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Factors Influencing Usage of Internet for Academic Purposes Using Technology Acceptance Model

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ABSTRACT

The purpose of this study was to examine the factors influencing the usage of the internet by the university students for academic purposes. This study adopted Technology acceptance model (TAM) as a research framework. The study tests the research framework using structural equation modeling. Three hundred and seventy-eight students from a private Universites in India participated in this study. The findings of this study suggest that the attitude and perceived usefulness of theInternet significantly influence the behavioral intention of the students on using the internet for the academic purposes. The study revealed that the perceived usefulness of the Internet is significantly influenced bythe perceived ease of using the Internet. Findings also demonstrate satisfactory model fit between the model and observed data. The results of this study will be useful for the university authority to enhance the internet sources and services within the campus for its effective and efficient use for academic purposes by the students.

Keywords: TAM, internet usage, academic purpose, sructural equation modeling

1. INTRODUCTION

The Internet has shaped and changed the way people live, both at the personal and expert levels, in the last few decades. As a result,the use of internet has expanded itself into education. The Internet has influenced the way people learn, especially in higher educational institutes. This provides ready accessibility to data. Therefore, it is necessary for academicians to stay well-informed with the current developments so that they do not lag behind in creating competitive advantage. As per the report published by Internet and Mobile Association of India[1], (32%) of the users are college students. Among the female Internet users, the highest growth has been among the non-working women followed by school going girls (36%) and college going girls (26%). It is increasing significantly because of its easy and quick accessibility to information. Besides social connection and entertainment, the internet provides academic and scientific information also. Internet use has the potential to enhance the quality of education[2]. According to Dryli & Kinnaman as cited by Muniandy[3] internet permits students to find information from as well as it allows users to think analytically and ingeniously to use co-operative, collective endeavors to solve problems. The Internet is an integral part of student's academic life, and it is essential to understand the factors which influence their behavioral intention in using the internet in an educational set up. The focus of this study is to examine the factors affecting the actual usage of internet by university students for their academic purpose. For this purpose, Technology Acceptance Model hereafter called as TAM[4], is adopted as a research framework. TAM is one of the renowned models associated with technology acceptance. It studies the acceptance of technology by an individual considering both perceived ease of use and usefulness of the technology. TAM suggests that when users are provided with new technology, many factors define their decision to use that technology. This model aims at investigating how individual perceptions affect intentions to use information technology as well as its actual usage.

Review of literature on internet usage shows that there is a dearth of research on the academic usage of internet by university students based on TAM though there exist enough studies on internet usage per se[2-3,5-17]. Earlier research studies conducted in the area of internet usage for academic purposes focused on the usage of digital library resources, e-resources among the faculties, students and the research scholars. In this study, the researchers have made an attempt to use TAM and study the how students generally use the internet resources for enhancing their academic skills. Students belonging to different discipline like medicine, engineering, management, hospitality, paramedical, dental commerce, and management were included as part of this study. The sample comprises of students from various constituent institutes and colleges of the university.

2. LITERATURE REVIEW

The Internet is perceived as one of the factors that determine students' success in academic life. Prior research on internet usage shows that a significant number of

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respondents of representative studies use the internet for a variety of reasons such as knowledge enhancement, education related information, solving their queries, and improving their academic performance[13]. The study conducted in a Malaysian Public University by Siraj[17] infers that students use the internet for more than 6 hours per week are observed to have a higher CGPA (p=0.003). The internet is also favored for obtaining information (48.8%) because of its easy accessibility and current information[12]. The survey, conducted by Sarita[15] reveals that though the respondent uses internet only for e-mail, 85.71% study subjects stated that Google is the favorite search engine for retrieving the information. Research conducted by Aggarwal[18] showed that 78.57% using the internet daily, 76.79% of respondents' access materials that are related to academics. Google is found to be the universal search engine.The survey, conducted by Limaye & Fotwenge[8] showed that a significant number of respondents of a representative survey spend more than 2 hours in a day in surfing on the internet. The study conducted by Goyal; Purohit & Bhaga[10] in exhibits that internet usage is the predictor of the students' performance.

The research undertaken in 2015 by Deniz & Geyik[19] reveals that the time spent on the internet is not a waste of time as it was perceived to be productive. The study conducted to examine the rewards and drawbacks of internet use and its relationship to the mental health of the university students shows that there are more rewards of internet use in comparison with its drawbacks[20]. Surendra Babu[21], *et al.*, in their study titled Use of internet Resources in the S.V. University Digital Library identified that the usage of internet resources is more among the students from science branches, and the usage is less among the students belonging to humanities and social science branches. Baikady & Mudhol[22] in their study found that the faculty and students prefer web-based resources to traditional library. Loan[23] through his study identified that urban students use internet for information seeking and rural students use it for acquiring knowledge. Bhat & Mudhol[24] observed that both faculty members and students have a positive attitude towards the usage of e-resources for their studies and research.

The literature review revealed that there is a dearth of studies especially focussing on the students behaviour of internet usage for enhancing their academic capabilities using TAM model, in a University consisting of students from diverse disciplines. Hence the need for the study.

3. RESEARCH MODEL AND HYPOTHESES

3.1 Technology Acceptance Model (TAM)

TAM is considered as an extension of TRA (Theory of Reasoned Action)[25]. According to TAM, the actual use of technology is influenced directly or indirectly by the users' perceived usefulness of technology, perceived ease of use, attitude towards the technology and behavioral intention to use the technology[26]. TAM suggests that two particular views, perceived usefulness and perceived ease of use are of prime importance that controls technology acceptance behavior. Perceived usefulness (PU) is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance."[26]. Perceived ease of use (PEOU) refers 'the degree to which a person believes that using a particular system would be free of effort[26]. TAM also states that the perceived usefulness (PU) is directly influenced by perceived ease of use (PEOU), when the user discovers technology as 'easy to use,' they perceive the technology as 'useful'. TAM proposes relationships of these central constructs with other three constructs namely 'attitude towards the technology' (ATT), 'behavioral intention to use the technology (BIT)' and 'actual use of technology (AU).' ATT is defined as 'an individual's positive or negative feeling about the performing the target behavior'[27]. BI is defined as 'the degree to which a person has formulated conscious plans to perform or not to perform some specified future behavior'[28]. TAM claims that the constructs of PU and ATT directly influence the constructs of BI. Similarly, PU of technology directly impacts the BI. TAM also suggests that behavioral intention outlines the actual use of technology (AU).

The basic version of the TAM is adopted as a research framework for this study Fig. 1.

H1. The perceived ease of using the internet has a direct influence on Perceived usefulness for academic purpose.

H2. Perceived usefulness has the direct influence on attitude to use the internet for academic purposes.

H3. Perceived ease of using the internet has a direct influence on attitude to use the internet for academic purpose.

H4. Perceived usefulness of the internet has a direct influence on the behavioral intention of the students in using the internet for academic purposes.

H5. Students' attitude has a direct influence on behavioral intention in using the internet for academic purpose.

H6. Students' behavioral intention has a direct influence on actual usage of internet for academic purposes.

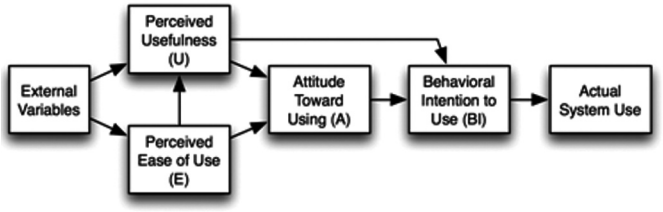

Figure 1. Research model based on original TAM (David, Bagozzi, & Warshaw, 1989).

4. RESEARCH METHODOLOGY

This study is quantitatively focused on to examining the usage of internet by university students for the academic purposes using TAM. The sample includes students undergoing both undergraduate and postgraduate studies in a private university in India. The study sample comprises students from technical, management and health sciences discipline. After obtaining the administrative permission from the Heads of Institutions, the survey instrument was distributed to the students in classrooms and libraries. The total number of questionnaires distributed were 425, out of which researchers received 393 resulting 93% of response rate. 15 questionnaires were not usable because of incomplete data.

4.1 Survey Instrument

The survey instrument consists of two distinct parts. The first part included subject information and consent letter and the second part included demographic information and questions related to actual usage of the internet by the students for their academic purposes. Three subject experts duly ascertained the face validity and content validity of the survey instrument. The final questionnaire composed of 28 items that represented five constructs perceived usefulness (PU) perceived ease of using (PEOU), Attitude towards using the internet (ATI) behavioral intention towards the internet (BI), and actual usage of the internet (AU) were adapted from earlier studies[29-33]. The items were rephrased to make relevant to the context of this study. All the five construct were measured using a 5 point Likert scale. PU and Au were measured from 1 being 'least useful' to 5 being 'highly useful.' PEOU was measured from 1 being 'very ease' and 5 being 'very difficult.' ATI and BI were measured from 1 being 'strongly agree,' and 5 being 'strongly disagree.'

5. ANALYSIS AND INTERPRETATION

5.1 Sample Characteristics

378 students of a private university from India participated in this study. The participating colleges and number of students from each discipline are as follows: Health and Allied Health Sciences (128), Technical (195) and Management (55). There were 268 male and 110 female students participated in this study. The average age of the respondent was 21.77% were undergraduates, and 23% were postgraduates.

5.2 Analysis of Measurement Model

The confirmatory factor analysis was used to verify the factor structure of the measurement instrument. All 28 items were significantly loaded onto the respective constructs. The loading fell above 0.7 except for PEOU1 (0.611) which was removed for further analysis in the measurement model (Table 1). The bivariate relationships showed that all the constructs were significantly correlated with each other at the level 0.01. The correlation among the latent constructs ranged from 0.52 to 0.77 at the 0.01 level (Table 2). The model fit was also evaluated on the basis of multiple indices. The ratio of chi-square to degrees of freedom (χ^2/df) was 2.4[34]. The ratio of Chi-square was well within the recommended threshold value of 5 as recommended[34]. The Comparative Fit Index (CFI), Incremental Fit Index (IFI), Tucker-Lewis index (TLI) was greater than 0.9 (CFI=0.918, IFI=0.919, TLI=0.909) as recommended by Bentler and Bonett[35]. The root mean square error of approximation (RMSEA) was 0.062, which was less than the suggested threshold level of 0.08 as suggested by Browne & Cudeck[36]. These results offer evidence that the data collected supports the model. The SRMR was 0.048 which was lower than the suggested value of 0.05[37,38]. The measurement model was further tested for assessing construct validity, convergent validity, and discriminant validity. Cronbach's

Table 1. Constructs reliability of measurement model

Co-structs	Items	Fator load-ings	Mean	SD	Cron-bach's Alpha	CR	AVE
PU	PU7	0.68	4.17	0.67	0.88	0.88	0.52
	PU6	0.73					
	PU5	0.75					
	PU4	0.72					
	PU3	0.74					
	PU2	0.73					
	PU1	0.70					
PEOU	PEOU7	0.69	4.30	0.71	0.87	0.87	0.53
	PEOU6	0.72					
	PEOU5	0.77					
	PEOU4	0.77					
	PEOU3	0.73					
	PEOU2	0.65					
ATI	ATI3	0.76	4.00	0.83	0.85	0.85	0.66
	AT2	0.87					
	ATI1	0.81					
BI	BI5	0.79	4.10	0.73	0.90	0.90	0.65
	BI4	0.86					
	BI3	0.86					
	BI2	0.78					
	BI1	0.72					
AU	AU6	0.71	4.29	0.64	0.85	0.87	0.52
	AU5	0.78					
	AU4	0.71					
	AU3	0.66					
	AU2	0.69					
	AU1	0.66					

*Note: *All items were measured on a 5 point Likert scale*

Table 2. Bivariate correlations among constructs

	PU	PEOU	ATI	BI	AU
PU	1				
PEOU	0.66**	1			
ATI	0.70**	0.60**	1		
BI	0.66**	0.52**	0.77**	1	
AU	0.66**	0.54**	0.65**	0.71**	1

*Note: **correlation is significant at the 0.001 level (2 tailed).*

alpha was calculated to assess the reliability of each construct. According to Hair[39], *et al*. Cronbach's alpha score of at least 0.70 is considered as acceptable for internal consistency. The reliability value of each factor is shown in Table 1. The construct validity was inspected by examining the convergent validity and discriminant validity. Convergent validity was assessed by the score of Composite Reliability (CR) and Average Variance Extracted (AVE)[40]. The value of CR should be at least 0.7[41]. The results confirmed the reliability of the scales. The constructs of the proposed research model also show theacceptable convergent validity and discriminant validity (Table 3). According to Hair[42] AVE estimates should be 0.5 or greater so as to suggest the adequate convergent validity. Table 1 shows that the AVE are all above the benchmark of 0.5, which demonstrates that there exists convergent validity among the constructs measured. To test discriminant validity, it is suggested that the AVE per construct should be higher than the correlations between any two different constructs[40]. AVE matrices can be seen in Table 3, with the AVE on the diagonal and squared correlations among constructs on the off-diagonal. The results specify that the elements in the principal diagonal were greater than the off-diagonal elements confirming the presence of discriminant validity.

To test the hypothesis, a structural model (Fig. 2) was built. The model indices for the structural model fit are as follows: CMIN/DF =2.436, RMSEA=0.062, SRMR=0.0597, CFI=0.921, IFI=0.921, TLI=0.912. The result indicated satisfactory fit between the model and observed data. Fig. 2 shows the results of the structural model. The test offers the standardised path coefficients between model constructs and also their statistical significance. The test also produces the squared multiple correlations (R2), which indicates the variance of the dependent constructs.

Table 3. Average variance extracted (AVE) matrix

	PU	PEOU	ATI	BI	AU
PU	0.52				
PEOU	0.43	0.53			
ATI	0.49	0.43	0.66		
BI	0.44	0.43	0.60	0.65	
AU	0.44	0.43	0.43	0.51	0.52

Note: Diagonal elements AVE for each factor. Off-diagonal are the squared correlations among factors.

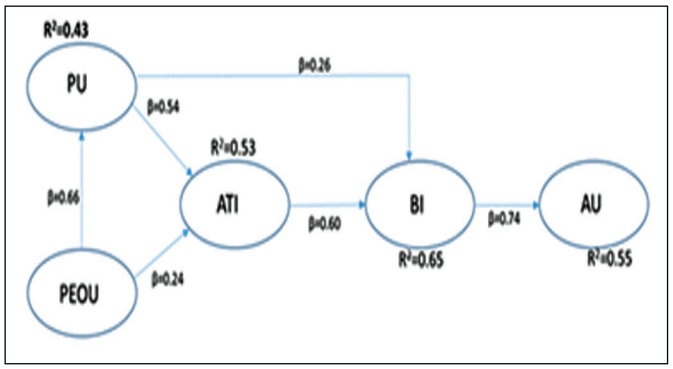

Figure 2. Structural equation model.

Perceived usefulness of the internet for academic activity was predicted by perceived ease of use (β= 0.66, p< 0.001), resulting in R2 of 0.43, which means PEOU accounted for a 43% variance in PU. Therefore, H1 is supported.

Attitude towards using the Internet for the academic purpose was predicted both by PU (β=0.54, p<0.001) and PEOU (β=0.24, p<0.001) resulting in R2 of 0.53, which means PU and PEOU jointly accounted for 53% of the variance in ATI. Therefore, H2 and H3 is supported.

Behavioral intention of students using the Internet for their academic purposes was predicted by their perceived usefulness of the Internet (β=0.26, p<0.001) and student's attitude towards the internet (β=0.60, p<0.001). The resulting R2 of 0.65, indicates that the perceived usefulness of the internet and students' attitude together accounted for 65% of the variance in Behavioral Intention. Therefore, H4 and H5 are supported.

The actual use of the Internet by the students for the academic purpose was predicted by their behavioral intention (β=0.74, p<0.001) resulting in R2 of 0.55, which means the behavioral intention of students in using the internet was accounted for 55% of the variance in actual usage of internet for the academic purposes.

6. DISCUSSIONS

The study examines the factors that influence students' actual usage of internet for their academic purposes and the causal relationships amongst the constructs utilising the proposed research framework based on original TAM. The study results supported the proposed model significantly. The results of this study uncover that perceived usefulness and attitude towards the internet are the significant factors in determining the students' behavioral intention in using the internet for academic purposes. These two constructs together explained 65% of the variance of behavioral intention. A similar study conducted by Bidin[9] on internet usage for the academic purpose also concludes that attitude variable significantly explains variance in intention. The study of online learning illustrates that the students' perception of ease of use, usefulness, attitudes towards online learning, and the social impact of students' referent group are identified as substantial factors of thestudents' intention to practice online learning[41]. The study directed on students'

outlook on learning management systems also discloses that there is a significant relationship between attitude toward using technology and behavioral intention to use technology. Also, there is a significant relationship amongst actual technology use and behavioral intention to use technology[33]. A recent study conducted by Sharma & Chandel[11] found that there is positive relationship amid attitude and behavioral intention in the direction of learning through websites.

The results of this study also show that behavioral intention of students is a key aspect of using the internet for their academic purposes. It clarifies 55% of the variance of actual usage of internet. This finding is in accordance with the study conducted by Bidin[9], *et al.*, which exhibits that attitude and perceived usefulness significantly impact the intention to use the internet for academic purposes at $p < .01$. Findings of this study also reveal that attitude towards using the Internet is significantly predicted by both perceived usefulness and perceived ease of using the Internet. It represented for 53% of the variance in the students' attitude towards the internet. This is in line with the findings of the earlier study conducted by Fathema; Shannon & Ross[30]. The study also indicates that perceived ease of using the Internet is significantly determines the perceived usefulness of the internet. It explained 43% of the variance in perceived usefulness.

7. CONCLUSIONS

The findings of this study are in agreement with the original TAM in predicting the actual usage of the internet for academic purposes by students in a university environment. The results reveal that the attitude and perceived usefulness of the internet significantly influence the behavioral intention of students in using the internet for their academic purposes. Actual usage of internet is significantly predicted by the behavioral intention of students. The students' attitude towards the internet is significantly predicted by perceived ease of and perceived usefulness of internet. Based on the findings of this study, it can be concluded that the use of the Internet by the students is determined by the four constructs as proposed in TAM. The findings of this study also suggest that the existing framework of TAM applies to understand the actual usage of the internet by the students for academic purposes.

REFERENCES

1. IAMAI, Internet and Mobile Association of India, 17 November, 2015. http://www.iamai.in/media/details/4486 (accessed on 29 July 2016).
2. Ciglaric, M. & Vidmar, T. The use of internet technologies for teaching purposes. *European J. Engin. Edu.*, 1998, **23**(4), 497-503.
3. Muniandy, B. Academic use of internet among undergraduate students: A preliminary case study in a Malaysian University. *Inter. J. Cyber Soci. Educ.*, 2010, **3**(2), 171-78.
4. Venkatesh, V. & Davis, F.D. A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 2000, **46**(20), 186-204.
5. Anadarajan, M.; Simmers, C.A. & Igbaria, M. An exploratory investigation of the antecedents and impact of internet usage: An individual perspective. *Behav. Info. Tech.*, 1998, **19**(1), 22-30.
6. Kubey, R.W.; Lavin, M.J. & Barrows, J.R. Internet use and collegiate academic performance, *J. Commu.*, 2001, **51**(2), 366-82.
7. Lal, P.; Malhotra, R.; Ahuja, C. & Ingle, G.K. Internet usage among medical students and residents of medical college of North India, *Indian J. Comm. Medi.*, 2006, **31**(4), 293-94.
8. Limaye, R. & Fotwengel, G. Use of internet among undergraduate students from Mumbai, India. *IJECT*, 2015, **6**(2), 26-28.
9. Bidin, Z.; Shamsudin, F.M.; Sharif, Z.; Mohd, F. & Asraf, M. H. Factors influencing students' intention to use the internet for academic purposes. *In* Conference on Interdisciplinary Business Research, June 2011. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1867902. (accessed on 28 August 2016).
10. Goyal, E.; Purohit, S. & Bhaga, M. Study of satisfaction and usability of the Internet on student's performance, *Inter. J. Edu. Devel. Using Info. Communi. Tech.*, 2011, **7**(1), 110-19.
11. Sharma, S.K. & Chandel, J.K. Technology acceptance model for the use of learning through websites among students of Oman, *Inter. Arab J. E-tech.*, 2013, **3**(1), 44-49.
12. Jali, P.K.; Singh S.; Babaji, P.; Chaurasia, V.R.; Somasundaram, P.; & Lau, H. Knowledge and attitude about computer and internet usage among students in Western Rajasthan, India. *J. Inter. Soc. Pre. Comm. Denti.,* 2014, **4**(1), 29-34, .
13. Borgohain, I. & Jaya, S. Internet usage and academic performance of rural and urban adolescents in Coimbatore District. *Indian J. Res.*, 2015, **4**(9), 140-42.
14. Jane, A.; Beetseh, K.; Ogban, O.O. & Umogbai, M.E. The use of internet services by postgraduate students for research in Francis Idachaba Library, University of Agriculture Makurdi. *IOSR J. Res. Method Edu.*, 2015, **5**(1), 15-23.
15. Sarita, A. Internet and its use in Engineering colleges of Udaipur, Rajasthan, India: A case study. *Res. J. Lib. Sci.*, 2015, **3**(3), 8-12.
16. Sridevi, S. & Indrani, T. A Study on the use of internet usage among B.Ed. students of KSR college of education–Tiruchengode. *Inter. J. Adva. Res. Edu. Tech.,* 2015, **2**(4), 23-27.
17. Siraj, H.H.; Salam, A.; Hasan, N.A.; Jin, T.H; Roslan R.B. & Othman, M.N.B. Internet usage and academic performance: A study in a Malaysian Public University. *Inter. Medical J.*, 2015, **22**(2), 83-86.

18. Aggarwal, S.S.; Ambalkar, D.D.; Kale, K.M.; Aswar N.R. & Bhatkule, P.R. Pattern of internet use among medical students: A cross-sectional study, *Asian J. Sci. Tech.,* 2015, **6**(4), 1285-88.
19. Deniz M.H. & Geyik, S.K. An empirical research on general internet usage patterns of undergraduate students. *Procedia-Social Behav. Sci.*, 2015, 195, 895-904.
20. Rayan, A.; Dadoul, A.M.; Jabareen, H.; Sulieman, Z.; Alzayyat, A. & Baker, O. Internet use among university students in South West Bank: Prevalence, advantages and disadvantages, and association with psychological health. *Inter. J. Mental Health Addi.*, 2016, 1-12.
21. Surendra Babu, K., Sarada & Ramaiah, C.K., Use of internet resources in the S.V. university digital library, *DESIDOC J. Lib. Info. Tech.*, 2010, **30**(1), 26-31.
22. Baikady, Mahabaleshwara Rao & Mahesh, V.M.Web as a learning resource at the medical college libraries in coastal Karnataka: Perception of faculty and students, *DESIDOC J. Lib. Info. Tech.* 2011, **31**(2), 121-35.
23. Loan, Fayaz Ahmad. Internet use by rural and urban college student, *DESIDOC J. Lib. Info. Tech.,* 2011, **31**(6), 431-36.
24. Iqbal Bhat & Mahesh, V.M., Use of E-resources by faculty members and students of Sher-E-Kashmir institute of medical science (SKIMS). *DESIDOC J. Lib. Info. Tech.,* 2014, **34**(1) 28-34.
25. Ajzen I. & Fishbein, M. Understanding attitudes and predicting social behavior, Prentice Hall, New Jersey, 1980.
26. Davis, F.D. Perceived usefulness, perceived ease of use and user. acceptance of information technology, *MIS Quarterly*, 1989, **13**(3), 319-40.
27. Fishbein M. & Ajzen, I. Belief, attitude, intention and behavior: An introduction to theory and research, Reading: Addison-Wesley, MA, 1975.
28. Warshaw P.R. & David, F.D. Disentangling Behavioral intention and behavioral expectation. *J. Expe. Social Psy.*, 1985, **21**(3), 213-18.
29. Park, S.Y. An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning, *Edu. Tech. Soci.* 2009, **12**(3), 150-62.
30. Fathema, N.; Shannon D. & Ross, M. Expanding the technology acceptance model (TAM) to examine faculty use of learning management systems (LMSs) in higher education institutions, *MERLOT J. Online Lear. Teac*. 2015, **11**(2), 210-32, .
31. Hsiao C.-Y., Teng K.-Y. & Lin, C. Exploring college students' intention to adopt e-textbooks: A modified technology acceptance model, *LIBRI*, 2015, **65**(2), 2.
32. Kolog, E.A.; Vanhalakka-Ruoho, M.; Suhonen J. & Anohah, E. Using unified theory of acceptance and use of technology model to predict students' behavioral intention to adopt and use of E-counseling in Ghana, *Int. J. Modern Edu. Compu. Sci.* 2015, **11**, 1-11.
33. Siang J.J. & Santoso, H.B. Student's perspectives of learning management system: An empirical evidence of technology acceptance model in emerging countries, *Researchers World*, 2015, **6**(2), 1-14.
34. Wheaton, B.; Muthen, B.; Alwyn D.F. & Summers, G.F. Assessing reliability and stability in panel models, *Sociological Methodology*, 1977, **8**, 84-136.
35. Bentler P.M. & Bonett, D.G. Significance tests, and goodness-of-fit in analysis of covariance structures, *Psychological Bulletin*, 1980, **88**(3), 588-606.
36. Browne M.W. & Cudeck, R. Alternative ways of assessing model fit, in testing structural equation models. Sage Publications, Newbury Park, CA, 1993, 136-62.
37. Byrne, B.M. Structural Equation Modeling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, applications and Mahwah, Lawrence Erlbaum Associates, New Jersey, 1998.
38. Diamantopoulos A. & Siguaw, J.A. Introducing LISREL, Sage Publications, London, 2000.
39. Hair, J.F.; Anderson, R.E.; Tatham R.L. & Black, W.C. Multivariate data analysis: With readings, Englewood, New Jersey, 1995.
40. Fornell C. & Larker, D.F. Evaluating structural equation models with unobservable variables and measurement error, *J. Mark. Res.*, 1981, **18**(1), 39-50.
41. Nunnally J.C. & Bernstein, I.H. Psychometric Theory, 3rd ed., McGraw-Hill, New York, 1994.
42. Hair, J.F. Multivariate data analysis: A global perspective. 7th ed., Prentice Hal,Upper Saddle River, 2009.

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