

Analysis of important parameters of social skills correlated to personal interview performance of engineering students.

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Abstract:

The objective of this research paper is to provide guidelines to the students & parents, for improving their performance in campus placement interviews on the basis of the performance of students in various activities representing their social skills

An attempt has been made to study the effect of students' performance in various activities on their performance in personal interview conducted during campus placement drives and also to identify the activity which has largest influence on performance in personal interview.

Introduction:

Campus placement activity is very significant for institutes, industries and students because of various reasons. The quantity and quality of jobs offered in campus placement drives is considered to be important for improving ranking of any institute. While finalizing admission of wards, parents also consider it as an important factor. The requirement of entry level engineering graduates in multinational companies is fulfilled through campus placement drives in technical institutes. While selecting a technical institute for campus drive industries give lot of importance to accreditations of the institution as a measure of quality of education being imparted to students. The accreditation agencies consider number of jobs offered in campus placement drives to be very important. Industries expect that the recruits are industry ready and should possess both technical and soft skills. They do not want to invest their resources in imparting training to the engineering graduates. As a result, only qualification of the engineering graduates is not adequate and it needs to be supplemented by social skills in order to get employment. The engineering graduates must be able to assess the possibility of getting job offers as per their own strengths and interests to have a successful career.

This study has been carried out to assess the effect of students' performance in various activities during their academic life on their performance in personal interview conducted during campus placement drives.

Objective of present research

To analyse the relation between parameters of social skills and engineering students' performance in campus placement interviews.

Literature survey:

Tripti Mishra has conducted a study for MCA students and have found that empathy is the most sought after quality in the industry since a student with high empathy becomes a good team player. Working on a project also helps the students in placement. They have stated that a student having project and good stress management skills is employable even if he does not have relevant work experience.

Selvi. R. et all have found that now a days, engineers opt for jobs that are not branch specific. They found out that there is a significant association between engineering branch and the working specialization and also between the graduate working on their area of specialization and job satisfaction. They have also found out that placement of students in campus drives depends upon their branch and their CGPA.

Duyen Q. Nguyen, has presented the results of a survey of personnel from academics, industry and students to get their views on what the essential generic and specialist skills and attributes are required for an engineer. The industry expects an engineer to have sound knowledge of fundamental engineering principles, to apply this knowledge into practice and is also expected to think logically, solve problems and communicate effectively. An engineer is expected to have competency, integrity, commitment, flexibility, commitment, reliability, discipline, punctuality etc.

Gowsalya G. and Ashokkumar M. have investigated the existing literature in the field of employability skills prevailing in India. They have reviewed the various employability skills desired from engineering graduates as well as university students. Being good at one skill is not adequate to sustain in the competent world. It emphasizes the importance of multitasking to get employment.

Research methodology:

An attempt has been made to evaluate the effect of students' performance in different activities during their student life on their performance in personal interview conducted during campus placement drives. These activities have been broadly categorized as co-curricular, extracurricular, literary, leadership and artistic activities, industry institute interaction and other academic inputs. The sample consists of students from engineering colleges affiliated to Nagpur university.

The statistical analysis of data using multiple regression analysis has revealed that 64.60% variance in personal interview score is explained by participation and performance of students in activities mentioned above. It has also been found that Personal Interview score is mainly determined by participation in Industry institute interaction and other academic inputs like knowledge of computer languages and spoken languages. However Industry Institute Interaction is found to have highest impact on Personal Interview score.

To study the further details of impact of all these social activity factors on different groups of students, Chi-square Automatic Interaction Detection (CHAID) method has been used to observe the relationship between the split variables and the associated related factors within the tree.

Chi-Square Automatic Interaction Detection (CHAID) Analysis:

The tree diagram shown in figure depicts the CHAID analysis between personal interview score and performance/participation of students in various activities using Chi-square test. It is found that Personal interview score is highly related to students' preference/participation in Industry Institute interaction which has been divided into four nodes depending upon their score in industry institute interaction. Node 1 has students having score of 8 or 9, Node 2 has students having score of 6, Node 3 has students having score of 7 and Node 4

has students having score of 0,1,2,3,4 or 5. Further node 2 has been divided into two nodes 5 and 6 depending upon their preference for art related activities.

As seen in node 0, out of total 629 students 193 i.e. 30.7% students have scored 9 points in Personal Interview out of 10. Total 135 i.e. 21.5 % students have scored 7 points while 114 i.e. 18.10% students have scored 8 points. 99 i.e. 15.7% students have scored 6 points. Remaining 26, 25, 17, 10, 10 students have scored 5, 1, 4, 2 and 3 respectively. CHAID analysis has found relationship with Industry Institute Interaction based on categories formed which have been classified into Node 1, 2, 3 and 4.

As seen in figure Node 1 has 278 i.e. 44.2% students out of 629. Out of 278 students 134 i.e. 44.2% of this Node have scored 9 points in Personal Interview. 61 i.e. 21.9% students have scored 7 points in Personal Interview while 54 i.e. 19.4% students have scored 8 points in Personal Interview score. Remaining 29 students have scored 6 and 4 points in personal Interview score. 99.3 % students in this category have scored 6 & above in personal interview and total 188 students have scored 8 or 9 points in Personal Interview.

Node 2 has 144 i.e. 22.9% students out of 629 who have preference/participation score of 6 in Industry Institute Interaction activities. Out of these 144 students, maximum 46 i.e. 31.9% students have scored 7 points in Personal Interview. 42 i.e. 29.2% students have scored 6 points in Personal Interview. 29 and 23 students have scored 8 and 9 points in Personal Interview while only 3 and 1 students have scored 5 and 1 points respectively. 97 % students in this category have scored 6 & above in personal interview and total 52 students have scored 8 or 9 points in Personal Interview.

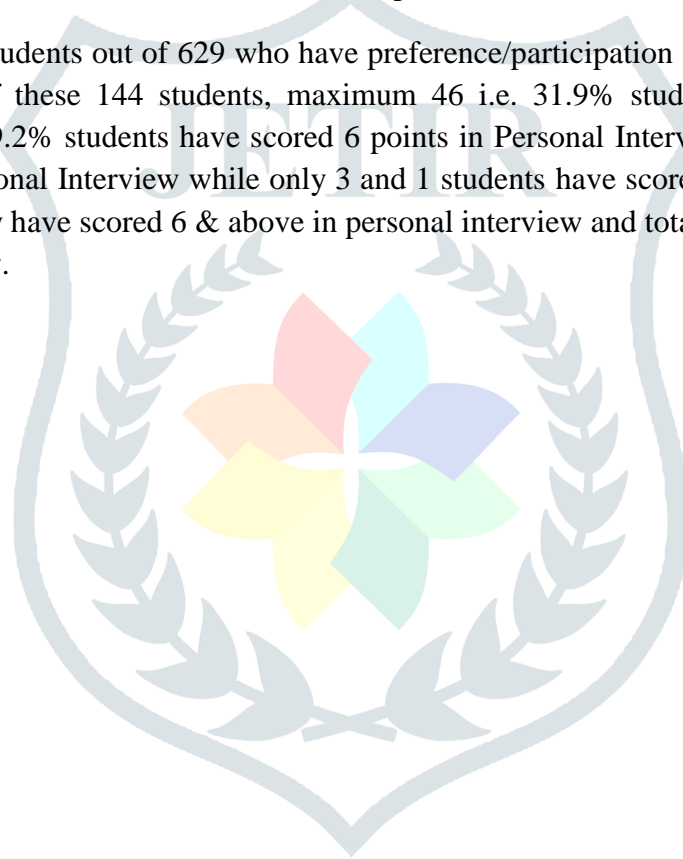
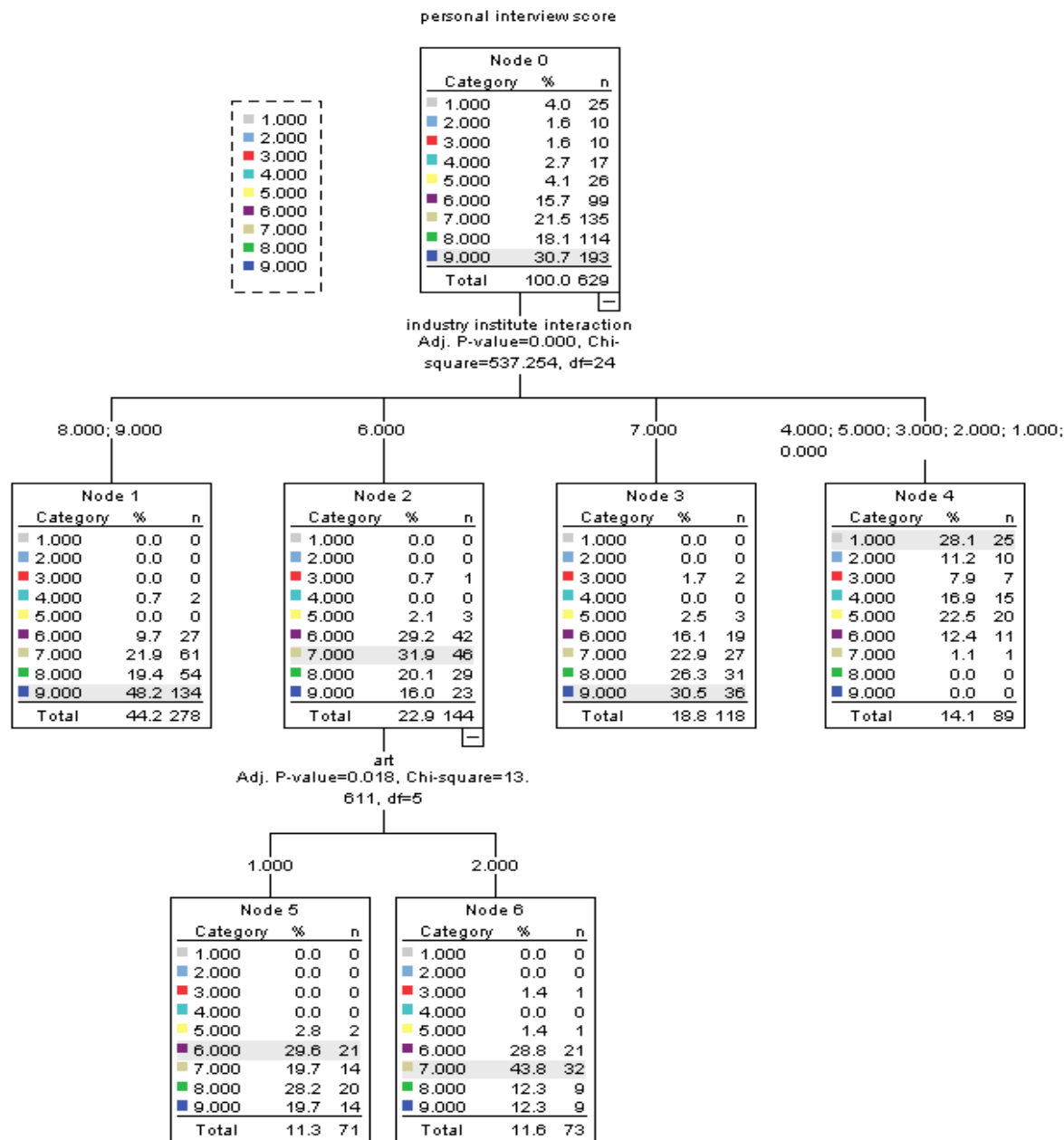


Figure: Chi-Square Automatic Interaction Detection (CHAID) Analysis



Node 3 has 118 i.e. 18.8% students out of 627 who had preference/participation score of 7 in Industry Institute Interaction activities. Out of these 118 students 36 i.e. 30.5% students have scored 9 points in Personal Interview. 31, 27 and 19 students have scored 8, 7 and 6 points in Personal Interview respectively. Only 5 students have got the Personal Interview score of 5 and 3. Approximately 96 % students in this category have scored 6 & above in personal interview and total 67 students have scored 8 or 9 points in Personal Interview

Node 4 has 89 students who have scored 0 to 5 score in Personal Interview. Out of these 89 students, 25 i.e. 28.1% students have scored only 1 point in Personal Interview out of 10. 20 i.e. 22.5% students have scored 5 points in Personal Interview. Only 1 student has able to secure 7 point in Personal Interview. Approximately 13

% students in this category have scored 6 & above in personal interview and no student out of total 89 students in this category could score 8 or 9 points in Personal Interview.

Further Node 2 has been classified into Node 5 and Node 6 based on their preference/participation in arts related activities. Score 1 for non participation and score 2 for participation in arts related activities. Node 2 has 144 students who have been classified based on their participation and non-participation in arts related activities. Thus, Node 5 has 71 i.e. 11.3% students who have not preferred/participated in arts. Out of these 71 students 21 i.e. 29.6% students have scored 6 points in Personal Interview. 20 students have scored 8 points while 14 students each have scored 7 and 9 points in Personal Interview.

Node 6 has 73 students out of 144 who have preferred/participated in arts. Maximum 32 i.e. 43.8 students have scored 7 points in Personal Interview while 21 students have secured 7 points in Personal Interview. 9 students each have scored 8 and 9 points in Personal Interview. The score of these 144 students is found to have relationship with Personal Interview score who have given preference/participation score of 6 in Industry Institute Interaction.

Findings after research

As per CHAID analysis it is found that the performance of students in Personal Interview is mainly related to industry institute interaction score. Though arts does not have any effect on performance of students who have higher scores in industry institute interaction but inclination towards arts has positive effect on performance of only one category of students who had a score of 6 in industry institute interaction.

Conclusion:

From the above study it can be concluded that performance in personal interview is largely affected by participation of students in activities related to industry institute interaction. This helps them to understand the work culture, requirement and expectations of industry and also utilization of their knowledge and skills for the benefit of industry in a better way.

Suggestions:

Engineering institutes may take more efforts to enhance industry exposure of students through implementation of activities like internships, industry projects, industrial tours and visits, step up programs to reduce the gap in academics and industry requirement, guest lecture of experts from industry etc. on a larger scale which in turn may improve the employability of engineering graduates.

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