
FACTORS INFLUENCING THE INTELLECTUAL CAPITAL OF INDIAN UNIVERSITIES: A STUDENTS PERSPECTIVE

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Abstract

India possesses a highly developed education system, next only to United States of America and China (World Bank, 2010) and will have the second largest graduate talent pipeline globally, following china ahead of the USA (OECD, 2012). Universities in India is undergoing a metamorphosis due to increasing stakeholder demand for the greater transparency, the increasing competition between universities and firms, a greater autonomy which compels the universities towards evaluating and reporting the intellectual capital. The students, researchers, faculty, administrators and service staff are considered as the valuable intangible resources of the University. The current study attempts to explore the student's perception on Intellectual Capital of Universities. It also discovers the influence of demographic variables on student's perspective on Intellectual Capital of Universities and also brings out the differences between the students perspective.

Keywords: Intellectual capital, Universities, Students Perspective, Higher Education Institutions.

Introduction

India possesses a highly developed education system, next only to United States of America and China (World Bank, 2010) and will have the second largest graduate

talent pipeline globally, following China ahead of the USA (OECD, 2012). OECD predicts that in 2010, 200 million of the world's age group between 25 and 34 years old will be the university graduate and 40% of them will be from China and India, leading to the huge proportion of the global talent pool. Thus, Universities in India is undergoing a metamorphosis due to increasing stakeholder demand for the greater transparency, the increasing competition between universities and firms, a greater autonomy which compels the universities towards evaluating and reporting the intellectual capital. As environment turbulence increases and competition intensifies Universities need to respond to the pressure of the market place (Levene, 2001). Thus, Universities are required to create, manage and leverage their intellectual capital, where knowledge serves as an input and output. The students, researchers, faculty, administrators and service staff are considered as the valuable intangible resources of the University. The current study attempts to explore the student's perception on Intellectual Capital of Universities. It also discovers the influence of demographic variables on student's perspective on Intellectual Capital of Universities and also brings out the differences between the students perspective.

Review of Literature

(Nazem, 2012) provide the structure model for intellectual capital based on knowledge management in universities. The study found out that the dimension of knowledge management had a direct effect on intellectual capital. The study also highlights the effect role of Higher Education in the economic, social, political and cultural development

Yolanda, et al (2013) make an attempt to standardise the indicator for measuring and reporting the intellectual capital of universities. Further, the study provides guidelines to help universities which are useful to the stakeholder for the greater transparency, accountability and comparability in higher education sector.

Further, the **British Council (2013)** in its report "Understanding India – the Future of Higher Education and Opportunities for International Cooperation" has explored the stakeholder views on future education in India by conducting semi-structured qualitative interviews. Further, the study explores the stakeholder's perceptions and insights on future priorities in systemic reforms, institutional development and teaching and learning. Thus, the present study explores the stakeholder's perspective, particularly the student's perspective on the factors influencing the Intellectual Capital in Indian Universities.

Research Methodology

This chapter deals with the research methodology. It states the research problem, objectives of the study, research design, sampling procedure, tools for analysis, the profile of the respondents, method of analysis.

Objectives of the Study

The objective of the study is as follows:

1. To identify the factors that influence the Intellectual Capital of Indian Universities based on students perspective
2. To find out the difference between the demographic variable and the factors influencing the students perspective among the Indian Universities

Research Design

The present study is empirical in nature. The primary data were used in this study. This study proposes to identify the student's perception on assessing the Intellectual Capital of Indian University.

Sampling Procedure

The data was collected from 372 students from the universities in India. The semi-structure questionnaire was used study Karpagam & Suganthi, 2013). Variables were developed for the identified variables and they were rated for their influence on the Intellectual Capital of an institution on a five-point rating scale where one represents very low influence and five represents very high influence.

Tools for Analysis

This study has applied Statistical tools such as factor analysis, mean ranking and 't' test. The statistical software was used for the study SPSS version 20.

Analysis and Findings

The demographic details from Table 1 show 60.8% of the respondents were men and the rest 39.2% of them were women, 73.9% were students and 26.1% were scholars.

Table 1 Demographic Profile of Students Perspective

Demographic Variable	Category	Frequency	Percentage
Gender	Male	226	60.8%
	Female	146	39.2%
Designation	Students	275	73.9%
	Scholar	97	26.1%

Factor Influence on Intellectual Capital in Indian Universities

Factor analysis was carried out based on the thirty-five variables presented in the questionnaire. Items with Eigen values greater than 1 and communalities (>0.6) were subjected to data reduction using principal component analysis and varimax rotation. When factor analysis was done 9 out of 35 variables were removed due to lesser communality values (<0.6) and hence only the remaining 26 variables were considered for further analysis. EFA resulted in a five factor model for the condition that eigen value above 1 and communality (>0.6). The results of factor analysis are presented in Table 2, 3, and 4.

Table 2 KMO and Bartlett's Test– Students Perspective

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.835
Bartlett's Test of Sphericity	Approx. Chi-Square	6417.231
	df	561
	Sig.	.000

The Kaiser-Meyer-Olkin (KMO) value of 0.835 of sampling adequacy was found to be significant. These show that the variables are factorable.

Table 3 Results of Factor analysis - Students Perspective

Variance explained	Factor	Cronbach-Alpha Values				
		1	2	3	4	5
65.10	5	.900	.889	.857	.804	.631

From Table 3, it can be inferred that the variance extracted is 65.10% and Cronbach alpha for most of the factors are above 0.6, the five factor structure was considered as the best structure with respect to students perspective. The factor model is proved to be valid and the factor loadings are presented in Table 4.

Table 4 Factor Grouping with Loadings of Students Perspective

S.No.	Variable No.	Variables Name	Factors	Loading	Extraction Sums of Squared Loading	CA
1	V3	Pay package offered by employers	Effective Placement	.853	27.918	.900
2	V2	No. of companies visiting for campus recruitment		.842		
3	V4	Percentage placement of students		.803		
4	V1	Ease of Placement		.782		
5	V22	Enrolment trend	Quality of Students	.708	41.799	.889
6	V21	Systematic selection of student/staff		.820		
7	V26	Motivation for knowledge creation		.789		
8	V20	Admission criteria		.742		
9	V11	Qualified faculty more than required number of faculty on rolls	Effective Teaching	.821	50.951	.857
10	CV12	Innovation in teaching		.805		
11	CV9	Employer satisfaction of students		.739		
12	CV8	Public examination easily complied		.731		
13	CV29	Quality of faculty	Standardized Process	.787	58.761	.804
14	CV30	Availability of top management for contact		.782		
15	CV31	Counselling and grievance cell		.770		
16	CV34	Student-teacher ratio		.617		
17	CV18	Online information dissemination	Academic Delight	.764	65.106	.631
18	CV19	Automated processes of the University		.758		
19	CV15	Publication in journals		.598		

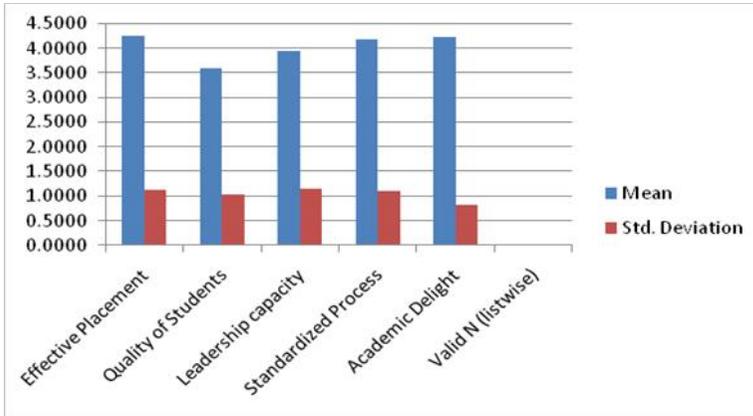
Table 4 shows that 19 items have merged into five factors. The five factors namely Effective Placement, Quality of Students, Effective Teaching, Standardized Process and

Academic Delight. These five factors influence the Intellectual Capital of the Indian Universities based on student's perspective.

Table 5 Mean analysis and Rank Scores of Intellectual Capital in Indian Universities – A Student's perspective

Factors	Mean	Std. Deviation	Rank
Effective Placement	4.26	1.11	I
Quality of Students	3.61	1.03	V
Effective Teaching	3.96	1.14	VI
Standardized Process	4.18	1.11	III
Academic Delight	4.23	.81	II

Figure 1 Graphical Representation of Means and Standard Deviations of Students Perspective



From the Table 5 shows the ranking using mean score and standard deviation are given. It can be inferred from the Table that the "Effective Placement" is most prominent variable for students with the highest mean score of (4.26), inferred that students and scholars are perceived universities, as an avenue for

their placement. Followed by "Academic Delight"(4.23), "Standardized Process" with a mean score (4.188), Effective Teaching (3.96) and Quality of Student(3.61).

T –Test was used to find out whether there is a significant difference between the demographic variables and factors influencing the student's perspective on Intellectual Capital of Indian Universities.

Null Hypothesis H₀1: There is no significant difference between male and female with respect to the Students Perspective.

Table 6 T test for Significance of Different between Male and Female with Respect to the Students Perspective

Gender		Mean	Std. Deviation	Levene's Test for Equality of Variances		t-test for Equality of Means	
				F	Sig.	t	Sig. (2-tailed)
Effective Placement	0	4.17	1.052	2.366	.125	-1.353	-1.353
	1	4.33	1.158				
Quality of Students	0	3.72	1.034	.001	.975	1.653	.099
	1	3.54	1.037				
Effective Teaching	0	3.82	1.164	.840	.360	-1.847	.066
	1	4.0531	1.13012				
Standardized Process	0	4.1986	1.06751	.455	.501	.145	.885
	1	4.1814	1.14613				
Academic Delight	0	4.2466	.82681	.374	.541	.189	.850
	1	4.2301	.81659				

Note: 1=Male, 0=Female

It can be inferred from Table 6. The thumb rule of Levene's test for homogeneity of variances had significant values (sig (p) < 0.05). The result shows that all the variable are more than 0.05. Hence, it is concluded that the respondents were considered to be a homogeneous set, states that variances are equal for male and female with regard to students perspective. The Thumb rule of t-test used for Equality of Means in variables Sig. (2-tailed) p < 0.05). The result shows that p value is greater than 0.05 for all the variables. Since p value is greater than 0.05, the null hypothesis is accepted at 5% level of significance. Hence, it is concluded there is no difference between male and female with respect to the Students Perspective on Intellectual Capital of Indian Universities.

Null Hypothesis Ho2: There is no significant difference between students and scholars with respect to the Students Perspective on Intellectual Capital of Indian Universities.

Table 7 T test for Significance of Different between Students and Scholars with Respect to the Students Perspective

Effective Placement		Mean	Std. Deviation	Levene's Test for Equality of Variances		t-test for Equality of Means	
				F	Sig	t	Sig. (2-tailed)
Effective Placement	1	4.24	1.070	1.25	.263	-.219	.827
	0	4.27	1.138				
Quality of Students	1	3.61	1.055	.23	.632	.033	.974
	0	3.61	1.034				
Effective Teaching	1	3.85	1.070	.45	.503	-1.092	.275
	0	4.00	1.172				
Standardized Process	1	4.32	1.087	.15	.694	1.459	.145
	0	4.13	1.121				
Academic Delight	1	4.39	.685	.76	.383	2.180	.030
	0	4.18	.856				

Note: 1=Students, 0=Scholars

It can be inferred from the Table 7, that all the variable are more than 0.05, hence it is concluded that the respondents were considered to be a homogeneous set and that variances are equal in students and scholars. The significant difference was found only with one factor called "Academic Delight" with respect to students and scholars (t=2.180 and p=0.030), hence the null hypothesis Ho is rejected at 5% level of significance which indicates that the student (4.39) has high mean score than scholars (4.18). Hence, it is concluded that equal variances for variables were justified in students and scholars with respect to the Students Perspective on Intellectual Capital of Indian Universities.

Conclusion

This study investigated the perspective of students on Intellectual Capital of Indian Universities. The effective placement is considered as the significant variable for

Intellectual Capital in the Universities because students and scholars consider university as an avenue to earn their placements. Thus 'Placement' plays an important role for the academic performance of higher education institutions (Geoff Mason and Gareth William (2009); Smith, McKnight and Naylor (2000); Alexandros Mandilaras). Therefore, the higher education institutions should focus on developing the student's skill development which will help the students for getting an opportunity to enter into the organisations (private firms, government jobs, universities and entrepreneurs, etc.). Though the gender place an important role in labour market outcomes, there is no difference between the genders on student's perspective on Intellectual Capital in Indian Universities

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