is a strong relationship between learners’ perceived motivations and perceived effective learning.

### *Interaction-Ability, Sense of Presence and E-Support*

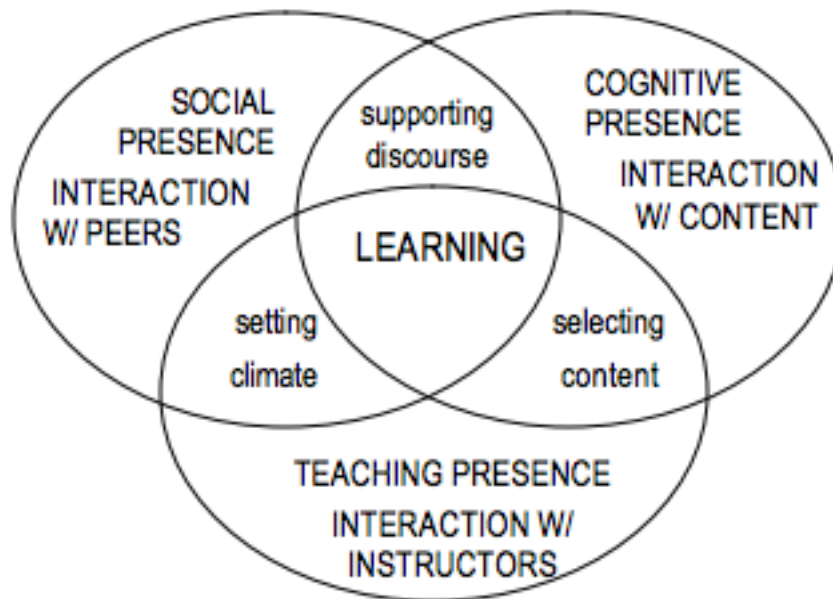
Another factor that may affect learning is the behaviour patterns of learners as well as lecturers. Personally, the researcher has observed that students tend to attend sessions with interesting interactive lecturers as compared to and consequently better learning in the earlier case. (Christofel, 1990) has argued that a teacher’s behaviour strategy namely ‘tutor’s immediacy’ has a significant effect on effective learning. The learners seek supports at each phase: during the beginning, learning and feedback phase and so tutor should be available during these phases at least. Students miss this physical presence in online environment i.e. social interactions: Sense of Presence, e-support with a human touch (Stodel, 2006). Different authors conceptualised this construct differently such as teachers ‘immediacy, social interaction, physical or psychological presence and human touch etc. It is about the degree of perceived physical or psychological presences of the tutor and co-learners in an online learning environment (Christofel, 1990).



*Concept of Presence and Interactivity*

In researcher's personal experience, all students in general and international student wish to meet their classmates and teachers face to face. Such meetings and corresponding interactions usually help them scaffold their learning and they are not de-motivated due to the feeling of isolation or being far-away in an online setting. Thus, interactions have a role in effective learning. Interaction involves two or more objects/people reciprocating actions, thus mutually affecting each other and ultimately each other's information and knowledge (McGuire, 2009). The online environment has also been found to negatively affect feelings of flow in discussions, work output/backlog, deep learning, etc. due to gravity/weight of online words that are mostly written-read as opposed to not speak with spontaneity in face to face classes (McGuire, 2009). So, there is great need of improving humanistic interaction 'or social psychosocial presence in e-learning modes. A tutor can enhance learning by using engaging students in deep learning by using a variety of activities that enhance stimulus, sustain and corroborate learning (Sodestrom 2005 cited in McGuire, 2009). Learners want teacher's immediacy also because they may not want to participate in online forums as the comments on the form are permanent, public and open to criticism and judgment (Williams (2002). The researcher's own experience and informal chats with MBA students also indicated that students miss non-verbal cues, body language, openness and honesty and physical or psychological closeness in an online environment. All learning theories such behaviourist, cognitive, or constructivist, social and so on have argued for the need of interactions or presence (fig2, 2). Swan (2003) argues a range of learning presence; such as the need for right content and platform (cognitive presence), lecturers (teaching presence), co-learners (social presence). Clearly, these are the main components that are mostly missed in an online environment and hence are examined in the current research.

**Figure 2.2. Different kinds of interaction and learning**



*Adapted from Rourke, et al. (2001) and community of inquiry model (Source: Swan, 2003).*

This leads to the second assertion: there is a strong relationship between overall interactive presence and effectiveness of learning.

#### *Learner-Content Interaction Thus Cognitive Presence*

A good course design and delivery can enhance students' experience with improvement in study material, learning content Interaction, thus can improve their overall knowledge, skills, and attitudes. A deeper involvement with a course material can lead to deeper understanding, cognition and critical analysis. This learning happens due to effects of the direct and vicarious presence and ultimately leading to the enhanced cognitive presence (Stodel, 2006). The cognitive presence has been measured in terms of quality of online content, students' actual grades or performance and the students' perceived learning effectiveness (Janick and Liegle, 2001). The cognitive presence can be improved by a good learning and course design that incorporates consistent layout, good navigation, e-support, tutor's appropriate style with a variety of pedagogies and by following Chickering's seven principles of effective learning (Chickering, 1987). Thus, it can be concluded that: There is a strong relationship between Cognitive Presence and the effective learning, which is assertion three.

*Learner-Tutor Interaction Thus Teaching Presences*

A Teaching Presence is felt when a learner feels that a teacher is nearby, has immediate availability, on the spot presence. In such a situation a learner thinks that interaction with a tutor is quite easy and should compete for instant access to it whenever it is needed. The immediacy and visibility of lecturer stimulate learner's interest and motivation and ultimately better learning (Chew, 2011). Such a kind of learning can be attributed to a better learning system design and tutor's facilitating support and spontaneity in the learning process. Also, any lower level of interaction satisfaction with a tutor is associated with lower level of learning and vice versa (Sheaf, et al 2002, Swan, et al. 2000, Richardson and Swan 2001).

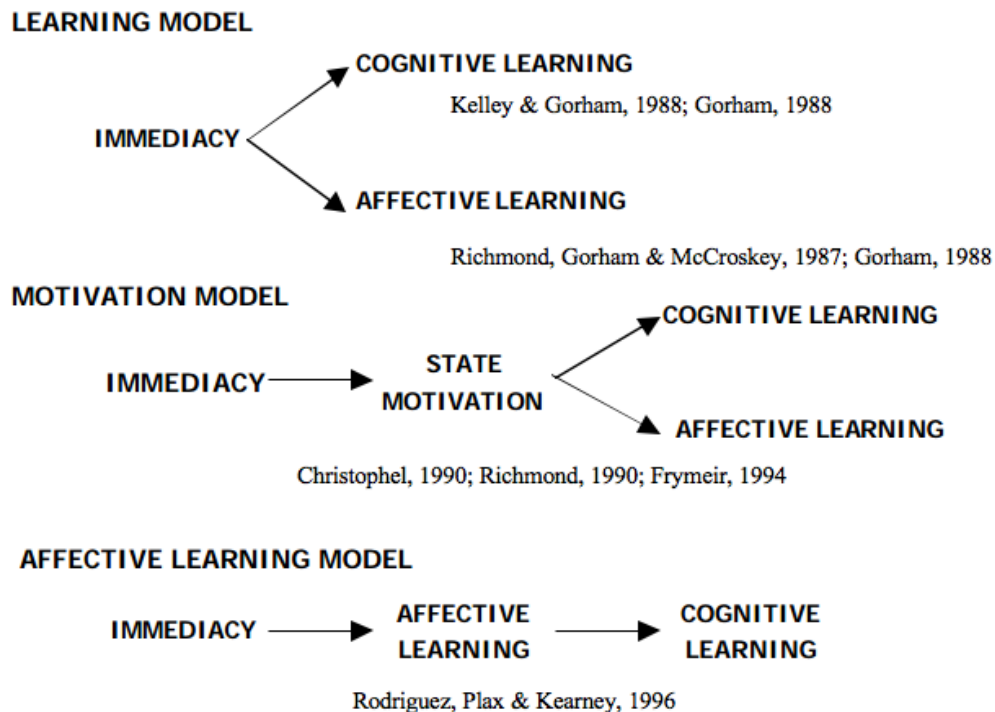
E-Learning becomes interesting and effective when a tutor takes the role of a direct facilitator and delegates learning to co-learners and assumes a role of meta-facilitator. The International students with lesser exposure to online learning environment want the immediate availability of the tutor for any communication. That is because the students seek a physical and psychological immediacy in space-distance and time. Many previous studies also have found a strong impact of the perceived immediacy of the tutor on the cognitive as well as effective learning (Jia, 2011, Gorham, 1988 Kearney, P., 1985). The motivational model has attributed this kind of learning to the motivation. The learner's motivation acts as an intervening variable between immediacy and reflective learning. Similarly, effective learning model has attributed that effective learning intervenes between tutor's immediacy and cognitive learning, see fig 2.3 (Christofel, 1990; Jia, 2011). This takes us to the fourth assertion that: There is a strong positive relationship between Teaching Presence and the effective learning.

*Learner- Classmates Interaction and Thus Social Presence*

As per Social-cognitive theories, the learning is at least partly constructed socially when a learner interacts with others and thus creating knowledge in situ (Harasim, 1990, Chew, 2011). However, the capacity of peripheral, verbal and nonverbal cues that can be transmitted in face to face mode is not fully possible via an online media. This carrying capacity of a media constitutes a perceived social presence and social immediacy. If the media is not rich or bandwidth is low then the capacity of media to carry peripheral social presence may be very low. Previous studies have found that perceived low social presence through the low

band with media has an adverse effect on effective learning (Short et al 1976, Swan et al, 2002, Shea et al 2002, Chew, 2011). Thus, implying that for learners who perceive a higher level of social presence, they will also have higher effective learning and vice versa a good social interaction due to the presence of peers be ‘verbal immediacy’.

**Figure 2.3. Caption Tutor’s Immediacy Behaviour and effective Learning**



*(source: (Jia, 2011)*

The verbal immediacy leads to more group cohesion, sharing of private or other information and emotions, and initiates an open and honest communications with all. Thus, a learner expects a complete response on three dimensions: a ‘cohesive response’, ‘affective response’ and ‘interactive response’ (Garrison et al 2000, Stodel, 2006) The social presence can be assured by a range of strategies like welcoming postings and online cafes, forum discussions, theme-based forums, calendar activities, collaborative activities,

sharing of funny or stressful emotions and tutor's immediate responses to such forums or emails. Such strategies improve the learning experience and effectiveness of learning (Gunawardena, 2005, Russo et al 2005, Anderson 2001, Swan 2001, Stodel, 2006). Thus, the following assertion can be drawn that: There is a strong relationship between Social presence and the effective learning, which is the fifth assertion.

### *Self-Efficacy*

The learning is also influenced by what a learner thinks about one's own potential or capability or self-efficacy (SE). The Self-Efficacy is learner's expectations about one's own capability to organise behaviour to achieve a goal or a task (Jia, 2011). The Self-efficacy has been observed as an antecedent of decision making, knowledge acquisition, memory, achieving cognitive task as well problem solving and even effectiveness in e-learning (North 2001, Jia, 2011).

In a virtual learning, environment and efficacy can be attributed to self or to IT system. Many international students often raise concerns that they tend to make less use of the VLE as they feel that they have less efficacy of IT system. Thus, overall perceived efficacy has two components; one being Self –efficacy and other is an IT system efficacy. The former is known as perceived self-efficacy and later as perceived Virtual environment efficacy (Jia, 2011). The first is measured as learner's perceptions of one's own capability to perform a task, while the latter is about learner's perceptions of one's capability of dealing with the virtual learning environment. Thus, the learning can be attributed to either intrinsically to self or extrinsically to the online system. The self-efficacy is a judgment about one's own magnitude of effort and persistence to achieve a task. If one thinks high of self, then he/she may put extra effort to understand and learn effectively.

In online environment Perceived Virtual Efficacy (VSE) is about perceived efforts required to work in the online environment and efforts needed to perform virtual learning activities through VLE (Jia, 2011). This can be inferred as student's perceived ability about the level of and quality of knowledge that one should transfer in to use the system. Thus, Perceived Virtual Efficacy (VSE) is Perceived ability to learning the quality of Cognitive (PCQ), Interaction (PIQ) and System-User interface (PSUQ) dimensions. Thus, Perceived Virtual Efficacy (VSE) can be measurable in three dimensions (Jia, 2011). The quality of Cognitive (PCQ) is VLE's capacity to support cognitive learning? The Perceived Interactions quality (PIQ) is the capacity of the system to support interactions and its usability in terms of ease of use and ease of learning, and the System-User interface (PSUQ) measures the capacity of VLE to give quality of output information required to perform a job relevant task (Sutcliffe, 2000, Jia, 2011)

The self-efficacy can influence one's perceived virtual self-efficacy and that in turn can affect one's learning. Thus, a learner's subjective impressions of the efficacies on interactions and learning experiences are significant for effective VLE designs and learning. Thus, the following assertions can be true that: There is a strong relationship between perceived overall self-efficacy and the effective learning. (assertion six); There is a strong relationship between perceived self-efficacy and the effective learning (assertion seven); and There is a strong relationship between perceived virtual self-efficacy and the effective learning (assertion eight).

*Moderating Variables: Learners' Culture and Demography*

The literature suggests an apparent connection between learner's perceptions (Motivation, Interactions and self-efficacy) and learning effectiveness may be moderated by learner's personal or other characteristics, demographic and cultural backgrounds etc. Previous studies have found that the relationship can be moderated by learner's Age, language, cultural (Biggs, 1987), gender (Hassal 2001), previous experience (Ramsden, 2003. Charlesworth, 2007), intrinsic motivation (WatKins, 1982), prior experience, perceptions towards technology, availability of technology and infrastructure (Chew, 2011). Hofstede (1973, 2001) has identified five dimensions of international culture. Accordingly, the people from different countries can differ on Power dominance, Individualism vs. collectivism, Masculine vs. feminine, uncertainty avoidance and long-term orientation (Hofstede, 2014). On the Hofstede's dimensions, most of the South Asian are higher on power dominance and masculinity and are lower on other dimensions. Such International students prefer more collective support and avoid risks (don't try new things first) of trying a new VLE and so on. Most of the International students are grown with teacher-centric learning and they don't want to take the risk of challenging tutors. In addition, out of respects to the tutors, the learners' might not attempt to learn completely independently without the teacher or peer's presence. Also, technology and IT penetrations are relatively low in developing countries. Thus, international students may not perceive VLE as an effective tool for learning as they are not in the habit of taking full control of their learning.

Hence there is need to explore the effect of demographic and ethnic cultural features in moderating effectiveness of learning. This leads us to the assertion nine that: All relationship of drivers of effective learning proposed in this research will be moderated by demographic and ethno-cultural factors.

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## **DISCUSSION AND CONCEPTUAL MODEL OF EFFECTIVE E-LEARNING**

Thus, as per previous sections in an online environment, the teaching and learning strategy and pedagogies need to be adapted and adopted as per new expectations. The conceptual model is proposed in this section, please see figure 3.

**Assertion One:** There is a strong relationship between Learners' perceived motivations and perceived effective Learning.

The first strategy should be directed to understand learners' motives and motivate them to learn. The more motivated the learners, higher will be probabilities that they will be ready to input higher efforts and ready to take a risk and cognitive leads in the online environment.

**Assertion Two:** There is a strong relationship between overall interactive presence and effectiveness of learning.

**Assertion Three:** There is a strong relationship between Cognitive Presence and the effective learning.

**Assertion Four:** There is a strong positive relationship between Teaching Presence and the effective learning.

**Assertion Five:** There is a strong relationship between Social presence and the effective learning.

As per assertions two through five, the learners miss physical presences in an online environment. They miss presences of context, situations, friends, people, tutors and a social setting. The effectiveness of learning might decrease due to the absence of physical class room situations in an online environment.

Thus, it is an urgent requirement that various forms of presences; interactions, cognitive, tutors, and social be assured in an online environment. This can be assured by an effective IT system, interactivity of the system, granularity of teaching concepts and twenty-hour presences of tutors, IT support and co-learners.

**Assertion Six:** There is a strong relationship between perceived overall self-efficacy and the effective learning.

**Assertion Seven:** There is a strong relationship between perceived self-efficacy and the effective learning.



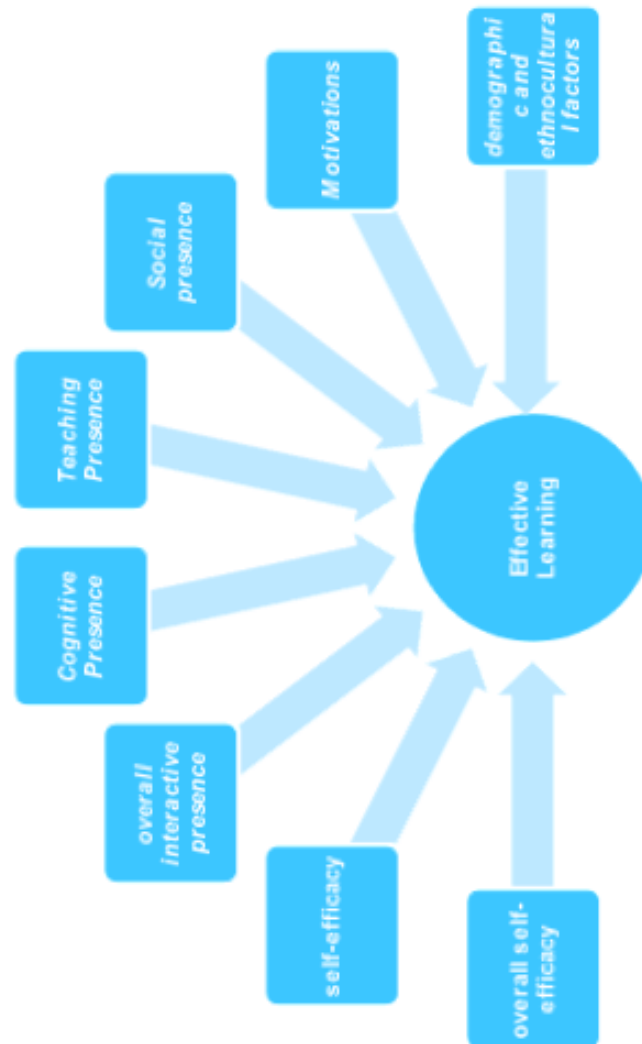
**Assertion Eight:** There is a strong relationship between perceived virtual self-efficacy and the effective learning.

The learners' self-confidence and sense of ability or self-efficacy have a direct bearing on the effectiveness of the eLearning. In an online environment, there are another challenge of maintaining and enhancing self-efficacy of the learners. In an isolated online environment and in the absence of support the online learners may feel less confident and lower self-efficacy. Thus, they will have fewer motivations to try learning online due to lack of trust in themselves. Hence for an effective online environment, both the individual self-efficacy and virtual self-efficacy to deal with the IT systems must be enhanced.

**Assertion Nine:** All relationship of drivers of effective learning proposed in this research will be moderated by demographic and ethno-cultural factors.

The learners with different background, demography, geographical and cultural have different perceptions about motivations, need of social presence and self-efficacy. Thus, the relationship of self-efficacy, motivations and presences with effective learning will be moderated by the background of the learner.

**Figure 3. Conceptual model of drivers of effective eLearning**



## **THE FUTURE SCOPE**

The proposed assertions and the conceptual model need to be empirically tested. The researcher proposes a mixed method is good as this helps in triangulate the research findings and it can make use of advantages of both qualitative and quantitative methods (Williamson 2005, Chew 2011). The qualitative method being exploratory not only sets the boundaries of the research but also being open to engaging in additional research questions to identify new themes or variables. Questionnaire and research instrument for quantitative research will be driven by research questions and will be underpinned by corresponding

theoretical concepts and constructs of the study namely: perceived motivations, missing interactional presences and self-efficacy and learning effectiveness. The main sources will be (Laiw, 2008, Chew, 20011, Cigdem 2013). The instrument should be pretested for usability, reliability, and validity (Saunders, 2009). Validity implies instrument to measure what is it supposed to measure accurately. The concept validity needs to be established with help of relevant literature, a factor analysis, expert views and preferably using existing scales (Saunders, 2009). The reliability of a scale is its ability to repeat experiments and getting same results. The reliability of the scale should be established by subjecting to reliability analysis and as per rule of thumb, the scale is reliable when reliability coefficient, Cronbach's  $\alpha = 0.70$ ). The quantitative data collected using the research instrument will be subjected to analysis.

The Qualitative data from interviews could be analysed using thematic and content analysis (Stodel, 2006). The hypothesis testing needs t-test, ANOVA, Correctional and regression analysis. Thus, the impact of learners of perceived motivations, missing interactional presences, and self-efficacy on learning effectiveness might be established with help of correlation and regression analysis. The stepwise regression is advised when there are possible strong correlations between variables involved otherwise simple regression is fine (Saunders, 2009). Ethics in any research involves moral issues or concerns that may arise as result of a research. The ethical issues may be related to procedures of data collections, questions to be asked, consent, data protection, privacy, physical and psychological protection of the participants etc. (Saunders, 2009). The data collected through primary survey must meet the requirements of consent, the full disclosure of purpose, age and anonymity of the respondents.

## **CONCLUSION**

This research paper theoretically investigates into main antecedents of effective learning as learner's perceptions on motivations, missing interactions, and self-efficacy in online learning environment at some UK HEIs. The research investigates the above relationship under the effect of demographic and ethnocultural variables of the international students studying at the university campus at London. The paper has provided some details on research background, rational, relevant literature review, proposed a conceptual framework and associated proposed research methodology. The conceptual model highlights the role of different kinds of 'presence; 'self-efficacy and personal; factors in achieving effective learning in an online environment.

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