

Campus placements in Kerala-An empirical study at the selected Engineering Colleges in Kerala

Suresh Kumar N^{*}, Prasanth MK^{**}, Ajith Sundaram^{***}

^{*} Associate Professor and Head of the Department, College of Engineering and Management Punnapra, Alappuzha, Kerala.

^{**} Assistant Professor, Institute of Management and Technology Punnapra, Alappuzha, Kerala

^{***} Asst Professor, RVS Institute of Management Studies, Kannampalayam, Coimbatore.

Abstract- The fundamental skills that are acquired by the students at the school level have an overall impact in shaping the career of students. In the later stages the extracurricular activities such as technical events, arts, sports and games, has an impact on the overall personality development and hence increases the employability of the students. Apart from that the quality of teaching and medium of instruction are important component at various stages of selection process. The percentage of drop outs in the first and second stage (Screening test and Group Discussion) is the highest in the selection process. The level of interest of students in campus placements whose guardian is in various professions such as business, salaried and professional differ. More over there is association between number of placement drives attended by the students and the percentage marks obtained by the students, the number of times the candidate have cleared the group discussion and the percentage mark obtained by the candidate.

I. INTRODUCTION

The Engineering education in Kerala is flourishing at a rapid rate with 140 Engineering colleges containing 39000 Engineering seats in various disciplines. Out of these 39000 Engineering seats only 3000 seats comes under Government of Kerala and the remaining 36000 Engineering seats are owned by Government controlled self financing colleges and privately owned self financing colleges But the real fact is that apart from tier1 Engineering colleges which includes various Government colleges under Department of Technical Education and very few private owned self financing colleges which have a good placement records the number of students who got industry offers through campus placements comes around 25%. In this paper we are focusing on what are the various parameters that affect the students in tackling campus placements and how these parameters affect the employability of the students.. Because there are lot of Government Engineering colleges, Management Engineering Colleges (aided) and self financing Engineering colleges in every district of Kerala. It is very hard to differentiate or rank the top 10 engineering colleges among them, we should judge many criteria, like Academic Record and history, Placement history, Lab and Library Facilities, Faculties, Campus culture, Management, Arts & Sports performances in competitions etc. The important factors that make a student to be successful in tackling campus placements is to identify the opportunities, practices in tackling interview ,GD and Aptitude Test, review curriculum an to search the profile of the company

where the applicant is papering for interview and to equip yourself in tackling it.

II. OBJECTIVES

To find out the impact of the extracurricular activities on students and its relation with campus placement.

To find out the impact of educational qualification of parents (family background) with respect to campus placement.

To find out various parameters of teaching that plays a pivotal role in modeling the students at various stages of selection process.

III. HYPOTHESIS

H1: There is a significant difference between Educational Qualification with respect to level of interest in campus placement.

H2: There is a significant difference between number of placement drives attended and the percentage marks obtained by the students.

H3: There is a significant difference between number of times the student cleared the aptitude test and the percentage marks obtained by the students.

H4: There is a significant between number of times the student cleared the Group Discussion and the percentage marks obtained by the students.

H5: There is a significant difference between mean ranks various factors affecting the students to convert campus placements to industry offers.

IV. SCOPE OF THE STUDY

Before the opening Kerala's Higher education sector to government controlled and Private self financing colleges, there were limited number of colleges(below 10) and limited number of engineering seats(in between 1500-2000). It was a golden time where almost all the students were placed in respected institutions. But the opening of the sector opened a new window of opportunity to the student's community to pursue engineering education but posed a big challenge to the system. The present pass rate is in between 40-45 percent and campus placement is nearly 25%.The study analyses the important factors affecting campus placements and put forward suggestions to improve it. The study having wide impact as it can be used as a tool by the academicians, corporate and students for improving in the future.

Research Methodology:

The study was conducted at the leading engineering colleges in Kerala. The various elements of research design are;

a) Database Design-The primary data was collected from students of engineering colleges in Kerala. The secondary data was collected from government records, other official records journals, text books and internet portals.

b) Measurement Design- The data was collected by using questionnaire. Nominal, ordinal; interval and ratio scales were used depending upon the data collected.

c) Sampling Design- The simple random sampling is used for the study. The total sample size is 114 and the samples were collected from the student’s community of selected engineering colleges in Kerala. The period of the study was from January 02, 2012 to May 25, 2012.

d) Statistical design: Appropriate mathematical and statistical tool were used for analysis.

Analysis Procedure

The data was analyzed using statistical package for social science (SPSS V 12.0). Descriptive statistics such as mean and standard deviation were generated to provide an overview of the data. ANOVA was used for finding significant difference between Educational Qualification with respect to level of interest in campus placement. Chi-square test were used to find out association between number of placement drives attended and the percentage marks obtained by the students, number of times the student cleared the aptitude test and the percentage marks obtained by the students, number of times the student cleared the Group Discussion and the percentage marks obtained by the students. The Friedman test was used for finding out the various parameters of teaching and extracurricular activities on campus placements.

Limitations of the study:

- There are certain limitations of these project report which are listed below;
- The major constraint of the study was the study was limited to last academic year 2011-2012.
- Some of the students did not co-operate with the survey.
- Sample size for the study is low.
- There are chances that the respondent’s bias may also reduce the effectiveness of the data collected.
- The result of the study cannot be generalized.

HYPOTHESIS 1

Null Hypothesis: There is no significant difference between occupation of guardian of students with respect to the level of interest in campus placements

Table 1: ANOVA for significant difference between Educational Qualification with respect to level of interest in campus placement

Occupation of guardian	Mean	Std. Deviation	F value	P value
Business	34.73 _c	1.973	22.531	0.000**
Salaried	33.14 _b	1.002		
Professional	31.00 _a	0.000		

Note ** Denotes significance at 1% level Duncan Multiple Range test

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence concluded that there is significant difference between occupation of the guardian with respect to the level of interest in campus placement. Based on Duncan Multiple Range test the level of interest of students in campus placements whose guardian is doing business , salaried and professional differ.

HYPOTHESIS 2

Null Hypothesis: There is no association between number of placement drives attended and percentage marks obtained by the student

Table 2: Chi-square test for association between number of placement drives attended and the percentage marks obtained by the students

No. of times campus placements attended	Percentage of marks		Total	Chi Square Value	P value
	60-65	66-75			
1	12 (100.0%) [20.0%]	0 (0.0%) [0.0%]	12 (100.0%) [10.5%]	48.619	0.000**
2	6 (25.0%) [10.0%]	18 (75.0%) [33.3%]	24 (100.0%) [21.1%]		

3	6 (20.0%) [10.0%]	24 (80.0%) [44.4%]	30 (100.0%) [26.3%]
5	12 (100.0%) [20.0%]	0 (0.0%) [0.0%]	12 (100.0%) [10.5%]
7	12 (66.7%) [20.0%]	6 (33.3%) [11.1%]	18 (100.0%) [15.8%]
9	6 (50.0%) [10.0%]	6 (50.0%) [11.1%]	12 (100.0%) [10.5%]
10	6 (100.0%) [10.0%]	0 (0.0%) [0.0%]	6 (100.0%) [5.3%]
Total	60	54	114

Note: 1. The value within () refers to Row Percentage
2. The value within [] refers to Column Percentage
3. ** denotes significant at 1% level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence we can infer that there is association between number of placement drives attended by the students and the percentage marks obtained by the students. The students who is securing 60 to 65% marks at the B.Tech level have attended more number of placement drives compared to students who is securing 66 to 75% marks. This may be due to the fact that the students who is securing percentage marks between 66 to 75 will get absorbed in campus placements in the initial campus recruitment drives .So they will not attend further recruitment drives and hence the number of drives attended by the students who is securing aggregate marks in the range 66 to 75 % will be less as compared to those securing the marks in the range 60- 65%.Moreover the majority

of the students with aggregate marks in the range 66 to 75 will get offers within three recruitment drives.

HYPOTHESIS 3

Null Hypothesis: There is no association between number of times the student had cleared the aptitude test and percentage marks obtained by the student

Table 3: Chi-square test for association between number of times the student cleared the aptitude test and the percentage marks obtained by the students

No of times cleared aptitude test	Percentage of marks		Total	Chi Square Value	P value
	60-65	66-75			
0	12 (100.0%) [20.0%]	0 (0.0%) [0.0%]	12 (100.0%) [10.5%]	43.519	0.000*
1	12 (28.6%) [20.0%]	30 (71.4%) [55.6%]	42 (100.0%) [36.8%]		
2	12 (50.0%) [20.0%]	12 (50.0%) [22.2%]	24 (100.0%) [21.1%]		
3	6 (50.0%) [10.0%]	6 (50.0%) [11.1%]	12 (100.0%) [10.5%]		
4	0 (0.0%) [0.0%]	6 (100.0%) [11.1%]	6 (100.0%) [5.3%]		
6	18 (100.0%) [30.0%]	0 (0.0%) [0.0%]	18 (100.0%) [15.8%]		
Total	60	54	114		

Note: 1. The value within () refers to Row Percentage
2. The value within [] refers to Column Percentage
3. ** denotes significant at 1% level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance.

Hence we can infer that there is association between number of times the candidate have cleared the aptitude test and the percentage marks obtained by the students .We can infer that the majority of students who secure an aggregate mark between 66 to 75% will clear at least one aptitude test. This may be due to the fact that the intelligence quotient level of students who secure 66 to 75% marks are more than that of those students who got 60 to 65% marks in the examination

HYPOTHESIS 4

Null Hypothesis: There is no association between number of times the student had cleared the group discussion and percentage marks obtained by the student

Table 4: Chi-square test for association between number of times the student cleared the Group Discussion and the percentage marks obtained by the students

No of times cleared Group discussion	Percentage of marks		Total	Chi Square Value	P value
	60-65	66-75			
0	18 (60.0%) [30.0%]	12 (40.0%) [22.2%]	30 (100.0%) [26.3%]	30.970	0.000*
1	12 (25.0%) [20.0%]	36 (75.0%) [66.7%]	48 (100.0%) [42.1%]		
2	18 (75.0%) [30.0%]	6 (25.0%) [11.1%]	24 (100.0%) [21.1%]		
4	6 (100.0%) [10.0%]	0 (0.0%) [0.0%]	6 (100.0%) [5.3%]		

6	6 (100.0%) [10.0%]	0 (0.0%) [0.0%]	6 (100.0%) [5.3%]		
Total	60	54	114		

Note: 1. The value within () refers to Row Percentage
2. The value within [] refers to Column Percentage
3. ** denotes significant at 1% level

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance.

Hence we can infer that there is association between the number of times the candidate have cleared the group discussion and the percentage mark obtained by the candidate. We can infer that the majority of students who secure an aggregate mark between 66 to 75% will clear at least one group discussion. This may be due to the fact that the students with good academic track record have a tendency to dedicate more time in equipping itself for clearing group discussion

HYPOTHESIS 5

Null Hypothesis: There is no significant difference between mean ranks towards various factors affecting the students to convert campus placements to industry offers

Table 6 Friedman test for significant difference between mean ranks various factors affecting the students to convert campus placements to industry offers

Factors affecting students to convert campus placements to industry offers	Mean Rank	Chi-square Value	P value
The quality of teaching is an important component at various stages of selection	5.13	210.832	0.000*
Medium of instruction by teachers has an impact on the ability of students in expressing their ideas when it comes to soft skill development	4.53		
The consistent academic track record has an impact in the overall employability of the students	3.92		
The fundamental skills that are acquired by the students at the school level has an overall impact in shaping the career of students in the later stages	5.84		
Spoon feeding by parents adversely affect the ability of the student to act on his own	4.24		

which in turn affects the employability in the later stages			
The percentage of drop outs in the first and second stage(Screening test and Group Discussion) is the highest in the selection process	5.03		
The one of the outcome of nuclear family is over attachment by parents towards children and vice versa adversely affect the career prospect of the student.	2.11		
The extra curricular activities such as technical events, arts ,sports and games, has an impact on the overall personality development and hence increases the employability of the students	5.21		

Since P value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Based on relative importance the various factors that plays pivotal role for students in converting campus placements to industry offers includes the fundamental skills that are acquired by the students at the school level has an overall impact in shaping the career of students in the later stages, the extracurricular activities such as technical events, arts ,sports and games, has an impact on the overall personality development and hence increases the employability of the students, the quality of teaching is an important component at various stages of selection, the percentage of drop outs in the first and second stage(Screening test and Group Discussion) is the highest in the selection process and medium of instruction by teachers has an impact on the ability of students in expressing their ideas when it comes to soft skill development

V. CONCLUSION

It is certainly possible that one's personality and emotional temperament would influence one's academic abilities, and, regardless of the variations in language and classification, there is some evidence of an association between affective characteristics and academic performance.

There is certainly a need for more research on the effectiveness of using multiple measures for academic placement, as well as guidance on the potential uses of the non cognitive assessments.

REFERENCES

[1] Armstrong, W. B. (2000). The association among student success in courses, placement test scores, student background data, and instructor grading practices. *Community College Journal of Research & Practice*, 24(8), 681–695.

[2] Bailey, T. (2009). Challenge and opportunity: Rethinking the role and function of developmental education in community college. *New Directions for Community Colleges*, 145, 11–30.

[3] Bailey, T., Jeong, D. W., & Cho, S.-W. (2010). Referral, enrollment, and completion in developmental education sequences in community colleges. *Economics of Education Review*, 29(2), 255–270.

[4] Behringer, L. B. (2008). Remedial education at the community college: A study of student sensemaking (Doctoral dissertation). New York, NY: New York University Steinhardt School of Culture, Education, and Human Development.

[5] Berger, D. M. (1997). Mandatory assessment and placement: The view from an English department. *New Directions for Community Colleges*, 100, 33–41.

[6] Bettinger, E. P., & Long, B. T. (2005). Remediation at the community college: Student participation and outcomes. *New Directions for Community Colleges*, 129, 17–26.

[7] Bettinger, E. P., & Long, B. T. (2009). Addressing the needs of underprepared students in higher education: Does college remediation work? *Journal of Human Resources*, 44(3), 736–771.

[8] Boylan, H. R. (2002). What works: Research-based best practices in developmental education. Boone, NC: Continuous Quality Improvement Network with the National Center for Developmental Education, Appalachian State University.

[9] Boylan, H. R. (2009). Targeted Intervention for Developmental Education Students (T.I.D.E.S). *Journal of Developmental Education*, 32(3), 14–23.

[10] Brennan, R. L. (Ed.). (2006). *Educational measurement* (4th ed.). Westport, CT: ACE/Praeger Publishers.

[11] Calcagno, J. C., & Long, B. T. (2008). The impact of postsecondary remediation using a regression discontinuity approach: Addressing endogenous sorting and noncompliance (NBER Working Paper 14194). Cambridge, MA: National Bureau of Economic Research.

[12] Cohen, A. M., & Brawer, F. B. (2008). *The American Community College* (5th ed.). San Francisco, CA: Jossey-Bass.

[13] College Board. (2003). *ACCUPLACER OnLine: Technical manual*. New York, NY: College Board.

[14] College Board. (2007). *ACCUPLACER coordinator's guide*. New York, NY: College Board.

[15] Collins, M. L. (2008). *It's not about the cut score: Redesigning placement assessment policy to improve student success*. Boston, MA: Jobs for the Future.

[16] Conley, D. (2005). *College knowledge: What it really takes for students to succeed and what we can do to get them ready*. San Francisco, CA: Jossey-Bass.

[17] CPT Cut Score Committee. (2006). *CPT cut score committee final report*. Retrieved from Florida Department of Education website: http://www.fldoe.org/articulation/pdf/acc_102506ada.pdf

[18] Cronbach, L. J., & Snow, R. E. (1977). *Aptitudes and instructional methods: A handbook for research on interactions*. New York, NY: Irvington Publishers.

[19] Ewell, P., Boeke, M., & Zis, S. (2008). *State policies on student transitions: Results of a fifty-state inventory*. Boulder, CO: National Center for Higher Education Management Systems.

[20] Fonte, R. (1997). Structured versus laissez-faire open access: Implementation of a proactive strategy. *New Directions for Community Colleges*, 100, 43–52.

[21] Gerlaugh, K., Thompson, L., Boylan, H., & Davis, H. (2007). National Study of Developmental Education II: Baseline data for community colleges. *Research in Developmental Education*, 20(4), 1–4.

[22] Achilles, C. M., Reynolds, J.S., & Achilles, S.H. (1997). Problem analysis: Responding to school complexity. Larchmont, NY: Eye On Education.

[23] Airasian, P.W., Kellaghan, T., Madaus, G.F., & Pedulla, J.J. (1977). Proportion and direction of teacher rating changes of pupils' progress attributable to standardized test information. *Journal of educational Psychology*, 69(9), 702 – 709.

[24] Akst, G., & Hirsch (1991). Selected studies on math placement. *Review of Research in Developmental Education*, 8(4), 3-9.

[25] Aldeman, C. (1999). Why can't we stop talking about the SAT? *The Chronicle of Higher Education*, 46(11), B4-B5.

- [26] Aleamoni, L. & Oboler, L. (1978). ACT versus SAT in predicting first semester GPA. *Educational and Psychological Measurement*, 38, 393-399
- [27] Allen, J., & Sconing, J. (2005). Using ACT assessment scores to set benchmarks for college readiness (ACT Research Rep. No. 2005-3). Iowa City, IA: American College Testing Program.
- [28] American College Testing Program (1994). ACT Assessment course placement service interpretive guide. Iowa City, I: author.

AUTHORS

First Author – Suresh Kumar N. B.Tech, M.Tech

Associate Professor and Head of the Department, College of Engineering and Management Punnapra, Alappuzha, Kerala
Second Author – Prasanth MK. MBA, PGDCM
Assistant Professor, Institute of Management and Technology Punnapra, Alappuzha, Kerala
Third Author – Ajith Sundaram. B.Tech, MBA, MS (UK), (MSc Psychology), (PhD)
Asst Professor, RVS Institute of Management Studies
Kannampalayam, Coimbatore.