

## **AWARENESS OF ARTIFICIAL INTELLIGENCE IN EDUCATION AMONG MANAGEMENT STUDENTS**

**Bhajneet kaur**

*Department of Management Studies,  
Rukmini Devi Institute of Advanced studies, India*

### **ABSTRACT**

**Objective** – The main aim of this research paper is to understand the student's awareness level about artificial intelligence (AI) on the basis of 3 basic demographical variables namely gender, specialization and number of hours used on internet for knowing the latest trends and techniques related to AI among MBA students of Delhi colleges.

**Research Design** – Data were collected from 222 respondents to know the awareness level of management students towards artificial intelligence using snowball sampling method. Survey questionnaire were distributed to the 350 respondents. Out of 350, only 222 usable responses were collected. An Outlier detection technique has been used to clean the data. Then homogeneity and normality has also been checked.

**Findings** – The result shows there is no significance difference towards awareness level of AI in education system among male and female students. But the significance differences found about awareness level of AI between various specializations. Also the significance difference has been found in terms of number of hours spent on internet to learn about current trends of AI in education system.

**Research limitations** – The current study limits to the MBA students of Delhi colleges to know about the awareness level of latest trends of AI in the education system. Only 3 demographical variables have been taken. In future more variables can be added to get the response from the students.

**Practical implications** – The findings will be very valuable for the universities and colleges to check the awareness level of the management students (MBA) towards AI in education system. Through this study various awareness and knowledge programs or lectures can be conducted for the MBA students about the latest trends as per their specializations so that students will be prepared to work with industries or organizations with new trends.

**Keywords:** Artificial intelligence, awareness, MBA students, specializations, Education system.

# 7th International Conference on Multidisciplinary Research

(IEI, Chandigarh) Institution of Engineers, India, Chandigarh



30<sup>th</sup> June 2019

[www.conferenceworld.in](http://www.conferenceworld.in)

ISBN : 978-93-87793-94-1

## 1. INTRODUCTION

During the 2014 EAAI conference, Todd Neller conducted an informal survey of the participants about which topics they teach in their AI courses as well as which topics they would like to teach. The survey suggested an apparent disparity between what is taught in many AI courses and what many AI colleagues would like to teach. Various researches are being conducted on Artificial Intelligence (AI) now a day. While AI may not ever be able to truly replace human grading, it's getting pretty close. It's now possible for teachers to automate grading for nearly all kinds of multiple choices and fill-in-the-blank testing and automated grading of student writing may not be far behind. Today, essay grading software is still in its infancy and not quite up to par, yet it can (and will) improve over the coming years, allowing teachers to focus more on in-class activities and student interface than grading. The Internet has become a central core to the educative environment experienced by learners, thus facilitating learning at any location and at any time. The information technology (IT) background or study's students are mostly aware about the AI related concept in education system but in this research the main focus has been drawn to the MBA students with three specialization only Marketing, Finance or Human Resources (HR).

## 2. OBJECTIVE OF STUDY AND HYPOTHESIS

### 2.1 MAIN OBJECTIVE

To study the relationship between different demographic variables with awareness level of MBA students about artificial intelligence in education system in Delhi.

### 2.2 SUB OBJECTIVES

2.2.1 To compare awareness about artificial intelligence (AI) in educational sector on the basis of gender.

2.2.2. To compare awareness about artificial intelligence (AI) in educational sector on the basis of various specialization.

2.2.3 To compare awareness about artificial intelligence (AI) in educational sector on the basis of number of hours used on the internet to get the awareness about the latest technologies related to AI in education.

### 2.3 RESEARCH HYPOTHESIS

2.3.1 H01: There is no significance difference between of Male and Female towards awareness level of artificial intelligence (AI) in education.

2.3.2 H02: There is no significance difference between various specializations towards awareness level of artificial intelligence (AI) in education sector.

- 2.3.3 H03: There is no significance difference between numbers of hours used on internet to know about the latest techniques of artificial intelligence (AI) in education sector.

### 3. RESEARCH METHODOLOGY

#### 3.1 UNIVERSE

The universe of the study consists of MBA graduates of Delhi colleges.

#### 3.2 RESEARCH SETTING

The proposed study is conducted to check the student's awareness level towards Artificial Intelligence (AI) in the field of education. With the help of the parametric tests the analysis has been done by using IBM SPSS version 21.

#### 3.3 SAMPLING DESIGN

For the study, a representative sample covering all male and female MBA students of different specializations by using **snowball sampling** method.

#### 3.4 RESEARCH TOOLS FOR DATA COLLECTION

For the data collection a survey questionnaire consisting 14 questions on the basis of 5 point scale has been used.

#### 3.5 SOURCES FOR DATA COLLECTION

To conduct the investigation for achieving the objectives of the study, data have been collected from both the primary and secondary sources.

### 4. DATA ANALYSIS & INTERPRETATION

As shown in Table 1, p-value or the significance value found .117 from t-test to prove the first null hypothesis (H01), which is greater than 0.05 therefore, the null hypothesis has been accepted. So the mean score of awareness level is not different for two different categories of gender i.e. male and female. Parametric test ANOVA has been used to test the null hypothesis-2 (H02) because there are more than two categories of specialization exists. The significance value through ANOVA has been found as .001 which is less than 0.05. So,

# 7th International Conference on Multidisciplinary Research

(IEI, Chandigarh) Institution of Engineers, India, Chandigarh



30<sup>th</sup> June 2019

www.conferenceworld.in

ISBN : 978-93-87793-94-1

null hypothesis (H02) has been rejected. Hence, there is a significance difference between the various specializations i.e. marketing, finance and HR of MBA students to awareness level of the artificial intelligence in education sector. Further, tukey method has been used to check the significance value of t-test between the different categories of the specialization. The following table has been mentioned for the significance values between the various groups of specialization.

**Table 1: Significance values through T-test and ANOVA**

| Hypothesis Number | Hypothesis Definition   | Significance Value (T-test/ ANOVA) |
|-------------------|---|------------------------------------|
| H01               | There is no significance difference between of Male and Female towards awareness level of artificial intelligence (AI) in education                                   | .117                               |
| H02               | There is no significance difference between various specializations towards awareness level of artificial intelligence (AI) in education sector                       | .001                               |
| H03               | There is no significance difference between numbers of hours used on internet to know about the latest techniques of artificial intelligence (AI) in education sector | .002                               |

**Table 2: Significance values for various categories of specialization**

| Specialization  | Specialization | Sig. |
|-----------------|----------------|------|
| MBA (Marketing) | Marketing      | .870 |
|                 | Finance        | .021 |
|                 | HR             | .896 |
| MBA (Finance)   | Marketing      | .002 |
|                 | Finance        | .860 |
|                 | HR             | .824 |
| MBA (HR)        | Marketing      | .011 |
|                 | Finance        | .002 |
|                 | HR             | .073 |

# 7th International Conference on Multidisciplinary Research

(IEI, Chandigarh) Institution of Engineers, India, Chandigarh



30<sup>th</sup> June 2019

[www.conferenceworld.in](http://www.conferenceworld.in)

ISBN : 978-93-87793-94-1

The third null hypothesis has been formed to fulfil the sub objective-3. Number of hours used on internet to search and know about the latest technologies and trends related to AI using the management education. The value of number of hours is described as less than or equal to 5 hours or more than 5 hours. There are two categories has been given in this variable so t-test has been used to prove the null hypothesis. The p-value or the significance value has been found as .002 after applying t-test. So, null hypothesis (H03) has been rejected. Hence, there is a significance difference between the two categories of number of hours used on internet to know about the AI and other machine learning techniques in the education system. This has been proved from the hypothesis that the students who are searching for longer period of time, they have more knowledge about the AI.

## 5. CONCLUSION

As per the conclusion drawn from the current study upon the awareness level towards Artificial Intelligence (AI) about education system among MBA students of Delhi colleges, different specialization has different level of awareness towards AI. In the teaching pedagogy, the awareness about the AI must be incorporated, so that maximum number of students must aware of these disruptions running in education system. This study is very limited to the one course only i.e. MBA students of Delhi colleges. The work can be enhanced further to include more courses and locations. Another limitation of the study is less number of demographical variables. There are 3 demographical variables are taken to check the awareness level of the students like gender, number of hours used and specialization. In future more parameters can be included in the further research. This research can be used further to design the pedagogy for management student to increase the awareness about artificial intelligence.

## References:

- [1] L. A. James, Evaluation of an Adaptive Learning Technology as a Predictor of Student Performance in Undergraduate Biology, (Master's thesis), Appalachian State University, North Carolina, USA, May 2012.
- [2] A. Ohle, N. McElvany, Teachers' diagnostic competences and their practical relevance. Special Issue Editorial, Journal for Educational Research Online, vol. 7, no. 2, 2015.
- [3] B. Bloom, The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring, Educ. Res., vol. 13, pp. 4–16, 1984.
- [4] T. Kidd, Online Education and Adult Learning. New York: Hershey, 2010.
- [5] M. Vandewaetere, P. Desmet, and G. Clarebout, The contribution of learner characteristics in the development of computer-based adaptive learning environments, Computers in Human Behavior, vol. 27, No. 1, pp. 118–130, 2011.

# 7th International Conference on Multidisciplinary Research

(IEI, Chandigarh) Institution of Engineers, India, Chandigarh



30<sup>th</sup> June 2019

www.conferenceworld.in

ISBN : 978-93-87793-94-1

- [6] C. Zhao, and L. Wan, A shortest learning path selection algorithm in e-learning, in Proc. 6th IEEE Int'l. Conf. on Advanced Learning Technologies (ICALT), 94–95, 2006.
- [7] I. E. Allen, and J. Seaman, Staying the Course: Online Education in the United States. Sloan-C, Needham, MA: Sloan Consortium, 2008.
- [8] Ambient Insight Research, US Self-Paced eLearning Market. Monroe, WA: Ambient Insight Research, 2009.
- [9] S. Adkins, The Worldwide Market for Self-paced eLearning Products and Services: 2011-2016 Forecast and Analysis, Ambient Insight Premium Report, 2013.
- [10] D. Ryan, E - learning Modules: DLR Associates Series, Author House, 2012
- [11] R.C. Clark and R.E. Mayer, E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning, 3rd ed., San Francisco, USA: John Wiley & Sons, 2011.
- [12] H. Beetham and R. Sharpe, Rethinking pedagogy for a digital age: Designing for 21st century learning, New York, NY: Routledge, 2013.
- [13] S. Selvakumarasamy and D. Dekson, "Architecture of Adaptive E-Learning Ecosystem, International Journal of Emerging Trends & Technology in Computer Science (IJETTCS), 2013.
- [14] B. Ciloglulil, and M. Inceoglu, User modeling for adaptive e-learning systems, Computational Science and Its Applications (ICCSA 2012), vol. 7335, pp. 5561, 2012.
- [15] F. Essalmi, L. J. B. Ayed, M. Jemni, Kinshuk, and S. Graf, A fully personalization strategy of Elearning scenarios, Computers in Human Behavior, vol. 26, no. 4, pp. 581–591, 2010.
- [16] Image from <http://language-teaching-tips.files.wordpress.com/2013/03/learning-delivery-continuum.jpg>, Retrieved February 8, 2016
- [17] V.J. Shute, and D. Zapata-Rivera, Adaptive educational systems, in P. Durlach (Ed.), Adaptive Technologies for Training and Education (pp. 7-27). New York: Cambridge University Press, 2012.
- [18] S. Oxman, and W. Wong, White paper: Adaptive Learning Systems, A white paper from DVX/ DeVry Education Group and Integrated Education Solutions, 2014.
- [19] I. Adaptive Learning, White paper based upon the Speak Up 2011 national findings, Leveraging Intelligent Adaptive Learning to Personalize Education, Intelligent Adaptive Learning: Speak Up Reports, 2012.
- [20] C. Martins, L. Faria, and E. Carrapatoso, An adaptive educational system for higher education, Proceedings of the 14th EUNIS 08 International Conference of European University Information Systems, Denmark, 2008.
- [21] S. Haggard, The maturing of the MOOC: Literature review of Massive Open Online Courses and other forms of Online Distance Learning (BIS Research Paper Number 130), Department for Business, Innovation and Skills, London, UK, Research Papers Research paper number 130, 2013.

# 7th International Conference on Multidisciplinary Research

(IEI, Chandigarh) Institution of Engineers, India, Chandigarh



30<sup>th</sup> June 2019

[www.conferenceworld.in](http://www.conferenceworld.in)

ISBN : 978-93-87793-94-1

- [22] R. Agrawal, T. Imielinski, and A. Swami, Mining Association Rules between Sets of Items in Large Databases, in: Proceedings Of The 1993 Acm Sigmod International Conference On Management Of Data, Washington DC (USA, 1993, pp. 207–216.
- [23] E. Garca, C. Romero, S. Ventura, and T. Calders, Drawbacks and solutions of applying association rule mining in learning management systems, 2007, pp. 15–25.
- [24] C. Romero, S. Ventura, M. Pechenizkiy, and R. S. J. d Baker, Handbook of Educational Data Mining. CRC Press, 2010 [41] B. K. Baradwaj and S. Pal, Mining Educational Data to Analyze Students' Performance, ArXiv12013417 Cs, Jan. 2012.