

In competencies Among Engineering Students as an Antecedents in Stress among Engineering Students in around Chennai

Madhusudan. K. S, Harihara Sudhan. R

Abstract: This paper tries to analyze the reasons behind stress among the students of engineering colleges in around Chennai. As academic stress mostly occurs to a student in the course of acquiring the educational knowledge and even after completing the course it continues since there is huge uncertainty regarding their future due to the incompetency among them to be employed in IT sector. Since IT sector is one of the major employers for the engineering graduate in the country, therefore, lacking employability in IT sector is a mirror image for total employability skills possessed by engineering students to be employable in any sector in India. About 80-90% of engineering students are under depression, therefore, in extreme cases, it is leading them to suicides, so an effective innovative intervention is needed to increase the employability skills among engineering students, which, will ensure a sustainable stress-free environment of learning that will not only help the students to be employed. Even it will ensure a healthy workforce that will enhance the country's growth at large.

Keywords:- IT sector is a mirror image for total employability skills possessed by engineering students to be employable in any sector in India.

I. INTRODUCTION

Stress is one of the major problems for students not only in India but globally in that too, engineering students in around India were more stressed than ever, according to one report, 90% of Indian engineering students are under depression and even they are subjected to other forms of negative impacts of stress in adverse cases it ends up in suicides. India has the highest rate of suicides between the age 15 to 29 and reasons are the failure in exam, unemployment and depression. Why this future reservoir of India decides to risk their lives. In this paper, we will be trying to explore the reasons for stress among AICTE approved engineering colleges in around Chennai. The main factors for the academic stress among engineering students in India are uncertainty on the Return on investment as job skills required for the job is lacking. But even after investing his/her valuable resource in terms of money and time one it is unable to acquire required skills to be employable.

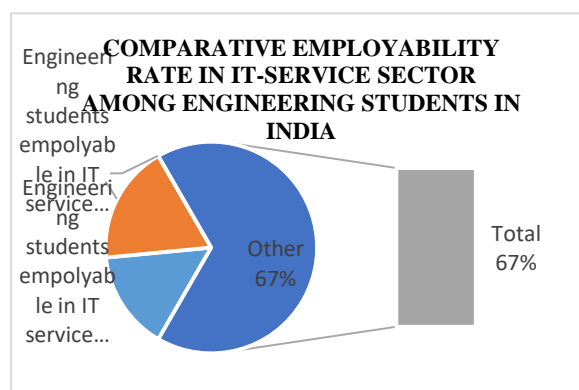
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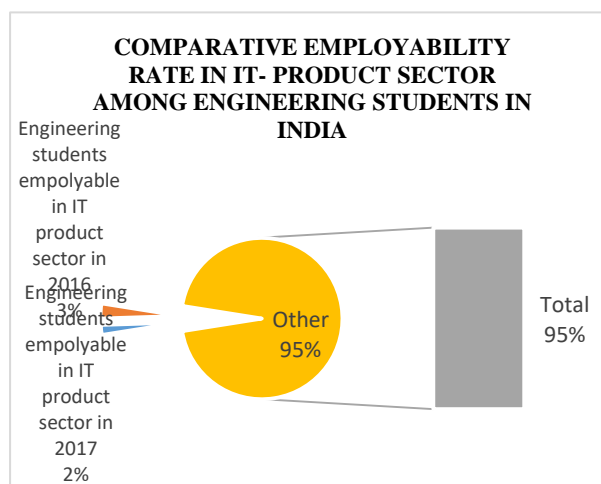
This can be ascertained from the following data for example from the Chart-1 we can say that the skills, possessed by the percentage of engineering students to be employable in IT service sector was 18% in 2016, Whereas in 2017 it came down to 15% with 3% of drop in the skills within 1 year, instead of going upwards it going downwards. CHART-1



Source: Aspiring mind (2016&2017)

From the Chart-2 we can say that engineering students who are possessing skills to be employable in IT product sector are only 3% in 2016 and it had come down to 2% by 2017 there was a drop of 1% in the skills among engineering students in India as per a study (within one year) done by Aspiring mind a reputed employability skills assessment agency in India.

CHART-2



Source: Aspiring mind (2016&2017)

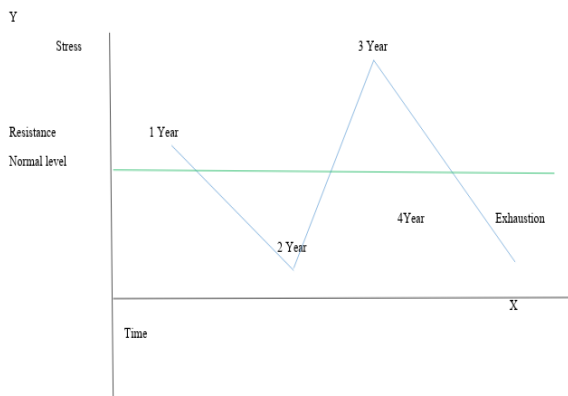
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II. STRESS AND ITS IMPACT AMONG ENGINEERING STUDENTS IN INDIA

Stress and its negative impacts such as anxiety, depression are on the rise side among engineering students in India even the government is also looking for alternatives in order to reduce stress among student. It had recently started an induction program for freshers since stress starts from the time a student enrolls in the course due to the uncertainty that prevails among student mainly regarding job opportunities, quality of education, amount of time and money invested on the course, return on investment etc. These all factors are collectively leading to the stress among engineering students that can be illustrated by following figure-1 given below.

STRESS CYCLE OF ENGINEERING STUDENTS IN INDIA

IMAGE-1

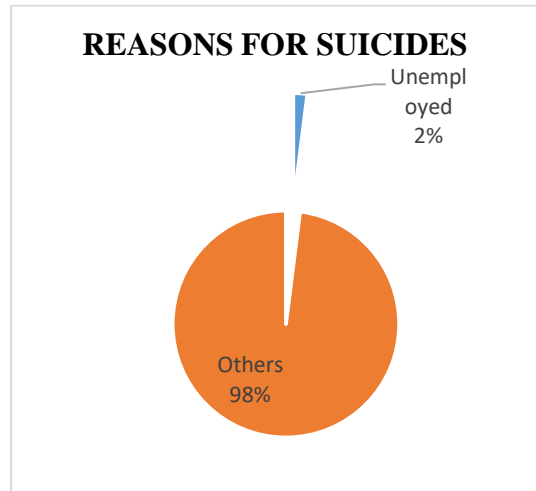


Source: Author own

The stress cycle of engineering student starts in the first year where the level of stress is seen to be normal. When time passes the level of stress in the second year goes below normal due to uncertainty regarding the quality of education and future scope and in the third year a student tries to cope up with the stress but in the final year due to lack of skills possessed by him to be employable which is leading him/her to exhaustion stage. The success of future engineers will be largely depends on how well this stress cycle is being managed effectively in order to have knowledgeable stress-free learning environment which can meet the industry and academic requirement.

According to the National Crime Records Bureau on an average suicide due to unemployment accounts for 2% of the total suicides in India which can be seen from the chart-3. So the unemployment in the country is largely due to the gap between the skills required by the enterprises having placement opportunities and skills possessed by prospective candidates.

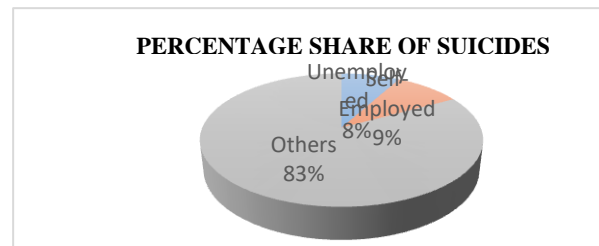
CHART-3



Source: NCRB (2015)

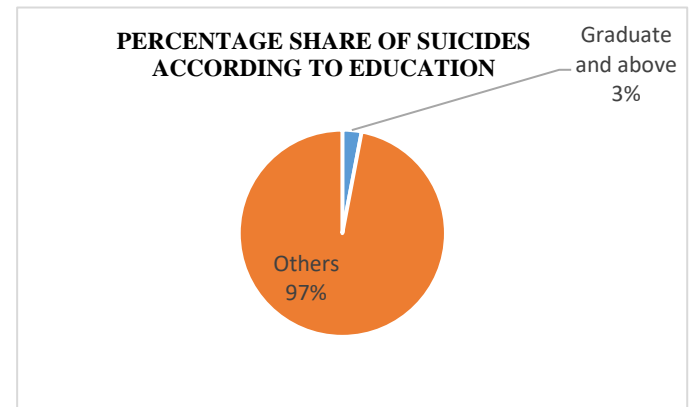
Even if we go by profession the rate of suicides among unemployment is about 8% and suicides due to the self-employment accounts for 9% of the total suicides in India, which can be seen from the chart-4. If we try to analyse the factors leading to suicides due to unemployment is largely because of the lack of skills, possessed by the prospective candidate to be hired for a job and with no option in hand, he/she goes for self-employment there also he/she lacks the skills to be self-employed, which, further induce them to take suicides as mode to rest their soul, Therefore, even if we go according to the level of qualification were graduates account for 3% of the total suicides commented by people with respect to education of persons committing suicides which can be seen from chart-5

CHART-4



Source: NCRB (2015)

CHART-5



Source: NCRB (2015)

COMPETENCY AMONG AICTE APPROVED ENGINEERING COLLEGE STUDENTS IN AROUND CHENNAI

A total of 72 engineering colleges in around Chennai from the academic year 2017-2018 have been taken for the study in which total seats allocated, total seats filled and placements done in that academic year were taken into account. The data are sampled from the AICTE website for the year 2017-2018. In, which it is found that only 47% of the total seats have been filled in that particular year that too, only 43% of students have been placed as shown in table-1, chart-6, and chart-7. But, unfortunately, if we see the percentage of the break-up of seat filled in different colleges. We have found that most of the colleges were able to fill seats up to 10% of total seat allocated they are in majority with 14 (19%) colleges whereas only 11 (15%) colleges have been able to make enrollment above 80% of total seats allocated. So the majority of the colleges that is nearly 14 (20%) colleges are able to fill up to 10% of total seats allocated to them in around Chennai as it can be seen from the table-2, chart-8

The reason is simple since students coming out from this colleges are lacking in the competency needed for a job which had given rise to less enrollment and in future, this college may go for closure, even another 15 (20%) of colleges have filled seats between 10 to 30%, to the total seats allocated. If this same condition prevail these colleges too, may go for closure in the near future. Only 11 (15%) colleges have been able to fill seats above 80% to the seats total allocated strategy followed by them can be adopted by others too.

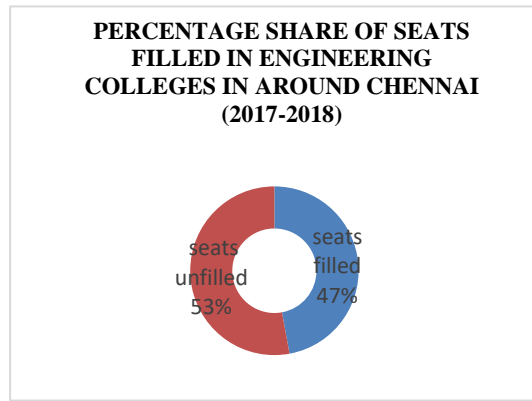
Table-1

SEATS FILLED AND PERCENTAGE OF STUDENTS PLACED IN AICTE APPROVED ENGINEERING COLLEGES IN AROUND CHENNAI (2017-2018)

S.NO	TOTAL SEATS ALLOCATED	TOTAL SEAT FILLED	PLACEMENTS
1	31350 approx. (100%)	14773 approx. (47%)	6381 approx. (43%)
Total colleges taken for the study	72		

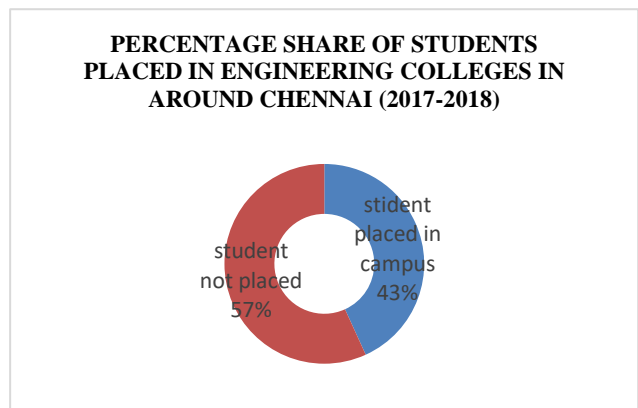
Source: Data compiled from data available in the AICTE website (2017-2018)

CHART-6



Source: Data compiled from the data available on the AICTE website (2017-2018)

CHART-7



Source: Data compiled from the data available on the AICTE website (2017-2018)

TABLE-2 SEATS FILLED IN AICTE APPROVED ENGINEERING COLLEGE IN AROUND CHENNAI

S.No	Frequency of seats filled (in %)	Number college	Percentage share of seat filled in each Category(%)
1	0-10	14	19
2	10-20	6	8
3	20-30	9	12
4	30-40	5	7
5	40-50	9	13
6	50-60	7	10
7	60-70	4	6
8	70-80	7	10
9	80-90	6	8

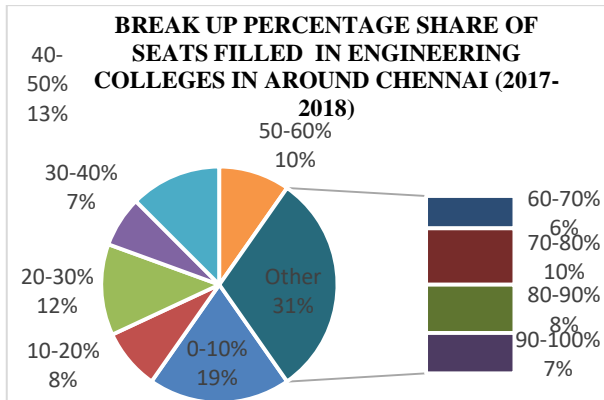


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10	90-100	5	7
Total		72	100%

Source: Data compiled from the data available on the AICTE website (2017-2018)

CHART-8



Source: Data compiled from the data available on the AICTE website (2017-2018)

PLACEMENT DONE IN ENGINEERING COLLEGES IN AROUND CHENNAI

If we see from chart-7 the placements done by the colleges in around Chennai in the academic year 2017-2018 was 6381 (43%) students have been placed among total enrolled students, in which, 18 (25%) colleges have placed up to 10% of total students enrolled. Even some college have zero placement and colleges account for more than 80% of students placed are only 7 (10%) colleges in the academic 2017-2018 in around Chennai according to the table-3.

So placements directly reflect the quality of education offered at these technical institutions across Chennai, which is leading to stress among engineering student in around Chennai. Since they are uncertain about their future finally they face negative impacts of stress, such as anxiety, depression and in extreme cases they go for suicides, this may be an awake up call for the policymakers to make a suitable intervention innovatively in the technical educational delivery model which can bridge the gap between industry and academia.

TABLE-3

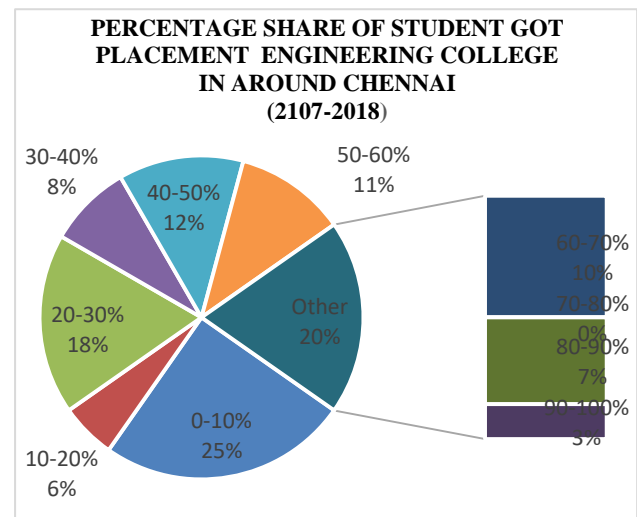
PLACEMENTS DONE FOR ENGINEERING STUDENTS IN AROUND CHENNAI

S.No	Frequency placement in college (in %)	Number of placement	Percentage share of Students placed in different Category
1	0-10	18	25
2	10-20	4	6
3	20-30	13	18

4	30-40	6	8
5	40-50	9	12
6	50-60	8	11
7	60-70	7	10
8	70-80	0	0
9	80-90	5	7
10	90-100	2	3
Total		72	100%

Source: Data compiled from the data available on the AICTE website (2017-2018)

CHART-9

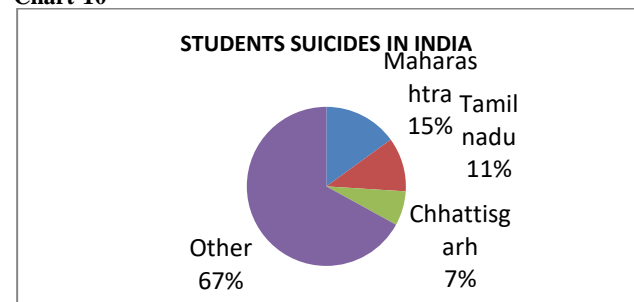


Source: Source: Data compiled from the data available on the AICTE website (2017-2018)

ADVERSE EFFECTS OF STRESS AMONG STUDENTS AND YOUTHS IN THE STATE OF TAMIL NADU

According to the national crime records bureau in 2015 Maharashtra has reported the highest rate of suicides in India with 1,230 of 8394 (15%) national wide, followed by Tamilnadu with 955 (11%) and Chhattisgarh 652 (7%). while Maharashtra and Tamilnadu are considered to be an advanced state, but suicides show the negative side of their economic growth. These student's suicides are directly related to the academic stress and uncertainty regarding the future due to the lack of competency possessed by the them.

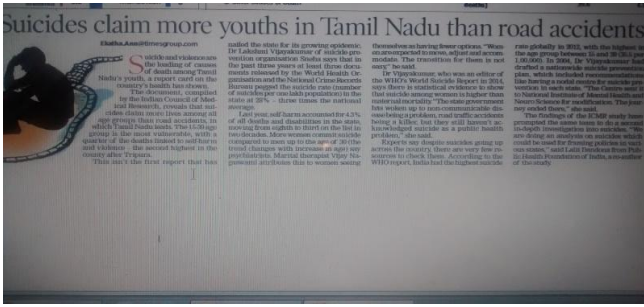
Chart-10



Source: NCRB



IMAGE-2



Source: Times of India

A recent article featured last year in times of India stated that more youths in Tamilnadu are leading to death by suicide rare then road accidents which is mostly happening due to unemployment and financial problem and it is mostly occurring in the age group between 15-39.

IMPACTS OF STRESS AMONG ENGINEERING STUDENT IN AROUND CHENNAI

CASE-1

An engineering fourth-year student of a reputed university in Chennai comments suicide since he was having back locks in seven papers.

CASE-2

Frustrated over unable to get a seat into a training institute, 19-year-old engineering university student commits suicide in Chennai.

CASE-3

A 22-year-old student from reputed university commits suicide over caught cheating in the exam at Chennai.

CASE-4

A final year engineering student is had been harassed by his head of department (HoD) for the last six months and blocked this hall ticket due he which committed suicide in Chennai.

III. CONCLUSION:

As we can see from the study it can be concluded that there is a huge gap between the skills required by the organization and skills possessed by the candidates and with every passing year skills should improve, but it is happening in the reverse way the skills of candidates are coming down, therefore, this is acting as an antecedents for inducing stress among students in India, Further, which is leading to depression, anxiety and in the adverse cases it is leading to suicides, which is not only spoiling the future of a students. It is even creating a roadblock for the country's growth. If we see the students from Tamilnadu are positioned in second place among students commented suicides nationwide. Considered the above facts from the colleges in round Chennai it is found that on an average 50% of the allotted seats gone empty in the academic year 2017-2018 and the same amount of enrolled students are not getting placed. This further leading to stress among students. Hence, therefore, this leads Tamilnadu to the top position in the list of student's commenting suicides with second position. So present competency among students should be analyzed and effective innovative method of teaching should be introduced to counter present situation, which, will lead to

have a healthy workforce and will add to effective growth of countries GDP.

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