

# A Study of Effect of Gender on E- Learning Orientation



**Shuchi Padarha**

Research Scholar,  
Institute of Management Studies,  
DAVV, Indore



**Vivek Sharma**

Assistant Professor,  
Institute of Management Studies,  
DAVV, Indore



**Ritu Joshi**

Professor,  
Deptt. of Business Management,  
Sagar Instt. of Management,  
Indore

## Abstract

Education has become an important factor determining the progress of individual human beings and human society. Education provides knowledge and develops the skills and abilities to perform various socio-economic tasks. Learning is an important part of education. Learning orientation (LO) and e- learning orientation have an impact on acquiring knowledge and its subsequent application for performing tasks. The present paper is an attempt to compare the e- learning orientation of males and females working in Indian corporate world. The results show that there is significant difference in some of the dimensions of e-learning orientation.

### Keywords:

### Introduction

Education has become an important factor determining the progress of individual human beings and human society. Education provides knowledge and develops the skills and abilities to perform various socio-economic tasks. Learning is an important part of education. Learning orientation (LO) and e- learning orientation have an impact on acquiring knowledge and its subsequent application for performing tasks. The present paper is an attempt to compare the e- learning orientation of males and females working in Indian corporate world. The results show that there is significant difference in some of the dimensions of e-learning orientation.

### Review of Literature

Cook et. al. (2008) E-learning involves the delivery of education through Information and Communication Technology (ITC) using a wide variety of instructional designs and formats, and includes synchronous and asynchronous delivery. It is often used synonymously with terms such as 'internet-based learning', 'online learning', 'computer-assisted learning' and 'web-based learning'. There is significant diversity in what constitutes e-learning; it can include multi-media, CD-ROMs, webinars, virtual patients, web-based tutorials, interactive online modules with embedded quizzes, and discussion boards. A meta-analysis by Cook et al. stressed that central to the definition is the use of the Internet and the computer to deliver information and interact directly with the learner; to replace, in part or completely, the human instructor. Sinclair et al. provides a more detailed discussion of the definition, also stressing the importance of distinguishing between synchronous and asynchronous e-learning in order to more rigorously compare and measure outcomes of different instructional designs and formats. Synchronous e-learning is often mediated by human interaction between the learning and instructor using ITC and/or between learners who use ITC to interact and learn from each other in real time. In contrast, asynchronous e-learning involved more self-directed learning; it can occur at any time and place determined by the learner, and does not rely on a human facilitator being present.

McCord L, (2009) has concluded that advantages of asynchronous e-learning have been noted in the literature, including its flexibility and the capacity for learning to be self-paced and traceable, catering to different learning styles, and enabling the learner to review as they need to, as well as e-learning's capacity to overcome resource issues such as time and travel costs, and classroom-learner-staff availability issues. Mahmud et al., for example, argued that e-learning is more engaging than face-to-face and learners are more satisfied with it because it is more interactive and also because of design, navigation and ease of access. A US evaluation of an e-learning case simulation library for nurses in aged care found that it was useful because it enabled learners to apply the cases to diverse clinical contexts. Additionally a Japanese study comparing e-learning and face-to-face learning with 93 nurses found that both groups demonstrated the same learning outcomes, but that the web

group had three distinct differences. There was a lower dropout rate and greater flexibility, the online learning was attractive and affordable to a wider range of nurses, and was especially suited to independent and self-directed learners including those who were stronger in writing skills than in classroom discussion. Glogowska M (2011) found that additionally, a systematic review of e-learning for nurses noted that the anonymity that it afforded to learners gave some greater confidence to reflect on and mediate their contributions to online discussions. E-learning has also been promoted to meet the educational needs of rurally-based health professionals and their patients, as the tyranny of distance can isolate health professionals and make the option of face-to-face education difficult and often non-viable .

There are also many disadvantages of e-learning noted in the literature, including the need for increased responsibility and self-discipline to sustain motivation, concerns that those with poor study habits might fall behind, experience learner isolation and lack peer interaction to support learning, lack immediate support from teachers when questions/problems arise within an asynchronous context, and that standardized content could limit the ability for adaptations. It is worth noting that technology is intimidating for those with more limited technical skills, unreliable internet/technical access or platform instability potentially disrupting learning. Additionally, there may be distractions for the learner in the home environment where much e-learning takes place, and there may be significant upfront costs for those developing e-learning content.

Back D. W. et. al. (2016) concluded that contents of a learning management system support an efficient learning. Interactivity of tools and their conceptual integration into face-to-face teaching are important for students. The learning management system was especially important for organizational purposes and the provision of learning materials. Teachers should be aware that free online sources such as Wikipedia enjoy a high approval as source of knowledge acquisition.

#### **Aim of the Study**

To compare the e- learning orientation between the male and female employees.

#### **Research Methodology**

The present investigation was aimed at studying gender as predictor of e- learning orientation in Indian corporate sectors.

In the present study, there is independent variable and dependent variables. The choice of dependent variable rests on the assumption that they are related to the independent variable. The research design is to facilitate finding out of impact of the independent variables on the dependent variable and interactive effect among themselves. The details of them are as follows:

Independent Variable is gender and the dependent variable is e-learning orientation and its

dimensions (Aptness, Appraisal, Attuneness, Empowerment, Accessible, Futuristic, Interactive, Learner Focused, Optimal Utilization, Explicit, Flexible, Congenial, Innovations, Updation). The sample of the universe comprised of 400 managers from different corporate sectors of India. The initial sample was of 500 subjects selected on random basis from different manufacturing and service organizations such as Force Motors Limited, Eicher Volvo Motors Limited, Medi Caps Limited, ICICI Bank, HDFC Bank, Devi Ahilya University, Apollo Hospitals, Life Insurance Corporation of India, etc. The incomplete sets of measures were screened out, and completed ones were taken into consideration.

#### **Hypotheses**

##### **H1**

There is no significant effect of gender on aptness factor of e- learning orientation.

##### **H2**

There is no significant effect of gender on appraisal factor of e- learning orientation.

##### **H3**

There is no significant effect of gender on attuneness factor of e- learning orientation.

##### **H4**

There is no significant effect of gender on empowerment factor of e- learning orientation.

##### **H5**

There is no significant effect of gender on accessible factor of e- learning orientation.

##### **H6**

There is no significant effect of gender on futuristic factor of e- learning orientation.

##### **H7**

There is no significant effect of gender on interactive factor of e- learning orientation.

##### **H8**

There is no significant effect of gender on learner focussed factor of e- learning orientation.

##### **H9**

There is no significant effect of gender on optimal utilization factor of e- learning orientation.

##### **H10**

There is no significant effect of gender on explicit factor of e- learning orientation.

##### **H11**

There is no significant effect of gender on flexible factor of e- learning orientation.

##### **H12**

There is no significant effect of gender on congenial factor of e- learning orientation.

##### **H13**

There is no significant effect of gender on innovations factor of e- learning orientation.

##### **H14**

There is no significant effect of gender on updation factor of e- learning orientation.

##### **H15**

There is no significant effect of gender on e-learning orientation.

**Table 1 Group Statistics**

	<b>Gender</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
Aptness	Male	206	19.8835	5.88972	.41036
	female	194	20.2680	5.78190	.41512
Appraisal	Male	206	15.4806	4.66613	.32510
	female	194	16.4072	4.22969	.30367
Attuneness	Male	206	13.4903	5.03523	.35082
	female	194	13.6804	3.99753	.28701
Empowerment	Male	206	16.7718	4.69056	.32681
	female	194	17.4330	4.52948	.32520
Accessible	Male	206	6.5971	2.16801	.15105
	female	194	6.9381	1.98081	.14221
Futuristic	Male	206	9.2913	3.17807	.22143
	female	194	9.9278	3.25353	.23359
Interactive	Male	206	3.2913	1.22280	.08520
	female	194	3.5515	1.16953	.08397
Learner Focussed	Male	206	6.8835	1.85210	.12904
	female	194	7.0000	2.05368	.14745
Optimal Utilization	Male	206	12.8835	3.80834	.26534
	female	194	13.2887	3.52624	.25317
Explicit	Male	206	6.7427	2.03070	.14149
	female	194	6.8918	1.84465	.13244
Flexible	Male	206	13.5534	4.04301	.28169
	female	194	13.6443	3.95208	.28374
Congenial	Male	206	6.3204	2.07759	.14475
	female	194	6.7268	1.82175	.13079
Innovations	Male	206	6.2476	2.19575	.15299
	female	194	6.7474	2.08700	.14984
Updation	Male	206	3.3544	1.18349	.08246
	Female	194	3.5000	1.09284	.07846
ELOS_tot	Male	206	140.7913	37.52879	2.61475
	Female	194	146.0052	36.06119	2.58904

# Shrinkhla Ek Shodhparak Vaicharik Patrika

Table 2 Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Aptness	Equal variances assumed	.125	.724	-.658	398	.511	-.38455	.58403	-1.53272	.76363
	Equal variances not assumed			-.659	397.309	.510	-.38455	.58371	-1.53209	.76299
Appraisal	Equal variances assumed	3.833	.051	-2.077	398	<b>.038</b>	-.92663	.44618	-1.80381	-.04946
	Equal variances not assumed			-2.083	397.428	.038	-.92663	.44487	-1.80123	-.05204
Attuneness	Equal variances assumed	.104	.747	-.417	398	.677	-.19012	.45637	-1.08731	.70707
	Equal variances not assumed			-.419	387.070	.675	-.19012	.45326	-1.08129	.70105
Empowerment	Equal variances assumed	2.591	.108	-1.433	398	.153	-.66115	.46152	-1.56847	.24618
	Equal variances not assumed			-1.434	397.747	.152	-.66115	.46104	-1.56752	.24523
Accessible	Equal variances assumed	3.071	.080	-1.639	398	.102	-.34106	.20803	-.75003	.06791
	Equal variances not assumed			-1.644	397.640	.101	-.34106	.20747	-.74892	.06681
Futuristic	Equal variances assumed	.190	.663	-1.979	398	<b>.048</b>	-.63657	.32163	-1.26888	-.00426
	Equal variances not assumed			-1.978	395.237	.049	-.63657	.32186	-1.26934	-.00380
Interactive	Equal variances assumed	1.740	.188	-2.173	398	<b>.030</b>	-.26028	.11978	-.49577	-.02480
	Equal variances not assumed			-2.176	397.903	.030	-.26028	.11962	-.49545	-.02512
Learner focused	Equal variances assumed	1.322	.251	-.596	398	.551	-.11650	.19533	-.50052	.26751
	Equal variances not assumed			-.595	387.728	.552	-.11650	.19594	-.50174	.26873
Optimal utilization	Equal variances assumed	3.100	.079	-1.102	398	.271	-.40516	.36759	-1.12783	.31750
	Equal variances not assumed			-1.105	397.888	.270	-.40516	.36674	-1.12616	.31583
Explicit	Equal variances assumed	1.571	.211	-.767	398	.444	-.14903	.19436	-.53113	.23306
	Equal variances not assumed			-.769	397.489	.442	-.14903	.19380	-.53003	.23196
Flexible	Equal variances assumed	.015	.903	-.227	398	.820	-.09093	.40010	-.87750	.69564
	Equal variances not assumed			-.227	397.443	.820	-.09093	.39982	-.87697	.69510
Congenial	Equal variances assumed	6.831	.009	-2.075	398	<b>.039</b>	-.40642	.19586	-.79146	-.02137
	Equal variances not assumed			-2.083	396.007	.038	-.40642	.19509	-.78996	-.02287
Innovations	Equal variances assumed	1.229	.268	-2.331	398	<b>.020</b>	-.49985	.21447	-.92148	-.07822
	Equal variances not assumed			-2.334	397.965	.020	-.49985	.21414	-.92084	-.07886
Updation	Equal variances assumed	1.761	.185	-1.276	398	.203	-.14563	.11409	-.36993	.07867
	Equal variances not assumed			-1.279	397.849	.201	-.14563	.11382	-.36940	.07814
ELOS_tot	Equal variances assumed	.899	.344	-1.415	398	.158	-5.21389	3.68410	-12.45662	2.02884
	Equal variances not assumed			-1.417	397.836	.157	-5.21389	3.67969	-12.44795	2.02017

**Interpretation**

On observing the values of p from the table 2, it is evident that hypotheses, H2, H6, H7, H12 and H13 stand rejected and rest all hypotheses are not rejected. This implies that respondents of the two genders perceive differently towards appraisal, futuristic, interactive, and congenial and innovations dimensions of e learning. For e learning and all the other dimensions the two genders perceive alike. From the values shown in table 1, it can further be interpreted that female respondents perceive higher than male employees as per the five dimensions viz. appraisal, futuristic, interactive, congenial and innovations are concerned.

**Conclusion**

As per e- learning orientation and its factors are concerned, the results are quite varying. The factors aptness, attuneness, empowerment, accessible, learner focussed, optimal utilization, explicit, flexible, updation and overall e- learning orientation showed no difference between males and females working in Indian corporate sector. Appraisal, futuristic, interactive, congenial, innovations are the factors of e –learning orientation which showed difference in perception of male and female employees.

**References**

1. Back D. A., Florian B., Ehlers J. P., Peters H. (2016), "learning management system and e-learning tools: an experience of medical students' usage and expectations" Published online 2016 Aug 20. doi: 10.5116/ijme.57a5.f0f5
2. Carroll C, Booth A, Papaioannou D, Sutton A, Wong R. UK health-care professionals' experience of on-line learning techniques: a systematic review of qualitative data. *J Contin Educ Heal Prof.* 2009;29:235–241. doi: 10.1002/chp.20041.
3. Chiu Y-L, Tsai C-C, Fan Chiang C-Y. The relationships among nurses' job characteristics and attitudes toward web-based continuing learning. *Nurs Educ Today.* 2013;33:327–333. doi: 10.1016/j.nedt.2013.01.011.
4. Cook DA, Levinson AJ, Garside S, Dupras DM, Erwin PJ, Montori VM. Internet-based learning in the health professions. *JAMA.* 2008;300(10):1181–1196. doi: 10.1001/jama.300.10.1181.
5. Cook DA, Levinson AJ, Garside S, Dupras DM, Erwin PJ, Montori VM. Instructional design variations in internet-based learning for health professions education: a systematic review and meta-analysis. *Acad Med.* 2010;85(5):909–922. doi: 10.1097/ACM.0b013e3181d6c319.
6. Corbridge SJ, Robinson FP, Tiffen J, Corbridge TC. Online learning versus simulation for teaching principles of mechanical ventilation to nurse practitioner students. *Int J Nurs Educ Scholarsh.* 2010;7:Article12. doi: 10.2202/1548-923X.1976.
7. Du Z, Fu X, Zhao C, Liu Q, Liu T. Interactive and collaborative e-learning platform with integrated social software and learning management system. In: Lu W, Cai G, Liu W, Berlin XW, editors. *Proceedings of the 2012 International Conference on Information Technology and Software Engineering: Software Engineering & Digital Media Technology.* Heidelberg: Springer Berlin Heidelberg; 2013. pp. 11–18.
8. Glogowska M, Young P, Lockyer L, Moule P. How 'blended' is blended learning?: Students' perceptions of issues around the integration of online and face-to-face learning in a continuing professional development (CPD) health care context. *Nurs Educ Today.* 2011;31:887–891. doi: 10.1016/j.nedt.2011.02.003.
9. Horiuchi S, Yaju Y, Koyo M, Sakyo Y, Nakayama K. Evaluation of a web-based graduate continuing nursing education program in Japan: a randomized controlled trial. *Nurs Educ Today.* 2009;29:140–149. doi: 10.1016/j.nedt.2008.08.009.
10. Kowlowitz V, Palmer MH, Davenport CS. Development and dissemination of web-based clinical simulations for continuing geriatric nursing education. *J Gerontol Nurs.* 2009;35:37–43.
11. Labeau SO. Is there a place for e-learning in infection prevention? *Aust Crit Care.* 2013;26:167–172. doi: 10.1016/j.aucc.2013.10.002.
12. Lewis, K.O., Cidon, M.J., Seto, T.L., Chen, H., Mahan, J.D. Leveraging e-Learning in Medical Education. *Pediatric Adolescent Health Care.* 2014;44(6):150-63
13. Lockyer L, Bennett S, Agostinho S, Harper B. *Handbook of research on learning design and learning objects: issues, applications, and technologies (2 volumes)* Hershey: IGI Global; 2009.
14. Mahmud K, Gope K. 2009 international conference on information and multimedia technology. Jeju Island: IEEE; 2009. Challenges of implementing e-learning for higher education in least developed countries: a case study on Bangladesh; pp. 155–159.
15. McCord L, McCord W. Online learning: getting comfortable in the cyber class. *Teach Learn Nurs.* 2010;5:27–32. doi: 10.1016/j.teln.2009.05.003.
16. McVeigh H. Factors influencing the utilisation of e-learning in post-registration nursing students. *Nurs Educ Today.* 2009;29:91–99. doi: 10.1016/j.nedt.2008.07.004.
17. Millery M, Hall M, Eisman J, Murrman M. Using innovative instructional technology to meet training needs in public health: a design process. *Health Promot Pract.* 2014;15:39S–47S. doi: 10.1177/1524839913509272.
18. Paliadelis P, Stupans I, Parker V, Piper D, Gillan P, Lea J, Jarrott HM, Wilson R, Hudson J, Fagan A. The development and evaluation of online stories to enhance clinical learning experiences across health professions in rural Australia. *Collegian.* 2015;22(4):397–403. doi: 10.1016/j.colegn.2014.08.003.
19. Shaikh WR, Geller A, Alexander G, Asgari MM, Chanage GJ, Dusza S, Eide MJ, Fletcher SW, Goulart JM, Halpern AC, et al. Developing an

- interactive web-based learning program on skin cancer: the learning experiences of clinical educators. J Cancer Educ. 2012;27:709–716. doi: 10.1007/s13187-012-0378-4. [*
20. Sinclair PM, Kable A, Levett-Jones T, Booth D. *The effectiveness of internet-based e-learning on clinician behaviour and patient outcomes: a systematic review. Int J Nurs Stud. 2016;57:70–81. doi: 10.1016/j.ijnurstu.2016.01.011.*
  21. Yu S, Chen I-J, Yang K-F, Wang T-F, Yen L-L. *A feasibility study on the adoption of e-learning for public health nurse continuing education in Taiwan. Nurs Educ Today. 2007;27:755–761. doi: 10.1016/j.nedt.2006.10.016*