ASSESSMENT OF E-LEARNING READINESS AMONG ADOLESCENTS CHILDREN IN RELATION TO SELF REGULATION

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ABSTRACT: The purpose of this study is to assess e-learning readiness among adolescent students in relation to self regulation of Govt. Senior Secondary School. Present research compares the e learning readiness and self regulation among adolescents' boys and girls. The sample of the study comprised of 196 students selected randomly from the Govt. Sen. Sec. Schools of Punjab. E-learning Readiness Self-assessment tool (Ryan Watkins, Doug Leigh and Don Triner (2004) and Self regulation questionnaire (Brown, Miller & Lawendowski, 1999) were employed to collect the information. The finding of the study revealed a significant negative relationship between total e-learning readiness and self regulation (r=-0.08) of adolescents boys of senior secondary schools. A study also revealed a significant positive relationship was between e-learning readiness and self regulation (r=-0.42) of adolescents girls.

Keywords: e-learning readiness, Self-regulation, Adolescents, ICT, Correlation.

INTRODUCTION

The transition of the world into a GLOBAL VILLAGE poses a big challenge for teachers of today to impart such quality of education, which will help the students in moving with confidence and remain abreast with the latest and innovative technologies in the outside world. Technology has become an integral part of our society today and as pressure is exerted upon educational systems to implement new technologies, teachers' abilities to respond to change and innovation has become a key factor for success. And, this implementation of technology in the class rooms, as well as, adapting to the various technological modes to get education is primarily defined as 'e-learning' in very simple terms. The field of e-learning is inundated with a number of terms used either interchangeably or with little difference as defined by the contributors. According to Rushby (2001), In today's scenario, with the introduction of SMART classes, a stressful condition has been created in the Indian class rooms where the teachers are in the stress to use technology, this results in a sense of low computer self-efficacy among them. With a low self-efficacy there perpetuates a low motivational level to make use of online learning and teaching materials.

As Thorndike in his laws of learning added a **law of readiness** which meant, that to initiate and accomplish any task, there needs to be a mental preparation or readiness to do so. But, in today's world, readiness is largely influenced by way an individual confronts with the changes and innovations in technology. But, the introduction of e-learning courses brings along certain stressful symptoms of making the use of technology, so there is a strong need to identify the stress levels caused by using the computers.

With readiness to accept e-learning in classes, there comes an urgent need to assess the thinking styles of the teachers as well as students, as how they react to the daily life situations, i.e. they become steadfast in adapting to newer educational technologies or, they blame their failures to the fate as a defence mechanism. And, here comes the need of generating the assessment of their innate computer self-efficacy so as to make use of the technology at its best.

Viewing e- learning readiness from the academic view point, it is imperatively required for learners of distance education courses where utilization of ICT resources is essential, as is the involvement of providing or regulatory institutions in optimizing the potential of e-learning within a knowledge–based economy. Significant to learners' involvement in e-learning is the notion of *e-readiness*, that is, their ability to make use of e-learning resources and multimedia technologies to improve the quality of learning. Continuous learning is the most important aspect for dynamic organizations. E-Learning provides the necessary environment and appropriate tools for task oriented, up to date and continuous learning. E-learning also makes organizations capable to train their geographically scattered workforce and make them eligible with the dynamic knowledge and skill demands with greater efficiency but at less cost (Kaur and Abas, 2004).

Self-regulated learning is a fairly new construct in research on student performance and achievement in classroom settings. Self-regulation is an integrated learning process, consisting of the development of a set of constructive behaviors that affect one's learning. These processes are planned and adapted to support the pursuit of personal goals in changing learning environments. A common set of self-regulation strategies exists, as well as an *individual* set of skills that each student must develop personally to be successful in school and life. These self-regulation skills can be taught, learned, and controlled. (Zimmerman,1989).

The term "self-regulated learning" (SRL) is used to describe independent, academically effective forms of learning that include metacognition, intrinsic motivation, and strategic action. In the process of metacognition, self-regulated learners can plan, set goals, organize, self-monitor, and self-evaluate during the acquisition, these processes make them to be self-aware, knowledgeable in their approach to learning. In the process of intrinsic motivation, self-regulated learners have high self-efficacy and are interested in the task. They employ effort and persistence during learning. In the process of strategic action, self-regulated

learners seek out advice, information, and strategies which are helpful for them to learn, they self-instruct and self-reinforce during performance enactments.

Lin (2015) supported social network awareness (SNA) is a highly effective means of increasing peer interaction and assisting student learning by raising awareness of social and learning contexts of peers. Network centrality profoundly impacts student learning in an SNA-related e-learning environment. Additionally, self-regulation behavior significantly influences online learning of students. However, exactly how network centrality and self-regulation influence learning behavior and effectiveness in an e-learning environment remains unclear. Therefore, this study investigates how both variables (ie, network centrality and self-regulation) impact student learning in an SNA-related e-learning environment. Analytical results indicate that the student group with high-level centrality and low-level self-regulation more significantly progresses in learning achievement than the other groups. The second finding shows the group also has the highest number of students asking for help, revealing they have the highest system utilization rate.

OBJECTIVES OF THE STUDY

1. To assess e-learning readiness of adolescents children with different levels of self regulation.
2. To find relationship between e-learning readiness and self regulation

HYPOTHESES OF THE STUDY

H1:   There is no relationship between scores of e-learning readiness and self regulation adolescents' boys of senior secondary school.

H2:   There is no relationship between scores of e-learning readiness and self regulation adolescents' girls of senior secondary school.

DELIMITATIONS OF THE STUDY

1. The study will be delimited to the adolescent children of class +1 of Government Schools of District Ropar, Punjab only.
2. The study will be conducted on students with different academic streams viz. Arts and Science.
3. The present study will be delimited with respect to the variables, e- learning readiness and self regulation.

DESIGN OF THE STUDY

Descriptive method of research was employed for the present study as this method is concerned with surveying, describing and investigating the existing phenomenon or issues, conditions and relationships that exist.

SAMPLE

The random sampling technique was followed. A list of all Government Schools of Ropar was obtained from DEO, Ropar, for the selection of the schools for data collection. Then, the slip for each school was made respectively for selection of government school for data collection. Then using the random sampling method slips of 4 government schools was selected.

Table 1: List of the Government Senior Secondary Schools for teacher's data

Sr. No	Name of the School	Distribution of adolescent under study in various faculties					
		Social Sciences		Sciences		Total	
		Boys	Girls	Boys	Girls	Boys	Girls
1.	Govt Senior Secondary School, Naggal, Sarsa	12	10	13	14	25	24
2.	Govt Girls Senior Secondary School, Ropar	13	12	13	10	26	22
3.	Govt Boys Senior Secondary School, Ropar	12	12	11	12	23	24
4.	Govt Senior Secondary School, Ghanauli, Ropar	14	13	10	15	24	28
		Total				98	98

TOOLS USED

The following tools employed for data collections have been presented.

➢ E-learning Readiness Self-assessment tool (Ryan Watkins, Doug Leigh and Don Triner (2004)

➢ Self regulation questionnaire (Brown, Miller & Lawendowski, 1999)

STATISTICAL TECHNIQUES

The following statistical techniques were employed to analyze the data obtained in order to test the hypotheses:

➢ Descriptive Analysis techniques like, means and standard deviations were worked out to study the general nature of the sample employed.

➢ t-ratios to study difference between e-learning readiness and self regulation of senior secondary school students.

➢ Coefficient of correlation was calculated to find correlation.

Research Findings

Table 2: Coefficient of correlation exhibiting relationship of e-learning readiness scores and self regulation adolescent boys of government senior secondary school students

VARIABLE	N	VALUE OF CORRELATION
E-LEARNING READINESS AND SELF REGULATION	98	-.08 **
**significant at 0.01 level of significance		

For sample of adolescents boys of government senior secondary school students, significant negative relationship was found between total e-learning readiness and self regulation (r=-0.08). So, null hypothesis was rejected. And a significant negative correlation was found between total e-learning readiness and self regulation. So it can be interpreted that respondents with greater e-learning readiness had lesser self regulation. Hence, the null hypothesis H1: There is no relationship between scores of e-learning readiness and self regulation adolescents' boys of senior secondary school. The result indicates that there is negative relationship e-learning readiness and self regulation of adolescents' boys.

Table 3: Coefficient of correlation exhibiting relationship of e-learning readiness scores and self regulation adolescent girls of government senior secondary school students

VARIABLE	N	VALUE OF CORRELATION
E-LEARNING READINESS AND SELF REGULATION	98	0.42 **
**significant at 0.01 level of significance		

For sample of adolescents girls of government senior secondary school students, significant positive relationship was found between total e-learning readiness and self regulation (r=-0.42). So, H2 was rejected. And a significant positive correlation was found between e-learning readiness and self regulation of adolescent girls. So it can be interpreted that respondents with greater e-learning readiness had higher self regulation. Hence, the null hypothesis H2: There is no relationship between scores of e-learning readiness and self regulation adolescents' girls of senior secondary school. The result indicates that there is positive relationship e-learning readiness and self regulation of adolescents' girls.

SUGGESTIONS FOR FURTHER RESEARCH

- The present study focused on three areas to seek student's readiness for e-learning. As such e-learning is a very broad concept which encompasses other educational ways like distance education,

correspondence learning, web-based learning, online learning technologies and blended learning designs so, more studies can be based on this type of learning ways too.

- This study involved the use of e-learning readiness in only one setting, i.e. schools of punjab, but its scope could be widened to other technologically advanced states like Mumbai, Delhi, Bengaluru etc.

- The study can be done on teachers and students of education colleges, degree colleges and, even at University level.

- Cross-country comparisons can also be made to assess e-learning readiness.

- This study used subjective, self-reported measures to assess e-learning readiness, but experimental method can also be used, so as to compare online learning teaching with traditional teaching.

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