

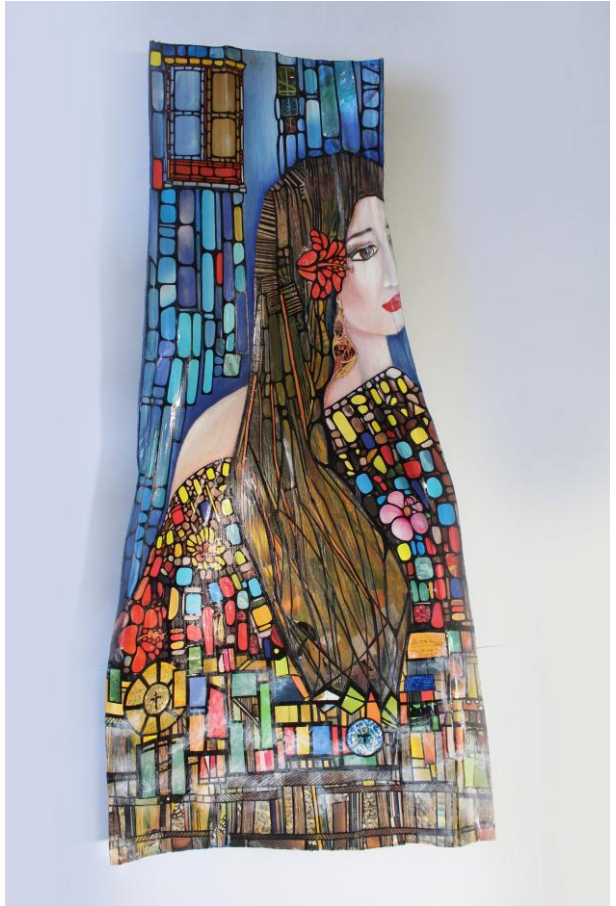
# opción

Revista de Antropología, Ciencias de la Comunicación y de la Información, Filosofía,  
Linguística y Semiótica, Problemas del Desarrollo, la Ciencia y la Tecnología

Año 34, 2018, Especial N°

# 16

Revista de Ciencias Humanas y Sociales  
ISSN 1012-1587/ ISSNe: 2477-9385  
Depósito Legal pp 198402ZU45



Universidad del Zulia  
Facultad Experimental de Ciencias  
Departamento de Ciencias Humanas  
Maracaibo - Venezuela

# Students' perception to increase students' engagement in learning project management

**Nor Syamaliah Ngah<sup>1</sup>**

<sup>1</sup> Faculty of Administrative Science and Policy Studies University Technology MARA, Campus Sere ban, 70300 Nigeria Sembilan, Malaysia.

[syamaliah@ns.uitm.edu.my](mailto:syamaliah@ns.uitm.edu.my)

**Thenmolli Vadeveloo<sup>2</sup>**

<sup>2</sup> Faculty of Administrative Science and Policy Studies University Technology MARA, Campus Sere ban, 70300 Nigeria Sembilan, Malaysia.

[thenm020@ns.uitm.edu.my](mailto:thenm020@ns.uitm.edu.my)

**Norazlin Abd Aziz<sup>3</sup>**

<sup>3</sup> Faculty of Administrative Science and Policy Studies University Technology MARA, Campus Sere ban, 70300 Nigeria Sembilan, Malaysia.

[norazlin525@ns.uitm.edu.my](mailto:norazlin525@ns.uitm.edu.my)

**Nasrudin Mohammed<sup>4</sup>**

<sup>4</sup> Faculty of Administrative Science and Policy Studies University Technology MARA, Shah Alma, 40450 Selangor, Malaysia.

[nasrudin@salam.uitm.edu.my](mailto:nasrudin@salam.uitm.edu.my)

## Abstract

This study explores the behavioural intention to use the new holistic technical module by looking at the factors of perceived ease of handling and recognising useful utilization of the module. A cross-sectional research is used by distributing a set of questionnaires to students at University Technology MARA. The results suggest that the lecturers should play their role to increase the students' perceptions towards the usefulness that will contribute to the implementation of the module and its success. In conclusion, educators must look at this factor whenever they want to innovate any form of support material in teaching and learning.

**Keywords:** behaviour, perceived, ease, usefulness, module.

# La percepción de los estudiantes para aumentar la participación de los estudiantes en la gestión de proyectos de aprendizaje

## Resumen

Este estudio explora la intención de comportamiento de usar el nuevo módulo técnico holístico al observar los factores de facilidad de manejo percibida y reconocer la utilización útil del módulo. Se utiliza una investigación transversal mediante la distribución de un conjunto de cuestionarios a los estudiantes de la Universidad de Tecnología de MARA. Los resultados sugieren que los profesores deben desempeñar su papel para aumentar las percepciones de los estudiantes hacia la utilidad que contribuirá a la implementación del módulo y su éxito. En conclusión, los educadores deben considerar este factor cuando quieran innovar cualquier forma de material de apoyo en la enseñanza y el aprendizaje.

**Palabras clave:** comportamiento, percepción, facilidad, utilidad, módulo.

## 1. INTRODUCTION

There are many materials for teaching and learning that have been implemented to increase the performance of the students, yet additional materials are still needed (Amoako, 2007). The problem is due to the shortening factor of product life cycles. Educators should be more creative and innovative to adapt to the changing environment. The role of lecturers should be as a guide for the realization of learning and not a person who only transfers knowledge to the students (Brooks, 1999). In designing any activities for teaching, Ling and Fraser (2014) suggest that the concept of

constructivism and situated learning have been applied on the learning style of the students. This idea is also comparable with Crisp (2014) that suggests that assessment activities should emphasize the requirements of the learners. Designing learner's centres in teaching methodology is essential to increase their participation in learning activities. Due to that, in ensuring the learning activities are productive, the educators must have a clear picture of the behaviours of the students towards the activities organized for them.

## **2. LITERATURE REVIEW**

Atasoy et al., (2011), suggest that a worksheet is a useful tool as a teaching material and it goes by the concept of constructivism theory. Atasoy et al. (2011) describe worksheets as an essential material that consists of necessary steps which can help the students to construct the knowledge and give a full commitment in class activities. The worksheets also indicate how they can manage and solve the problems in a better way. A study conducted by Vahdany & Gerivani (2016) on the usage of the learning materials found that it is necessary to provide the learning materials in enhancing student engagement. It was found that the learning materials can build the students' interest in their learning process. By using the supporting tools in teaching and learning, it can support the learning enhancement, student centeredness and lifelong learning (Haseeb & Azam, 2015; Wijayanto, H., & Sumarwan, 2016; Jayakumar, 2016). However, in the Faculty of Administrative and Policies Studies, the students are not provided with the tools to support the learning activities for project management purposes. The only references provided are books

that are prepared by international authors, and the contents are quite complicated for the beginner learners. Thus, the researcher has devised a comprehensive yet straightforward technical module that shows a step-by-step process in project management. The objective of the study is to determine the behaviour factors which are perceived easier to use and view the usefulness of the module from the students' perception in increasing their participation in learning.

The technical module aims to help the students to integrate into the concept and application of project management in the areas of:

- Activity-in-the-box
  
- Activity-on-the-arrow
  
- Work Breakdown Structure
  
- Responsibility Matrix

All of the four components will be taught thoroughly in the module. The purpose of the utilization of the module is not only meant for the students, but for the educators as well. This is to ensure the standardization in teaching and learning process to achieve the outcome of the course.

### **3. METHODOLOGY**

#### **3.1. Sample and data collection**

This study uses the survey as a method to collect the data. The questionnaires were disseminated to students who had enrolled in the project management course. The survey questions are displayed in Table 1. The questionnaire measured the perception of the students. The questions measured respondents' perceived ease of using the module, perceived usefulness of the module and attitude towards utilizing the module. Also, the students were asked about their intention to use the module as their main reference for learning project management. Lastly, an open-ended question was used to gather additional insight. The survey was administered through the project management classes' course to preserve the anonymity of the respondents. Of the 332 students enrolled in the four campuses, 322 completed and returned the questionnaires for a response rate of 97%.

Table 1: Survey Questions

1.0 Perceived ease
1.1 I found the holistic technical module easy to use.
1.2 This module is easy to understand.
1.3 Drawing the diagram by using this module is easy for me.
1.4 It would be easy for me to understand the technical part by using this module.
2.0 Perceived usefulness
2.1 I think by using this holistic technical module, my learning process will be more efficient.
2.2 I can perform better in my studies by using this module.
2.3 I can be more productive in learning project management course by using this module.

2.4 I think this module is handy.

3.0 Attitude

3.1 In general, I have a definite feeling toward using the holistic technical module.

3.2 I am confident that it is okay to use the module for my support material.

3.3 I don't like using this module.

4.0 Module usage behaviour

4.1 I think students should use the module as the primary reference

4.2 I will use this module every time I revise my Project Management subject

4.3 I will use this module frequently.

4.4 I will use this module more than the textbook for the technical concept.

Additional comment

Do you have any further comments for the continuous improvement purposes of the module

#### **4. FRAMEWORK**

Any support materials cannot be considered as successful if the implementation is not up to the expectation. This is a cross-sectional study that uses a survey method. This study adopted the Technology Acceptance Model (TAM) that was formulated by Davis (1985). Even though this module is not using any technology, to create this module itself can be considered as an innovation and the researcher believes it is suitable to use this theory to get the perception from the end users towards the implementation of this new module.

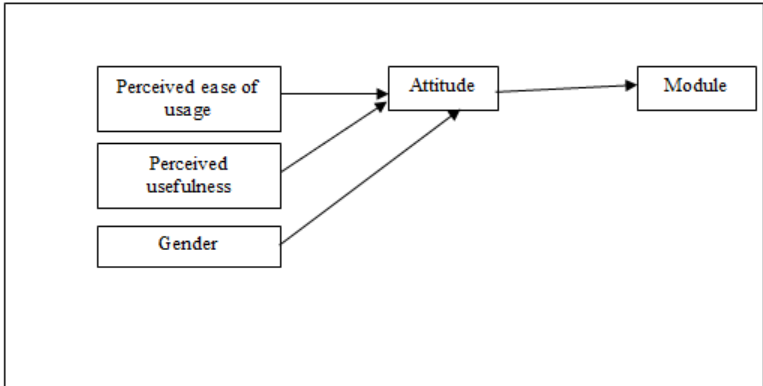
#### **4.1. Perceived ease usage (PE)**

According to Davis (1986); the perceptiveness of ease is the level to which people believe that the utilization of the tool or innovation will make the process more comfortable. The objective of learning also can be achieved in a shorter time. Usoro and Echeng (2015) also used this element in forecasting the level of acceptance of technology to increase participation in learning activities.

#### **4.2. Perceived usefulness (PU)**

Seen helpful is the belief that by using a module it will improve and progress the work or learning activity of an individual. Davis et al. (1989) in their study indicated that how students perceive the usefulness of support material will affect their acceptance. TAM theory also includes other factors which are attitude and intention or behaviour in using the innovation (Davis, 1985; Verma., Stoffova & Zoltán, 2018). The questionnaire for data collection was constructed by adopting the study by (Letchumanan & Muniandy, 2013).





### 4.3. Hypothesis development

The consistency and reliability of both items for the independent and dependent variables were examined by conducting a reliability test. The scale is reliable which 0.86 is for the Cronbach's Alpha of the reliability test. Many studies have concluded that perceived ease and perceived usefulness significantly impact attitudes of the end user that leads to the usage of any innovation (Hess et al., 2014; Detlor et al.; 2013; Davis, 1989). Revels et al., (2010) indicated that perceived usefulness is one of the essential elements of innovation usage. For this study, discern usefully is considered as the perception by the students towards using the holistic technical module which will make their learning process more manageable. Therefore, the hypothesis is:

Ho1 There is no relationship between perceived ease of usage and attitude.

Ho2 There is no relationship between perceived usefulness and attitude.

Ho3. Perceived ease of use will not influence perceived usefulness in using the module for learning.

Past studies focussing on technology and innovation confirmed that attitude towards using the change and usage behaviour is significantly correlated. Thus, the hypothesis is:

Ho4. There is no relationship between attitude and usage module behaviour for learning.

Ho5: There is no difference between male and female students' perception of module usage behaviour.

## 5. RESULTS AND DISCUSSION

The result of Pearson Correlation Matrix is shown in Table 2.

		Perceived ease	Perceived Usefulness	Attitude	Usage Behaviour
Perceived comfort	Pearson Correlation	1	.821(**)	.642(**)	.773
	Sig. (2-tailed)	.	.000	.006	.051
	N	322	322	322	322
Perceived Usefulness	Pearson Correlation	.821(**)	1	.680(**)	.536(**)
	Sig. (2-tailed)	.000	.	.000	.000

Attitude	N	322	322	322	322
	Pearson Correlation	.642(**)	.680(**)	1	.682(**)
	Sig. (2-tailed)	.006	.000	.	.000
Usage Behaviour	N	322	322	322	322
	Pearson Correlation	.773	.536(**)	.682(**)	1
	Sig. (2-tailed)	.051	.000	.000	.
	N	322	322	322	322

Table 2: The correlation between perceived ease and perceived usefulness and module usage

\*\* Correlation is significant at the 0.01 level (2-tailed).

The result shows that perceived ease and perceived usefulness are positive and correlated to the behaviour in using the module. Therefore, hypothesis H<sub>0</sub>1, H<sub>0</sub>2, H<sub>0</sub>3 H<sub>0</sub>4 is substantiated. The result explains that there is a correlation between the perception of the module and usage of the module. The analysis of t-test is shown in Table 3.

	Gender	N	Mean	Std. Deviation	t	Sig.
Module Usage	Male	221	4.24	.4578	1.060	.560
	Female	101	4.17	.45545	1.064	

Table 3: T-test for the differences between male and female students towards the usage of the module in learning Project Management course

Table 3 shows that the difference in the means of perceiving the module used for the male and female student is 4.24 and 4.17 with the standard deviation of both gender 0.45 is not significant ( $t = 1.06, p > 0.05$ ). Thus, the H<sub>05</sub> is not substantiated. This result shows that male and female students have the same positive perception towards usage of the module in learning project management course. The findings above indicate that perceived ease factor affects the attitude of using the module. It can be concluded that if the students view the module as easy to use, it can create positive attitudes in using the module. As can be seen in the result above, perceived usefulness gives a higher impact on approach in handling the module as compared to the factor that observes ease of using the module. Thus, the students prefer to use the module if they perceive the module is useful for them in learning particularly in a project management course. This result has supported the studies done by (Ngai et al., 2007; Davis, 1989). The results above show that perceived ease significantly affects the perceived usefulness of using the module. This is similar to previous studies by Lee (2013), Chang et al. (2012) that show a strong relationship between these two factors in using any innovation products. Thus, perceived ease plays an essential role in making the module to be recognised as useful in learning and to be the support learning materials in learning project management course. The result above also indicates that the attitude of the user will affect their behaviour in using the module. This finding supports the studies by (Chang et al., 2012; Stoel and Lee, 2003). It shows that, if the students are having a positive attitude towards the module, their usage behaviour will be higher. This result is not supported by the study by (Letchumanan & Muniandy, 2013).

## 6. CONCLUSION

The study reveals some vital information about any innovation in teaching to increase the success rate of the implementation of the change. Perceived ease to use and perceived usefulness are essential factors that emphasize positive attitudes towards the innovation. This study also finds that perceived usefulness is more critical as compared to perceived ease in ensuring students' willingness to adapt to the change. So, educators must look at this factor whenever they want to innovate any form of support material in teaching and learning. The educators should also play their role to help the students to feel at ease while using the module so that they can handle the usefulness of the module to make their learning process more manageable. Attitudes of the students also play an essential role in influencing the usage of the module. Additionally, this study could be regarded as the beginning of a line of investigations examining the factors of usage behaviour towards the utilization of the module to increase their engagement in learning activities. Is it suggested that this module should be used as part of the primary references in project management course syllabus? To answer this question, there is a need to study the impact of module usage on students' performance as a model reflection.

## REFERENCES

- AMOAKO, K. 2007. **Perceived usefulness, user involvement and behavioural intention: an empirical study of ERP implementation.** Computers in Human Behavior, Vol. 23, N° 3: 1232-1248. Netherlands.

- ATASOY, S., KUCUK, M., & AKDENIZ, A. 2011. **Remedying science student teachers' misconceptions of force and motion using worksheets based on constructivist learning theory.** *Energy Education Science and Technology Part B: Social and Educational Studies*, Vol. 3, N° 4: 519-534. USA.
- BROOKS, J. 1999. **In search of understanding: The case for constructivist classrooms.** ASCD. USA.
- CHANG, C., YAN, C., & TSENG, J. 2012. **Perceived convenience in an extended technology acceptance model: Mobile technology and English learning for college students.** *Australasian Journal of Educational Technology*, Vol. 28, N° 5. Australia.
- CRISP, G. 2014. **Assessment in next generation learning spaces. In The future of learning and teaching in next-generation learning spaces.** Emerald Group Publishing Limited. pp. 85-100. UK.
- DAVIS, F. 1985. **A technology acceptance model for empirically testing new end-user information systems: Theory and results.** Doctoral dissertation, Massachusetts Institute of Technology. USA.
- DAVIS, F. 1989. **Perceived usefulness, perceived ease of use, and user acceptance of information technology.** *MIS Quarterly*, pp. 319-340. USA.
- DETLOR, B., HUPFER, M., RUHI, U., & ZHAO, L. 2013. **Information quality and community municipal portal use.** *Government Information Quarterly*, Vol. 30, N° 1: 23-32. Netherlands.
- HASEEB, M., & AZAM, M. 2015. **Energy consumption, economic growth and CO2 emission nexus in Pakistan.** *Asian Journal of Applied Sciences*, 8(1), 27-36. USA
- HESS, T., MCNAB, A., & BASOGLU, K. 2014. **Reliability Generalization of Perceived Ease of Use, Perceived Usefulness, and Behavioral Intentions.** *Mis Quarterly*, Vol. 38, N° 1. USA.
- JAYAKUMAR, R. 2016. **Opinion of the University Teachers towards Educational Television Programmes.** *American Journal of Education and Learning*, Vol. 1, N°1: 45-52. USA
- LEE, S. 2013. **An integrated adoption model for e-books in a mobile environment: Evidence from South Korea.** *Telematics and Informatics*, Vol. 30, N° 2: 165-176. South Korea.

- LETCUMANAN, M., & MUNIANDY, B. 2013. **Migrating to e-book: a study on perceived usefulness and ease of use.** Library Hi Tech News, Vol. 30, N° 7: 10-16. UK.
- LING, P., & FRASER, K. 2014. **Pedagogies for next-generation learning spaces: Theory, context, action.** In **The future of learning and teaching in next-generation learning spaces.** Emerald Group Publishing Limited. pp. 65-84. UK.
- NGAI, E., POON, J., & CHAN, Y. 2007. **An empirical examination of the adoption of WebCT using TAM.** Computers & Education, Vol. 48, N° 2: 250-267. Netherlands.
- REVELS, J., TOJIB, D., & TSARENKO, Y. 2010. **Understanding consumer intention to use mobile services.** Australasian Marketing Journal (AMJ), Vol. 18, N° 2: 74-80. Australia.
- STOEL, L., & LEE, K. 2003. **Modelling the effect of experience on student acceptance of Web-based courseware.** Internet Research, Vol. 13, N° 5: 364-374. UK.
- USORO, A., & ECHENG, R. 2015. **Model of acceptance of Web 2.0 technologies for increased participation in learning activities: A case study of a Scottish university.** International Journal of Intelligent Computing and Cybernetics, Vol. 8, N° 3: 208-221. UK.
- VAHDANY, F., & GERIVANI, L. 2016. **An analysis of the English language needs of medical students and general practitioners: A case study of Guilan University of Medical Sciences.** International Journal of English Language and Literature Studies, Vol. 5, N° 2: 104-110. USA
- VENKATESH, V., MORRIS, M., DAVIS, G., & DAVIS, F. 2003. **User acceptance of information technology: Toward a unified view.** MIS quarterly, pp. 425-478. USA.
- VERMA, C., STOFFOVA, V., & ZOLTÁN, I. 2018. **Perception Difference of Indian Students towards Information and Communication Technology in Context of University Affiliation.** Asian Journal of Contemporary Education, Vol. 2, N°1: 36-42. USA
- WIJAYANTO, H., & SUMARWAN, U. 2016. **Analysis of the Factors Influencing Bogor Senior High School Student Choice in Choosing Bogor Agricultural University (Indonesia) For**

**Further Study.** Journal of Education and e-Learning Research,  
Vol. 3, N° 3: 87-97. USA





**UNIVERSIDAD  
DEL ZULIA**

---

## **opción**

Revista de Ciencias Humanas y Sociales

Año 34, Especial N° 16, 2018

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia.  
Maracaibo - Venezuela

[www.luz.edu.ve](http://www.luz.edu.ve)

[www.serbi.luz.edu.ve](http://www.serbi.luz.edu.ve)

[produccioncientifica.luz.edu.ve](http://produccioncientifica.luz.edu.ve)