



Determinants of Learners' Intention to Continue Using the e-Learning Program of the Agricultural Training Institute (ATI)

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Research Objectives

e-Learning for agriculture and fisheries

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General

investigate the influence of the learners' attitude, the perceived satisfaction and perceived e-Learning effectiveness

Specific

1. Determine the socio-demographic profile of the learners of the ATI's e-Learning for agriculture and fishery program in the Philippines;
2. Assess their e-Learning experience;
3. Find out the learners' attitude towards the e-Learning program, their perceived satisfaction and perceptions of the effectiveness of the program;
4. Determine the relationship between the learners' attitude towards the program, the perceived satisfaction of the program and the perceived effectiveness of the program, and their intention to continue using the e-Learning program.
5. Identify the strengths and challenges of the e-Learning program.

Theoretical Framework

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Decomposed EDT
(Chiu C. M, Hsu
M. H. et al. 2004)

3-TUM
(Three-Tier Use
Model)
(Liaw 2007)

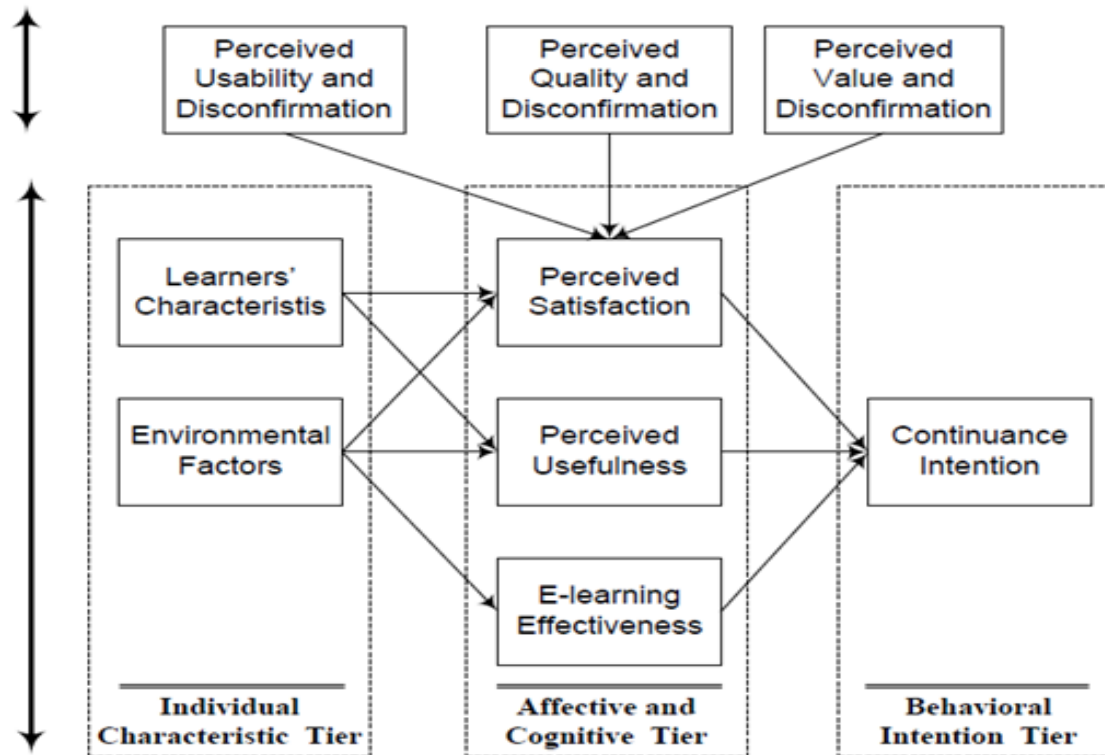


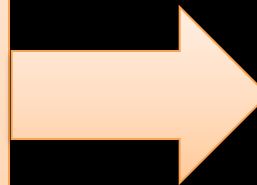
Figure 1. Theoretical Framework of the Study

Conceptual Framework



e-learners

- Attitude towards the ATI's e-learning program
- Perceived Effectiveness of the program
- Perceived Satisfaction of the program



**Intention to
continue using
ATI's e-Learning
Program for
Agriculture and
Fishery in the
Philippines**





Research Methods and Data Sources

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1. Instruments and data sheets

- Online questionnaire
- Printed questionnaire
- FGD transcriptions

2. Focus group discussion

- selected e-Learners
- Agricultural extension workers
- Students
- 16 ATI Regional Training Centers nationwide

3. ATI-Central Office data base

- List of enrollees and graduates covering 2009-2012 with complete contact details (email; phone numbers and house address)

960 respondents (both enrollees and graduates from 2009-2012)

The **e** SITUATION: ATI's e-Learning

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- Online certificate course
- Digital learning resources
- e-Extension coordinator as regional administrator
- Started 2007
- 10,000 registered users
- 6,000 graduates
- 33 online courses

- Crops
- Livestock and poultry
- Marine and fisheries
- Organic agriculture
- Social technologies

e-Learning for agriculture and fisheries



any place, any pace





e-Learning Office

www.e-extension.gov.ph

e-Learning

- Online, offline, blended
- Digital learning resources (technokits, agri-videos, etc.)

e-Farming

- Farm & business advisory services
- Technical advisory services for agriculture & fisheries technologies
- Technical assistance to farmer organizations

- Online
- Microfinance
- Agri-entrepreneurship

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ATI-RTC CITIZEN'S CHARTER

Socio-Demographics

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1. Sex

- **58.9% Females**

2. Status

- **66.1% Married**

3. Age

- **From 16 to 63 range; mean is 36 years**

4. Educational Attainment

- **56% College Graduates**
- **28.4% Post Graduate**
- **10.4% College Level**
- **4.8% High School**
- **.3% Vocational**

5. Respondents

- **67.9% Agricultural Extension Workers**
- **14.2% In-school youth**
- **17.9% others**
(agriculture advocate, farmer, government employee, self-employed; farmers, OSY, housewife, retirees, OFW, private employees)



e-Learning Experience

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Statement	Mean* (n=960)	Qualitative Description
Experience using the Internet	4.03	Experienced
Experience with word processing and/or spreadsheet (Microsoft Applications)	3.84	Experienced
Experience with typical software applications plus web development	3.12	Fairly Experienced
Experience with all of the above plus some programming	2.76	Fairly Experienced
Extensive programming experience	2.42	Fairly Experienced
Over-all mean	3.23	Fairly Experienced

Mean Rating:

1.0-1.4999 = 1 No Experience

1.5-2.4999 = 2 Less Experienced

2.5-3.4999 = 3 Fairly Experienced

3.5-4.4999 = 4 Experienced

4.5-5.0 = 5 Well Experienced



Mean Rating:

1.0-1.4999 = 1 Strongly Disagree

1.5-2.4999 = 2 Disagree

2.5-3.4999 = 3 Neutral

3.5-4.4999 = 4 Agree

4.5-5.0 = Strongly Agree



Learners' Attitude

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System Stability

Statement	Mean* (n=960)	Qualitative Description
The speed of system connection is good so there is no need to waste much time in waiting	3.83	Agree
The browsing of teaching/learning materials using the course lab won't cause computers to crash	3.81	Agree
There is no response delay on the system	3.58	Agree
As a whole, the system is stable	3.83	Agree
	3.76	Agree

Learners' Attitude

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Courselab Satisfaction

Statement	Mean* (n=960)	Qualitative Description
Menu and links using the course lab are clearly marked, which makes it easy and comfortable for the learner to browse	4.07	Agree
The layout and the color management of the course lab are friendly	4.23	Agree
The layout and the color arrangement of the course lab make it easy to use	4.20	Agree
The steps of the course lab setting are easy and convenient	4.15	Agree
Overall, the course lab's operating interface is user-friendly	4.20	Agree
	4.17	Agree

Learners' Attitude

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Multi-Media Instruction

Statement	Mean* (n=960)	Qualitative Description
I like to use voice media instruction	3.83	Agree
I like to use video media instruction	3.96	Agree
I like to use multimedia instruction	4.08	Agree
	3.96	Agree

Learners' Attitude

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e-Learning System Quality

Statement	Mean* (n=960)	Qualitative Description
I am <u>satisfied</u> with e-Learning functions	4.12	Agree
I am <u>satisfied</u> with the Internet speed	3.79	Agree
I am <u>satisfied</u> with e-Learning content	4.10	Agree
I am <u>satisfied</u> with e-Learning interaction	4.08	Agree
I am satisfied using e-Learning as a learning assisted tool	4.10	Agree
I am satisfied with e-Learning contents	4.07	Agree
I am satisfied with multimedia instruction	4.03	Agree
	4.04	Agree

Learners' Attitude

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Interactive learning activities

Statement	Mean* (n=960)	Qualitative Description
I would like to share my e-Learning experience	4.20	Agree
I believe e-Learning can assist in the teacher-learner interaction	4.26	Agree
I believe e-Learning can assist in the learner-learner interaction	4.25	Agree
	4.24	Agree

Perceived Satisfaction

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Self-efficacy

Statement	Mean* (n=960)	Qualitative Description
I am confident using the e-Learning program	4.02	Agree
I am confident operating the e-Learning functions	4.00	Agree
I am confident using online learning content	4.00	Agree
I am confident linking to buttons by clicking	4.06	Agree
	4.02	Agree

Perceived Satisfaction

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e-Learning effectiveness

Statement	Mean* (n=960)	Qualitative Description
I believe e-Learning can assist learning efficiency	4.19	Agree
I believe e-Learning can assist learning performance	4.15	Agree
I believe e-Learning can assist learning motivation	4.18	Agree
	4.17	Agree



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Intention to continue using



Statement	Mean* (n=960)	Qualitative Description
I intend to use the ATI e-Learning program in the future because course materials were placed online in a timely manner and can be accessed any time at any pace.	4.25	Agree
I intend to continue using the e-Learning program because instructions provided are sufficiently clear and easy to understand.	4.24	Agree
I intend to continue using the ATI e-Learning program because the course content is sufficient and related to the subject of my interest.	4.11	Agree
I intend to continue using e-learning program because I could easily contact the online support team anywhere and it can provide answers to our queries comprehensively.	4.02	Agree
I intend to continue using the ATI e-Learning program because I can access a wide array of free digital resources to enhance my knowledge as well as other relevant agricultural information.	4.07	Agree
	4.14	Agree







Strengths and Challenges



Extent of influence on participation

	Mean* (n=960)	Qualitative Description
I experience lack of pressure because of little interaction between me and the coordinators and co-participants as well.	3.49	Neutral
I experience difficulty in understanding the lessons because of limited instructions and information provided in the modules of the online courses.	2.59	Neutral
I experience lack of motivation because there are no deadlines for the requirements I have to submit.	2.76	Neutral
I experience that old age and less knowledge on ICT is a hindrance to e-Learning.	2.84	Neutral
	2.92	Neutral

Strengths and Challenges

e-Learning for agriculture and fisheries

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Extent of influence on implementation

Statement	Mean* (n=960)	Qualitative Description
It is costly to complete a course in ATI e-Learning component.	2.53	Neutral
Our LGUs are not yet equipped with computer and internet connectivity.	2.96	Neutral
Internet is not yet a priority in our LGU.	2.83	Neutral
Lack of knowledge on computer and internet is a hindrance to e-Learning.	3.33	Neutral
Virtual presence is hard for extension workers like us.	2.93	Neutral
The downloadable materials are difficult to understand.	2.41	Disagree
The downloaded materials are irrelevant to our work and function.	2.21	Disagree
<u>e-Learning</u> courses are irrelevant to our work and function.	2.18	Disagree
	2.67	Neutral

Conclusions



- 1. Most of the adult-learners are in the middle-age category and are college graduates, married and agricultural extension workers and generally have a fair experience with e-Learning.**
- 2. The ATI's e-Learning program is well-established, secured and stable. In its entirety, the respondents are satisfied with the course lab used by ATI.**
- 3. The respondents prefer to use a multi-media instruction program. The adult-learners have recognized that the e-Learning system quality of the program is important as well as the interactive learning activities.**

Conclusions



- 4. Operating the e-Learning system of ATI can boost self-efficacy/ confidence of extension workers. The e-Learning program is effective because it assists them in their learning efficiency, performance and motivation.**
- 5. The adult-learners intend to continue the use of the ATI's e-Learning program because they can access a wide array of free digital resources. Consistent with FGD results where learner's said that: *"I intend to continue with e-learning for it gave me satisfaction whenever I see my grades; the knowledge I gained, and the multimedia presentation is enjoyable,"* quoted by a student-learner. Moreover, an agricultural extension worker-learner said that: *"Agriculture is a very dynamic field. I need to update my know-how in my field."***



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Yummy Yam

Online Course on UBI PRODUCTION

Thank you for your interest and welcome to the course on Ubi Production. This course is developed and brought to you by ATI-RTC 7 based in Bohol, the ubi capital of the Philippines.

This course is ideal for beginners, no previous or special education is required. All you need to have is your interest on ubi.

The course covers the major management practices in ubi production. It is broadly divided into two modules. Each module is further subdivided into lessons dealing with the specific learnings and practices that you need. It has its own activities, exercises, and tests (scored and unscored). If you are from Bohol, a special farm visit to Cedar Farms shall be arranged as part of a module activity.

Course Objectives:

At the end of the course, you will be able to:

1. Identify the different cultural traditions emanating ubi, its varieties and characteristics;
2. Learn the easy to follow organic production technologies and storage; and
3. Determine the different control methods of pests and diseases.

So if you are ready to take the course, start your first module now! Goodluck and enjoy!

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- Provision of IEC Materials and e-Learning Courses
- Provision of Scholarship Programs (EHRDP & YAFP)
- Provision of Farm and Business Advisory Services
- Provision of Dormitory Services and Use of Center Facilities

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DAGHANG SALAMAT!

THANK YOU!