1. INTRODUCTION

1.1 EMPLOYABILITY SCENARIO OF ENGINEERING STUDENTS

Technological advancement has paved the way for knowledge-driven economy (Gunn et al. 2010). In order to withstand the pressure of getting placed in the globally competitive job market, individuals are expected to possess desired knowledge, skills and creative potential (Lang et al. 1999; Hernandez March et al. 2009). Earlier, qualifications gained through formal education played a major role in getting employment whereas the current scenario has changed radically. Formal education degree is just viewed as an ‘entrance ticket’ (Tomlinson, 2007; Baker, 2009). Despite possessing a degree, the students are expected to acquire additional employability competencies to get placed in companies (Hesketh, 2000; Turhan and Akman, 2013). The research studies carried out by Abdullah et al. 2007; Zaharim et al. 2009; Husain et al. 2010; Hinchliffe and Jolly, 2011; Cai, 2013 highlight clearly the perception of recruiters towards students. The recruiters are of the opinion that the students do not possess the competencies that make them employable in the job market. The studies reveal that problem solving ability, basic engineering proficiency, team work skills, communication skills and presentation skills are the most important competencies expected by the recruiters (Goel, 2006; Jake and Leon, 2014).

Though the research work carried out by Becker, 1993; Brown and Hesketh, 2004; Wickramasinghe and Perera, 2010; Pillai et al. 2012; Belagodu, 2013 emphasize on the role of educational institutions in imparting adequate skills and competencies to the students, the responsibility equally lies in the hands of each and every individual student (Bakar and Hanafi, 2007; Nilson, 2010).

The present study intends to identify the employability status of engineering students studying in two different types of educational institutions, Private Self-Financing Engineering Colleges and Private Deemed Universities.
1.2 INDIAN HIGHER EDUCATION SYSTEM IN ENGINEERING – PSFEC AND PDU

The standards after school education (tertiary level) is set by the University Grants Commission (UGC), a statutory body established by the Indian Union Government in accordance to the UGC Act 1956 under Ministry of Human Resource Development (MHRD). The headquarters of UGC is in New Delhi and at its regional centres are in six cities namely Pune, Bhopal, Kolkata, Hyderabad, Guwahati and Bangalore. UGC has twelve autonomous institutions which oversees the accreditation process involved in granting powers to Universities/ Colleges. There is a rapid growth for engineering education in India. All India Council for Technical Education (AICTE) is a statutory advisory body at national level for engineering courses. It was first established in the year 1945 and later on, the act of parliament gave statutory status during the year 1987. All technical institutions, whether public or private are governed by AICTE. Deemed university or Deemed-to-be-university is an accreditation awarded to private universities under UGC Act, 1956 (AICTE Approval Process Handbook, 2016-2017).

The current study has taken into consideration two types of technical institutions for the purpose of research. One is the Private Self-Financing Engineering Colleges affiliated to State Government University and the other is the Private Deemed University. Both the type of institutions are owned by the private parties and do not receive any funded support from the government for their execution and development. Private Self-Financing Engineering Colleges have uniform curriculum for all the branches framed by the departments of the State University and approved by the Academic Council Committee constituted by the University. The state university further conducts central evaluation, publishes results and grants degree to the students belonging to Private Self-Financing Engineering College. These colleges strictly follow the guidelines set by AICTE.
On the contrary Private Deemed Universities enjoy complete autonomy in terms of fixing norms for admission, conducting examinations, evaluation of answer scripts as well as granting degree to the students (Ministry of Human Resource Development, 2016). The syllabus is not uniform across such universities. Each university design their own syllabus which undergoes revision during board of studies conducted by the Deemed University departments. The curriculum and academic regulations is further sent to Academic Council Committee constituted by the University for their final approval.

1.2.1 Engineering Institutions: The Current Issues

In Private Self-Financing Engineering Colleges the students are admitted either through government quota or management quota. The government quota is based on the counselling sessions carried out for students applying for engineering programme every year at Anna University, Chennai. The students are allocated both government and private colleges in the city based on the cutoff mark fixed by the State University. The cut off mark tends to change every year on the basis of the scores obtained by the candidates in three subjects namely physics, chemistry and mathematics.

The students with the best scores are allocated the top ranked colleges in the city with a provision to choose the branch of their choice. This pattern flows in a sequential manner. For government quota students, the tuition fee is fixed by the state government of Tamil Nadu, whereas for management quota students the fee is fixed by the respective colleges. The fees for the government quota students is far lesser as compared to the fees collected from the management quota students.

Recently there is a booming increase in the number of engineering institutions which has resulted in huge vacancy of engineering seats in Private Self-Financing Colleges. In the year 2013 out of 2.7 lakh counselling quota seats 80,000 seats were vacant. In 2014 and 2015, the number of
vacant seats increased to 1.1 lakh. In the current year 2016 out of 1,85,670 counseling quota seats over 82,000 seats remains vacant. It was found that tier-2 and tier-3 colleges had surrendered up to 90 percent of their seats in counselling with a fear that their seats may fall vacant (Mannan, 2015; Express News Service, 2016). Such situation leads to admission of even those students who are found to be average in academics. This problem is observed not only with government quota students but also with management quota students. Admitting average students requires tremendous effort on the part of the institution in making them employable. Similar scenario is experienced in Private Deemed University as well. The present study aims at finding out the employability status of students studying in these institutions.

1.3 NEED AND PURPOSE OF THE STUDY

India is the third largest higher education system in the world after China and United States of America with about 13,507 AICTE (All India Council for Technical Education) approved technical institutions of which 3,495 institutions offer engineering and technology programmes. There are totally 574 universities including 44 central universities, 13 state open universities, 130 deemed universities and 387 other institutions (MHRD, 2013). The Indian Ministry of Human Resource Development (MHRD) encourages the spread of engineering education. Even though there is an increase in the number of engineering colleges and universities, India seems to face serious unemployment problems. According to NASSCOM (2014) report, around five million graduates are estimated to pass out of the Indian education system every year, across a range of courses. Among which only 24 – 26 percent of candidates are found to be employable in IT services, engineering, research and development and software products. The report revealed the fact that there is a shortage of the right talented candidates to get employed in the job market. This statistic reveals the employability status of graduates. The reason for this problem needs to be identified and necessary intervention needs to be recommended both to the government
and to the educational institutions for bringing down the adverse effect of unemployment. This acute problem has stimulated to focus research in this area.

The present study would help the engineering students in carrying out self-introspection about their own competency level. It would also help the engineering educational institutions to identify and strengthen themselves in key result areas, such as teaching-learning process, technical and soft-skill training, infrastructure facility, institution culture and many more. This would in turn facilitate better employability status of the students.

1.4 RESEARCH QUESTIONS

- What is the employability status of students studying in two different types of educational institutions, Private Self-Financing Engineering Colleges and Private Deemed Universities?
- What is the knowledge, skills and ability (KSA) level of students belonging to these institutions?
- What is students’ perception about the institutional facility support (TTIC) offered by their respective educational institution?
- Is there any relationship between predictor variable and dependent variable?
- Which independent variable highly predicts the dependent variable?
- Does moderator variable (TTIC) moderates the relationship between independent and dependent variable?
- Is there any association between self confidence and placement status of students?
• How do HR professionals perceive the graduates belonging to these institutions (PSFEC and PDU) when it comes to employment?

• What measures needs to be taken for the enhancement of students’ employability status?

1.5 OBJECTIVES OF THE STUDY

The study objectives are as follows

• To assess the knowledge, skills and ability possessed by the students studying in two different types of educational institutions, Private Self-Financing Engineering Colleges and Private Deemed Universities.

• To understand the perception of students regarding the institutional facility support offered by the two different types of educational institutions in terms of teaching, training, infrastructure and culture.

• To study the relationship between predictor variable (knowledge, skills, ability, teaching, training, infrastructure, culture) and the dependent variable (self confidence level of an individual student in getting placed).

• To identify which one of the independent variables (knowledge, skills, ability) highly influence the dependent variable.

• To analyse the gender differences in terms of the type of independent variable that highly influences the dependent variable.

• To find out the role of institutional factor as moderators (teaching, training, infrastructure and culture) in strengthening the relationship between independent variable
To find out if self confidence plays a major role in facilitating campus placement status of students.

- To study the perception of HR professionals’ regarding the personal qualities possessed by the graduates belonging to the two different types of educational institutions.

- To suggest specific measures to develop the employability status of students.

1.6 CHAPTERIZATION

The thesis is divided into six chapters.

1. Introduction

This chapter contains the introduction, need and purpose of the study and the study objectives.

2. Literature Overview

This chapter contains the literature review of the variables used for the study.

3. Research Methodology

This chapter includes research design and sampling techniques used for the study.

4. Discussion/ Analysis

This chapter includes data analysis and its interpretation.
5. Conclusion

This chapter consists of the suggestions and conclusion of the study that is derived based on the statistical results.

6. Scope for further work

The scope for future research is presented in this chapter.