

FACTORS AFFECTING THE EMPLOYABILITY OF ENGINEERING GRADUATES IN KERALA By Dr Sruthy K.S and Dr Sinitha Xavier

Abstract

The article unfurls the factors which are essential for the employability of engineering graduates. The research is made in the context of Kerala with sample selected from the districts of Ernakulam and Thiruvananthapuram. The rationale behind the selection of these two districts is because these two districts have maximum number of engineering colleges in Kerala. The study unfolded that the most important factor which influences the placement of an engineer is 'career development and learning' wherein an engineer develops a lifetime method of handling learning, work, leisure and transitions in order to change a personally determined and evolving preferred future besides his or her usual level of acquiring knowledge of the respective subject . It increases the level of motivation and productivity. To be employable in a firm or industry a candidate should possess various sets of skills such as communication skills, time management skills, programming and organization skills, presentation skills, problem solving skills and decision making skills. These skills have dwindled over the years and affected the employability of engineering graduates.

Key words: Career Development and Learning, Time Management Skill, Planning and Organization Skill, Career Edge Model, Programming Skill, Self Confidence, Intuition and time allocation and Factor Analysis.

Introduction

Markets may lead to a productive economy; however, one cannot overlook the negative influences of its dominance in areas of judiciary, health and education (Sandel 2012). Higher education is moving towards a direction where it is seen as a commercial service, wherein the focus remains on serving the interests of entrepreneurs and economy (Ball and Youdell (2008), especially in the prevalent neo-liberal economy. The state of Kerala has completed sixty years since its configuration on the Ist of November 1956. The enigma of the alternative rules led by the United Democratic Front (UDF) and Left Democratic Front (LDF) made the higher education of Kerala, more complex and market oriented and the state of affairs of the aspect of employability has dwindled over the years especially in engineering education. The concept of employability plays a vital role in the process of job seeking of an aspirant. In professional courses like engineering quite natural it is vital. Hence, the present article deals with the factors affecting employability of engineering graduates in Kerala. Factor Analysis is used to find out the important factors affecting employability of engineering graduates in Kerala. The study is based on primary data and is analyzed in the Career EDGE model frame.

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Employability

The study brings to the notice that every graduate has been affected by the factors of employability. In professional courses like engineering it has more relevance. There are different factors affecting 'employability. Employability is required for a person to attain a satisfying job. Employability plays an important role in the success of an individual. In general, the engineering graduates have given priority to the factors of employability. The qualities and skills of the graduates are conceptualized differently by different universities and higher education systems. The employability of any section of the population has several features that are influenced by the overall economy of the region. Employability skills are not attained immediately. The individual has to find out the important skill sets which are obligatory by the potential bosses from the various announcements unrestricted by them from time to time. Every graduate desires it, every educational institution attempts for it, and every employer waits for it. It is prerogative to decide on the curriculum of the course by the educational institution and the potential employers who provide employment.

The employability is being inclined by the nature and the type of the skills conveyed to the graduates and the perception by the investors. The students who are the ultimate winners and one, who lag behind in their academic progress, must yield themselves to the understanding of the significance of the skills to be put on and the teachers who are the main instruments should sow the correct seeds at the correct time in the minds of the students. In the present study, an attempt is made to examine the skills of employability of employed engineering graduates in consideration with their personal differences.

Important Skills Required to be Employable

The present study intensely looked for the responses from the sample selected. Primary data was collected from employed engineering graduates from sample districts by making use of mailed questionnaire, schedule method and participant observation. Primary data was collected through questionnaires and schedules from the fresh employed and experienced engineering graduates in Kerala. Primary data was collected from those engineers who passed during the period from the year 2010 to 2017 and have completed their courses within this given time frame. The sample survey was done in two districts (Thiruvananthapuram and Ernakulum) in Kerala and in selected five branches of specialization namely Electronics and Communication Engineering, Mechanical Engineering, Civil Engineering, Computer Science Engineering and Electrical and Electronics Engineering. Career EDGE model was used developed by Decre Pool and Peter Sewell. Factor Analysis was applied to analyse and extract the findings.

The analysis revealed that for the placement as an engineer, developments of specific skills are very important. Communication skill is one of the obligatory skills required to be employable as an engineer. Table 1.1 narrates the details of the important skills required for the job of an engineer. It is noticed that 47.2 per cent came to the conclusion that communication skill was the most important skill required for job. As per the analysis, 11.8 per cent pointed out that subject knowledge was required for employability and 11 per cent of the respondents gave the response that 'engineering skill 'was required for a job. Problem solving skill (8.8 per cent) is another skill required for a job and 7.4 per cent of the respondents came to the conclusion that practical knowledge was required to be employable. The study

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displayed that only 0.4 per cent came to the conclusion that decision making skill was important.

Table 1.1

	Frequenc y	Percent	Valid Percent	Cumulative Percent
Communication skill	236	47.2	47.2	47.2
Decision making skill	2	.4	.4	47.6
Engineering skill	55	11.0	11.0	58.6
Listening skill	4	.8	.8	59.4
Planning& organizing	24	4.8	4.8	64.2
Practical knowledge	37	7.4	7.4	71.6
Presentation skill	6	1.2	1.2	72.8
problem solving	44	8.8	8.8	81.6
Programming skill	1	.2	.2	81.8
Self confidence	15	3.0	3.0	84.8
subject knowledge	59	11.8	11.8	96.6
Time management	17	3.4	3.4	100.0
Total	500	100.0	100.0	

Important Skill Required to be Employable

Source: Survey Data

Table 1.1 specifies that there are various skills required for a job. Skill levels are different and are important to attain a job. Communication skill, engineering skill, subject knowledge, problem solving skill, practical knowledge, Planning and organizing skill are important skills required to be employable. In the analysis it was found that communication skill was the important skill desired to attain a good job. Every institution or employer prefers a person with good communication skill to employ in their institution. The most desirable quality in a newly hired person is effective communication skill. Communication skill is essential for the successful future career of a student. In today's competitive world, communication skill is the most sought after quality of an educated person. Reading, writing and listening carefully are the three most important communication skills for students. Another important skill is subject knowledge. It is needed to do a particular job or work in a particular industry. These skills are essential in job and career. The next is engineering skills. Engineering skill for a graduate of engineering is an important element in getting a good placement. Employers who are looking to hire engineers demand in the candidate they hire to have engineering skills. Engineers should have a solid foundation in Science, Technology, Engineering, and Mathematics (STEM). The other skill is problem solving. It is extremely obligatory to have the ability to solve problems when a person is in a responsible post like that of an engineer especially in the modern technological and digital world.

Time management skill, self –confidence, presentation skill, planning and organizational skills are required to get good employment. Every institution must check their employee's skills at the time of interview. Self-confidence of the workers helps them to work anywhere, in any situation, whether it is highly demanding or not. Time management skill helps to manage all the work in their institutions very accurately. If worker has a good time management skill, it helps the worker to be very effective. Presentation skill is yet another important skill for a job and it helps to increase the employees' 'level of confidence'.

Additional Skill Required for Getting an Employment

Every employment demands additional skills in its unique capacity. It is very effective to find a job. In everyday life, the development of life skills helps the students to find new ways of thinking and solving problems. To cope with the increasing pace and change of modern life, students need new life skills such as the ability to deal with stress and frustration.

Table 1.2

Opinion about	Ernakulam		Thiruvananthapuram		T 1
Additional skill for job	Male	Female	Male	Female	Total
	154	89	181	68	492
Yes	(61.6)	(35.6)	(72.4)	(27.2)	(98.4)
	4	3	1	0	8
No	(1.6)	(1.2)	(0.4)	(0)	(1.6)
Total	158	92	182	68	500
10141	(63.2)	(36.8)	(72.8)	(27.2)	(100)

Additional Skill Required for Getting Employment

Source: Survey Data (Figures in brackets show percentage)

The study displays that 492 (98.4 per cent) of the respondents expressed that additional skills are required for getting an employment. Only 1.6 per cent of the respondents articulated that additional skills were not important to get a job. Table 1.3 narrates those additional skills that are needed for getting a job. In the analysis, it is illustrated that the communication skill is an important additional skill required to get a job. Additional skills help to increase the productivity of the industry.

Skills		Frequenc	Percent	Valid	Cumulative
SKIIIS		У		Percent	Percent
	communication skill	151	30.2	30.2	30.2
	Engineering skill	46	9.2	9.2	39.4
	Good attitude	1	.2	.2	39.6
	Hardwork, confidence	1	.2	.2	39.8
	Industrial exposure	1	.2	.2	40.0
	training				
	Listening skill	2	.4	.4	40.4
	Organizing skill	1	.2	.2	40.6
	Planning& Organizing	16	3.2	3.2	43.8
	Practical knowledge	74	14.8	14.8	58.6
	Presentation skill	11	2.2	2.2	60.8
	problem solving	86	17.2	17.2	78.0
	Self -confidence	4	.8	.8	78.8
	Software relate skill	3	.6	.6	79.4
	Subject knowledge	78	15.6	15.6	95.0
	Time management	25	5.0	5.0	100.0
	Total	500	100.0	100.0	

Additional Skill Required for Getting Employment

Source: Survey Data

The study brings to the light that 30.2 per cent came to the conclusion that communication skill was one of the additional skills required for a job. Problem solving (17.2 per cent) is another additional skill. Every employment demands problem solving skill. It is one of the additional skills required in a company or institution. It will help to have good performance in job. The engineering graduates have given importance to additional skills which they expressed through responses. Subject knowledge is another additional skills are the additional skills required for attaining a god job.

Quality of the Project Undertaken

In engineering degree, project of their subject is very important. Quality is the main issue of this degree. Every project of good quality will help graduates to find a good job. After the engineering degree, the quality of project helps to find out suitable jobs. The multinational companies search for qualified graduates for job who have completed industrial projects of high quality. At the time of interview, additional marks are given for the projects completed from good industries. Quality of the project is positively related to the prospects of employment.Hence it can be stated that the quality of the project undertaken would help to shape the career of the candidate.

Table 1.4

Opinion about	Ernakulam		Thiruvanantl	napuram	
quality of project					Total
important to get					
a job	Male	Female	Male	Female	
	77	46	112	41	276
Yes	(30.8)	(18.4)	(44.8)	(16.4)	(55.2)
	81	46	70	27	224
No	(32.4)	(18.4)	(28)	(10.8)	(44.8)
Total	158 (63.2)	92 (36.8)	182 (72.8)	68 (27.2)	500 (100)

Quality of the Project Undertaken

Source: Survey Data (Figures in brackets show parentheses)

The study observed that table 1.4 brought out the fact that quality of project was one of the elements in determining the opportunity to acquire a good placement. Table 1.4 brings to the notice that 55.2 per cent agree to the statement that quality of the project the students take up during their study is significant in getting good employment. This statement was rejected by 44.8 per cent. Generally it is observed that the quality of the project is a non-compromising element.

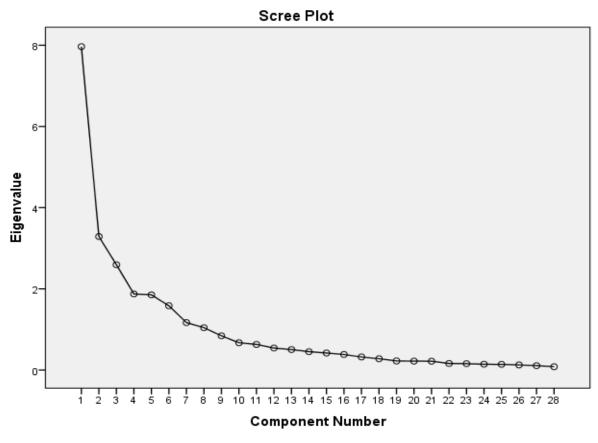
Factors Affecting Employability of Engineering Graduates

Based on the different factors of employability, the study applied seven point scale statements for detecting the factors affecting employability of engineering graduates in Kerala. The seven point scale consisted of Strongly Disagree, Disagree, Slightly Disagree, Neither agree nor disagree, Slightly Agree, Agree, Strongly Agree carrying scores one, two, three, four, five, six and seven respectively. The study applied Orthogonal Varimax Rotation method of Principal Component Analysis (PCA) to these observed variables in order to identify the factors influencing the employability of employed engineering graduates. The PCA explored the variables which were correlated to each other for the factor models, which were important for exploration.

Factor Analysis among Employed Engineering Degree Holders

The present study used Factor Analysis to summarize data so that relationships and patterns could be easily interpreted and understood. Factor analysis was used to rearrange variables into a narrow set of cluster. In factor analysis, the observable variables were reduced to fewer latent variables which shared a common variance and were unobservable and were reducing dimensionality.

The reasons for getting a job by the engineering graduates were analyzed using a measuring instrument of seven point scale consisting of 28 statements. All the statements were included in the analysis frame because of high extraction value. The responses in seven point scale were used with Factor Analysis to reduce the dimensions. In the primary survey conducted among engineering graduates, the study selected 28 variables.





Source: Primary Data

The Scree Plot determines the optimal number of components. It plots the Eigen values of each component. The components which fall on the steep slope were extracted because the Eigen values of those components were greater than 1.

Total	Variance	Explained
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Stateme	Initial E	igen values		Extractio	n Sums of Square	ed Loadings
nts(Com	Total	% of	Cumulativ	Total	% of	Cumulative %
ponents)		Variance	e %		Variance	
1	8.850	31.606	31.606	8.850	31.606	31.606
2	3.264	11.656	43.262	3.264	11.656	43.262
3	2.453	8.762	52.024	2.453	8.762	52.024
4	1.909	6.818	58.841	1.909	6.818	58.841
5	1.610	5.750	64.591	1.610	5.750	64.591
6	1.516	5.414	70.005	1.516	5.414	70.005
7	1.113	3.974	73.979	1.113	3.974	73.979
8	1.071	3.825	77.804	1.071	3.825	77.804
9	.783	2.795	80.599			
10	.697	2.491	83.090			
11	.562	2.006	85.096			
12	.516	1.844	86.940			
13	.465	1.659	88.599			
14	.440	1.571	90.171			
15	.400	1.429	91.600			
16	.331	1.182	92.782			
17	.281	1.003	93.784			
18	.249	.891	94.675			
19	.225	.802	95.477			
20	.196	.699	96.176			
21	.175	.627	96.803			
22	.158	.565	97.367			
23	.158	.563	97.931			
24	.141	.503	98.434			
25	.135	.484	98.917			
26	.122	.436	99.354			
27	.102	.364	99.718			
28	.079	.282	100.000			

Extraction Method: Principal Component Analysis, Source: Primary Data

Table 1.5 elucidated the actual factors that were extracted. As explained earlier, 28 statements were used for the Factor Analysis. The result of the Factor Analysis stated that 77.804 per cent of the variation in the responses of 28 statements was reduced to eight factors having Eigen values greater than one using the standard procedure. Factor loadings were done through orthogonal factor rotation method-Varimax. In Kaiser's Rule, eight factors which have Eigen values greater than unity were extracted from the data. Eigen values explained partitioning of the total variation contributed by each factor. Rotation is a method used to simplify interpretation of a factor analysis.

1.2 New Factors of the Model

The factors were named as follows:

Factor 1-Career Development and Learning Factor-2 Subject Knowledge and Experience Factor-3 Capability of Engineering Graduates Factor 4: Intuition and time allocation Factor 5- Emotional Intelligence Factor 6- Self –Confidence Factor 7 - Comprehensive behaviuor Factor 8 – Innovation

Factor 1-Career Development and Learning

The first important factor affecting employability of engineering graduates is Career Development and Learning. Career development is the lifetime method of handling learning, work, leisure and transitions in order to change a personally determined and evolving preferred future. It increases employee's motivation and productivity. A discussion with employed engineering graduates regarding factors affecting employability assures "I discern about what is the required factor for me to successfully sort of job I want to do" this statement gave highest factor loadings (0.920). The second factor loading statement from this factor is "I know what kind of work would outfit my personality" (0.888). The next loading factor was " After my graduation I know what I want to do " (0.816) and the fourth factor loading from the factor Career Development and Learning was "I am familiar with where to find out information about the employment that interests me"(0.754). And the last factor loading from this section was "Apart from money, I Know what I want from my working life (0.568)".

The study found out that employed engineering graduates gave importance to the statements given in table 1.6. The Factor loading of the first factor is given in Table 1.6.

Table 1.6

Factor 1: Career Development Learning

Variable	Factor Loadings
I discern about what is required factor for me successfully sort of job I want to do	0.920
I know what kind of work would outfit my personality	0.888
After my graduation I know what I want to do	0.816
I have familiar with where to find out information about the employment that interest me	0.754
Apart from money, I Know what I want from my	0.568
working Life.	
Source: Primary Data	

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Table 1.6 puts forth that highest factor loading is recorded to Career Development and Learning (CDL). The second factor loading (0.888) is recorded to the statement "I know what kind of work would outfit my personality". In Kerala engineering graduates give importance to their work and their personality. If they know the type of job they are going to take up, they would prepare their personality for the newly assigned job. Every person outfits a personality and adjusts their personality with the job. It helps the employees to work effectively in their institutions. The next factor loading was accorded to the statement "I am familiar with where to find out information about the employment that interests me". After the graduation in engineering, every engineering graduate must find out the employment for which they are interested. It states that every individual must know the career which suites him or her. Next highest factor loading was assigned to the statement "Apart from money, I Know what I want from my working Life". It explains that money is not an important concern but everyone knows the satisfaction they get from their professional life.

Factor-2 Subject Knowledge and Experience

The second important factor is Subject Knowledge and Experience and it shows the knowledge the graduates have gained from the subject they studied and the experience they acquired from their job. Subject knowledge and experience of work was essential in employed engineering graduates. Subject knowledge means information of the person expected to learn in a given subject. It helps them to achieve a good position in their job. Experience of work means one of the experiences that a person gains while working in specific field or Occupation. It is very essential to get an employment. Factor loadings were given in table 1.7.

Table1.7

Variable	Factor Loadings
I am satisfied with academic performance	0.830
I can explain the value of my experience to a potential employer	0.786
I have lot of work experience	0.687
My academic performance so far is in line with my career aspirations	0.638

Factor 2: Subject Knowledge and Experience

Source: Primary Data

Table 1.7 elucidates that four variables help to make employment effective. Every employee desires to gain experience from their work and attain knowledge or information. In the factor subject knowledge, highest factor loadings (0.830) were assigned to the statement "I am satisfied with academic performance". The engineering graduates were admitted in the branch of study that they were satisfied with and they were happy with their performance. Academic performance has a prominent role in getting employed. The next factor loading (0.786) was assigned to the statement "I can explain the value of my experience to a potential employer". This elucidated that experience of work is an important element in the interviews in search of job. Value of experience is an attractive factor to the potential employer. The next

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factor loading (0.687) was for the statement "I have lot of work experience." This explains that every worker must discern about their work experience. It will lead to attain good salary or promotions. The last factor loadings was for the statement "My academic performance so far is in line with my career aspirations"(0.638). This statement clarifies that each employee must give importance to their academic performance and it will help to attain a career as per their ambition.

Factor-3 Capability of Engineering Graduates

The third factor affecting the employability of engineering degree holders is Capability of Engineering Graduates. Being capable means that the person is able to make things work, he or she is responsible for it to be implemented in the practical life. The factor loadings are put forth in table 1.8.

Table 1.8

Variable	Factor Loadings
I am good at making presentations	0.832
I am confident to my writing communication skill	0.802
I have good oral communication skill	0.743
I work well in a team	0.668

Factor 3: Capability of Engineering Graduates

Source: Primary Data

Table 1.8 reveals that in the statement analysed, four variables are linked to the skill formation. The respondents believed that skill development was gained through graduation and it would help to get employed. The first statement got the highest factor loadings from this factor (Capability of Engineering Graduates). The statement was "I am good at making presentations" (0.832). This displays that the skill levels of graduates of engineering. Making presentation was good in employment and it had highest factor loading. It is one of the capabilities of engineering graduates. The second factor loading (0.802) statement of this factor was "I am confident of my writing and communication skill". After graduation, many students captured different levels of skills and their confidence level on written communication skill was increasing. Another statement that has attained the next factor loadings (0.742) was "I have good oral communication skill". This narrates that oral communication is an important element in employment. It will help to get the attention of the employer of the institution and it will lead to promotion facilities or increase the salary of employees. The next factor loading was given to "I work well in a team" (0.668). This statement helps to achieve good team management skill. With good team management skill the engineering graduates can support well the progress of the company, they work.

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Factor 4-Intuition and time allocation

Factor four focuses on the need of allocating the time well. Intuition means a process that gives the ability to know something directly without analytic reasoning and bridging gap between the conscious and unconscious parts of mind. In our study, the factor "Intuition and Time Allocation" has a significant role in determining the employability of engineering graduates. It is observed that in the study this factor was not the most decisive factor to affect the employability. Table 1.9, explains factor four.

Table 1.9

Variable	Factor Loadings
I work well independently	0.877
I have good time management skill	0.864
I am good at solving problems	0.734

Factor 4: Intuition and Time Allocation

Source: Primary Data

The three components mentioned in table 1.9 are essential to create a good working environment. The factor loading was 0.877 and the statement was "I work well independently". It brought out that every worker wanted to work independently. Freedom gives a better working environment. Another important factor loading statement was "I have good time management skill" (0.864). This indicates that time management skill was important for a systematic and disciplined working atmosphere. The last factor loading from this factor was "I am good at solving problems" (0.734). It is important in everyday life. Problem solving is a skill that helps the employee to be mature individuals to carry out the duties entrusted to him or her well.

Factor 5- Emotional Intelligence

Emotional Intelligence is another important factor that affects the employability of engineering graduates. This factor explains how people perceive, understand and manage emotion and feelings of oneself and others. It helps to be aware of those feelings and manage them effectively. Emotional intelligence helps them to solve difficulties which they experience in their personal relationships and their professional relationships with colleagues, managers and customers. Therefore it is important to make engineering graduates conscious of this and help them to develop their ability in this area. The factor loadings are given in table 1.10:

Table 1.10

Factor 5: Emotional Intelligence

Variable	Factor Loadings
I am good at working out what other people are feeling	0.887
I am able to manage my emotions effectively	0.852
I am good at knowing how I am feeling at a given time	0.763

Source: Primary Data

Table 1.10 shows the variables of emotional intelligence and explains that respondents were more concentrated on this factor than other factors. Every person has emotional feelings .The highest factor loading (0.887) was recorded to this factor and the statement used was "I am good at working out what other people are feeling". This makes clear that every worker has his or her own emotions. The engineers expressed that they were more conscious on what others thought and felt about them. The next factor loading (0.852) statement was "I am able to manage my emotions effectively. Every individual has their own emotions. In work place, the emotions often burst out in different forms. If an employee is very sad because of some reason or other, he has to manage his or her emotions and work well on that day. This helps to understood that emotions should be managed effectively .The last factor loading (0.763) statement of this factor was "I am good at knowing how I am feeling at a given time". This describes that each graduate knows his or her factor emotion.

Factor 6- Self –Confidence

Another factor to affect the employability was self-confidence. It is self- guarantee in one's personal judgment, ability and power. It was influenced by factors like atmosphere of employment and levels of dedication towards pursuing a cause. It helps to believe in oneself. The main factor loading variables are given in table 1.11.

Table 1.11

Factor 6: Self – Confidence

Variable	Factor Loadings
I am confident to use IT	0.825
I satisfied with my level of numeracy	0.772
I have good planning& organizational skill	0.703
Source: Primary Data	<u> </u>

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The statements given in table 1.11, helped to improve the self-confidence of the respondents. It had helped them to get a good employment. Factor loadings indicated that every respondent in this study gave importance to these statements. The highest factor loading statement from this factor was "I am confident to use IT" (0.825). In modern technical world, information technologies have uppermost prominence. Every employee needs to use IT in modern world. It helps to increase the productivity of the institution. The next factor loading (0.772) statement was "I am satisfied with my level of numeracy". Numerical ability of the individual helps to achieve a good job. The last factor loading statement was "I have good planning and organizational skill" (0.703). This narrated that each worker had their own planning and organization skill.

Factor 7 – Comprehensive Behaviour

Comprehensive Behaviour is another factor that affects the employability. This factor is helpful to know the overall knowledge of the engineering graduates. It helps to know the complete pictures of their nature. The employers were enthusiastic to appreciate the employees and the innovations of their work.

Variable	Factor Loadings
I am able to adjust easily to new situation	0.806
I have good understanding on how business operate	0.754
I am good at coming up with new ideas	0.642

Table 1.12

Factor 7: Comprehensive Behaviour

Source: Primary Data

Comprehensive behaviour of the respondent is a crucial factor in working place. The general belief that every person adjusts to new situations of the work place is revealed from the survey. The survey discloses that comprehensive behavior is an essential factor in the employment of a person. The highest factor loading statement (0.806) of this factor was "I am able to adjust easily to new situation". It denotes that every worker must adjust easily in new situation. This helps the worker to attain a good position. The next factor loading (0.754) statement was "I have good understanding on how business operate". This statement explains the capability of the employee to contribute to the profit of the company. The last factor loading statement (0.642) was "I am good at coming up with new ideas". Every graduate who comes out of engineering institutions with an aspiration to get employed should be bubbling with new ideas. This will contribute to the innovations of the industry and the institution.

Factor 8 – Innovation

The last factor affecting the employability of employed engineering graduates is innovation. It is a process of making a new idea that creates value. The results of new ideas are accepted and they satisfy the need and expectation of employers. Creativity is in the nature of generating a new idea, concept or method. Innovation uses creativity to enhance the performance of a process, person, team or organization.

Table 1.13

Variable	Factor Loadings
I can pay attention to detail when necessary	0.827
I am good at coming up with new ideas	0.692
I am always open to new ideas	0.571

Source: Primary Data

Factor 8: Innovation

Table 1.13 demonstrates that each variable from the factor Innovation had importance in the survey. Employed persons create new ideas and they use those when in necessary situations. The highest factor loading (0.827) statement was "I can pay attention to detail when necessary". In a necessary situation of employment, the employees have to give attention to the situation. The next factor loading statement was (0.692)"I am good at coming up with new ideas". Every worker has to have new and innovative ideas about his or her job. This will help him or her to attain good position in their career. The last factor loading statement was "I am always open to new ideas". This will help to accept new idea in their work.

Conclusion of Factor Analysis

The factor analysis had identified eight factors which had significant impact on the employability of employed engineering graduates in Kerala. Among the eight factors, Career Development Learning was the most important one as far as the employability of engineering graduates was concerned.

The factor analysis gave emphasis to the Career Development and Learning as the most loaded factor which had the factor loading as 0.920, 0.888, 0.816, 0.754 and 0.568 respectively. This reveals that the most imperative reason which deters the employability of engineering graduates is Career Development and Learning. In Career Development and Learning, employment related statements like "which is the most required factor for me to successfully seek a job I want to do" is much relevant for the modern engineering graduates. The second statement was "what kind of work would outfit respondent's personality". It clearly specified the personal awareness of their capacity to work in the particular field to find good job. The third variable was "after graduation, what do you want to do". It explains assessment of the

knowledge of the graduate. The next variable was "I am familiar with where to find out information about the employment that interests me". It discloses the idea of familiarity of the job that interests them. The last variable was "Apart from money, I Know what I want from my working Life". It shows that they should give more importance to work than money. This should be an eye opener to the whole of working people. In the second factor the highest factor loading was Subject Knowledge and Experience. In a career or job, knowledge of their subject is very significant. From the analysis it can be concluded that besides knowledge in the relevant subject, the prospective candidate of engineering should possess important skills like communication skill, life management skills, engineering skills time management skill, organization skill and comprehensive behaviour to make them employable. The concept of employability is getting dwindled over the years due to the paucity of these skills.

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