

Impact of the Industry-Academia Higher Education Programs on the Productivity of Employees: Stakeholder's Perspective

Dr. Seema Singh¹, Dr. Kishori Kasat² and Dr. Naim Shaikh³

¹Director, Symbiosis Centre For Corporate Education, Symbiosis International (Deemed University)

²Assistant Professor, Symbiosis Institute of Computer Studies and Research, Symbiosis International (Deemed University)

³Associate Professor, DPU Global Business School and Research Centre, D. Y Patil Vidyapeeth

Abstract

Introduction: Productive employees are a key asset to each and every organization. Productivity at the workplace can be an end product of a lot of factors and impact of the higher education programs' offering is being studied through this research. It's a known fact that when working professionals are feeling engaged at their workplace, productivity is at an ultimate high and definitely profits are higher than expected. This research paper investigates the influencing factors of academic industry mobilization towards a newer perspective of offering higher education program to the working professionals in an organization. These higher education programs through the industry-academia tie-up play a crucial role in enhancing the productivity of employees.

Purpose: The study aims to identify the reliable and valid constructs of effective corporate education / training on enhancing employee productivity.

Methodology: Quantitative methodology was used to carry out this study. The sample comprised of the employees who have undergone the corporate education / training. A structured questionnaire was posed to the employees from the IT and Manufacturing sector. Research methodology used was Confirmatory Factor Analysis. Responses of Respondents were recorded based on their 'experience' and 'perception' about corporate education / training. Data is analyzed using SPSS and AMOS 23.00 version.

Findings: Reliable and valid Constructs of effective corporate education / training on enhancing employee productivity were identified and confirmed.

Originality: The study provides reliable and valid Constructs of effective corporate education / training for employee productivity. It provides novel basis to improve overall productivity of an employee.

Keywords: Corporate training, Productivity, employees, Higher Education, Industry-Academia tie-ups

1. INTRODUCTION

Employees of any organization form the basis of performance for the organization. These employees are the intangible assets of the organization and so it becomes increasingly important to keep the employees productive. Not just keeping them productive but also enhancing the productivity of these employees becomes even more challenging. This study is to ascertain the extent to which the Higher Education Programs offered through the Industry - Academia tie-ups impacts the level of productivity of the employees of an organization.

All employees can never have the knowledge and skills that are of equivalent strategic importance to the organization. The lack of skills motivates organizations to train their workforce and enhance their skill sets (McKinsey, 2006). Employees' training through the Industry-Academia Higher Education Programs is a very different kind of a training intervention. It can benefit organizations as employees enhance their productivity and performance by acquiring the skills required in a specific functional area. Realizing this, many organizations are willing to go in for an Industry-Academia program or in other words, the Work Integrated Learning Programs for their employees. These programs positively result in skill improvement, enriched efficiency and productivity at the workplace. An Industry-Academia program can serve varied purposes, and organizations initiate such programs for various motives but the main motive would ideally be to enhance productivity.

Despite employing already experienced employees, the Corporate Human Resource departments of various organizations still design training programs to make employees enhance and gain skills on a regular basis and

this is mainly done with the understanding that employees are the bloodstream and basically form the backbone of organizations.

The Corporate fraternity is very open to have innovative moves like offering Higher Education Programs to their employees which definitely gives a competitive edge to these employees. Appropriate training to the employees will result in getting better work output and this leads to the fact that training has become inevitable in the workplace (Meyer and Allen, 1991). The better work output will in turn culminate into better productivity or enhanced productivity.

This study will need a proper interpretation of the intricate relationship of the varying perceptions of employees regarding their productivity as a result of the Higher Education offering through the Industry-Academia tie-ups.

2. LITERATURE REVIEW

According to (Becker, 1964) Human Resource (HR) is broadly recognized as a significant aspect for economic performance, at both the macroeconomic and microeconomic level. A large part of human resource accrual takes place after entering into the organization. Still most of the literature on the ROI (Return on Investment) in the HR has always been concentrated on education, due to problems faced regarding the availability of data and its measurement. Comparatively fewer facts exist on the accumulation of human capital through the constant training of workers and, explicitly, on the effects on employees' productivity by the training activity.

Previous studies on productivity of employees and training programs (Tovey et al. 2015) powerfully support a positive relationship between the productivity of employees and industry-academia training programs.

Research has shown how enhanced skills, acquaintance and expertise of the competent labor force has resulted to be greater source of cutthroat benefit in the worldwide market (McKinsey, 2006).

The study indicates very clearly that employee performance is at the helm of any business; employees are the bloodstream of the business. So, to enhance the productivity or performance of an employee, there should be continuous training programs being conducted. Also, the training programs should be planned after having proper goals and objectives in mind to be met in terms of the needs of the employees as well as the business. This study also confirmed that training imparted has a affirmative impact on employee performance. (Elnaga et al. 2013).

Appropriate training is a must so as to strengthen the craving data abilities of the workforce so that they achieve on the work front which will automatically inspire workers and their dedication to the organization (Meyer and Allen, 1991). Firms offer training to workers so that they get their employees ready to perform well at their job as anticipated and at the same time training helps these employees to enhance their own abilities. With a constant aim to establish fresh skills in their labor force, organizations are in a way helping these employees to manage ambiguous situations that they may have to go through in their work careers and as a result enhancing their abilities. The other positive impact is that, these training programs help to achieve a greater level of inspiration and assurance for these employees. The moment the workers distinguish their firm's engrossment in them by providing training sessions, it will result in the workers' hard -work to attain the firm's objective and display greater accomplishment at the workplace.

Jaoude (2015) pointed out that organizations giving advanced training have been realizing increasing profits three times more as compared to their competitors. However, to have such high impact training programs for employees is definitely not an easy task. It involves a blending of alignment and planning as well. Also needs developing and designing training in a manner that meets the organization's highest goals. As per another study, successful organizations invest a huge sum of money in training and development than unsuccessful organizations (Kraiger, 2003).

The study conducted at public universities in Northern Malaysia stressed on building organizational commitment among employees for ensuring organizational effectiveness through employee training as committed employees can lead to favorable outcomes. This study aimed to examine the effects of different factors including training and the results indicated the that it helped also to attract and retain employees and in turn enhance their productivity. (Jalal, 2016).

Research based on measurement approach (Collier et al. 2011) gave a confirmation to highlight the direct and more tangible impact of industry-academia programs on productivity. But at the same time it failed in clarifying the complex and subjective relationships between employee industry-academia training and productivity.

According to (Singh, 2016), Corporate Education Programs contribute to the increase in the skills and competencies of employees and these programs are extremely beneficial and can be used by organizations to perk up the performance of the employees as well as the organization as a whole.

(Conti, 2005) evaluated the effects of training programs on productivity of employees by giving testing methods to create these effects. Most of the studies have resulted in a positive impact of training programs on employees' productivity. Further, specific training has a major effect compared to others. Conti presented results using two dissimilar empirical analyses which combine two complementary databases. She utilized data to categorize significant training features that relate to improvement in productivity.

(Yao et al. 2020) through their research at medical institutions in China indicated that human capital is a very important element in the growth function of any organization and did a thorough study of the relationship of job training and organizational performance. The study includes a clear estimation of the effects of training on performance across different cities as there is a heterogeneous intensity of market competition, availability of medical resources as well as the healthcare utilization behavior of residents in different regions in China.

According to (Putri and Darma, 2014), Employees' productivity comprises of employees' ability, readiness to work, work environment, and work relationship. (Chhetri et al. 2018) aims at analyzing the effect of employee training on the employee productivity sponsored by the employer in the Australian transport and logistics business. Considering the productivity as the only crucial measure, it challenges the quantitative concept of the ratio of input-output per labor hour. The analysis is administered through online and on-site survey questionnaires and interviews of employers, employees and students from the industry and also with the help of vocational education and training individuals to determine the aspects of productivity gains and through conduct of qualitative interviews to acquire employer's conceptualization and outlook of the performance of employees through training. The analysis suggests that employer/firm must redefine the advantages of training and consider the well-being of the employees and individuals to undertake common goals of the workforce as well as the enterprise. It suggests that the firms must henceforth widen the concept of productivity in order to integrate intangible benefits.

(Ganganwar et al, 2019) has very well brought out the importance the Industry- Institution linkages and the manner in which the brand image of the higher education institutes is affected by the placements which in turn means the connect with the corporate. There is a significant brand building by creating the next generation of productive employees by giving the right kind of inputs at the higher education level.

(Aghazadeh, S. M., 2007) emphasizes the revaluation of past and present-day research on the problems related to productivity, the need and the method to improve it through suitable training. The analysis is presented through research on a grocery store chain and top outsourcing supplier and has shown the outcome that greater level of productivity can be achieved through finding the productivity problems and accordingly apply suitable on-job training methods. Through these two experiments it represents that firms must integrate suitable training methods which will result in higher levels of productivity and will have a positive impact on the business of the enterprise.

(York, M, 2018) through an extremely well drafted article has enabled an understanding of creating productive employees. According to this article, among different essential requirements like knowing the employees, developing them, communicating clearly with them, inspiring them and some more, coaching them in the correct and appropriate manner brings about the best results where productivity of employees is concerned. As brought forth by the article, this investment in employees will in turn make them love their job and want to come to work and intrinsically motivate them and help in making the employees more productive as well.

Banu Ozkeser (2019), in his research paper describes the impact of training on employee motivation with reference to their relationship with motivation. This study identifies the significant relationships between motivation and the age of the employee, gender, marital status, educational status, working hours at the

workplace, designations at the workplace. It also narrates that the training activity improves the efficiency of the organization. The rapid change and development of technology has led organizations to an intense competition among themselves. To maintain the continuity of business in such a competitive environment and to maximize their productivity, businesses have changed their policy towards its employees.

Norfazlina et al (2016) examines the influence of user satisfaction towards customer information system and its impact on task productivity in their research study. According to the researchers, measuring the user satisfaction in handling their task is essential as a satisfaction factor as it directly has an effect on their productivity. Training moderates the relationship between ease of use in Customer Information System (CIS) in contrast to the relationship between the user satisfaction (content and format) and task productivity.

(Schonewille, M., 2010) through this paper explores the sector model that measures how the investment in training given to employees has an affirmative and momentous effect on productivity growth. It analyzes that employers tend to give a general training and it has a constructive effect on the productivity of an employee. It concludes that training effects the productivity of employees even though one cannot clearly determine whether it is through on-job or off-job training.

The reviewed literature reflected different thought processes about the impact of training on the productivity of employees. The preceding discussion provides a context to create an understanding regarding the impact of the Industry-Academia tie-ups on the productivity of employees undergoing these programs.

3. RESEARCH METHODOLOGY

Research Questions (RQ)

RQ1) What are the driving factors for enhancing productivity at the workplace after undergoing Industry-Academia Higher Education Programs?

RQ2) What is the reliability and validity of the identified driving factors for enhancing productivity at the workplace?

Objectives of the Study

- To identify driving factors for enhancing productivity at the workplace.
- To test and confirm the reliable and valid driving factors of corporate education / training for enhancing employee productivity.
- To test whether the “Industry-Academia Higher Education programs” contribute significantly towards enhancing the Productivity of employees undergoing these programs.

Hypotheses

Hypothesis 1

H_{A0}: The driving factors for enhancing productivity at the workplace are not reliable and valid.

H_{A1}: The driving factors for enhancing productivity at the workplace are reliable and valid.

Hypothesis 2

H_{B0}: Industry-Academia Higher Education programs are not contributing significantly in the enhancement of the Productivity of employees.

H_{B1}: Industry-Academia Higher Education programs are contributing significantly in the enhancement of the Productivity of employees.

Sample Design

i. Population Size: 500 (Managers and Professionals from IT and Manufacturing Industry which have undergone the Industry-Academia Higher Education programs)

ii.a) Sampling Frame: Managers and Professionals from IT and Manufacturing Industry which have undergone the Industry-Academia Higher Education programs: (General Managers, Manager-Technical, Deputy Managers, Solution Architects, Financial Analysts, General managers R&D, Product Development, Managing Consultant,

Senior Regional Manager, Senior Managers, Technical Leads, Account Delivery Head, GM - Process Development, R & D, Technology Specialist, Product Managers, Release Managers), Experience Levels more than two years.

b) Sample Size: 122

c) Sampling Technique: Simple Random Sampling Technique is used in the research.

iii. Questionnaire was sent to 145 employees who had undergone this program, out of which 122 employees (respondents have responded for the questionnaire shared with them online)

iv. Questionnaire formulation

The design of the instrument consists of 15 questions to measure the impact of 'Industry-Academia Higher Education Programs' for improving the productivity of employees who have undergone the program. Design of the instrument comprises of demographic information, and also relevant questions for finding the impact of Industry-Academia Higher Education Programs on the 'Productivity of Employees'.

A thorough review of literature was conducted for the content validity. All items of the questionnaire have been drawn from well-established studies to ensure content validity.

The instrument was tested in stages and in the initial stage, it was reviewed by professionals. In the next stage, a panel of experts was established to check the content validity of the instrument. The draft items were examined by the panel of experts consisting of three individuals – two Directors and a Dean of an Management Institute. These people had earlier participated in the development of the required instrument.

The reviewed questionnaire was then piloted before being accepted as the final version. Each item was placed into the 5-point Likert scale and then responses were obtained.

With the extensive review of literature and the experts' opinions the final survey questionnaire was prepared.

DATA COLLECTION

The primary data is collected through a questionnaire sent to 145 employees in the IT and manufacturing sector out of which 122 responses were received. Content and construct validity are carried out.

The reliability of the measurement model is tested by the Cronbach's Alpha Test and Fornell's Composite Reliability Test. The first hypotheses is tested using CFA (Confirmatory Factor Analysis) & the second hypothesis testing is done by the One Sample t-test.

4. DATA ANALYSIS AND INTERPRETATION :

Reliability of the Instrument :

Table-1: Reliability Statistics		
Cronbach's Alpha Value	Based on Standardized Items value of Cronbach's Alpha	N No. of Items
.920	.923	15

The Cronbach's Alpha value was 0.920 which is very high in comparison to the acceptance level of 0.7 and so it indicates that the items in the instrument are internally reliable and consistent. So, $0.920 > 0.7$ indicates that the used instrument is a reliable and consistent instrument.

Table-2: KMO and Bartlett's Test for adequacy of sample

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.877
Bartlett's Test of Sphericity	Approx. Chi-Square	1043.305
	Df	105
	Sig.	.000

As per the KMO, the sample is adequate and results are meritorious with 0.877

(Sig. < 0.05) A significant result indicates that the matrix is not an identity matrix.

Hypothesis 1

H_{A0}: The driving factors for enhancing productivity at the workplace are not reliable and valid.

H_{A1}: The driving factors for enhancing productivity at the workplace are reliable and valid.

The method used for testing Hypothesis 1 is the Confirmatory Factor Analysis (CFA). CFA was used to validate the measurement model empirically and Hypothesis 1 was tested using AMOS 23.

Validation of the Measurement Model: The following validity and reliability checks are carried out in order to satisfy the validity procedure :

- Convergent Validity
- Composite Reliability
- Discriminant Validity

Identification of Constructs using CFA :

1. Construct 1: Organizational Communication and Leadership
2. Construct 2: Professional Development & Job Satisfaction
3. Construct 3: Stress Management

Variables and Measurement:

1. **Organizational Communication and Leadership:** Using the following six measured indicators, Construct 1 was measured.

Table-3: Construct 1

Latent Construct: Construct 1: Organizational Communication and Leadership	
Indicators	Statement
OCL1	Helps in building cohesiveness in groups
OCL2	Provides a good climate for learning, growth and coordination
OCL3	Makes the organization a better place to work
OCL4	Corporate Education / Training helps the individual in making better decisions and effective problem solving
OCL5	Provides information for improving leadership, knowledge, communication skills and attitude
OCL6	Increase in Productivity due to the enhanced competencies

2. **Professional Development & Job Satisfaction:** Using following five measured indicators, Construct 2 was measured.

Table-4: Construct 2

Latent Construct: Construct 2 (Professional Development & Job Satisfaction)	
Indicators	Statement
PDJS1	Aids in bringing and accomplishing self-development and self confidence
PDJS2	Increases Job Satisfaction and recognition
PDJS3	While improving interactive skills moves towards personal goals
PDJS4	Develops a sense of growth in learning outcomes
PDJS5	Helps to develop speaking, listening and the writing skills

3. **Stress Management:** Using following four measured indicators, Construct 3 was measured.

Table-5 Construct 3

Latent Construct: Construct 3 (Stress Management)	
Indicators	Statement
SM1	Helps to manage stress, tension, frustration and conflict.
SM2	Stimulates Critical Thinking
SM3	Helps to remove fear in attempting new tasks
SM4	Boosts up the morale

Convergent Validity

Using t-statistic for each factor loading, the convergent validity is verified. All factor loadings lie between 0.673 and 0.808 and are greater than 0.50. The standardized factor loadings (λ) of construct items of the measurement model are presented in the below Table-6.

Table-6: Factor Loadings

Construct Indicators	Item	Factor Loading (λ)
Organizational Communication and Leadership	Helps in building cohesiveness in groups	0.786
	Provides a good climate for learning, growth and coordination	0.808
	Makes the organization a better place to work	0.673
	Increase in Productivity due to the enhanced competencies	0.679
	Aids in bringing and achieving self- development and self confidence	0.712
	Increases Job Satisfaction and recognition	0.673
Professional Development & Job Satisfaction	Industry-Academia higher education programs helps the individual in better decision making and effective problem solving	0.772
	Provides information for improving leadership, knowledge, communication skills and attitude	0.733
	Moves towards personal goals while improving interactive skills	0.76
	Sense of growth in learning is developed	0.756
	Supports to develop speaking, listening and writing skills.	0.744
Stress Management	Helps to manage stress, tension, frustration and conflict.	0.726
	Stimulates Critical Thinking	0.736
	Helps to remove fear in attempting new tasks	0.74
	Boosts up the morale	0.789

As $p < 0.001$, so it can be said that all the factor loadings are significant.

Table-7: Constructs with Average Variance Extracted (AVE) and Factor loadings

Sr. No.	Construct	CR	AVE	Construct Factor Loadings (λ)
1.	Organizational Communication and Leadership	0.868	0.524	0.721

2.	Professional Development & Job Satisfaction	0.868	0.567	0.753
3.	Stress Management	0.835	0.560	0.750

For the first factor of ‘Construct 1’ AVE was calculated as:

$$AVE = \frac{(\sum_{i=1}^n \lambda_i^2)}{(\sum_{i=1}^n \lambda_i^2) + (\sum_{i=1}^n \delta_i)}$$

$$\frac{3.144}{3.144+2.855} = 0.524$$

The AVE and the construct factor loadings are shown in Table 7. Factor loadings and AVE values are greater than 0.5. All constructs and all items have high loadings, indicating convergent validity

Composite Reliability

It is a square of the sum of standardized factor loadings divided by square of the sum of loadings plus the sum of indicator measurement errors . The composite reliability for the construct ‘Construct 1: Organizational Communication and Leadership’ was calculated as follows :

$$\text{Composite Reliability } (\rho) = \frac{(\sum \lambda_i)^2}{[(\sum \lambda_i)^2 + \sum(\delta_i)]}$$

$$CR = \frac{18.757561}{18.757561 + 2.855}$$

CR=0.867881=0.868

In a similar manner, the remaining constructs’ Composite Reliability can be calculated.

Discriminant Validity

The diagonal items in the table represent the square root of AVEs, which is a measure of variance between the construct and its indicative factors. The off-diagonal items represent the squared correlation between constructs.

For confirming the discriminant validity following three conditions must be met.

1. Inter-Construct Correlations must be less than the square root of AVE
2. AVE>MSV
3. AVE>ASV

Table-8: Check for Discriminant Validity

Sr. No.	Name of Construct	C.R.	AVE	MSV	ASV
1.	Organizational Communication and Leadership	0.868	0.524	0.520	0.259
2.	Professional Development & Job Satisfaction	0.868	0.567	0.502	0.214

3.	Stress Management	0.835	0.560	0.546	0.181
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Table-9: Inter-construct Correlations:

Constructs	Organizational Communication and Leadership	Professional Development & Job Satisfaction	Stress Management
Organizational Communication and Leadership	0.776		
Professional Development & Job Satisfaction	0.748	0.779	
Stress Management	0.739	0.677	0.853

1. As shown in the above two tables, the “Square Root of AVE” which lies in the range 0.776 to 0.853. It can be seen that the square root of AVE of each construct > each value of inter-construct correlations.
2. In the above table $MSV < AVE$.
3. As per the above table shown $ASV < AVE$.

Therefore, with respect to the above three conditions as they are satisfied this confirms the Discriminant Validity.

Measurement Model Confirmation

Once the validation was fulfilled for the measurement model, the results of the CFA using AMOS 23 was used to fit the model for confirmation.

The Measurement Model

All the three factors are correlated with each other. In this measurement model, observed variables are minimum 4 to maximum 6. Each observed variable is checked for regression with dependent factor. Their reliability is checked with the error terms.

Model Identification

The identified model in this research study is an over-identified model with positive degrees of freedom (87). In this model, there are 135 distinct sample moments. Using these estimates of the default model, and 48 dissimilar parameters were derived, leaving 87 degrees of freedom. Since it is positive it is referred as over identified.

Table-10: Computation of degrees of freedom from AMOS output

Number of distinct sample moments	135
Number of distinct parameters to be estimated	48
df : 135-48	87

The measurement Model is as drawn below:

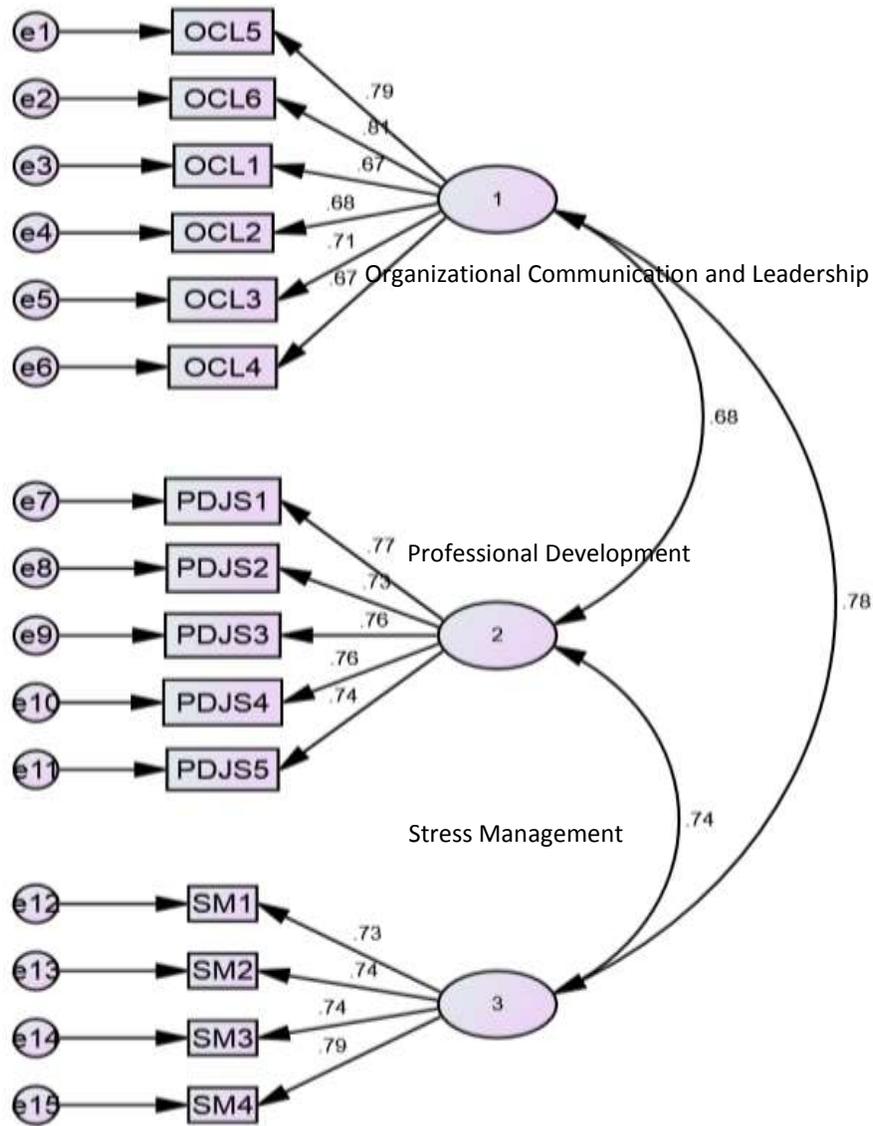


Figure-1: Measurement Model

Table-11: CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	48	213.419	87	0.000	2.453
Saturated model	135	.000	0		
Independence model	30	1096.150	105	.000	10.440

In the Model Fit a relatively small chi-square value supports the proposed theoretical model being tested. In this model, the value χ^2 is 213.419 and is small as compared to the value of the independence model (1096.150). Hence the χ^2 value is good .

Fit statistics of the Measurement model

The outcome of Confirmatory Factor Analysis was assessed using IBM SPSS AMOS-23. The measurement model indices are compared with model fit indices and confirmed about the fit statistics which are shown in the below Table 12.

Table-12

Sr. No.	Fit Indices	Observed Value	Criteria of Acceptable Fit	Result
1.	DF/CMIN	2.453	< 5	Accepted Fit
2.	CFI	0.91	>0.9	Accepted Fit
3.	RMSEA	0.087	0.05 to 0.10	Moderately Fit
4.	RMR	0.042	< 0.05	Accepted Fit

The model shows an overall acceptable fit.

As Composite Reliability, Construct and Discriminant Validity are positive and the Measurement Model also has an overall acceptable fit, hence null hypothesis 'H_{A0}' is rejected and alternate hypothesis 'H_{A1}' "The driving factors for enhancing productivity at the workplace are reliable and valid" is accepted.

Hypothesis-2

H_{B0}: Industry-Academia Higher Education programs are not contributing significantly in the enhancement of the Productivity of employees.

H_{B1}: Industry-Academia Higher Education programs are contributing significantly in the enhancement of the Productivity of employees.

Test used

- The Statistical test used is the One Sample t-test
- Variables and Measurement: The respondents were offered the "Industry-Academia Higher Education programs" and the related parameters measuring effectiveness of the programs.. Each parameter was further measured using the 5-point Likert Scale.
- Quantifying Effectiveness: since point 5 & 4 in the above scale refer to 'Strongly Agree' and 'Agree', the value "4" was taken as a test value and used to quantify the concept of effectiveness.

H₀: $\mu = 4$

H₁: $\mu \neq 4$

- The level of significance used was (α): 0.05

Table-13: One Sample t-test

Parameters	Mean	S.D.	t-value	p-value	Result
PDJS1	4.47	.658	7.844	.000	$P < 0.05$ Significant
OCL5	4.61	.521	13.023	.000	$P < 0.05$ Significant
MS1	4.01	.918	-.395	.694	$P > 0.05$ Insignificant
PDJS2	4.66	.600	12.074	.000	$P < 0.05$ Significant
OCL6	4.08	.905	1.000	.319	$P > 0.05$ Insignificant
MS2	4.34	.678	5.612	.000	$P < 0.05$ Significant
PDJS3	4.46	.694	7.304	.000	$P < 0.05$ Significant
PDJS4	4.57	.668	9.353	.000	$P < 0.05$ Significant
PDJS5	4.43	.703	6.695	.000	$P < 0.05$ Significant
MS3	4.29	.777	4.081	.000	$P < 0.05$ Significant

MS4	4.40	.746	5.948	.000	<i>P<0.05 Significant</i>
OCL1	4.32	.753	4.692	.000	<i>P<0.05 Significant</i>
OCL2	4.52	.646	8.976	.000	<i>P<0.05 Significant</i>
OCL3	4.22	.940	2.599	.011	<i>P<0.05 Significant</i>
OCL4	4.46	.645	7.864	.000	<i>P<0.05 Significant</i>

From the above Table-13, for variables (PDJS1, OCL5, PDJS2, MS2, PDJS3, PDJS4, PDJS5, MS3, MS4, OCL1, OCL2, OCL3, OCL4) Mean>4 and $p<0.05$, hence respondents are strongly agreeing to the significant contribution of these parameters. For (variables MS1, OCL6) Mean>4 and $p>0.05$ so it indicates that the respondents are agreeing to the significant contribution of these parameters (MS1, OCL6).

Based on the above analysis, the null hypothesis “ H_{B0} : Industry-Academia Higher Education programs are not contributing significantly in the enhancement of the Productivity of employees is rejected and hence " H_{B1} : Industry-Academia Higher Education programs are contributing significantly in the enhancement of the Productivity of employees" is accepted.

5. CONCLUSION

- 15 distinct driving factors and their three constructs (Organizational Communication and Leadership, Professional Development & Job Satisfaction, Stress Management) are identified through this research study by using Exploratory Factor Analysis (EFA).
- Hypothesis-1 is tested using Confirmatory Factor Analysis (CFA), reliable and valid driving factors for enhancing productivity at workplace are confirmed. Hence, Null Hypothesis ‘ H_{A0} ’ is rejected.
- Measurement Model of enhancing 'Productivity of employees' at workplace is proposed with accepted fit parameters using CFA.
- Cronbach's Alpha Value is 0.920 which shows the internal consistency of items.
- The study provides a reliable and valid Measurement model with three constructs of effective higher education through corporate training for employee productivity viz. Organizational Communication and Leadership, Professional Development & Job Satisfaction, Stress Management. These constructs are confirmed with the measurement model fit parameters.
- Hypothesis-2 was tested using ‘One Sample t-test which results that ‘Industry-Academia Higher Education program are contributing significantly in the enhancement of the Productivity of employees’.

6. DISCUSSION

Through this research the driving factors for enhancing productivity at the workplace are identified. A measurement model for the enhancement of the productivity of the employees is suggested. The reliability and validity of the model is ensured by appropriate statistical tools.

The proposed model is the best tool to identify the impact of Industry-Academia Higher Education for enhancing the Productivity of employees in the IT and Manufacturing sectors. Further it can be extended to other industries with some relevant customization as per the need of those particular sectors.

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