

# LEARNING INCLINATION, EXECUTIVES, AND ONLINE LEARNING

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#### **ABSTRACT:**

Computing technologies are creating new vistas for learners and educators. Online learning appears to be the most advantageous and efficient learning method. Various advantages such as reasonable pricing, the flexibility of course content and timings, the comfort of learning from home or office, and the value of accredited certification make online learning a preferred learning method, especially for executives. However, how the target audience (executives) perceives the urge for learning and learning preference is under question. We conducted this study to capture their learning inclination or an inner urge for learning and how these executives prefer learning through various modes and upskill themselves.

A quantitative approach was adopted to study learning inclination. The study included 103 executives from midlevel to CXO levels in their careers. Non-probabilistic sampling is used to collect the data. The data thus gathered is analyzed to check the validity of the construct and the impact of demographic variables.

We found that 'Online Learning' is the third-most preferred learning channel, superseded by 'On-the-job learning' and 'Mentoring.' Moreover, 'Certification,' 'Monitoring,' and 'Recommendations by friends or peers' are the top three reasons for choosing online learning. The demographic parameters considered; namely, gender, age, qualification, household income, and occupation, did not affect the learning inclination of the target group.

The present study examines the urge to update professional knowledge, refresh existing knowledge, acquire a new skill, and learn a hobby as indicators of learning inclination.

Keywords: Learning inclination, Willingness to learn, Online learning, Executive Education

#### **INTRODUCTION**

Online learning is perceived as an easy and successful way to learn because of independence and ownership of working practices (Paterson, 2014). Moreover, factors such as comfort with online technologies and time management (Liyan, Ernise, Hill, & Myung, 2004) adds face value to the game of online learning. The financial cost of online learning can be much lesser than learning in classroom settings. Timing and traveling challenges play an insignificant role, and as it is a modular concept, enrolling for a complete course is not required. A quick certification can be obtained by selecting a precise topic. Therefore, this method seems more acceptable and appealing to learners, especially working executives. Moreover, online learning is considered a panacea when everyone is confined at home during a pandemic looking for value addition options.

Furthermore, this method should become more popular because of the availability of numerous sources, flexible schedules, and a plethora of topics to choose from. The learner should be able to enroll and finish their education quickly. However, it needs to be studied whether this occurs in reality or is it a more utopian thought. Therefore, the present study aims to understand executives' learning inclination, relationship with demographic variables, and preferred learning modes.

Bransford, Brown, and Cocking (1999) discuss learner requirements such as the role of prior knowledge in learning, learning as an active process, learning for understanding, adaptive expertise, and learning as a time-consuming endeavor in their early and influential book on the "new science of learning." However, the role of learning inclination in addition to these basic tenets needs to be studied. Although all the requirements mentioned above hold true, learners' inclination toward learning plays a significant role. The present study attempts to explore



learning inclination concerning online learning for executives. These respondents are employed in white-collar/corporate/office jobs ranging from mid-level to the P&L leadership roles.

As many theorists (Garrison and Shale, 1990) have argued and practitioners have experienced for themselves, online learning is a subset of learning in general; thus, issues relevant to how adults generally learn may be relevant to online learning. Nevertheless, the study focuses more on learning inclination and the relationship of the demographic variables.

## **REVIEW OF LITERATURE**

Even before the internet was established, distance courses were available to provide students with education on particular subjects or abilities. Isaac Pitman used letters to teach his students shorthand in the 1840s (NA, n.d.). The first computer-based training program was not introduced to the world until 1960. It was initially created for University of Illinois students. (Santovec, 2003; Liyan, Ernise, Hill, and Myung, 2004). The first online learning systems were set up only to deliver information to the students. However, in the 1970s, online learning started to become interactive. In Britain, the Open University began offering a wide range of interactive educational experiences through the internet and corresponding faster with students via email to benefit from e-learning.

Today, online learning is an established and developed form of learning. Initially, this mode was considered apt for adult learning; however, with the advent of graphics, sound, and motion capabilities of computing, this method is as applicable and popular for children as it is for advanced learners.

#### **Learning Inclination**

As suggested by Aristotle, the inclination is the "desire to know," while Kant describes it as "wanting to do" and has always been instrumental in understanding the psyche. If we want to understand the factors responsible for students' academic success, the learning inclination may help. Researchers' are trying to capture the same from a different perspective, such as students' 'Need for Cognition and 'Positive Attitudes Toward Literacy' (Loes, Saichaie, Padgett, & Pascarella, 2012), Self-concept of competence, Task, and Effort orientation, flexibility, and independence (Alexender Seeshing, 2003) or intrinsic motivation as an indicator of a desire to learn (Kerssen-Griep, Hess and Tress 2009)

"Learning inclination" is defined as "the ability to steer one's learning through a mix of certain attitudes, relevant abilities, and suitable help from relevant sources." (Samad and colleagues, 2019). Learning inclination is crucial in online learning. Visible peer pressure, physical supervision, and strict timelines for various assessments help learners grasp and complete a course in classroom settings. However, these benefits are not available in online settings.

Motivation is required to complete any goal-oriented process. External motivation by stakeholders such as teachers (M, Humpherys, & Chan, 2002), family (Knoz, 1977), friends, colleagues (Kashif et al., 2013), and culture (Merriam & Ntseane, 2008) may play a significant part in online learning; however, internal motivation is more important, as argued by Wolters (2003) and Fertig, Zeitz, & Blau, (2009).

Research accentuates the importance of internal motivation, such as the 'interest of the learner' (Krapp, 1999; Schiefele, 1991; Su, Rounds, & Stoll, 2019) 'subject-specific internal motivation' (Staribratov & Babakova, 2019). In a study, Kim & Park (2015) found that internal motivation is one factor that influences adult female learners' dropout of e-learning courses.

A quick review of the literature on learning can explain executives' learning landscape and the position of online learning. Researchers are attempting to understand the phenomenon of online learning and students' connectivity. Many researchers have studied various aspects, such as attitudes (Bertea P., 2009) and people's willingness to learn online (Darban & Polites, 2016). These studies focused on usage, self-reporting inventory, and learners' interest in using the e-content, available on either mail or website.

Several studies explored the willingness to learn from experience in an organizational setting. Zakay et al. (2004) found that a negative outcome triggers the need to learn amongst managers in organizations more than a positive outcome. While searching the relationship between error criticality and organizational learning, Ellips et al. (1999) found the effect of error criticality on the likelihood of developing an organizational learning culture. As these studies explored these issues from the perspective of organizational learning, they focused more on the organizational process and less on individual thought processes or inclinations.



The present study focuses on respondents' inclination towards learning by upgrading professional knowledge, refreshing existing knowledge, acquiring a new skill, and building or enhancing an existing hobby.

# **RESEARCH METHODOLOGY**

The study was conducted in Mumbai using 103 working executives. The data were strictly gathered only from mid-level executives in the P&L leadership role.

Non-probabilistic sampling was used for the study. Age, gender, qualification, occupation, and household income were the demographic variables considered.

The executives' four different learning requirements can be summarized: the urge to update professional knowledge, refresh existing knowledge, acquire a new skill, and learn a hobby. Different statements for each indicator were framed with the help of senior executives. The sum of all four aspects was considered an indicator of learning inclination.

The construct thus formed was tested for reliability and validity using Cronbach's Alfa and unidimensionality using factor analysis.

# **Research Objectives**

- 1. To capture the online learning scenario of executives
- 2. To understand the effect of demographics on learning inclination.

## Hypothesis

H<sub>01</sub>: Age does not affect learning inclination

H<sub>A1</sub>: Age has a significant effect on learning inclination

H<sub>02</sub>: Gender does not affect learning inclination

H<sub>A2</sub>: Gender has a significant effect on learning inclination

H<sub>03</sub>: Qualification does not affect learning inclination

H<sub>A3</sub>: Qualification has a significant effect on learning inclination

H<sub>04</sub>: Occupation does not affect learning inclination

H<sub>A4</sub>: Occupation has a significant effect on learning inclination

H<sub>05</sub>: Household income does not affect learning inclination

HA5: Household income has a significant effect on learning inclination

# ANALYSIS

Descriptive

# **Table I: Age Distribution**

If we go through the respondents' age distribution, only one-third are below forty years of age. The majority of the respondents are over forty years.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	< 30 Years	17	16.5	16.5	16.5
	30-40 years	18	17.5	17.5	34.0
	40-50 years	37	35.9	35.9	69.9
	50+ years	31	30.1	30.1	100.0
	Total	103	100.0	100.0	

Table I: Age Distribution

The age distribution signifies that the respondents are pretty experienced and must have tried different learning mechanisms to cope with their professional challenges.

## Table II: Gender & Age Crosstabulation

The gender distribution is skewed in favor of male respondents. It is almost a 30:70 ratio. Female executives are less than the 40-50 age group in percentage terms.

Count						
		Age				Total
		< 30 Years	30-40 years	40-50 years	50+ years	
Candan	Male	10	13	24	27	74
Gender	Female	7	5	13	4	29
Total		17	18	37	31	103

 Table II: Gender & Age Crosstabulation



The data is not sufficient to comment on, but probably the data portrays the picture of the female employee's journey. As time passes, the women employees leave the job and focus on other things, probably house responsibilities.

#### Chart-I: Preferred mode of learning for the executives

As Ford said, "Anyone who stops learning is old," so people would like to learn, especially in the work environment where stakes are high. In this study, the respondents were requested to rank their learning preferences such as online learning, On-the-job training, Mentoring, Learning from peers, or related courses.



*Chart-I: Preferred mode of learning for the executives* 

As we can see, on-the-job training (OJT) is the preferred choice of learning, followed by mentoring. Online learning stands third. Learning while working suits senior executives probably because of their busy schedules and responsibilities; they can not afford to sit even on the laptop for a session.

Mentoring is the second most preferred choice. Mentoring is specific to the individuals, and the situation probably works better in the case of working executives.

## Chart-II: Decisive factor for choosing an online course

While making enrollment decisions about an online course? The respondents were given a curated choice to think upon. The options range from the cost (price) of the course to customization of the course. The program's flexibility, friend's recommendation, and Interactivity were other options.





Chart-II: Decisive factor for choosing an online course

The above-ranking chart indicates that certification is of paramount importance. The choice is evident because, in work settings, a certificate is handy while applying for a promotion or a new job.

Interestingly, monitoring during the certification becomes the second important factor. These executives are probably worried that they may miss the deadlines. Hence the certification, so active monitoring of the certification process becomes their second choice when deciding the online enrollment.

## Inferential

## Learning Inclination as a Single Factor

Factor analysis compresses many variables to a smaller number of components. This method takes the largest common variance from all variables and converts it to a single score. If there is more than one component proposed by exploration, confirmatory factor analysis is recommended; otherwise, it can be assumed that the variables within a factor are highly correlated, and hence convergent validity is assumed.

## Table – IIIa / IIIb Reliability Statistics – Learning Inclination

Reliability statistics, or Cronbach's alfa, is the first indicator of internal consistency. Any value above .7 is considered as good.

<u>Table – IIIa Reliability Sta</u>	ntistics – Learning Inclination
Cronbach's Alpha	N of Items
755	4

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Updation of professional knowledge	9.60	2.575	.623	.670
Refreshing the existing knowledge	9.81	2.472	.523	.714
Acquiring a new skill	9.77	2.318	.621	.659
Learning a hobby	10.09	2.375	.472	.751

*Table – IIIb Item-Total Statistics* 

**Inference:** Internal consistency assesses the continuity of the responses across items within a single measurement scale [ (Kline, 2005), as cited in (Tyastuti et al., 2014)]. As in table 3 (*a*), the reliability score was higher than 0.7, signifying the four statements' internal consistency.



## Table – IV Correlation Matrix

The four-item learning inclination scale was subjected to exploratory factor analysis (EFA) to examine the scale further. Hair et al. (2006) suggested that EFA can be applied for reduction data by identifying similar variables. The correlation matrix is one of the first few checks before proceeding with the EFA.

Table – IV Correlation Matrix<sup>a</sup>

a. Determinant = .449

**Inference:** The value of the determinant should be more than zero. If the determinant is higher than 0.00001, then there is no multicollinearity, whereas if it is less than that, data are not fit for factor analysis.

## Table - V Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that shows how much of the variance in the variables is due to underlying factors. Bartlett's test of sphericity tests the hypothesis that the correlation matrix is an identity matrix, which would suggest that the variables are unrelated and thus unsuitable for structure discovery.

Table – V Kaiser–Meyer–Olkin (KMO) and Bartlett's Test					
KMO Measure of Sampling Ade	equacy.	.662			
	Approx. Chi-Square	80.247			
Bartlett's Test of Sphericity	Df	3			
	Sig.	.000			

**Inference:** As a prerequisite of principal component analysis, it is mandatory to ensure that the data matrix has sufficient correlations to justify the application of factor analysis. Bartlett's test of sphericity and the Kaiser-Meyer-Olkin tests of sampling adequacy was taken into consideration for this purpose. The KMO value lies between 0 and 1. Values greater than 0.5 are accepted (Samuels 2017).

In Bartlett's Test, small values (less than 0.05) of the significance level indicate that factor analysis may be helpful. (KMO and Bartlett's Test 2020)

## Table – VI Communalities

The amount to which an item correlates with all other items is called communality—the higher the communality, the better the construct.

## Table – VI Communalities

Initial	
1.000	
1.000	
1.000	
	Initial 1.000 1.000 1.000

Extraction Method: Principal Component Analysis.

**Inference:** The proportion of variance in a given variable explained by the three components is the communality for that variable. A communality value of 0.5 is considered acceptable (Samuels 2017). The fourth statement was dropped due to low communality.

## Table - VII Total Variance Explained

The Total variance is the amount of variance in the original variables accounted for by each component.



Table – VII Total Variance Explained							
Component	Initial H	Initial Eigenvalues					
	Total	% of variance	Cumulative %				
1	2.025	67.509	67.509				
2	.614	20.451	87.960				
3	.361	12.040	100.000				

Extraction Method: Principal Component Analysis.

Inference: The major variance explained originated in the first statement. The first component provided almost 67% of the total variance, whereas the first two statements provided a cumulative variance of 87%.

# Table – VIII Component Matrix<sup>a</sup>

The unidimensionality of item response data must be investigated as part of concept validity. (Slocum-Gori and Zumbo, 2011)

Table – VIII Component Matrix<sup>a</sup>

a. 1 component extracted.

Inference: Unidimensionality signified the convergent validity of the construct (Farmell and Larcker, 1989).

# The Hypothesis

# Age and Learning Inclination

H<sub>01</sub>: Age does not affect learning inclination H<sub>A1</sub>: Age has a significant effect on learning inclination

Table - IX - ANOVA - Learning Inclination1

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.732	3	.577	2.270	.085
Within Groups	25.180	99	.254		
Total	26.913	102			

Inference: Calculated p-value was higher than 0.05. Thus, the test was accepted, and we accepted the null hypothesis that no difference was found among the various age groups concerning learning inclination. This means that the urge to learn is the same for all age groups.

#### **Gender and Learning Inclination**

H<sub>02</sub>: Gender does not affect learning inclination HA2: Gender has a significant effect on learning inclination

Table – X - a Group Statistics									
	Gender	Ν	Mean	Std. Deviation	Std. Error				
					Mean				
Learning_Inclinati	Male	74	3.3423	.53200	.06184				
onl	Female	29	3.4138	.46849	.08700				

#### Table X - b Independent Samples Test

		Levene's Test for Equality of			t-test for Equality of Means					
		Variances								
		F	Sig.	t	Df	Sig. (2- tailed)	Mean Differenc e	Std. Error Differenc	95% Cor Interval Differ	of the rence
								e	Lower	Upper
Learning_I nclination1	Equal variances assumed	.009	.924	.633	101	.528	07145	.11287	29535	.15244



Equal						
variances	- 57.78	506	07145	10674	20512	14000
not	.669 9	.300	0/143	.100/4	26315	.14223
assumed						

**Inference:** Calculated *p*-value was higher than 0.05. Thus, the test was accepted, and we accepted the null hypothesis that no difference was found among the genders concerning the learning inclination. This means that the learning inclination does not get impacted by gender.

#### **Educational Qualification and Learning Inclination**

H<sub>03</sub>: Qualification does not affect learning inclination

 $H_{A3}:$  Qualification has a significant effect on learning inclination

Table XI ANOVA

Learning\_Inclination1

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.664	3	.555	2.175	.096
Within Groups	25.249	99	.255		
Total	26.913	102			

**Inference:** Calculated *p*-value was higher than 0.05. Thus, the test was accepted, and the null hypothesis found no difference in the educational qualification concerning the learning inclination was accepted. This means the learning inclination does not get impacted by the education level of the executive.

# **Occupation and Learning Inclination**

H<sub>04</sub>: Occupation does not affect learning inclination H<sub>A4</sub>: Occupation has a significant effect on learning inclination

	Occupation	Ν	Mean	Std. Deviation	Std. Error Mean
Learning_Inclinati	Service	71	3.3991	.51523	.06115
onl	Business	32	3.2813	.50877	.08994

Table XII- b -	Independ	ent Sampl	es Test

		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	Df	Sig. (2- tailed)	Mean Differenc e	Std. Error Differenc	95% Cor Interval Differ	of the rence
								e	Lower	Upper
Learning_I nclination1	Equal variances assumed	.022	.883	1.07 8	101	.284	.11781	.10928	09897	.33460
	Equal variances not assumed			1.08 3	60.55 1	.283	.11781	.10876	09969	.33531

**Inference:** Calculated *p*-value was more than 0.05. Thus, the test was accepted, and we accepted the null hypothesis that no difference was found among the various occupation concerning the learning inclination.

#### **Household Income and Learning Inclination**

H<sub>05</sub>: Household income does not affect learning inclination

H<sub>A5</sub>: Household income has a significant effect on learning inclination



Table XIII ANOVA Learning Inclination1

mennan	5111				
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.190	3	.397	1.526	.212
Within Groups	25.723	99	.260		
Total	26.913	102			

**Inference:** Calculated *p*-value was more than 0.05. Thus, the null hypothesis that there was no difference between the various household income groups concerning the learning inclination was accepted.

#### FINDINGS AND CONCLUSION

In this study, learning inclination emerged as a single factor statistically. However, demographic variables such as age, gender, household income, or educational qualification do not impact it significantly.

Initially, four statements were to capture the learning inclination; however, the last statement was discarded due to low communalities (<0.5). The present study showed that senior executives probably did not consider learning a hobby as necessary as learning career skills, resulting in them not being inclined toward learning a hobby.

The descriptive analysis states that learning online is the third-most preferred learning channel for the executives after on-the-job learning and mentoring (Refer to Chart-1). This preference may be because career challenges for mid-level executives are unique and cannot be generalized, whereas formal education (certifications included) is more about generalized knowledge.

Most of the respondents (precisely 66%) in the present study were aged 40 years and above, meaning they were either at a mid-level or top-level position in their careers (Refer to Table-1). These executives must have realized the power of on-the-job training, perhaps shadowing, or other methods. In the same way, mentoring must have given better results than online learning.

As the respondents were in mid to top-level positions, the course's cost was the last priority. The top three reasons to join online learning are certification, monitoring, and recommendation from friends or peers (Refer to Chart-2). This behavior can be easily explained as certification is vital for career growth (and probably a hook on social media for a future employer). The hectic work schedule demands constant supervision from the instructor, and hence 'liberal' online media may not be able to push for continuity of the course. Probably high dropout rates (40 to 90%) (Gregori, Martínez, & Moyano-Fernández, 2018) indicates this finding as closer to the reality. The findings suggested that internal motivation was of secondary importance, making monitoring the second crucial factor when choosing learning sources.

This study may be helpful while planning the course and delivery for the executives. Keeping learning inclination in mind, the course's complexity can be adjusted to enhance learners' understanding of the subject.

Similarly, if 'on-the-job' elements can be embedded with the online curriculum, the course may become more attractive. Adding a few one-on-one mentoring sessions would undoubtedly enhance the utility of the course amongst future learners.

#### FUTURE SCOPE OF THE STUDY

There is a vast scope for this subject as literature reveals a dearth of studies that relate to understanding learning inclination. Most papers focus on 'attitude scales' such as attitude toward learning English (Al Noursi, 2013), learning chemistry (Yunus & Ali, 2013), and learning management system (LMS) (Alghamdi & Bayaga, 2016) or e-learning (Bertea P., 2009).

Some researchers tried to capture 'Willingness to learn, such as willingness to learn from experience (Fertig, Zeitz, & Blau, 2009) and willingness to learn in school (Cekaite, 2012). However, the papers discuss acceptance or refusal to learn, in a way, attitude toward learning. In this case, developing a context-free scale to understand learning inclination may be the next natural progression of the present study.

#### LIMITATIONS

There were several limitations to this study. The scarcity of time and funds was the more generic ones; however, the study's descriptive nature was the most significant limitation. The study describes the learning inclination with the help of indicators and the impact of demographic variables. However, unidimensionality is not sufficient to prove a factor. There are tools such as Known-group validity and nomological validity that would give more



concreteness to the construct. The paper depends upon the Self Reporting Inventory, which is again a limitation. There should be one more data point, such as peers' reports assessing the learning inclination. (Schermelleh-Engle, 2020)

The geographic coverage and sample size were relatively small. We need to cover a larger geographical area and consider a corresponding large sample size better to represent the variables for a decision-maker in the business. As all the social science methods are data-dependent, a repetition of the current study in various geographics and a different dataset would give it more validity for decision-makers to consider.

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