

A study of Virtual Learning Environment with
reference to Perception of college students in
Tamilnadu.

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Virtual Learning Environment

- A virtual learning environment (VLE) is a set of teaching and learning tools designed to enhance a student's learning experience by including computers and the Internet in the learning process.
- Internet links to outside curriculum resources.
- Commercial VLE software packages available, including Blackboard, WebCT, Lotus LearningSpace, and COSE

Research Problem

- The purpose of this study is to assess the preparation of learners to adopt to the virtual learning environment, as all students are expected to be computer savvy if they are to participate in the VLE .
- This study helps us in understanding the conditions under which web-based courses are or are not accepted by students.

Significance and Scope of the study

- This study helps in gaining , further understanding of students preparation for a Virtual Learning Environment.
- It will help local educational authority, Policy makers of educational institutions in understanding the influence of VLE.
- It will help in understanding the resisting factors which inhibit the acceptance of VLE.
- It will help in understanding the attitude of the students towards acceptance of VLE.

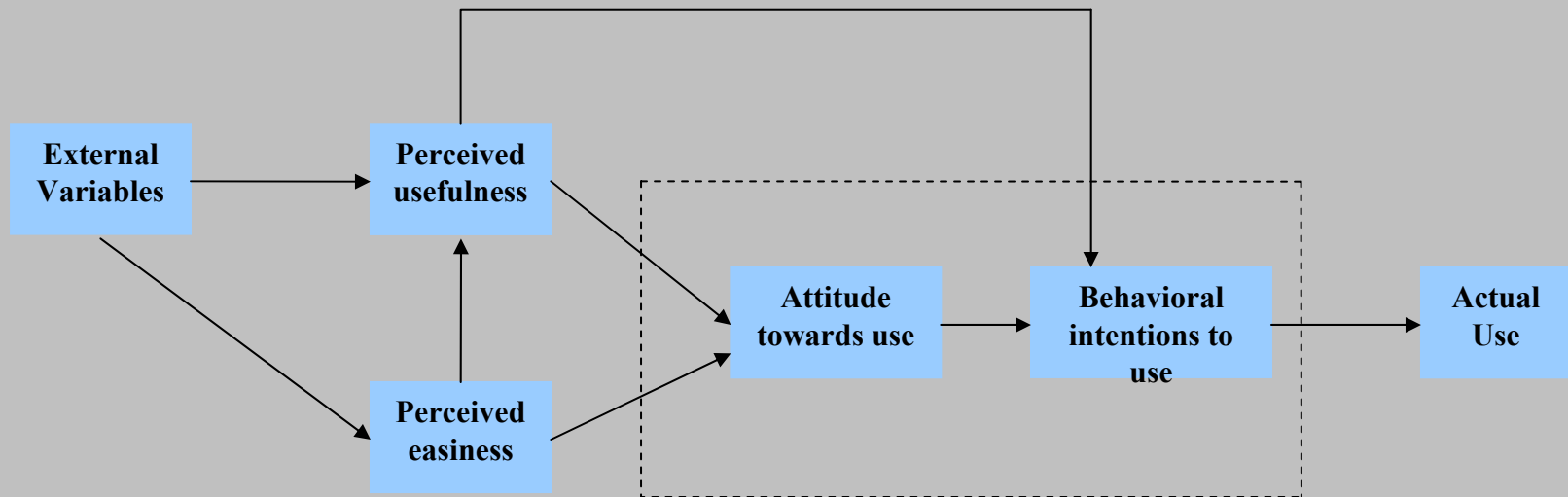
Research Question

- How well the students are prepared for a newly developed virtual learning environment.
- What are the factors which may effect student's skills and attitudes towards VLE (web based course) .
- How students use Internet and their attitude and perceptions towards Internet as an educational and instructional media .
- What are the perceptions of the students who use internet or not using Internet towards Virtual learning environment.
- Why students accept or reject use of new Information Communication Technology for their learning.
- Assess the students study habits and their usage of ICT's for higher education

Theoretical Framework

- Diffusion of Innovation
- Technology Acceptance Model
- Relationship between TAM and Diffusion of Innovation Model

Technology Acceptance Model



Variable Categories Under Study

Key TAM Variable

- Perceived Ease of Use of Internet
- Perceived Usefulness of Internet

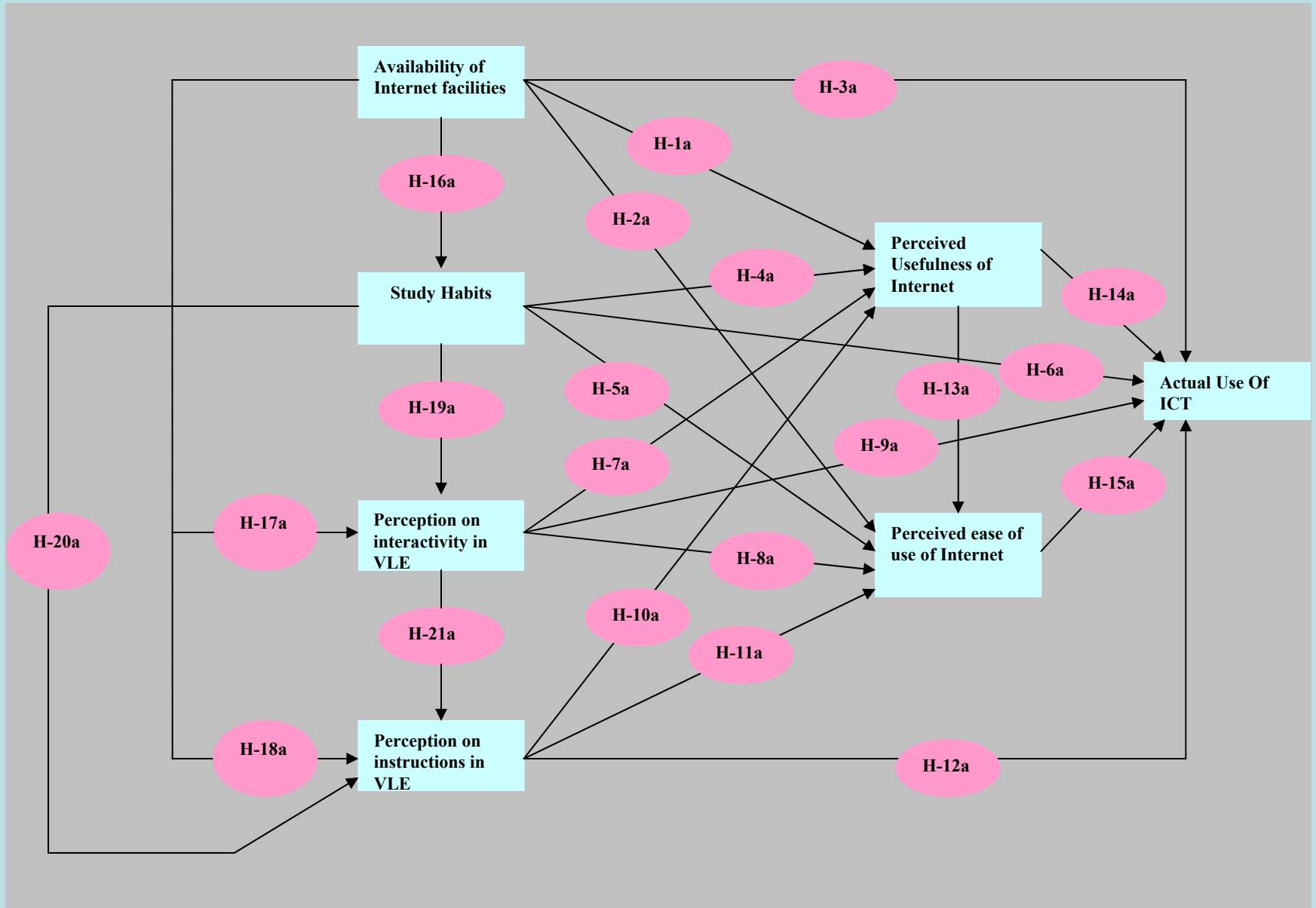
VARIABLES FROM PEDAGOGICAL THEORIES

- Perceptions of instruction in Virtual Learning Environment
- Students perception of Interactivity in virtual learning Environment

OTHER EXTERNAL VARIABLES SUPPORTING THE STUDY

- Study Habits
- Availability of Internet facilities
- Actual Use of ICTs
- Demographical Variables

Conceptual Framework



Research Objectives

- To study the relationship between external variables, i.e., demographics, availability of Internet facilities, and study habits with perceived usefulness and perceived easiness of using Internet in a virtual learning environment;
- To analyze the correlation between the perceived usefulness and perceived easiness of using Internet in a virtual learning environment;
- To study the relationship between perceived usefulness and perceived easiness of using Internet that will affect the attitude of students towards perception of virtual learning, instructional and interactive.
- To test the hypothesis developed based on the conceptual framework of the study

Research Design

- *Survey Method*
- *Judgement Sampling*
- *Data Collection: Self-administered questionnaire*
- *Data Analysis*
- *Frequency analysis of the demographic variables*
- *Significance difference of demographic variables with that of the theoretical framework of the study*
- *Correlation analysis*

Reliability Analysis

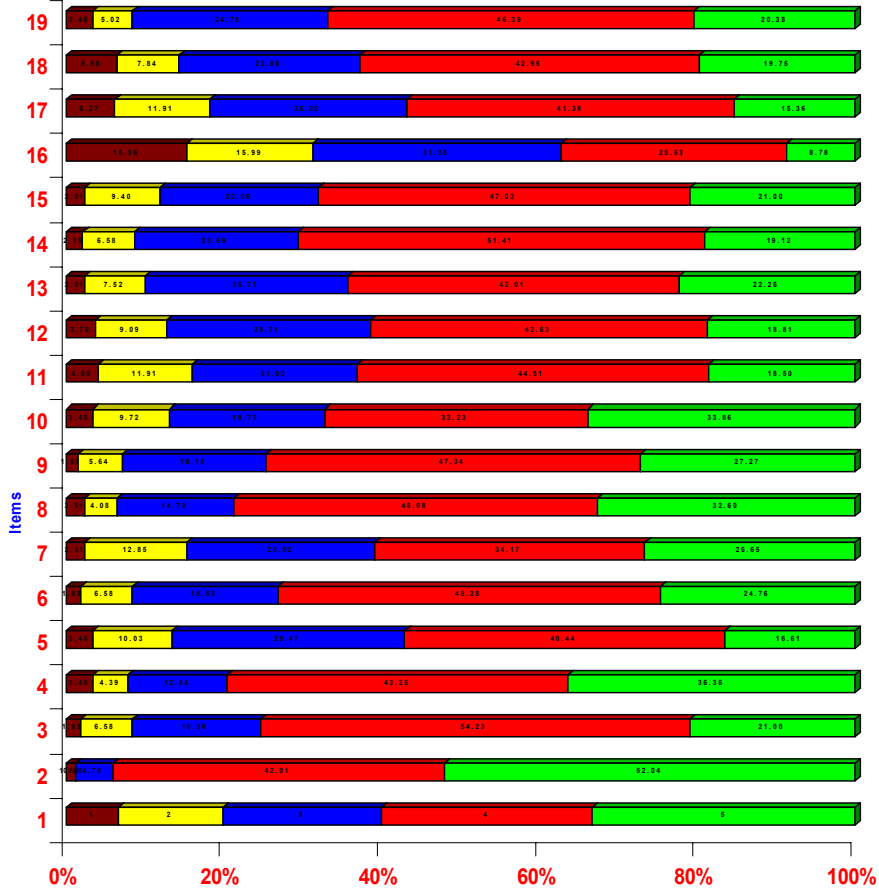
External Variable

S.No	Variable	No of Items	Standard Alpha	Cornbach Alpha
1.	Perceptions of Instruction in VLE	5	0.7353	0.7355
2.	Perceptions of Interactivity in VLE	11	0.7998	0.8012
3.	Study Habits	10	0.8213	0.8213
4.	Availability of Internet facilities	6	0.7826	0.7920

Internal Variable

S.No	Variable	No of Items	Standard Item Alpha	Cornbach Alpha	Reports from Earlier Studies Cornbach Alpha
1.	Behavioral Intention to Use	5	.8822	.8795	0.806 (Adapted from Chau 1996)
2.	Attitude Towards Information system	4	.8029	.7606	0.812 (Adapted from Harrison & Rainan)
3.	Perceived Ease Of Use	3	.8861	.8774	0.889 (Adapted from Davis1989)
4.	Perceived Usefulness	4	.8903	.8852	0.841 (Adopted from Davis1989)

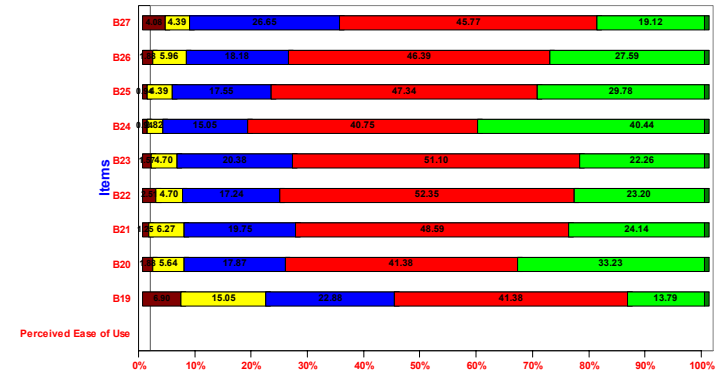
Perceived Usefulness



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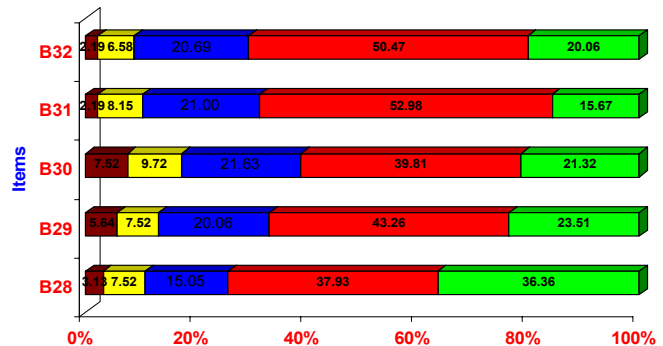


Perceived Ease of Use



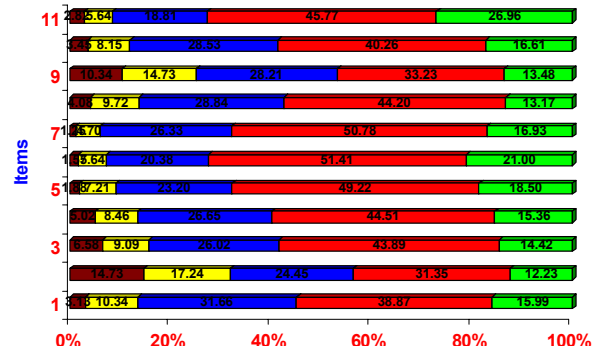
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Perception towards instruction in VLE



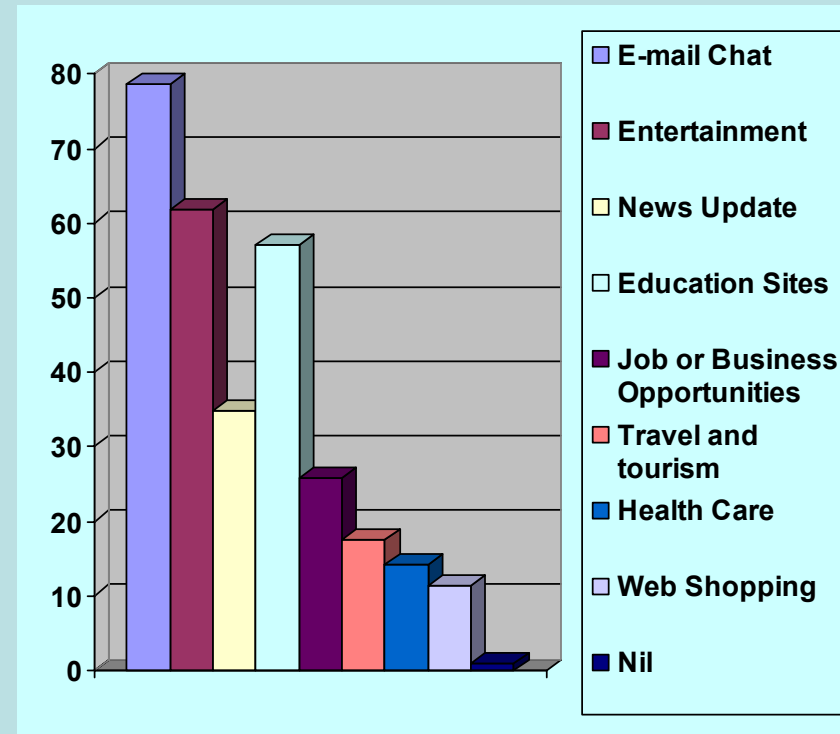
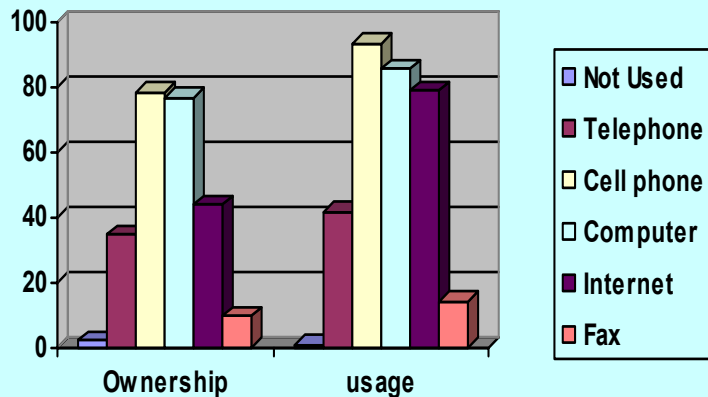
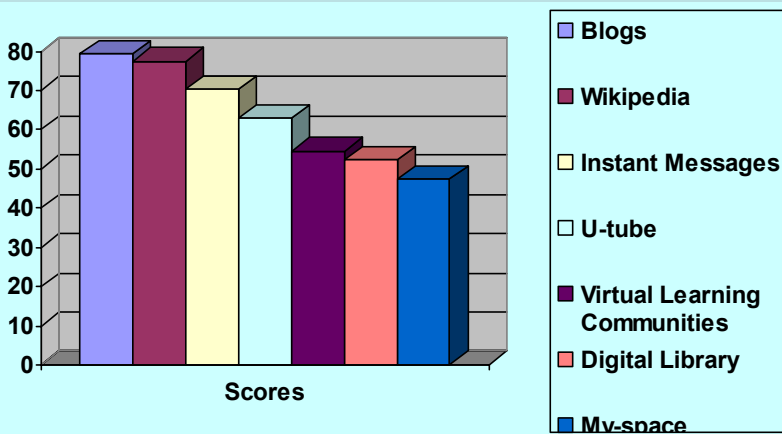
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Perception towards interactivity in VLE



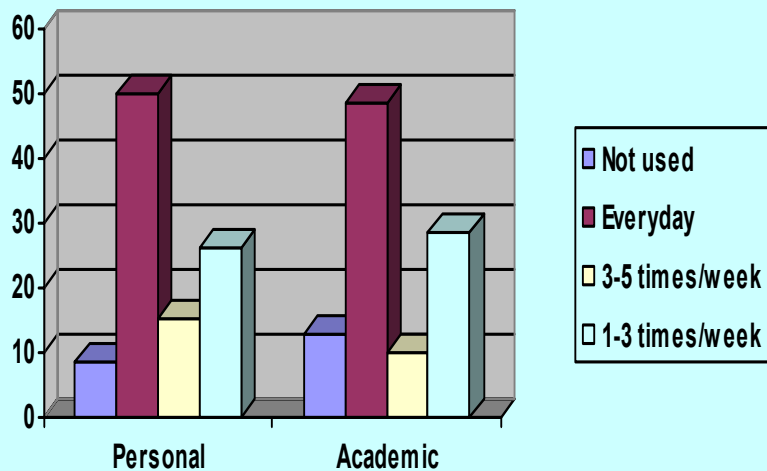
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Usage of ICTs By Students

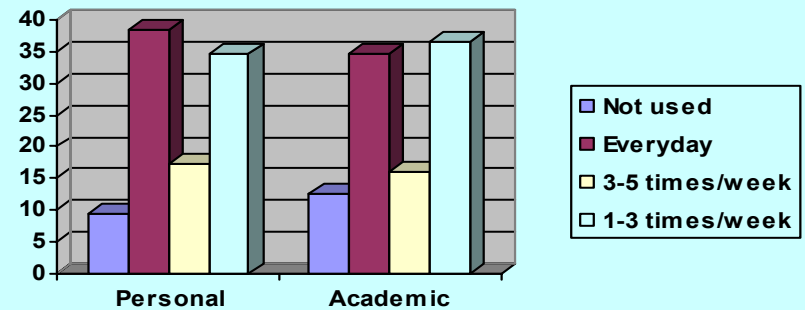


Usage of ICTs For Learning

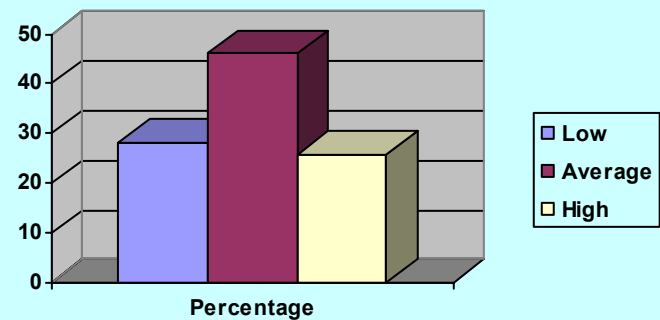
Personal /Academic Usage of Computer



Personal/Academic Usage of Internet

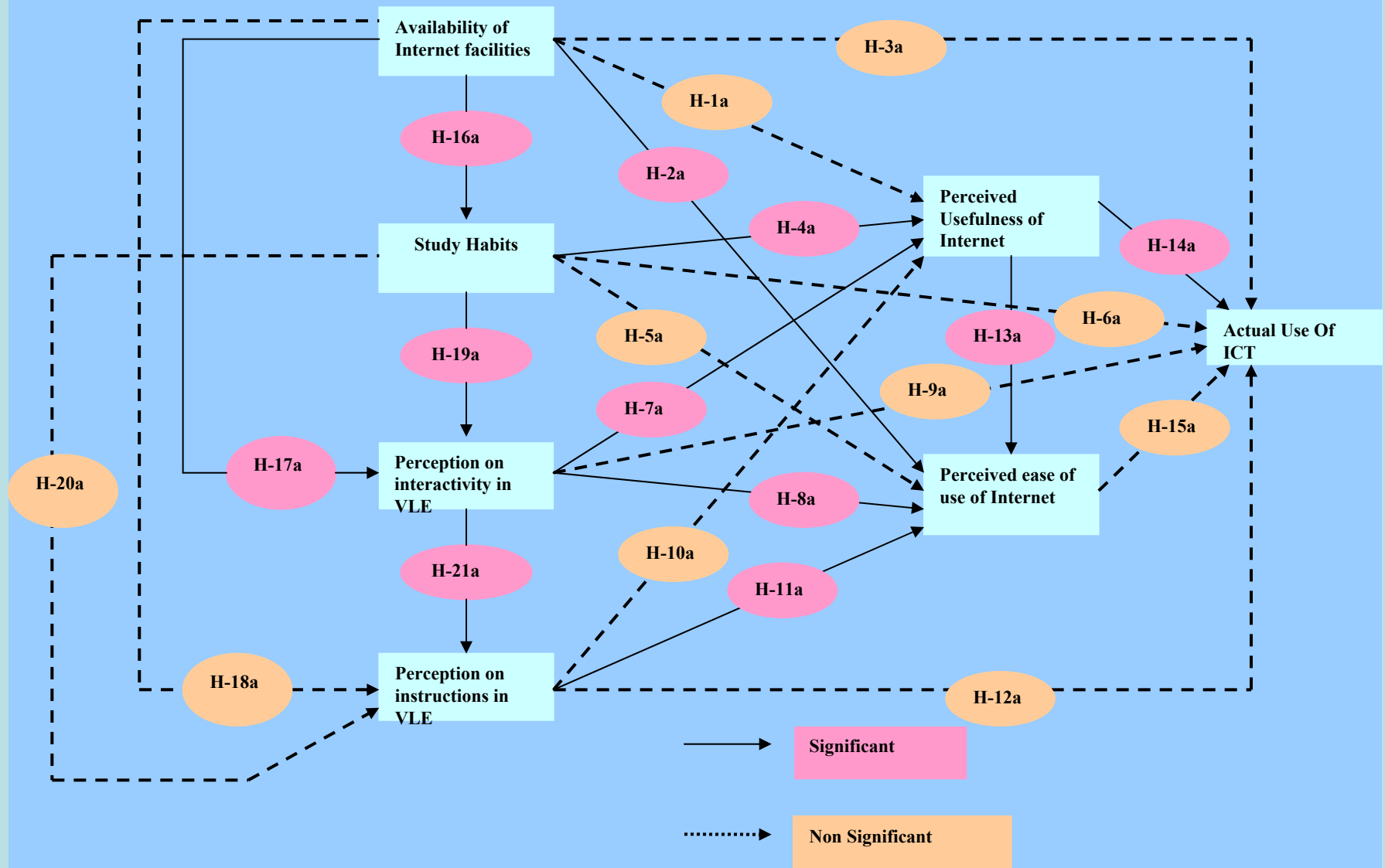


Overall Usage of ICTs for Learning



<i>Demographic Variables</i>		<i>Frequency</i>	<i>Perceived Usefulness</i>	<i>Perceived Ease of use</i>	<i>Actual use Of ICTs</i>
1.Gender	Male	191	0.541(n.s)	0.611(n.s)	0.01017*
	Female	128			
2.Age	>18 years	46	0.285 (n.s)	0.8382 (n.s)	0.04652*
	19-20 years	118			
	20-23 years	129			
3.Level of Study	Graduate	182	0.766 (n.s)	0.057*	0.1503 (n.s)
	Postgraduate	137			
4.Discipline of Study	Science	72	0.0029**	0.0590*	0.0000***
	Arts	66			
	Commerce	51			
	Medical	39			
	Paramedical	35			
	Engineering	56			
5.Income (per month)	>10,000	75	0.339 (n.s)	0.01*	0.00002**
	10,001-20,000	114			
	20,000,130,000	65			
	<Rs 30,000	65			
6.Years of Using internet	Not Used	40	0.0982 (n.s)	0.4028 (n.s)	0.0000**
	>1year	46			
	1-2years	63			
	2-3years	61			
	<3 years	109			
7. Usage of Internet	Yes	264	0.159 (n.s)	0.065 (n.s)	0.0000**
	No	55			

Regression Analysis of Research Model



IMPLICATIONS OF THE RESULTS

- Majority of students are using Internet for learning purpose and have a significant positive relationship with the usage of Internet and virtual learning Environment.
- Most of them are average users of computers and Internet, they use internet for entertainment and chatting.
- Most of the students have shown positive attitude towards the usage of Internet and the virtual learning environment, most of them are found to be comfortable with Interactivity and Instruction
- But it was found that Interactivity and Instruction proficiency has not led to the actual use of Virtual learning System.
- Students don't use internet since it is easy to use or it is easily accessible rather they use it if it is necessary and useful.
- Students prefer to use E-mail, chat, blogs often for their learning. Blogs are rated as most preferred virtual learning resources by students.
- Instructions if it is easy for the students to understand then only it is used by the students.
- For the policy makers, it is good news that students are having a positive attitude towards the usage of Internet for learning; they can go for blended format of teaching both online and offline.

Limitations of Research

- Usage measures were self- reported .
- Validity should be treated with caution.
- Common method bias.
- TAM is applicable where use of technology is voluntary