TRACER STUDY OF GRADUATES
UNIVERSITIES IN SRI LANKA

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Abbreviations

APIIT	Asia Pacific Institute Of Information Technology
CMB	University of Colombo
EUSL	Eastern University, Sri Lanka
GCE(A/L)	General Certificate in Education(Advanced Level)
GCE(O/L)	General Certificate in Education(Ordinary Level)
GER	Gross Enrolment Ratio
HEIs	Higher Educational Institutions
HEMS	Humanities, Education, Management and Social Sciences
HETC	Higher Education for Twentieth Century
HSS	Humanities and Social Sciences
ICT	Information and Communication Technology
IT	Information Technology
KLN	University of Kelaniya
LIMCs	Lower Middle Income Counties
MGT	Management
MRT	University of Moratuwa
PDN	University of Peradeniya
RUH	University of Ruhuna
RUSL	Rajarata University of Sri Lanka
SEUSL	South Eastern University of Sri Lanka
SJP	University of Sri Jayewardenepura
SLIIT	Sri Lanka Institute of Information Technology
STEM	Science (including Medicine), Technology, Engineering and Mathematics
SUSL	Sabaragamuwa University of Sri Lanka
UGC	University Grants Commission
UJA	University of Jaffna
UMICs	Upper Middle Income Countries
UVPA	University of the Visual & Performing Arts
UWU	Uva Wellassa University
WUSL	Wayamba University of Sri Lanka

Executive Summary

There are two critical problems faced by the higher education sector in Sri Lanka. Despite the impressive achievements in school education both at primary and secondary levels regarding enrolment and completion ratios, the country has failed to create enough opportunities for its youth in the tertiary sector, especially university education. From the annually qualifying numbers (at present approximately about 160,000 a year) for tertiary education, the state universities under the University Grants Commission (UGC), the main route to higher education in the country, can enroll only about 31,000 a year. The system is not sufficiently equipped to meet the long-held aspiration for higher education of both the youth and their parents. This insufficiency is critical in the context of the general belief of society that entering a university is an assured source of employment and security.

The other problem that the country's higher education sector faces is employment opportunities available to graduates and number of graduates searching for employment opportunities at any given point of time. Finding a suitable job after graduation is a significant challenge for most of the university graduates in the country. This could be a reflection of the lack of opportunities created by the economy as well as the skills mismatch between the graduates produced by the universities and the market requirements. A large section of those in employment are not enjoying or feeling fulfilled in their jobs. Many university graduates have taken stop-gap jobs since they have not been able to find roles that are suitable for graduates. Therefore, feasible efforts are required from the government, universities, and other relevant stakeholders to address the issue of graduate employment as a national priority.

Against this backdrop, the current study assesses the employment outcomes of graduates from 14 conventional universities under the UGC after two to three years of graduation, with a particular emphasis on identifying the nature of the unemployment problem that prevails among university graduates. The study was sponsored by the UNESCO Participation Programme 2016/2017 and conducted by the UGC.

For the purpose of the current study, a potential sample of 5,000 graduates was selected from a population of 30,270 students who graduated during the years 2014 and 2015 from the 14 conventional universities under the purview of the UGC. However, the actual sample of the study was limited to the 1,265 graduates from the14 universities considered for the study who responded to the questionnaire survey. The response rates were not uniform across disciplines and universities. Higher response rates were recorded from the Arts and Education streams while the lowest was recorded from the Computer Science/ IT streams.

Out of the 1,265 graduates traced from state universities, 65.5% were employed, 32.2% were unemployed and 2.4% were engaged as volunteers. A higher percentage of male graduates were employed (81%) compared to their female counterparts (58%). Despite the overwhelming preference of graduates for public sector jobs, the study revealed that 46% of the employed graduates were engaged in private sector jobs at the time of the survey. This proves that the majority of jobs for graduates are generated by the private sector, thus highlighting the vital role played by this sector in the economy. The different branches of the state sector provided only 44% employment opportunities for the graduates while the remaining 10% were engaged in either semi-government sector employment or self-employment. Historically, a high percentage of graduates have been absorbed into the teaching profession in Sri Lanka. This study also found that approximately one in every four employed graduates was employed as a teacher. A high proportion of graduates in the disciplines of Education, Arts, Performing Arts, Agriculture, and Science join the teaching profession.

Underemployment is a significant aspect of graduate employment issue which often remains unrecognized and is rarely analyzed. As per this study, approximately one in every ten employed graduates of the sample was underemployed, engaged in jobs don't require or utilize their education, such as clerical and allied roles.

Compared to Architecture, Computer Science/ IT, Allied Health Science and Engineering graduates whose employment rates were over 90% within about two years of graduation, graduates from other disciplines seem to be less dynamic in finding jobs. The only exception is the graduates from the field of Education as all of them have been absorbed into the teaching profession by the state. The lowest employment rates were recorded by the graduates from the Arts (45.6%) and Performing Arts (37.1%) disciplines. Employment rates among graduates not only vary across disciplines but also among universities. This variation is high among HEMS graduates compared to STEM graduates.

With regard to other attributes of graduates, it was observed that there is a clear relationship between enhanced English language skills and the employability of graduates. In the absence of a common measure to determine the English language skills of graduates, the results of the GCE (A/L) General English exam and GCE (O/L) English Language exam were used as alternative measures of the English language proficiency of the graduates in this study. Accordingly, it was revealed that over 88% of the graduates who had an "*A*" for the GCE (A/L) General English were employed while the employment rate among graduates who had failed in GCE (A/L) General English was 48.6%. Alarmingly, 38.8% of the graduates who responded to this survey had failed the General English paper at the GCE (A/L) exam. A similar association was also observed between the graduates' performance at their GCE (O/L) English Language exam and their employment status. Another important attribute of graduates that helps them in securing past employment after graduation is the training they received through internship placements. A significant percentage of graduates who had

gone through internship training were employed compared to the graduates who had not gone through such study-related internship programmes as a part of their course of study. Interestingly, despite their employment status after graduation, a majority of the graduates have a positive perception regarding the quality of education they received at the university. They seem to view their degree as a good investment for their future, despite the hostile job market they have to confront.

In this study, the graduate survey was supplemented with an employer survey which was conducted to ascertain employer perceptions of university graduates regarding their knowledge, skills, and attitudes in relation to employer expectations and to identify any perceived deficiencies in this regard. The findings revealed that employers were extremely satisfied with the performance of local graduates regarding their numerical skills, practical use of IT, and ability to work in teams. Generally, they were happy with the content knowledge of graduates as opposed to their application of that knowledge to a particular situation. However, they expressed their frustration about local university graduates with regard to their skills in communication, use of the English language, decision making skills, and reading/writing skills. One has to be cautious about these conclusions as the views expressed by the employers are mainly based on their experience about graduates that they have already employed. The issues associated with unemployed graduates could be more serious.

The graduate employment problem is a complex one which cannot be addressed by simple solutions. In the context of the current issue, Sri Lanka as a country may have to redefine the goals of its higher education system in order to develop professionally competent, service-oriented, principled and productive citizens. The Higher Educational Institutions of this country must commit to a mandate to prepare students for the world of work. The effectiveness of an academic programme offered by a university can be best measured through the competencies, knowledge, and skills of its graduates and how they can be applied in the world of work. Therefore, it is crucial that the outcomes of the educational programmes offered by our universities are studied as a mean of understanding how well the graduates apply the knowledge and skills they acquired at University in the professional environment, irrespective of the discipline they represent.

Chapter 1

Objectives and Design of the Study

1.1   Introduction

Provision of higher education especially university education was a state monopoly in Sri Lanka until the 1990s. Even today 72 percent of the annual enrolment of undergraduates education takes place within the 14 conventional universities[1] which are under the purview of the University Grants Commission (UGC). This number is currently around 30,000 a year spreading over 110 different degree programmes offered by 14 universities. As per UGC statistics, annual enrolment into other Higher Educational Institutions (HEIs) outside the conventional universities is around 12,000[2]. The two critical problems encountered by the country's higher education sector are: (1) failure to create sufficient opportunities compared to the demand for higher education despite the impressive achievements in the school education both at primary and secondary levels in terms of enrolment and completion ratios, and (2) quality variation of graduates produced by the system across disciplines and among universities, exacerbating graduate unemployment. In an attempt to address the critical challenges faced by the higher education sector of the country and the changing needs of the employment market, the current policies and programmes of the UGC encourage reforms that aim at improving the efficiency and effectiveness of the state higher education system by way of producing able graduates who have not only acquired knowledge in academic subjects but also enhanced other skills and competencies required by the workplace. They also need to have learnt how to apply a number of important practical life skills in order to be able to fully embrace and adjust to new adult life after graduation. Needless to say for graduates to be career-ready today, their learning at the university must go beyond mastery of core subjects and focus on broadening their skills such as critical thinking, communication, collaboration, creativity and problem-solving, technology and economic literacy.

The Gross Enrolment Ratio (GER) in tertiary education which measures the ratio of students enrolled in higher education from the corresponding age group is around 19% which is low compared to the standards of the lower middle-income counties (LMICs). However, the basic human development level in Sri Lanka, especially in indicators such as primary and secondary education and life expectancy, are high by the standards of LMICs and comparable to upper-middle income countries (UMICs).

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[1] This includes all universities under the purview of the UGC except the Open University of Sri Lanka.

[2] This includes numbers entering into 5 universities set up outside the Universities Act 1978, locally recognized degree programmes and locally offered foreign degree programmes by different higher educational institutes in the country while excluding external degrees and degrees offered by the Open University of Sri Lanka.

As per the UNESCO data, Sri Lanka's Net Enrolment Ratio (NER) in primary education is over 99 percent, and that of secondary education is about 89 percent. Though access to university education is limited in the country, it has a high reputation among Sri Lankans as a secure path for employment. Almost all Sri Lankan families have a great aspiration of providing university education for their children. Thus, there is a high demand for higher education. However, this growing demand cannot be adequately addressed by the present system. Hence, it has created a lacuna which is being filled through higher education institutions which have been established in the recent past.

The second problem that the country's higher education sector faces is that the job search and employment experience of students graduating from the universities and higher education institutions is highly variable. This variation has been observed both across the degree programmes and over institutions. Finding a suitable job after graduation is a key challenge for most of the university graduates in the country. The degree certificate obtained after 3 or 4 years of hard work at university does not seem to be sufficient to find suitable employment for graduates in many disciplines. Therefore, graduate unemployment has become a hotly debated issue in Sri Lanka for several decades. According to De Silva 1977 (as cited in Ariyawansa, 2008), "Even if one of the main objectives of the university education is to improve the skills of students to face the challenges in external society, they have to leave from the university without having sufficient self-confidence and assurance for better employment." Studies have been conducted by the Higher Education for the Twentieth Century (HETC) project (2010-2015) under the guidance of the Ministry of Higher Education in all state universities in Sri Lanka to assess the employment status of the graduates and to explore the employment patterns based on the graduates' general characteristics, educational background, field of education and other variables. The results show that the employability of graduates varied depending on their general characteristics as well as the study programme (Ramanayake et al., 2013). Though the country has conducted surveys to trace the issue from time to time, findings are fast made obsolete, and they are not comprehensive enough to understand the nature of the problem that exists today.

As time and money spent on education is an investment when graduates are unemployed, return on investment is not achieved both at the country level and the family or individual level. Indeed, a potential mismatch between the skills possessed by the graduates (supply) and that of demanded by employers is perceived as a significant obstacle in finding a job for most of the graduates in many counties including Sri Lanka. As a result, some graduates have to engage in underpaid jobs, or they have to be unemployed. According to Devarajan 2017, universities in Asia must align more closely with the needs of the labor market to ensure graduates have the

appropriate knowledge and skills demanded by the employers. Such conditions related to concerning graduate employment create frustration, youth unrest, violence, and other forms of anti-social behaviors among them as well as social, cultural, economic and political issues in the country which makes the country's progress slow or even act as a barrier to progress sometimes. Therefore, feasible efforts are required of the government, universities, and organizations to address the graduate unemployment issue.

1.2   Study Objectives

The primary objective of this tracer study is to assess the employment level of graduates after two to three years of graduation and to evaluate the adequacy and relevancy of the internal undergraduate degree programmes offered by the universities under the University Grants Commission (UGC) especially concerning employment prospects of graduates. Accordingly, the current survey provides a snapshot of the path students take both before and after graduation, highlighting the hurdles encountered by them in a quest to assist stakeholders in the decision-making process.

The specific objectives of the study are:

1.   to examine the overall level and the patterns of graduate employment mainly in state universities under the UGC,

2.   to assess the rate and trends of employment patterns both across universities and over study programmes,

3.   to recognize the factors associated with the employment prospects of graduates,

4.   to uncover the assessment of graduates about the relevance of the training provided by the university in relation to their employment prospects,

5.   to ascertain employer perception of university graduates in terms of their knowledge, skills, and attitudes in relation to employer expectations and to identify any perceived deficiencies in this regard.

1.3   Data and Methodology

To achieve the objectives mentioned in the previous section of this chapter, the study was conducted in three phases, as listed below. All three stages used the survey method as the primary tool of data collection.

Phase I: Graduates' Employability Survey – State Sector

Phase II: Graduates' Employability Survey – Non-State Sector

Phase III: Employer Survey

The Phase I of the study, the graduates' employability survey of state sector universities, is the main component of this study to achieve the first four specific objectives mentioned in the previous section whereas Phase II of the study, the graduates' employability surveys of non-state sector degree awarding institutions, supplements Phase I of the study. Also, it provides a basis for comparison with the findings of the state sector survey. The third survey (Employer Survey) was also designed to supplement the results of the primary study. This phase of the study helps to realize the fifth specific objective of the study, which is to ascertain employer perceptions of university graduates in terms their knowledge, skills, and attitudes in relation to employer expectations and to identify any perceived deficiencies in this regard.

1.4   Study Design

Phase 1: Graduates' Employability Survey – State Sector

The graduates' employability survey of the state sector universities (universities under the UGC) was conducted for all degree progammes except for Medicine, Dental Surgery, Veterinary Medicine and Indigenous Medicine due to the reason that these graduates are fully absorbed by the state sector for employment. A potential sample of 5,000 graduates was selected from the 30,270[3] students who graduated in the years 2014 and 2015 from the 14 conventional universities under the purview of the UGC. The Open University of Sri Lanka which offers its courses of studies in the distance mode was excluded from the survey due two main reasons: first, most of the students of the Open University of Sri Lanka are employed prior to graduation: second, the students enrolled in the Open University of Sri Lanka represent a heterogeneous population in terms of age and entry requirements.

The selection of a potential sample of graduates covering both years 2014 and 2015 provides an opportunity to examine the experience of graduates in their job search over a period of 3 to 2 years respectively to the point at the survey was conducted. As a part of the sample selection process a database of all eligible graduates was constructed with their names and contact details. This was undertaken with the assistance of the respective universities. Though all universities were able to provide addresses of graduates, only some universities were able to provide their telephone numbers

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3 Excluding Medical, Dental, Veterinary Medicine and Indigenous Medicine graduates

The technique of stratified random sampling was used to select the potential sample of 5,000 graduates from the broader categories of study streams (mentioned in Table 1) that could be considered as independent sub-populations. The sample of 5,000 graduates could be considered as a reasonable representation of the 30,270 graduates produced by the 14 state universities under consideration during the years of 2014 and 2015 excluding Medicine, Dental Surgery, Veterinary Medicine and Indigenous Medicine graduates.

A questionnaire was prepared in all three languages: Sinhala, Tamil and English and posted to each participant as per their medium of instruction. Methodical interviews were conducted of about 250 graduates whose telephone numbers were available. Within the space of 3 months, a credible response rate was 25% was achieved.

Academic / University	Arts	Management	Education	Law	Agriculture	Engineering	Architecture	Computer Science	Allied Health Sciences	Science	Fine Arts	Total
Colombo	172	118	31	80					10	123		**534**
Peradeniya	214	62		16	79	135		16	33	126		**681**
Sri Jayewardenepura	206	360							18	172		**757**
Kelaniya	314	155						14	13	118		**614**
Moratuwa						248	96	37				**381**
Jaffna	76	45		11	12			10	10	38	48	**250**
Ruhuna	138	101			43	68			11	97		**457**
Eastern	116	61			10				10	18		**215**
South Eastern	98	36						20		28		**182**
Rajarata	72	96			27			17		37		**249**
Ssnaragamuwa	72	78			25			18		59		**252**
Wayamba		83			31					57		**172**
Uva Wellassa		31			65			27		23		**146**
Visual & Performing Arts											112	**112**
Total	**1477**	**1225**	**31**	**107**	**292**	**451**	**96**	**158**	**105**	**897**	**160**	**5000**

Table 1: Selected Sample by University & Academic Stream

Phase II: Graduates' Employability Survey –Non State Sector

The survey of the graduates produced by the non-state sector Higher Educational Institutions (HEIs) was limited to two institutions: Sri Lanka Institute of Information Technology (SLIIT) and the Asia Pacific Institute of Information

Technology (APIIT) who provided the contact details of 610 graduates who graduated in the year 2015. Of this population a sample of 251 graduates was selected using the stratified random sampling technique considering their academic streams as sub populations. This survey was conducted using the same questionnaire used in the phase I of the survey for the state universities but only through telephone interviews as the telephone contacts of the respondents were available from the source. A high response rate of 94 percent was achieved in this phase of the survey.

Phase III: Employer Survey

A list of companies covering a spectrum of industries who provide internship and career opportunities for the graduates of universities was prepared from the information provided by the Career Guidance Units of the universities for the purpose of the Phase III of the study. From this list, 79 companies were invited, out of which 47 companies participated in a structured discussion that was conducted in two sessions. This group covers the major employers of graduates in the country and they shared their experience and expectations about the graduates they had hired over the years. Further, the information gathered from the discussions was supplemented through a structured questionnaire[4] in order to ascertain their perceptions of graduates in terms of knowledge, skills and attitudes in contrast to the expectations of the employers in more concrete terms.

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[4] The questionnaire used for the employer survey is a modified version of the questionnaire used for the Study on *Employers' perception of graduate employability* conducted by the *Flash Eurobarometer 304 – The Gallup Organization*.

Chapter 2

Sample Profile

2.1   Introduction

This section starts with the analysis of the sample profile. The sample of graduates who participated in the survey from both the state and non-state sectors was initially scrutinized in terms of gender composition and academic stream. From the data, it is evident that the participation of female graduates from the state universities has been significantly higher (67.8%) compared to that of male graduates (32.2%). Further, it was found that academic streams available in non-state sector is limited a few (IT, Management, Law and Engineering, etc.) in contrast to more than 14 main academic streams including medicine, dental and veterinary medicine available in state universities. The majority in the sample has been graduated with special/honors degree (72.2%). As per the survey data, the medium of instruction in all Science based degree programmes is English while Social Sciences and Humanities degree programmes are mainly conducted in the local languages, Sinhala and Tamil. The majority of the Business Management and Allied degree programmes are conducted in English.

2.2   General Profile of the Sample of Graduates

Of the 5,000 graduates selected from the state sector, the potential sample, only 1,265 (25%) responded to the survey. About 100 questionnaires were returned without being delivered to the target due to numerous reasons. Figure 1 shows the distribution of the response rate across nine main academic streams (as mentioned in Chapter 1, graduates of Medicine, Dental Surgery, Veterinary Medicine and Indigenous Medicine were excluded from the survey).
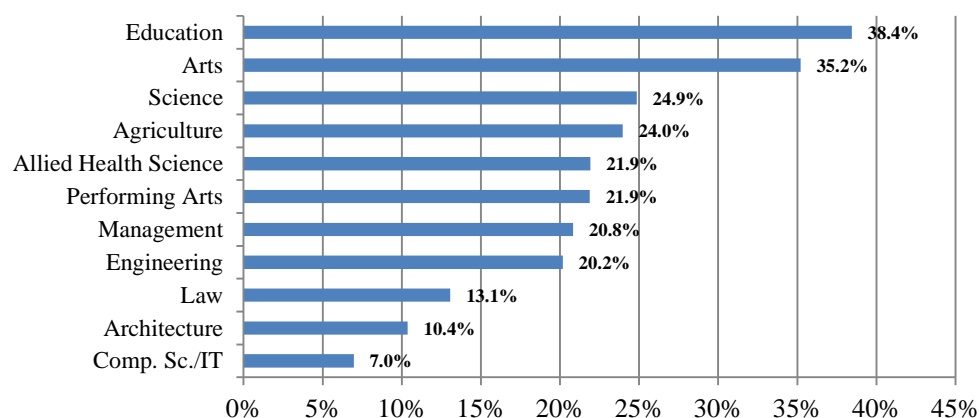
Figure 1: Response rate by Academic Stream – State Universities

As evident in figure 1, higher response rates were recorded from graduates of Education (38.4%) and Arts (35.2%) academic streams and the lowest are was recorded from the graduates of Computer Science/ IT (7%) stream. It is interesting to note that the response rates of graduates coming from disciplines where the employment prospects are low such as Arts was high compared to that of more readily employable disciplines such as Computer Science/IT and Architecture.

Figure 2 presents the response rates by university. According to this, the highest response rate is recorded from Uva Wellassa University (34.8%) followed by Kelaniya (32.9%), Colombo (32.2%) and Ruhuna (28%) respectively. Peradeniya, Rajarata and Sri Jayewardenepura are around 25%. The rest of the Universities have more than 15% response rates.
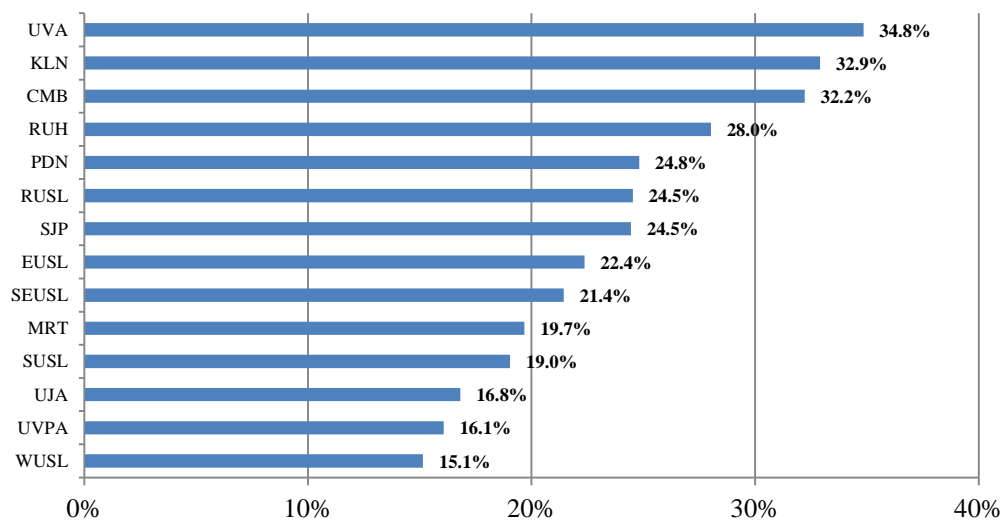
Figure 2: Response rate by University – State Universities
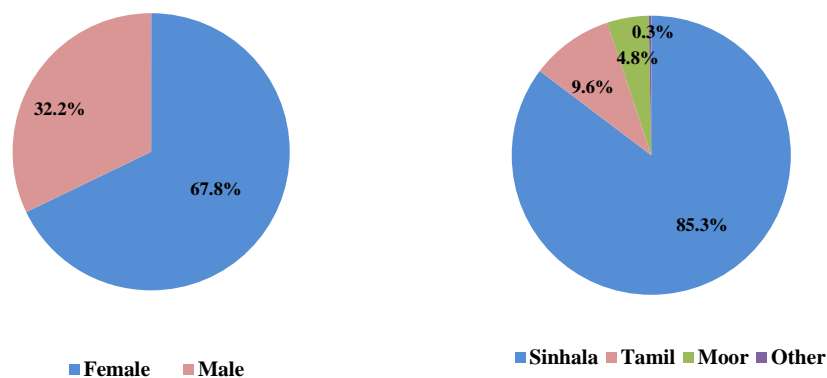
Figure 3: Gender and Ethnicity– State Universities

The sample of respondents was also classified by gender and ethnicity. Figure 3 shows the composition of responded graduates of state universities by gender and ethnicity. Of the total 1,265 graduates who responded from 14 state universities, percentage of females has been more than double (67.8%) to that of the males (32.2%). And the percentage of Sinhalese graduates in the responded sample is more than 85%.
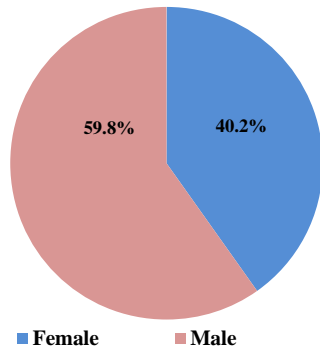
In relation to the non-state sector sample, the gender based composition is given in figure 4. Out of 251 non–state graduates in the sample, 234 graduates responded to the survey. Response rate of male graduates (59.8%) was higher compared to female graduates (40.2%)

Figure 4: Gender –Non- State Institutions

State Universities   *Non- State Institutions*
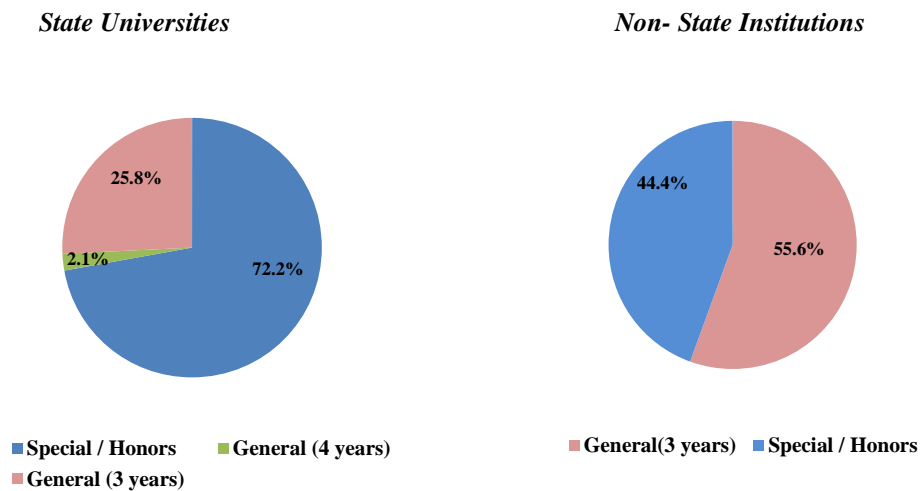
Figure 5: Composition by Type of the Degree

According to figure 5, a higher percentage (72.2%) of state sector graduates in the sample consists of four year special/honors degree holders. The lowest percentage, 2.1% was recorded by the 4 year general degree holders, since there are only a few state universities which conduct general 4 year degrees. However, in the non- state sector most of the graduates have followed 3 year general degrees (55.6%).
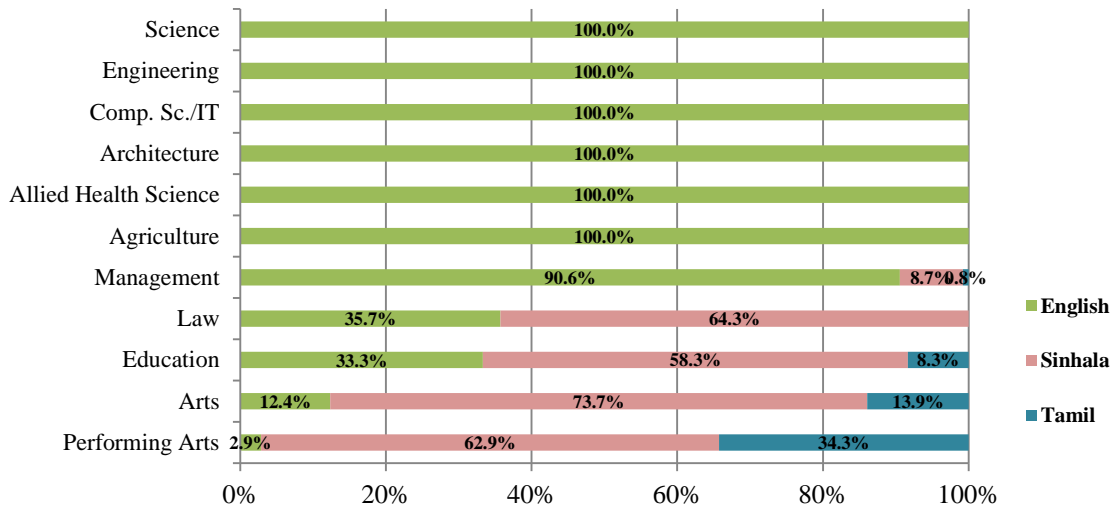
Figure 6: Academic Stream and Medium of Instruction-State Universities

Based on the responses of the graduates, it is found that all Science based graduates (STEM) in the sample have followed their degree programmes in the English medium. The dominant medium of instruction in the Management stream (90.6%) as per the responses received is also English. On the other hand, the local languages (Sinhala/Tamil) are the dominant medium of instruction in Law, Education, Arts and Performing Arts streams.

Chapter 3

Analysis of the Employment Status of Graduates

3.1   Introduction

Today, the provision of higher education is not a state monopoly. Annually about 20,000 graduate from state universities under the UGC while about 3,500 graduate from non-state higher educational institutions. For this study, as already outlined, a potential sample of 5,000 graduates were selected from those who graduated in the years 2014 and 2015 from state universities while a sample of 251 graduates who graduated in the year 2015 were selected from two non-state higher educational institutions.

There is no significant difference in the overall employment status of the graduates of state universities and that of non-state institutions. The overall employment rate of the state university graduates is 65.5% whereas the employment rate of the non-state graduates is 66%.   In both sectors, the employment rate of males is higher; 81% of the state university male graduates and 76% of non-state male graduates were employed at the time of the survey. Regarding academic streams, a 100% employment rate was found among graduates of the Architecture, Computer Science/IT and Education streams. Allied Health Sciences and Engineering graduates showed the next highest employment rates. The lower employment rates were found among the graduates of the Arts and Performing Arts disciplines. As the survey was conducted in August/September of 2017, the state sector graduates who graduated in the years 2014 and 2015 had about three years and two years respectively for their job search while non-state sector graduates had around two years as the sample from the non-state sector covers only 2015 graduates.

The analysis in this chapter is presented in five sections: (i) overall employment status of graduates, (ii) other attributes relevant to graduate employment (English language proficiency, computer literacy, importance of internship training prior to employment and professional qualifications), (iii) classification of graduates' employment, (iv) characteristics of unemployed graduates and (v) graduates' perception of the quality of university education.

3.2   Overall Employment Status

The overall employment status was analyzed for both samples - state sector and non-state sector. Among the state sector graduates, the employment rate was 65.5%. From the rest, a small percentage (2.4%) was engaged in voluntary work

while 32.2% were not employed. In the non-state sector, 66% was employed and 34% was not employed. It is important to mention that the sample of graduates from non-state institutions is smaller compared to that of the state sector as only two non-state institutions agreed to share their information. Further, it is important to note that the sample of graduates of the non-state sector was restricted to a few disciplines: Management, Engineering, IT, and Law.

State Universities   *Non-State Institutions*
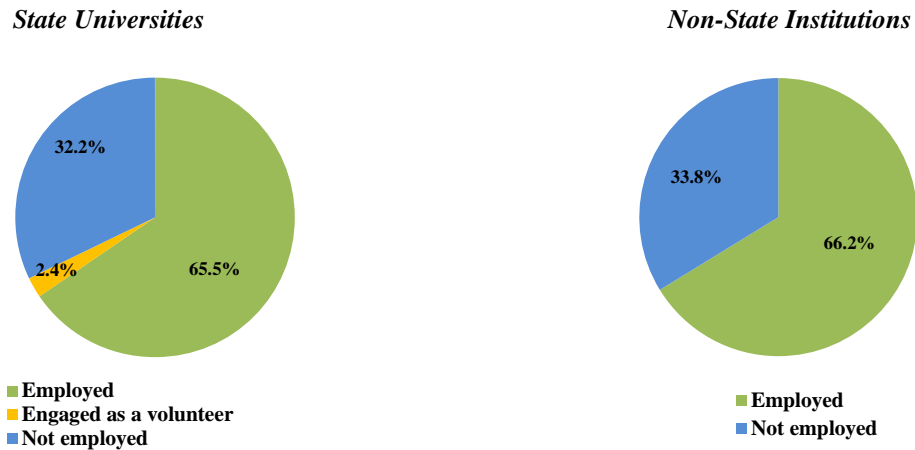
Figure 7: Employment Status of Graduates

3.2.1 Employment Status by Gender

Promoting productive employment opportunities with a decent income for men and women equally is considered one of the priorities in today's world. Therefore, the overall employment status of graduates was analyzed in terms of gender. Findings in this regard show a clear employer preference for men over women. Whereas 80.8% of male graduates of the state sector are employed, only 58.2% of their female counterparts are employed. The disparity between male and female employment is more than 22%. A similar disparity could be observed among the non-state sector graduates as well.

Figure 8: Employment Status by Gender

3.2.2 Employment Status by Type of the Degree

In the state sector, the highest percentage of graduates who are employed are those who followed the 4 year general degrees (88%), followed by special/honors degrees (68.9%). It should be noted that only a few Science Faculties offer general four-year degrees, and the number of graduates in the sample is meager (26) compared to total sample of 1,265. However, the employment rate is low among three-year general degree holders (54.2%). The employment percentage of the special/honors degree holders of non-state sector graduates is higher than that of the general degree holders.

State Universities

Non- State Institutions
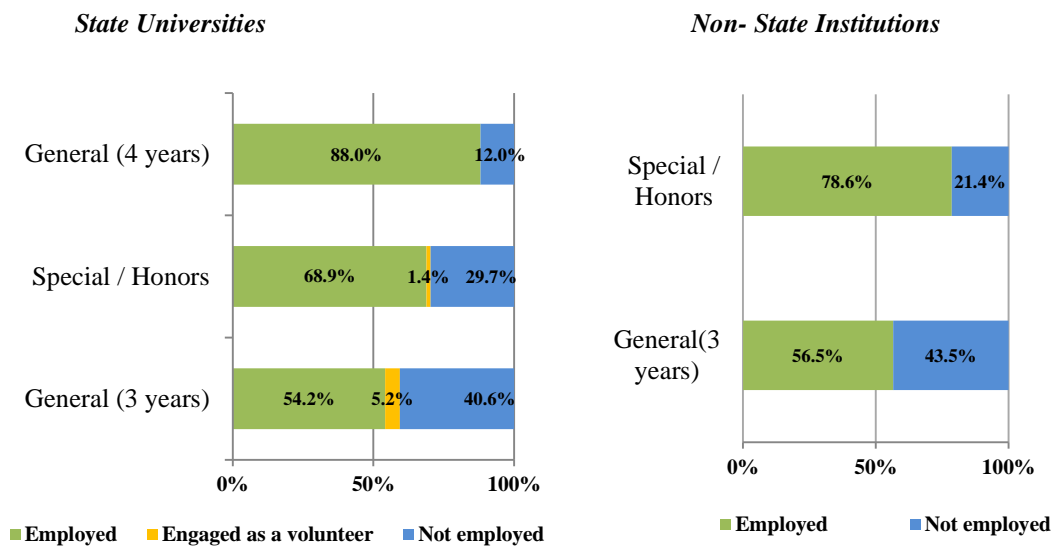
Figure 9: Employment Status by Type of Degree

3.2.3 Employment Status by Academic Performance

Following the British tradition, Sri Lankan universities divide the overall performance of graduates into four categories: First Class, Second Class Upper Division, Second Class Lower Division and General Pass. Figure 10 presents the employment status of state university graduates according to their level of performance at university. It is interesting to note that there is no significant difference in employment rates between graduates with general passes (71.4%) and graduates with first classes (71.9%). However, the employment rate of graduates with second class upper division is the lowest (59.1%) followed by second class lower divisions (67.7%).
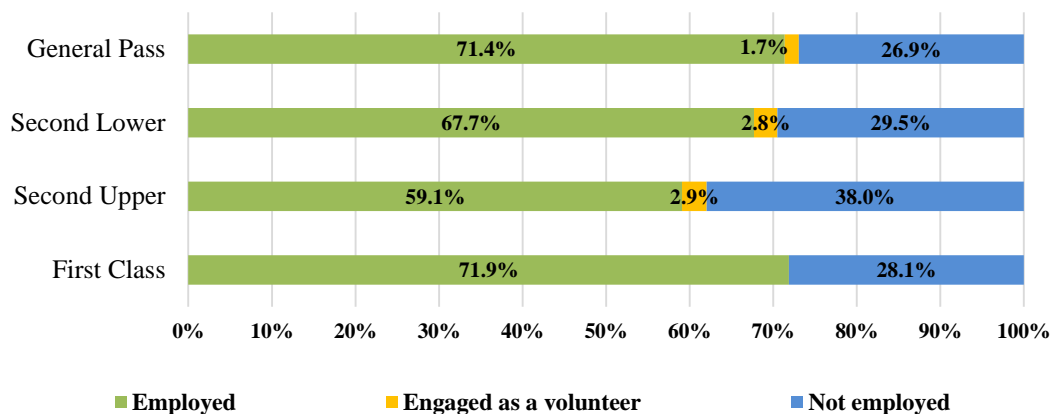
Figure 10: Employment Status by Level of Performance - State Universities

In relation to non-state sector graduates, more than 87% of first classes are employed while among other classes the employment rate is around 60%. These results are reported in figure 11.
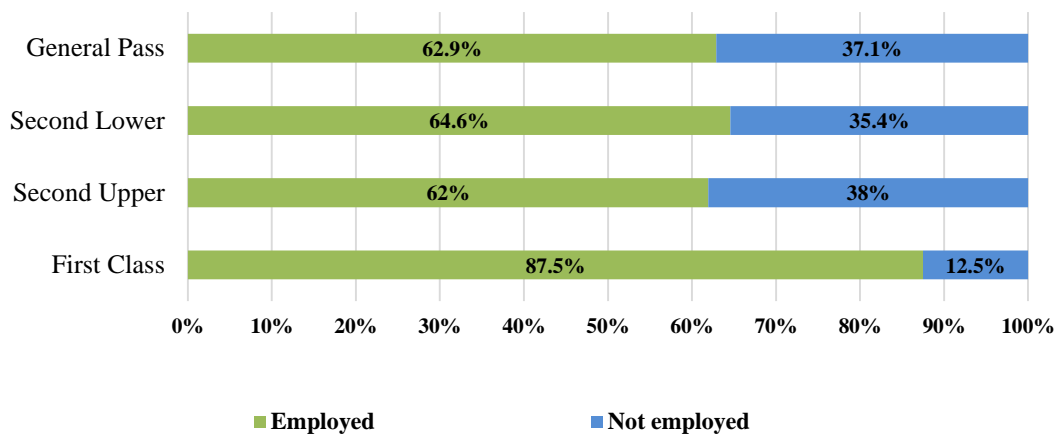
Figure 11: Employment Status by Level of Performance -Non-State Institutions

3.2.4 Employment Status by Medium of Instruction

The Language of instruction at University is an important factor in the job search for graduates as most of the job openings of the private sector and some public sector institutions require some level of fluency in the English language. Therefore, in this study, the employment status of graduates was analyzed in terms of the language that they received instruction in university. The primary results are reported in figure 12. As per the figure, it is evident that a higher percentage of graduates who followed degrees in the medium of English (81.2%) are employed while employment rates among graduates who followed their study programmes in Sinhala and Tamil are 46.5% and 27.6% respectively.
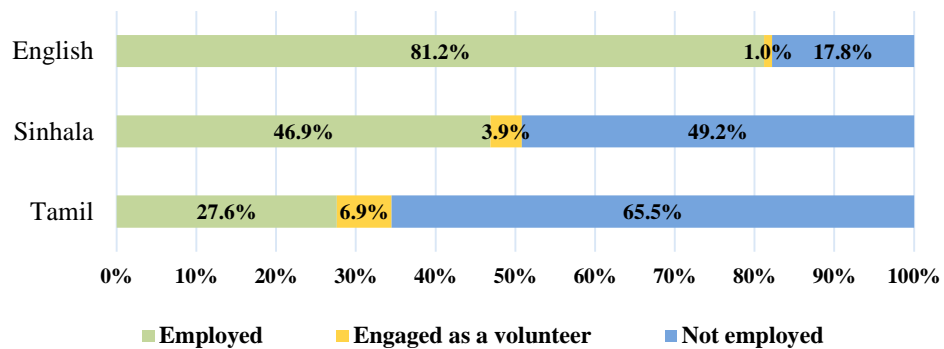
Figure 12: Employment Status by Medium of Instruction - State Universities

Since most of the graduates who followed their degrees in Sinhala or Tamil medium belong to the Arts stream, the employment status of Arts stream graduates by the medium of instruction was further analyzed. According to figure 13, it is clear that although the overall employment rate of Arts stream graduates is at the low percentage of 46%, the employment rate among English medium Arts graduates is at the satisfactory level of 71.9%. However, the number of English medium graduates in the sample is 57 which is quite small compared to the sample of Sinhala medium Arts graduates.
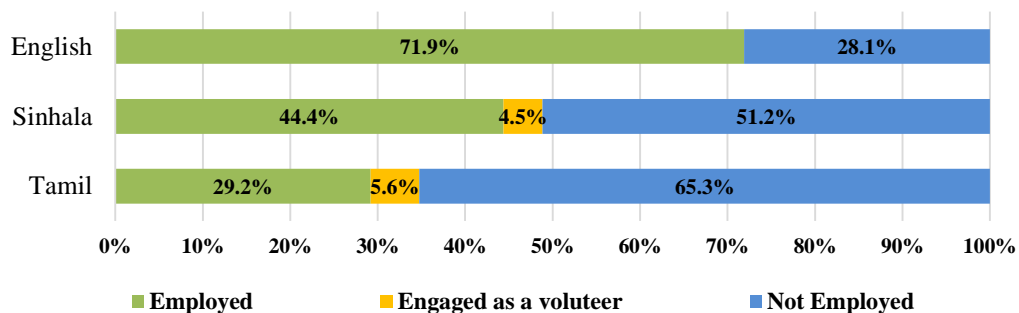
Figure 13: Employment Status by Medium of Instruction - Arts Stream

3.2.5 Employment Status by Academic Stream

The employment status of graduates can vary by the academic stream that they have followed at university due to various reasons such as types of employment opportunities created by the economy and the nature of the education and training received at university. In the current study, eleven academic streams were broadly identified for this purpose. Of the eleven, six streams can be classified into STEM[5] disciplines and the remaining five streams can be classified into HEMS[6] disciplines. The overall employment level of STEM graduates is higher compared to that of HEMS graduates. Computer Science/IT and Architecture graduates had reached full employment status at the time of the survey. Graduates produced by the remaining STEM related streams - Allied Health Sciences, Engineering, Science and Agriculture - had achieved the employment rates of 95.7%, 92.2%, 83.0% and 82.6% respectively. Strangely, the response rate in Architecture and Computer Science/IT fields was low compared to others.
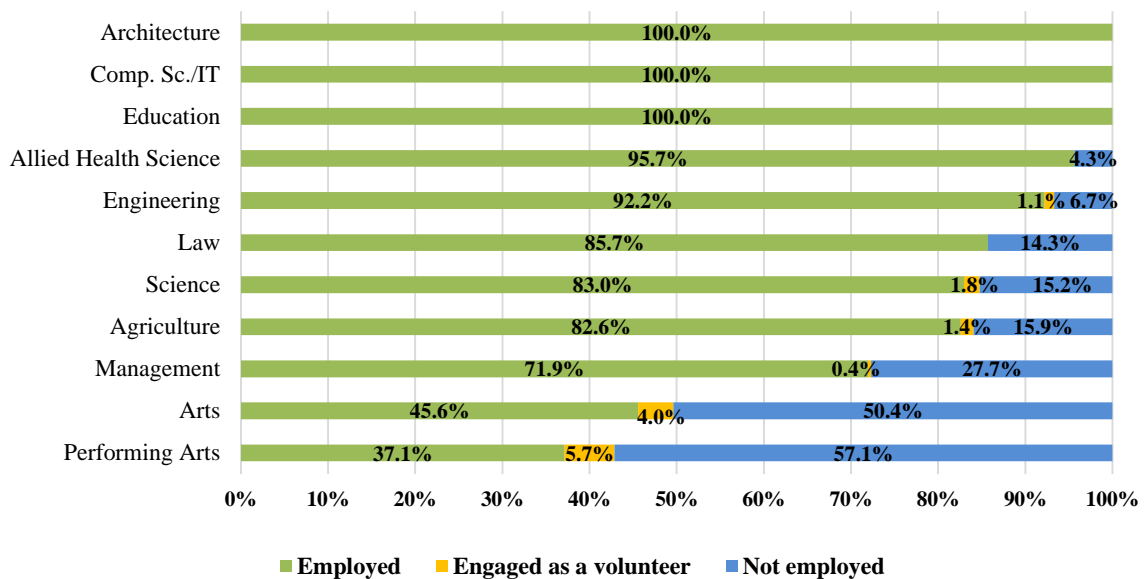
Figure 14: Employment Status by Academic Stream- State Universities

Among the HEMS disciplines, full employment status was achieved only by the graduates of the Education stream as they had been fully absorbed into the teaching profession by the Ministry of Education and Provincial Ministries of Education. In HEMS disciplines, the next highest employment rate was observed in the Law stream (85.7%) followed by the Management stream (71.9%). Graduates produced by the Arts and Performing Arts streams had the lower employment rates of 45.6% and 37.1% respectively. Further, in the fields of Arts and Performing Arts, the

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5 STEM=Science(including Medicine), Technology, Engineering and Mathematics
6 HEMS=Humanities, Education, Management and Social Sciences

rate of engagement in volunteer services is comparatively higher (around 5%) compared to other fields.
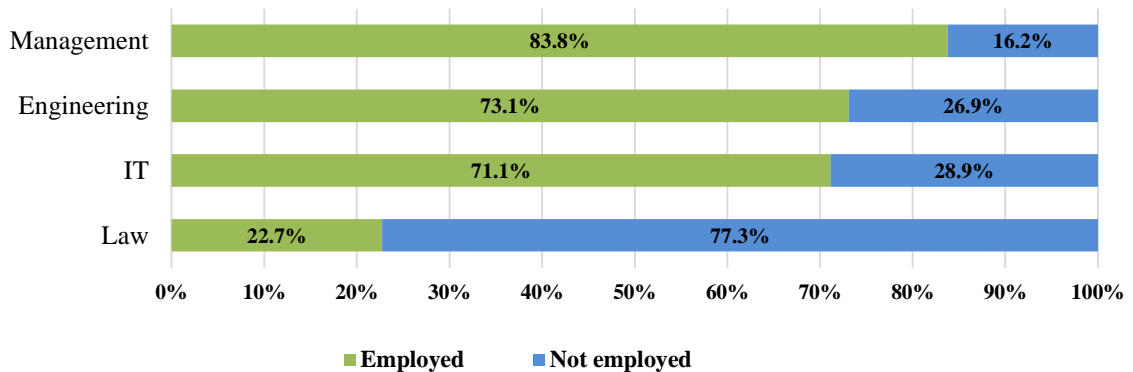
Figure 15: Employment Status by Academic Stream - Non- State Institutions

Next, the employment status of graduates produced by the non-state sector higher educational institutions was examined by discipline. As explained earlier, the non-state sample represents only four academic streams: Management, Engineering, IT and Law. Among these academic streams, the highest employment rate was recorded in the Management stream (83.8%). The employment rate was significantly low among Law graduates produced by these institutions (22.7%). The main reason would be the time taken for those who have completed Law degrees at these institutions to pass the exams conducted by the Law Collage to get into the legal profession. Unlike state university Law graduates, they have to complete all levels of examinations of the Law College to be qualified as practicing lawyers. Further, it is important to note that, except for graduates of Management stream, the employment rate of non-state sector graduates is low in all other streams compared to graduates produced by the state universities in the respective streams.

3.2.6 Employment Status by Academic Stream and University

The employment status of its graduates is a good measure of performance of a University. This information is vital for various stakeholders such as parents, students, policy makers, regulators and the management of the University. Therefore, in this section we present the employment status of graduates of 14 universities under the UGC (except Open University of Sri Lanka) for 5 major academic streams.

However, the response rates in some disciplines across the universities were not evenly distributed. This would have had an impact on the final result.

Arts Stream

Analysis of this section starts with the assessment of the employment status of graduates produced by the faculties of Arts or similar faculties in the system. Ten universities in the system offer the Arts stream. Figure 16 shows the results of the analysis. As per the figure the highest employment rate of the Arts graduates (64.1%) is recorded at the University of Colombo. Only three universities exceed the 50% rate of employment out of the 10 universities that offer Arts degree programmes. They are the University of Colombo (64.1%), the University of Kelaniya (51.3%) and the Sabaragamuwa University of Sri Lanka (50%). The lowest rank was recorded by the University of Jaffna (12.5%). Compared to the other universities, the Arts graduates produced by the University of Jaffna have recorded the highest engagement as volunteers (18.8%).
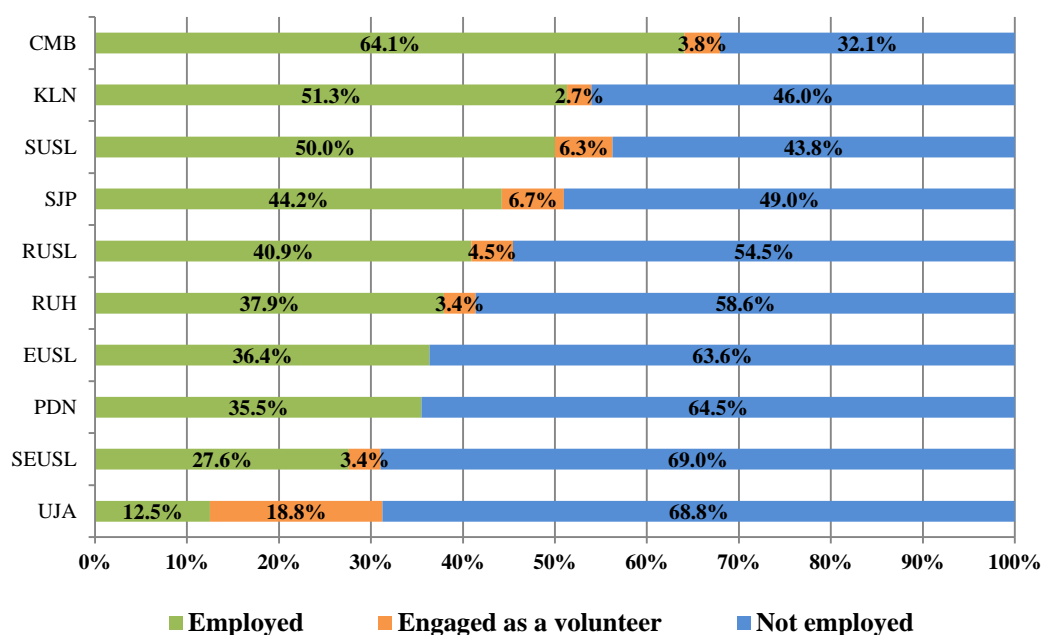
Figure 16: Employment Status by Academic Stream - Arts

Management Stream

Twelve Universities in the system offer degrees in the Management stream. Figure 17 shows the results of the analysis. In the Management stream, the highest employment rate is recorded by the University of Colombo (92.6%) followed by Kelaniya (87%), Sri Jayewardenepura (83.3%) and Sabaragamuwa (80%) respectively. The lowest employment rate is recorded by the South Eastern University of Sri Lanka (28.6%).

Figure 17: Employment Status by Academic Stream - Management

Science Stream

In the University system, Science degrees are offered by 12 universities (all except the universities of Moratuwa and Visual & Performing Arts). Figure 18 illustrates the employment status of the Science graduates. However, this graph excludes the Jaffna, Eastern, South Eastern, Rajarata and Wayamba Universities due to low number of responses received. Overall employment status of all the universities is better in the Science stream compared to the Arts and Management streams.
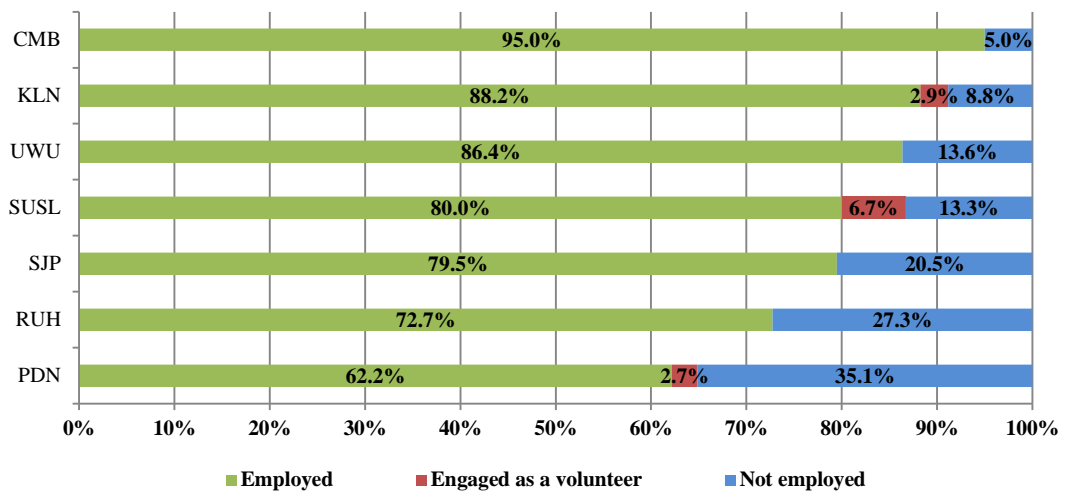
Figure 18: Employment Status by Academic Stream - Science

Engineering Stream

Employment rates of the Engineering graduates of the Peradeniya and Moratuwa universities are identical (95%) while the graduate employment rate of the University of Ruhuna is low (85.7%). Currently, Engineering degrees are offered by six universities. However, this study covered only three universities: Moratuwa, Peradeniya and Ruhuna as the first batch of students from the other three universities are yet to graduate.
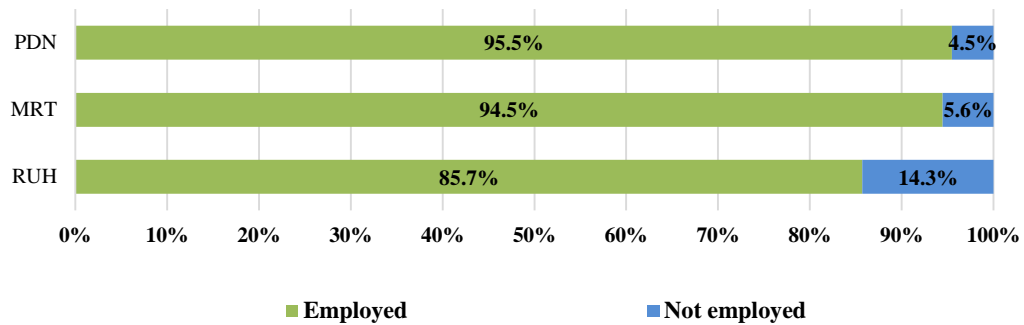
Figure 19: Employment Status by Academic Stream - Engineering

Agriculture Stream

Nine universities offer Agriculture degrees. However, the University of Jaffna, the Eastern University of Sri Lanka and the South Eastern University of Sri Lanka were excluded in the analysis due to low rate of responses received from graduates of these universities. According to figure 20, graduates of the University of Peradeniya have secured the highest percentage of employment in the Agriculture stream (94.1%) followed by Ruhuna (91.7%). The employment rates of Agriculture graduates produced by Wayamba, Sabaragamuwa and Rajarata are also high. (87.5%, 85.7%, and 80% respectively).
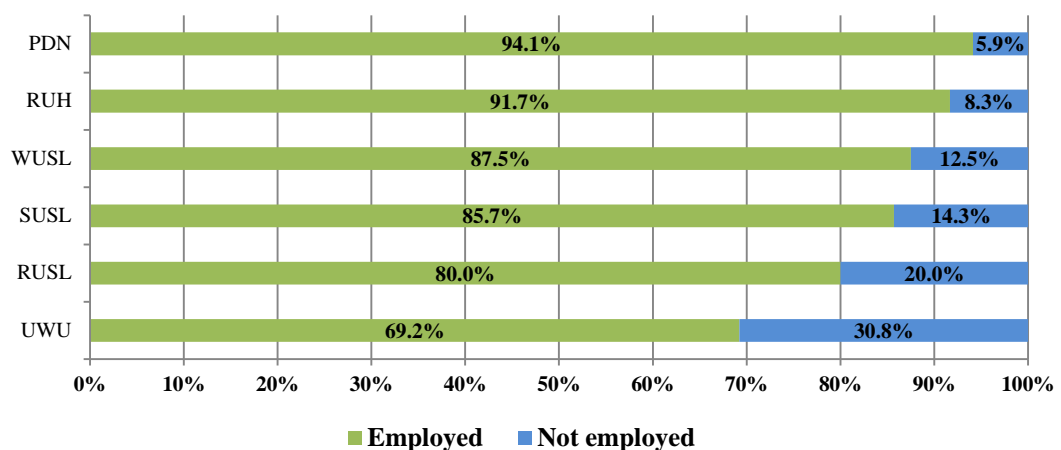
Figure 20: Employment Status by Academic Stream - Agriculture

3.2.7 Timing of First Employment

The time spent on job hunting is an essential consideration of any tracer study of graduates. Graduates may find their first employment in one of the following three phases:

1. During the University career - before the final exam
2. After completing the final exam but before release the final results.
3. After releasing the official results (after graduation)[7]

Therefore, all graduates who employed were asked to indicate the timing of the first employment with reference to the above three broad time-frames. The summarized results are given in figure 21 for both state universities and non-state institutions. Interestingly, a clear difference can be noted in the timing of first employment between state university graduates and the graduates of the non-state institutions. In the case of state universities, more than half (56.8%) of the employed graduates have received their first employment "after releasing the results" followed by 26.9% who have received the first employment "after sitting the final exam", and only 16.4% found their first employment "during the University career ". Regarding non-state graduates, the distribution observed is almost equal among the three phases of the timing of first employment.
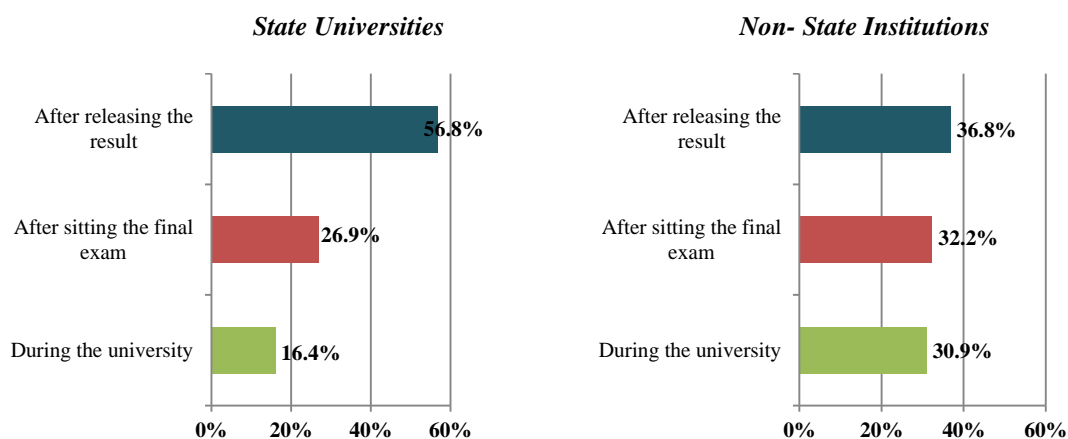
Figure 21: Timing of the First Employment

The analysis of the timing of employment performed under the three time-frames was further expanded by dividing third time frame (the category of graduates who found their first employment after releasing the final results) into five further categories: first six months of graduation (0-6 months), next 6 months of graduation

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[7] The official graduation date of a university is not significant to a search for employment.

(7-12 months) etc. Figure 22 presents the findings. In the figure, each of the first two bars represents the percentage of graduates who found their first job during the University career (16.4%) and those who found the first job after sitting the final examination but before releasing the results (26.9%) respectively. Altogether, 43.3% were employed before releasing the final results, 24.4% were employed within six months of receiving the results, and a 16.2% have found a job within the 7 to 12 months of receiving the results. However, there are about 5.6% who have spent more than 2 years to find a job.
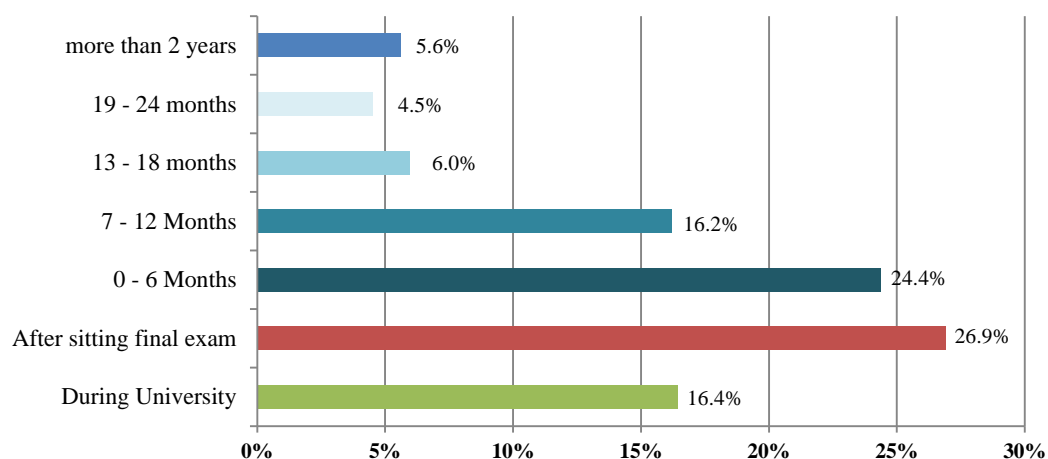
Figure 22: Timing of the First Employment: expanded after releasing results - State Universities

The timing of first employment was analyzed in relation to academic stream too, and the results are given in figure 23. Accordingly, a higher percentage of graduates of Computer Science/IT, Engineering, Architecture and Management have found their first job faster than their counterparts in other streams. The majority of the graduates in the streams of Education (100%), Performing Arts (92.3%), Agriculture (75.4%) and Arts (70.5%) who were employed at the time of survey had found their jobs "after releasing the final results". It is noteworthy that all Education stream graduates were employed within one year of graduation. A high percentage of the Performing Arts graduates (23.1%) have taken more than two years to find a job after graduation. Further, among Arts graduates, 12.1% waited for more than 2 years to find a job after graduation. However, not only Arts /Performing Arts but also some Management, Agriculture and Science graduates waited for more than 2 years to find a job even though it is a small percentage. In the non-state sector, most of the graduates who worked during their university career belong to the Information Technology stream (52.4%). As in the state sector, more than 75% of IT graduates were employed before the release of their final results.
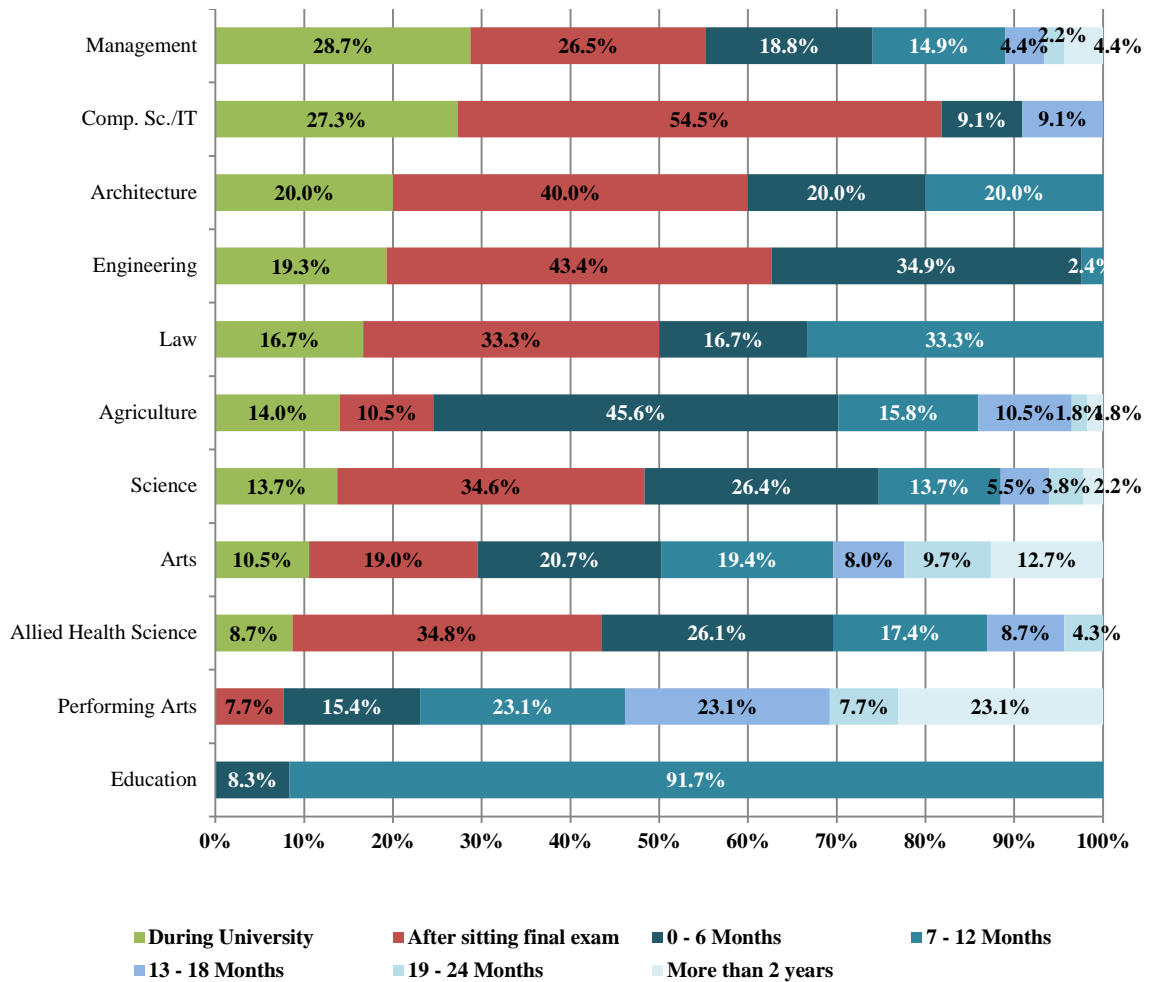
Figure 23: Timing of First Employment: expanded after releasing results by Academic Stream – State Universities
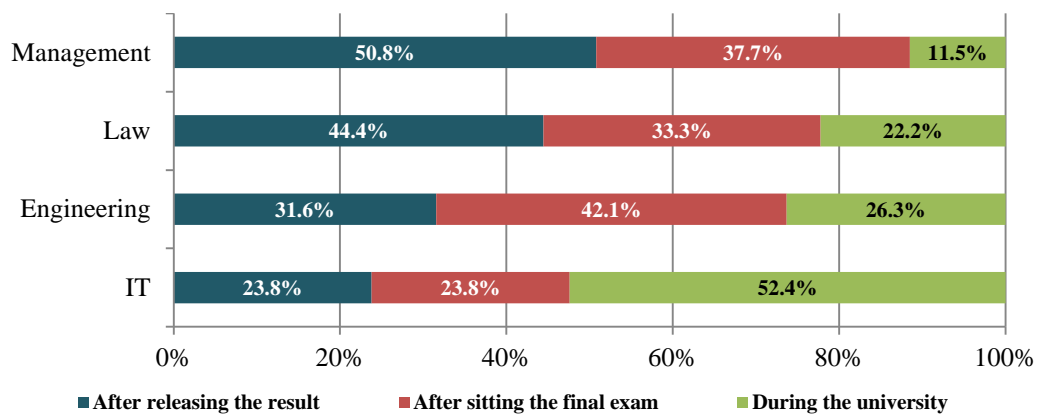
Figure 24: Timing of the Employment by Academic Stream – Non- State Institutions

3.3   Other Attributes Relevant to Graduates Employment

Further, four other attributes relevant in improving the employment status of graduates: proficiency in English, level of computer literacy, availability of internship training during the University, and possession of professional qualifications other than the University degree were examined for their relevance to graduate employment. It is sad to note that even today there is a small percentage (0.3%) of graduates who do not possess any computer literacy. Further, it was revealed that around 38% of graduates possessed at least one professional qualification in addition to the academic degree. It is encouraging to note that at least 57% of the graduates had undergone internship training during their undergraduate career.

3.3.1   Proficiency of English Language

English education dominated the Sri Lankan polity since early 20th century, and thus is perceived as the language of the elite and as a means for accessing power and privilege in society (Ranasinghe, 2012). Consequently the deficiency in English language communication skills among present day undergraduates and graduates is identified as a crucial factor that affects their prospects of securing employments, particularly in the private sector.

3.3.1.1   Proficiency of English prior to the University Entrance

In the absence of a common measure to assess the English proficiency at the University level, we used the English proficiency levels as reflected in both the GCE (A/L) General English and the GCE (O/L) English results as measures the level of English language proficiency of the sample of graduates for the purpose of this study. There is a high likelihood that those who had performed well in the GCE (A/L) General English paper and the GCE (O/L) English Language paper will improve their English language skills faster compared to the rest in their late university and employment careers. Figure 25 clearly shows that a high proportion (38.8%) of the state university graduates have failed (F) general English in their GCE (A/L) while, on the other hand, a significant percent of graduates of non-state institutions (41%) have secured A grades for General English at the same examination. Accordingly, the level of performance in General English at the GCE (A/L) is better among non-state graduates compared to state university graduates.

State Universities

GCE(O/L) English
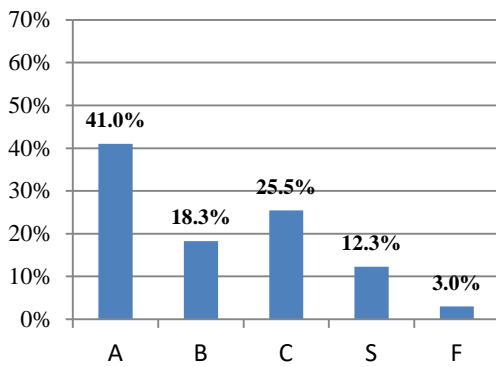
GCE (A/L) General English
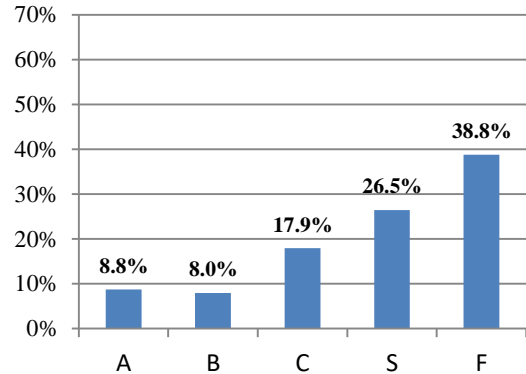
Non- State Institutions

GCE(O/L) English
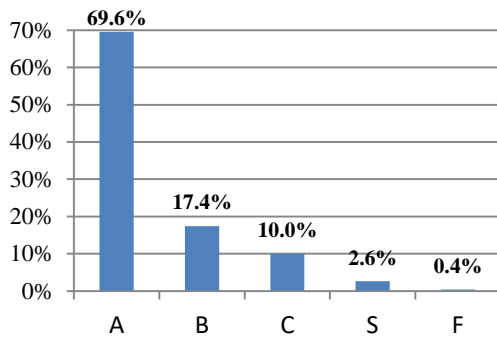
GCE (A/L) General English
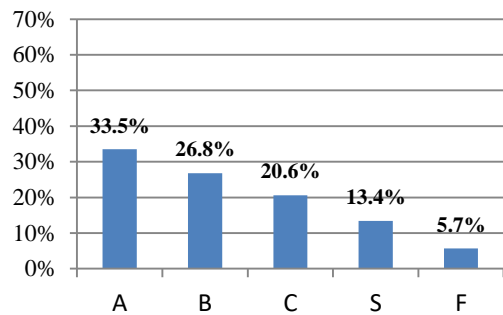
Figure 25: Composition of the Sample in terms of Performance of English Language at the GCE(O/L) and General English at the G.C.E(A/L)
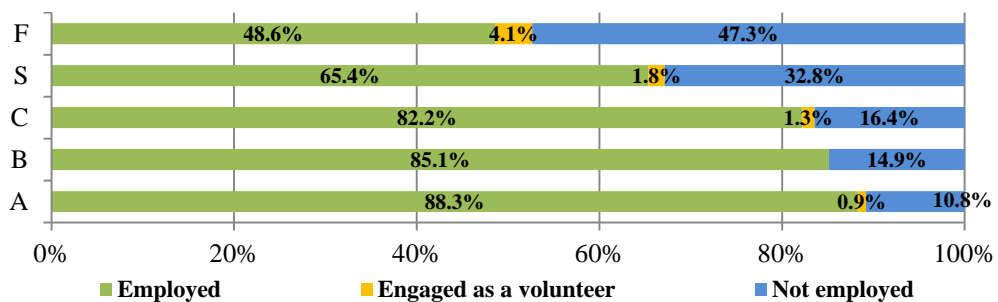
Figure 26: Employment Rates by Performance of General English at the G.C.E. (A/L) - State Universities

According to the figure 26, there is a relationship between the employment rate and the level of performance in General English at the GCE (A/L). Better performance in General English at the GCE (A/L) is associated with higher employment rates. Accordingly, over 88% of graduates who had "*A* grades" for the GCE (A/L) General English are employed. In contrast, the employment rate of the graduates who failed General English at the GCE (A/L) is 48.6%. Among the respondents, 491 (38.8%) of the graduates had failed the GCE (A/L) General English paper. However, students alone cannot be blamed for the status quo, as English is not an essential subject for gaining entry to the state Universities.
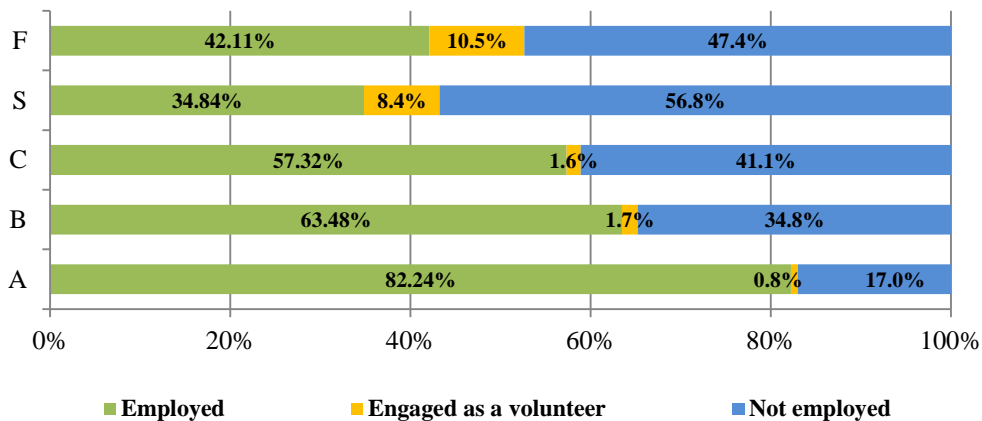
Figure 27: Employment Rates by Performance of English Language at the G.C.E. (O/L) - State Universities

A similar association has been observed between the performance of students at the GCE (O/L) English language paper and the employment rates of the graduates. Though the findings in this regard are not surprising, they are an eye-opener to the academic administrators and education policy makers to pay their attention to improve the standard of English both at school and tertiary levels.
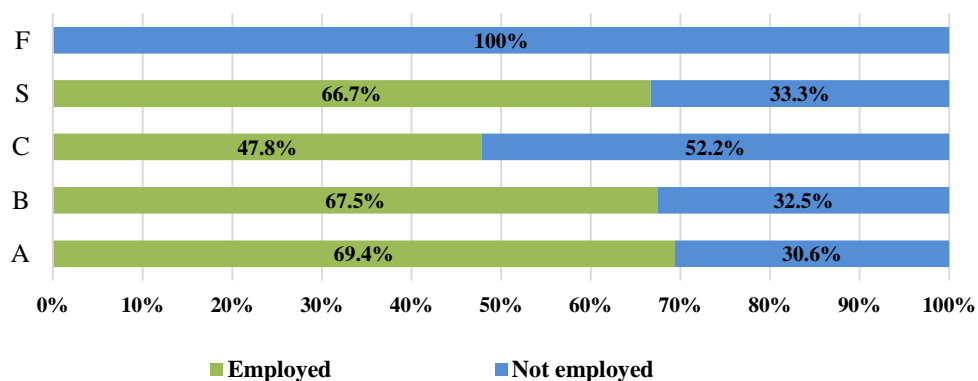
Figure 28: Employment Rates by Performance of English Language at the G.C.E. (O/L) –
Non - State Institutions

The association between employment status and performance at the English language paper at the GCE (O/L) was analyzed in relation to non-state sector graduates as well. However, there no significant association between these two factors was detected.

3.3.1.2   Use of English Language during the Undergraduate Career

To understand how the English language has been used by graduates during their undergraduate career, data were collected under five dimensions as shown in figure 29.
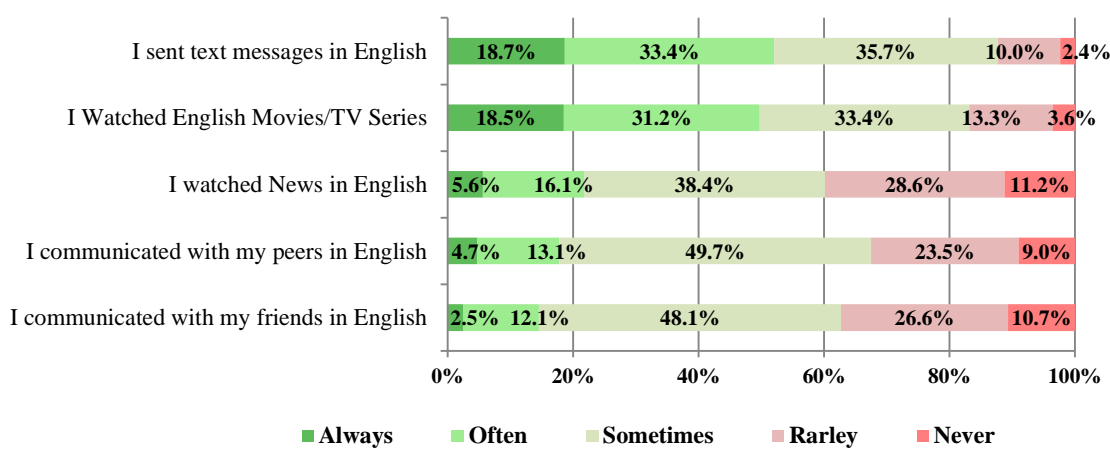
Figure 29: Use of English Language during stay at the University - State Universities

These data explain the extent to which the use of the English language has become a habit or part of the lifestyle of undergraduates. A considerable percentage (52.1%) of graduates of state universities uses English as the medium of sending text messages often/always. Similarly, around 50% of graduates watch English movies or TV series often/always during their University period. However, it is impossible to neglect the fact that the rate of responding graduates who watched the news in English, communicated with peers in English, communicated with friends in English in their university days is very low (below 20% in the under always/often categories). On the other hand, among the graduates from non-state institutions, a more significant percentage: around 75% watch English movies/TV series and use English as the medium of sending text massages. The notable point in the case of non-state graduates is that more than 50% of them communicate with peers and friends in English during their undergraduate career. However, the number who watch the news in English is relatively low (36%) even among the non-state sector graduates. When the data reported under each of these dimensions the two categories of graduates is compared, the use of English language seems to be a regular part of the lifestyle of non-state graduates. This could be a reflection of the difference in the socio economic backgrounds of the two sets of students and institutional practices.
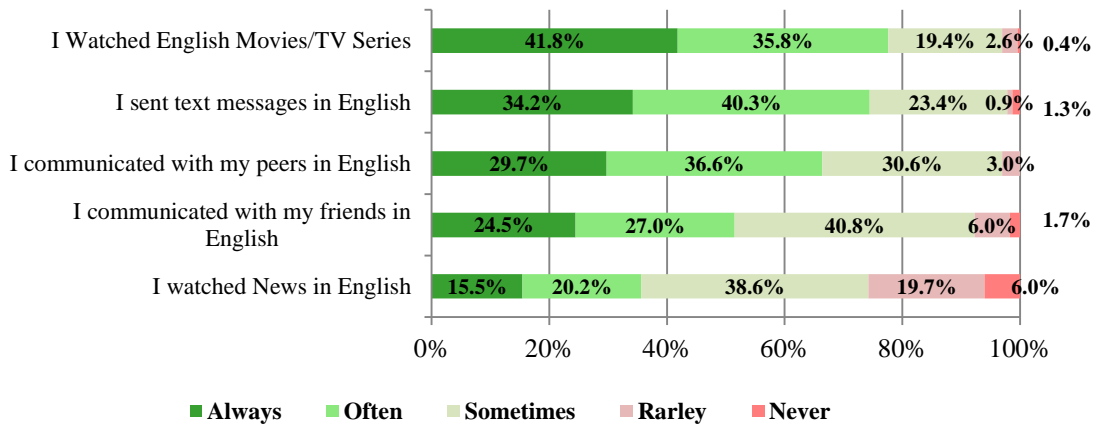
Figure 30: Use of English Language during stay at the University- Non -State Institutions
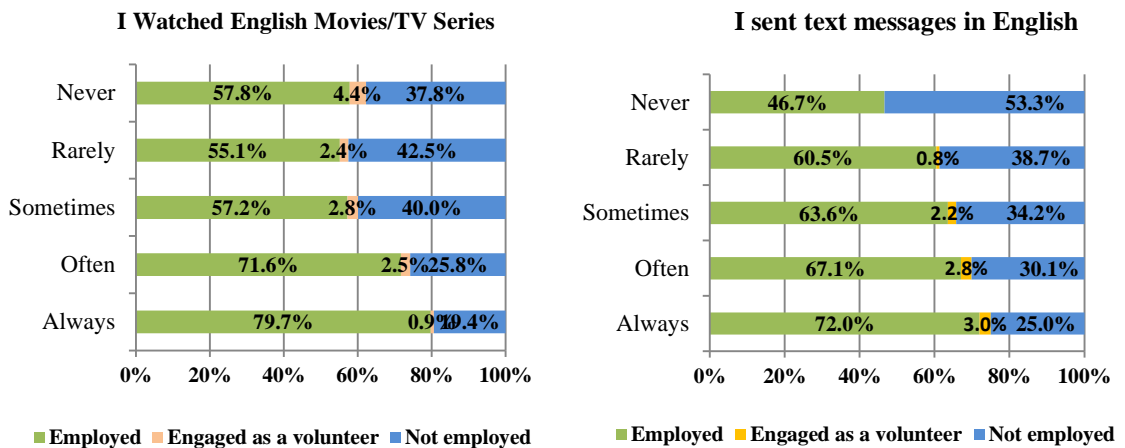
Figure 31: Employment Status and use of English Language

Finally, efforts were made to understand how the use of the English language at University relates to the employment search after graduation. As figure 31 shows, there is a clear relationship between the level of use of English language during the university to subsequent employability. The employment rate is high among the graduates who watched English movies (79.7%) as well as those who sent text massages in English (72%) during their undergraduate days.

3.3.2 Computer Literacy

It is encouraging to note that the vast greater majority (84.0%) of the graduates of state universities had access to computing both at University and at home. Almost

99% of graduates had the opportunity to use computers at University. This fact emphasizes the availability of a healthy environment for undergraduates to improve their computer literacy during their university career. This may be attributed to the fact that every academic programme in state universities offers at least an introductory course unit in computer literacy. Secondly, students are expected to complete a relatively high number of assignments under the course unit system, and they are provided access to computer laboratories and computer lounges to complete these assignments. Access to computer labs/lounges is available for students both at the University level and at the faculty level in almost all the state universities. The situation of the non-state sector in this regard is better than the state universities as all the graduates in this category had access to computing during their undergraduate career both at home and at the institution. One should not forget the fact that students of non-state universities are from families which are of a higher socio-economic level compared to that of the average students of the state universities and naturally they can afford to purchase computers.
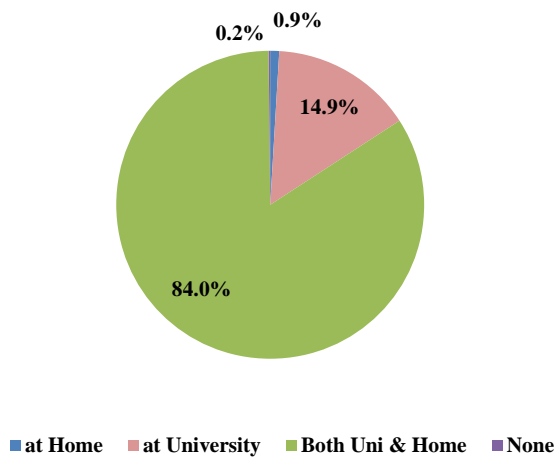
Figure 32: Status of Access to Computing at the University and Home – State Universities
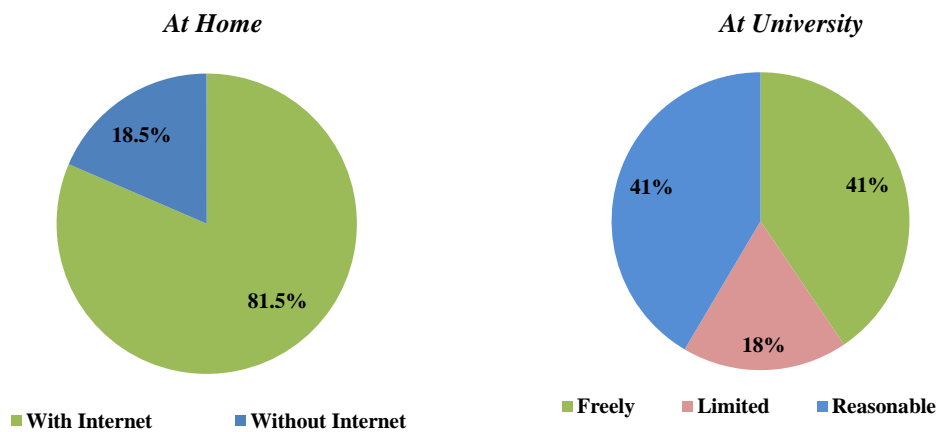
Figure 33: Internet Access at the University and Home - State Universities

A large proportion of graduates (81.5%) have internet access at their homes. Only 18% graduates said that they had limited internet access at the University while the others (82%) said that they had unlimited or reasonable internet access at University.

Further, the level of computer literacy of the graduates at the time of their graduation was assessed by the four characteristics mentioned in figure 34. Out of the respondents from the state sector only a negligible number of graduates (0.3%) had never used a computer in their life. Further, it was revealed that most of the graduates were comfortable browsing the web (84.6%), using social media (70.8%) and using e-mail (70.2%) at the time of their graduation. These students may have improved some of such skills in relation to computing through the use of smart phones and similar devices. 3.2% of graduates did not respond to this question.
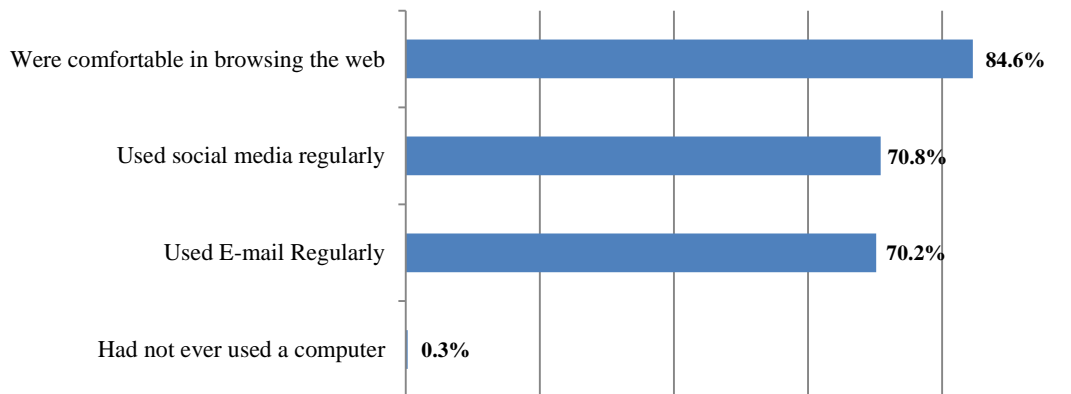
Non Respondents rate - 3.2%

Figure 34: Computer Literacy at the time of Graduation - State Universities

MS Office is an essential collection of desktop applications which includes several software solutions/packages that help to improve work efficiency that is used in the entire world. Today this is mainly commonly used for documentation, presentation and data analysis purposes. The figure 35 depicts the participants' ability to work with the following MS Office programmes: Word, Excel, Access, Power Point and Project at the point of graduation of the state university graduates. Most of the respondents are comfortable with using MS Word (94.9%), Power Point (90.6%) and Excel (88.5%) since these applications are commonly used in the academic and office environment. Almost half of them are also familiar with MS Access which is a database management package. MS Project is the least used programme among undergraduates (28.5%).

Non Respondents rate - 3.2%
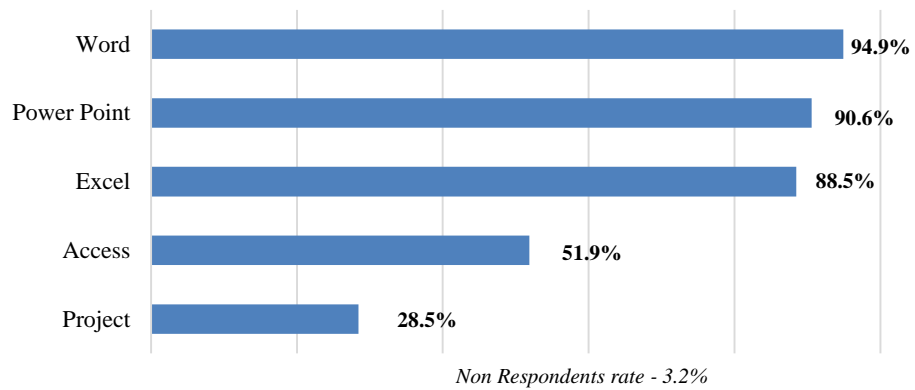
Figure 35: Ability to work with MS Office –State Universities

Further, the employment status was studied based on the participants' ability to use MS Office as given in the figure 36 which shows that there is no significant difference between employment status and the ability to use the MS Office package. This may be due to the fact that percentage of graduates who could not use the MS Office package is relatively small and such graduates would have been attracted to jobs that did not demand computer literacy.
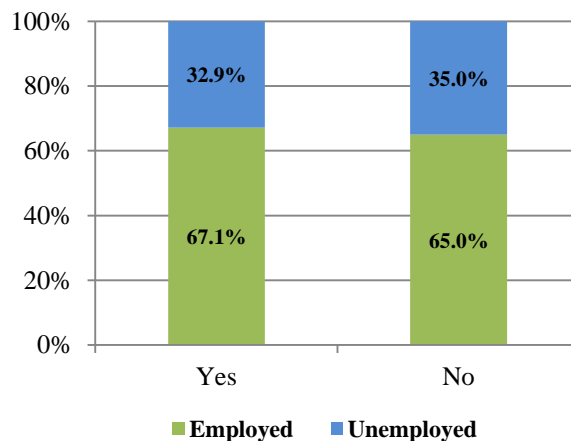
Figure 36: Employment Status and Ability to work with MS Office –State Universities

3.3.3 Internship Training

Internship training probably provides the first opportunity for students to get exposed to a work environment while they are reading for their university degrees. It's considered essential training that should be facilitated by universities today. Internship training gives students a certain degree of confidence to enter suitable employment after graduation.

A majority of the graduates (57%), revealed that the internship training was a component of their degree programme whereas the balance 43% of them had followed academic programmes that did not have internship training as part of their curriculum. Those who revealed that internship trainnig was part of their curriculum were then asked to indicate how the internship had been incorporated into their degree progammes regarding credit requirements. The results are shown in the figure 38. Accordingly, the internship training was compulsory, with credits awarded, for the majority of them (71%). For 12% though the internship was compulsory, no credits were allocated to it. For 10% the internship was an elective with credits while for the balance 7%, the internship was an elective with no credits.
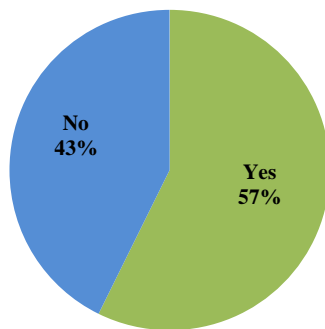
Figure 37: Availability of an "Internship Training"
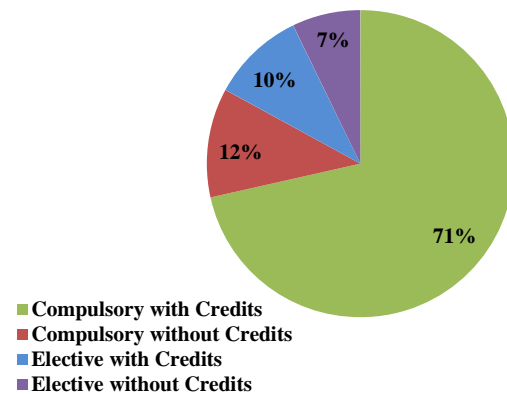
Figure 38: Status of the Internship as a part of the Degree Programme

As per figures 39 and 40, out of the graduates who had an internship training component in their degree programmes, only 78% of them have received the support of the University to find the internship training, while 22% have not received such support. However, majority (62%) of the respondents indicated that an internship programme was useful for them to find an employment whereas 38% students have stated that it was not important to find employment.
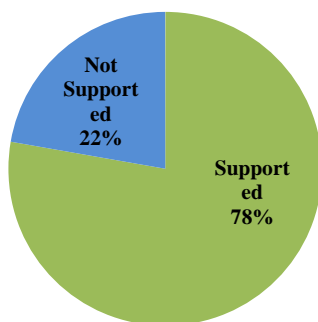
Figure 39: Support provided by the University to find the Internship
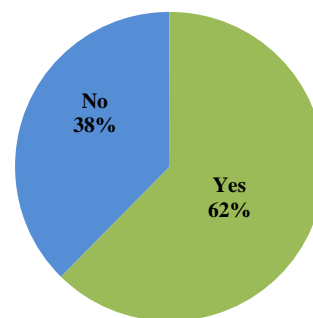
Figure 40: Usefulness of the Internship to find an Employment

As internship training gives students a certain degree confidence before graduation to enter suitable employment, the relationship between employment status and the availability of internship training in the degree programmes was further analysed.
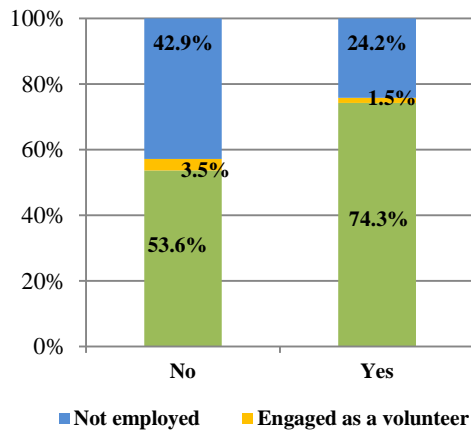
According to figure 41, it is clear that a higher percentage (74.3%) of graduates who had gone through an internship training during their university career was employed at the time of this survey while the employment rate among the graduates without an internship training is quite low (53.6%).

Figure 41: Employment Status and availability of Internship - State Universities

3.3.4 Professional Qualifications

This study also examined the possession of professional qualifications by graduates since it is generally considered an added advantage for employment. However, it was uncovered that more than 60% of the graduates did not possess any professional qualifications at the time of their first employment (Figure 42) while approximately 38% of the graduates possessed at least one professional qualification at the time of their first employment. Of the sample, around 12% had more than one professional qualification.
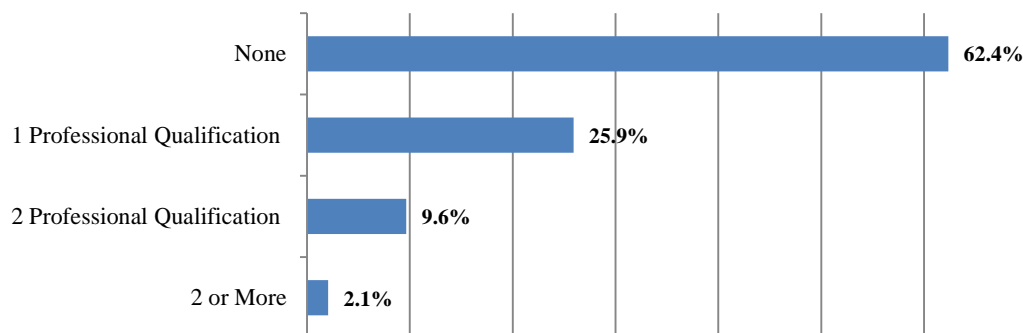
Figure 42: Professional Qualifications possessed by Graduates - State Universities

Professional qualifications possessed by the graduates at the time of their first employment were further studied according to the academic stream, and the results are presented in figure 43. It shows that the highest percentage of graduates who possessed professional qualifications were from the field of Architecture, (80%) followed by Management (76.5%), Law (64.5%) and IT (54.5%), while the others were less than 50%.
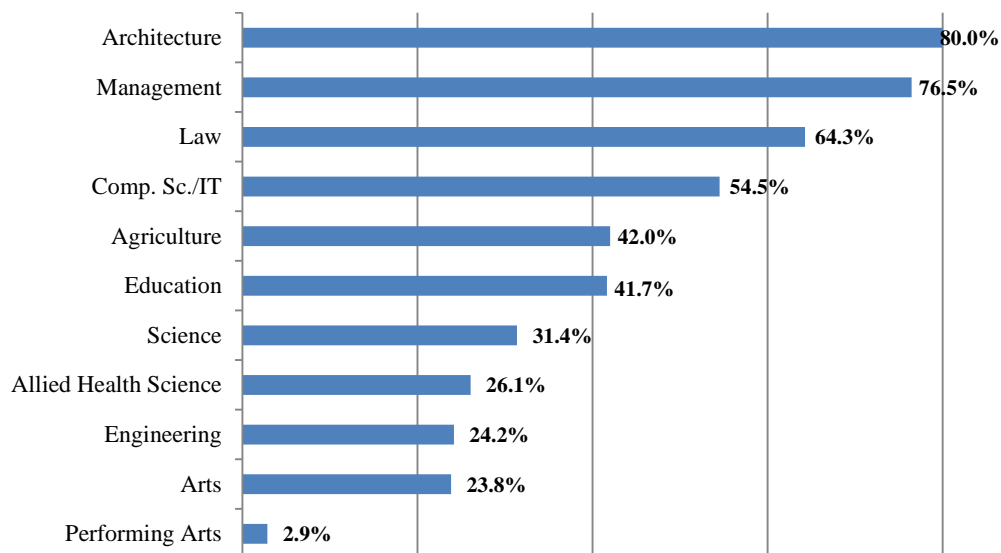
Figure 43: Professional Qualifications possessed and Academic Stream - State Universities

It is clear from figure 44 that possessing a professional qualification is a definite advantage when finding an employment for graduates. According to this graph, around 80% of those who possess at least one professional qualification are employed. The employment percentage of graduates without professional qualifications is substantially low, at the level of 56.4%. On the other hand, having more than one professional qualification does not seem to be an additional advantage in finding an employment.
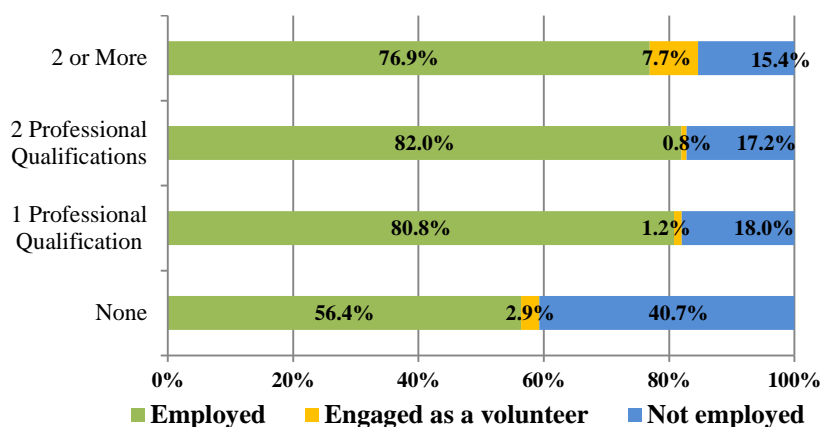
Figure 44: Professional Qualifications possessed and Employment status – State Universities

3.4 Classification of Graduates' Employment

In this section, graduates employment is classified in terms of the under-mentioned considerations:

1. Type of Employment (Full Time/ Part Time)
2. Sector of Employment (Public, Private etc.)
3. Sector of Employment (Economic Classification)
4. Position held by the employed graduates

3.4.1 Type of Employment (Full Time/ Part Time)

Graduates who were employed at the time of survey were classified into two categories: full time employed and part-time employed. As per the figures 45, from the graduates employed in the state sector, 89.7% were engaged in full-time employment while 10.3% were engaged in part-time employment (less than 40 hours a week). When compared to the females (88.4%), a higher percent of males (91.8%) are engaged in full time employment.
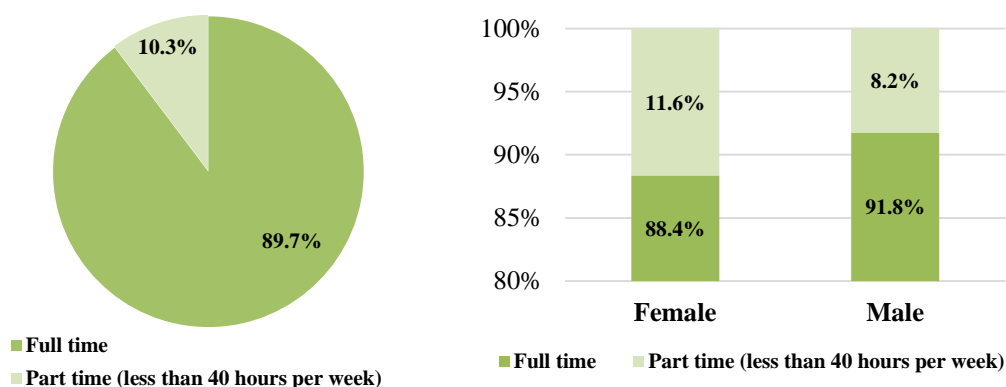
Figure 45: Type of Employment (Full Time/ Part Time) – **State Universities**

The type of employment was further analyzed by academic streams and the results are provided in figure 46. When analyzing by academic streams, it was found that part-time employment is comparatively high in the fields of Performing Arts (30.8%), Computer Science/IT (25%) and Education (15.6%) compared to other fields of studies.
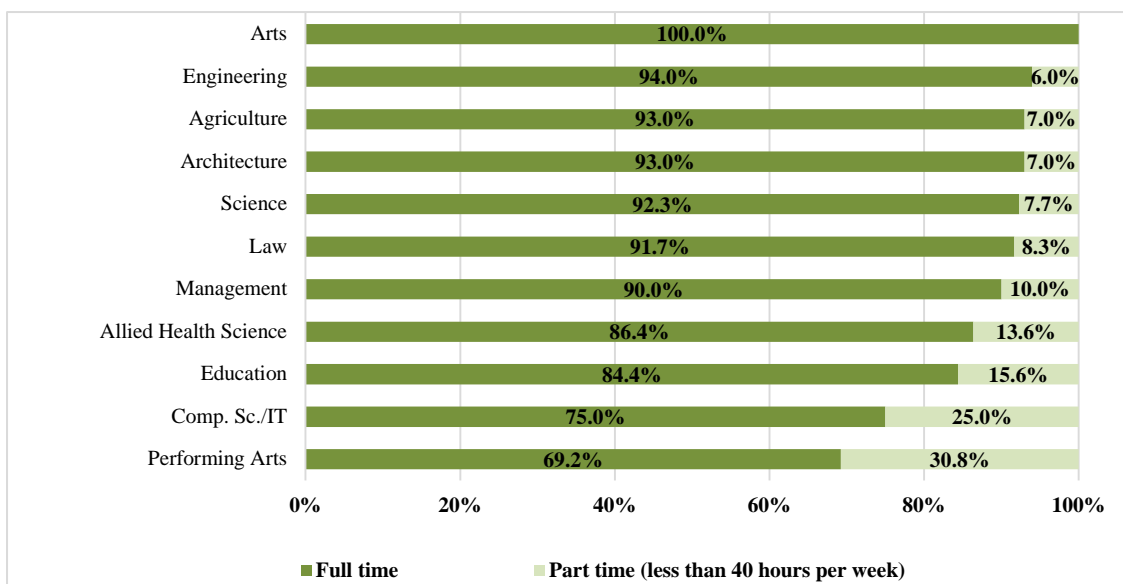
Figure 46: Type of Employment (Full Time/ Part Time) by Academic Stream- State Universities

As compared to the state university graduates, most of the non-state sector graduates were able to find full time employment. However, the highest percentage engaged in full time jobs are from the field of Engineering (100%). On the other hand, law has the highest percentage of graduates engaged in part time employments (20%).
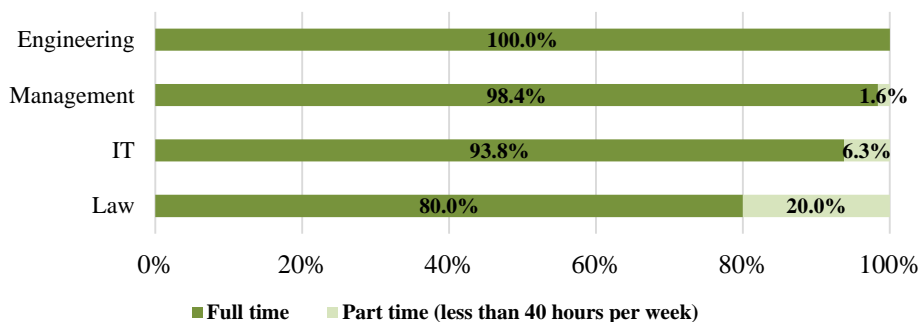
Figure 47: Type of Employment (Full Time/ Part Time) and Academic Stream – Non-State sector

3.4.2 Sector of Employment

The employment sectors were classified into seven categories as shown in the figure 48, according to, 46.2% of which the employment opportunities for graduates are created by the private sector.   Teaching positions in the public sector have created the second largest source of employment for graduates (21%). Altogether the

public sector has created only 44% of the employment opportunities for graduates. Therefore, it is essential for universities to appreciate the fact that the private sector is creating more jobs for graduates and to realize the importance of preparing their graduates with the qualities expected by private sector employers. In contrast to the graduates of the state university system, non-state sector graduates are overwhelmingly employed by the private sector (89%).
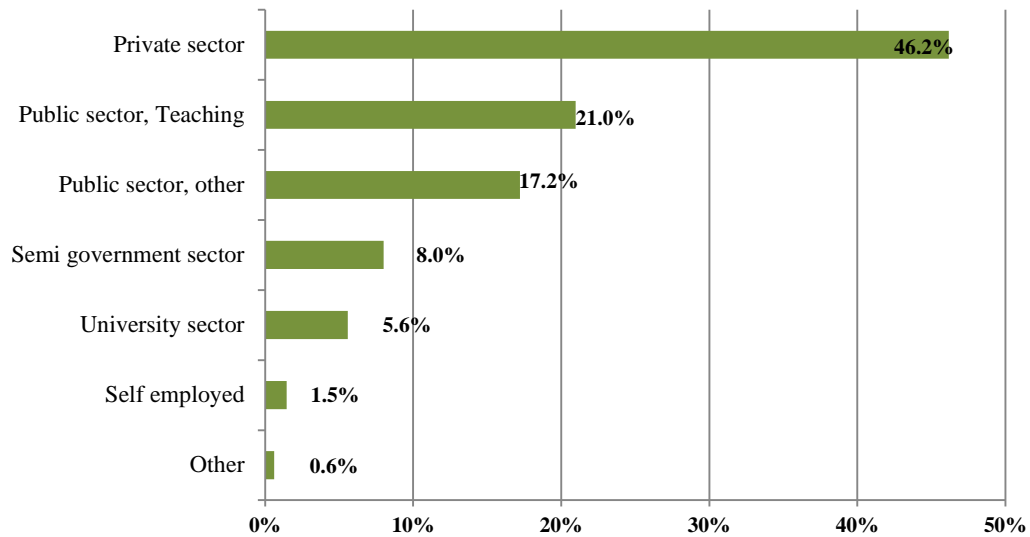
Figure 48: Sector of Employment – State Universities
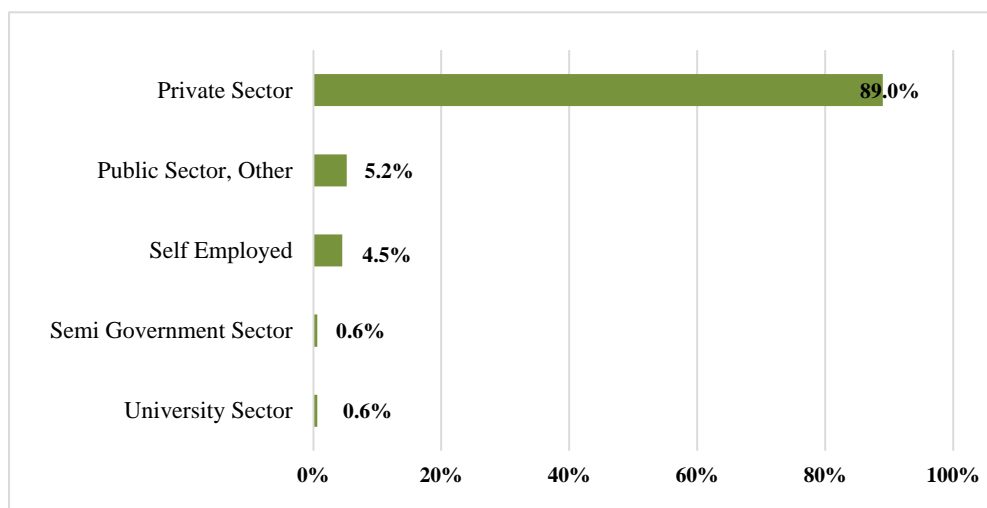
Figure 49: Sector of Employment – Non-State Institutions

Next, the same analysis was performed with reference to the gender of the participants. The results are shown in the figure 50. Among the employed male graduates, more than 60% work for the private sector while only 37% of the female graduates are employed by the private sector. The clear preference for men over women by the private sector may be due to two reasons: (a) women prefer public sector jobs, and (b) private sector job openings such as field jobs are considered more suitable for men than women.
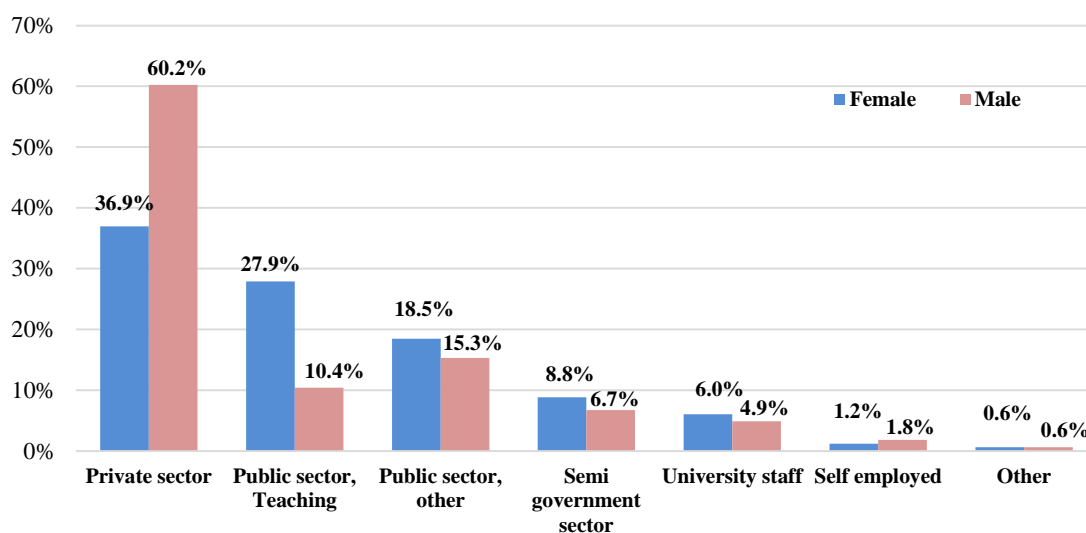
Figure 50: Sector of Employment by gender- State Universities

Next, the same analysis was performed separately for different academic streams. The results are shown in figure 51. A higher percentage of Computer Science/IT (72.7%), Engineering (68.7%), Law (66.7%), Management (64.3%) and Architecture (60%) graduates have been attracted by the private sector. On the other hand, all Education graduates (100%) were employed as public sector teachers. Further, a higher percentage of graduates in the fields of Performing Arts (76.9%), Agriculture (36.8%) and Arts (32.9%) were also employed as teachers in public schools. In the case of non-state sector graduates, both males (95.9%) and females (85.8%) are employed in the private sector, unlike the state sector university graduates.
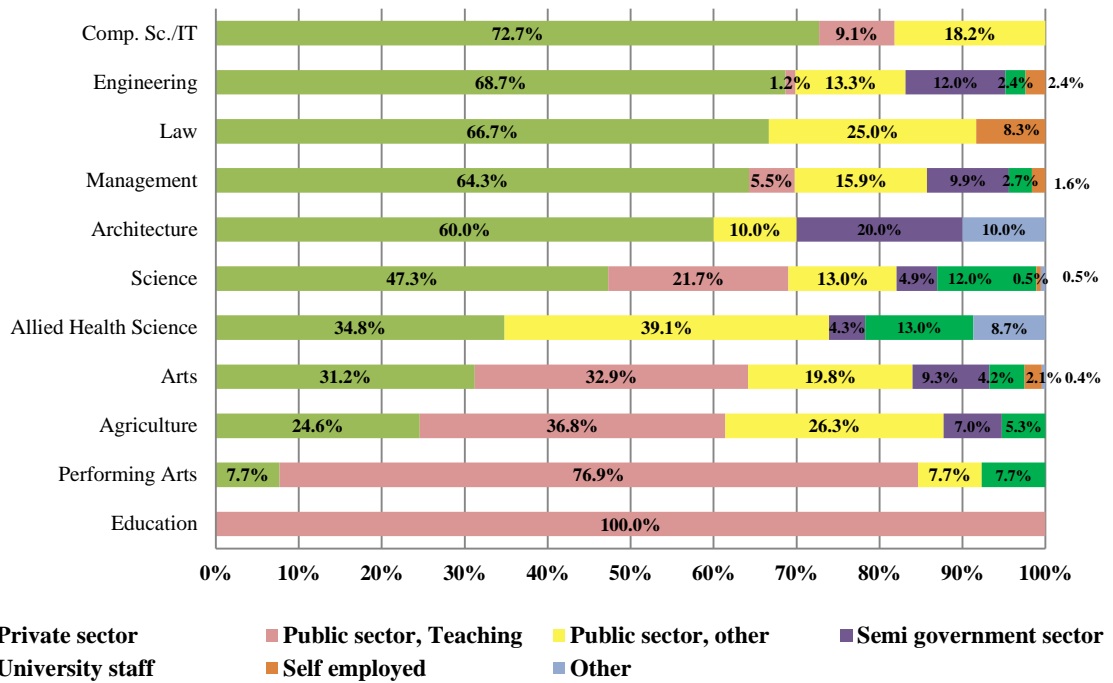
Figure 51: Sector of Employment by Academic Stream- State Universities

3.4.3 Economic Sector of Employment

Since it is also important to understand the economic sectors that create employment opportunities for graduates, we analyzed the percentage of graduates attracted by different economic sectors in the economy. For this purpose, we identified ten economic sectors as shown in figure 52. According to the figure, it is clear that the single most important sector that attracts more university graduates for employments is the Education sector (34.4%) followed by the Banking and Finance Sector (13.6%). Other important sectors are Construction and Engineering (11.5%), Professional, Scientific and IT (11.4%), Manufacturing (9.5%) and Public Administration (7.5%). In terms of graduate employment, the Agriculture and Plantation (3.6%), Healthcare (3.6%), and Hotels, Travel and Tourism (2.8%) sectors play a less important role despite the economic significance of these sectors. However, it is noteworthy that the Healthcare sector could be misrepresented here as medical graduates were excluded from the sample.
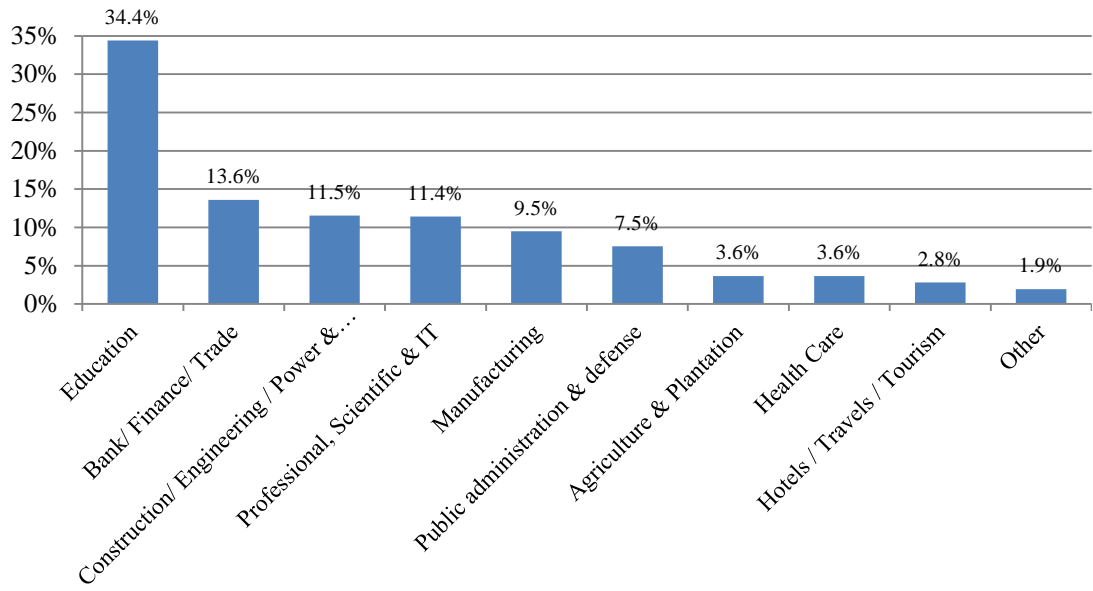
Figure 52: Employed Graduates by Economic Sector – State Universities

Agriculture Graduates

Education 40.4%
Agriculture / Dairy 29.8%
Public administration & ... 12.3%
Construction / Engineering 5.3%
Professional, Scientific & ... 3.5%
Manufacturing 3.5%
Hotels / Travels / Tourism 3.5%
Bank Finance / Insuarnce 1.8%

Arts Graduates

Education 55.1%
Public administration & ... 12.7%
Trade 7.6%
Manufacturing 6.8%
Construction / Engineering 4.2%
Bank Finance / Insuarnce 3.8%
Other 3.4%
Hotels / Travels / Tourism 3.0%
Professional, Scientific & ... 2.1%
Telecommunication 1.3%

Management Graduates

Bank Finance / Insuarnce 26.9%
Education 13.7%
Manufacturing 12.6%
Trade 9.9%
Public administration & ... 9.9%
Professional, Scientific & ... 8.2%
Hotels / Travels / Tourism 6.6%
Construction / Engineering 5.5%
Health Care 2.7%
Other 2.7%
Plantation 1.1%

Engineering Graduates

Construction / Engineering 53.0%
Manufacturing 15.7%
IT 13.3%
Education 6.0%
Telecommunication 4.8%
Power & Energy 3.6%
Professional, Scientific & ... 2.4%
Public administration & ... 1.2%

Science Graduates

Education 39.3%
IT 14.2%
Manufacturing 12.0%
Professional, Scientific & ... 9.3%
Construction / Engineering 6.6%
Trade 3.8%
Health Care 3.3%
Bank Finance / Insuarnce 3.3%
Agriculture / Dairy 2.7%
Public administration & ... 2.2%
Other 2.2%
Telecommunication 1.1%

Figure 53: Employed Graduates by Economic Sector for major Academic Stream –State Universities

As it is equally important to know the economic sectors that the graduates produced by each academic are attracted to, the same analysis was performed by academic streams. The results are reported in figure 53. According to the figure, Management graduates are less concentrated to a particular sector of employment compared to the graduates of the other streams. Further, a higher percentage of Arts (55.1%), Agriculture (40.4%) and Science (39.3%) graduates are attracted by the Education sector, probably indicating that they move into teaching positions. It is suprising to see that only 29.8% Agriculture graduates are attracted to Agricuture related jobs. Engineering gradutes are mainly attracted by Construction and other Enginerring (53.0%) related jobs, followed by Manufaturing (15.7%) and IT (13.3%) related jobs. The most diverse pattern of employment was observed in relation to the Management graduates. A high percentage of Management graduates (26.9%) are attracted to the Banking and Finance sector jobs.

3.4.4 Position of Employment

The position or the level related to a job describes not only the type of responsibilities of the person who holds the job but also the career path of the person. When looking into the positions held by employed graduates in the state universities, the highest percent is engaged in Junior Management positions (31.9%) and the next highest percentage works as Teachers (26.5%). It is noticeable that about 12% were still engaged in lower level clerical and allied grade jobs even after about 2 years of graduation.
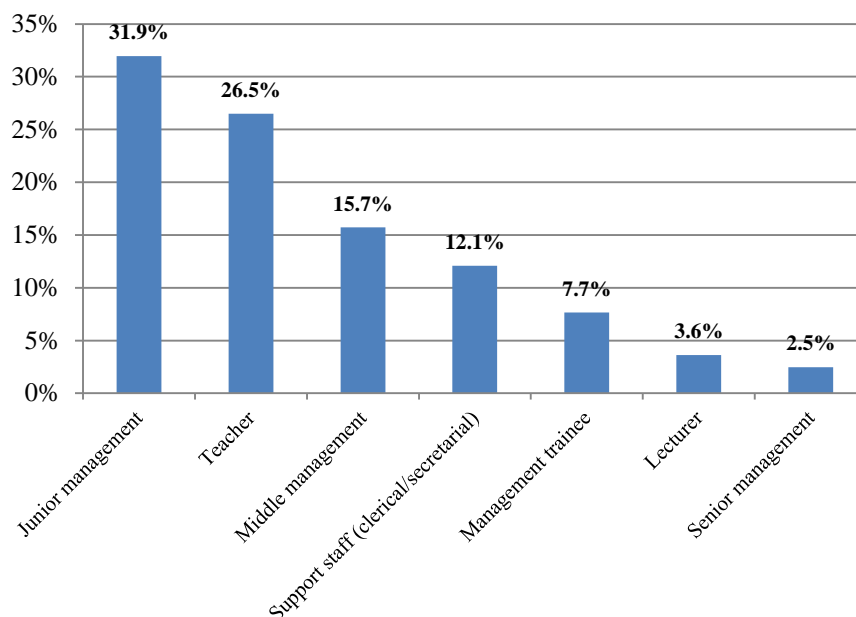
Figure 54: The Position of Employed Graduates - State Universities
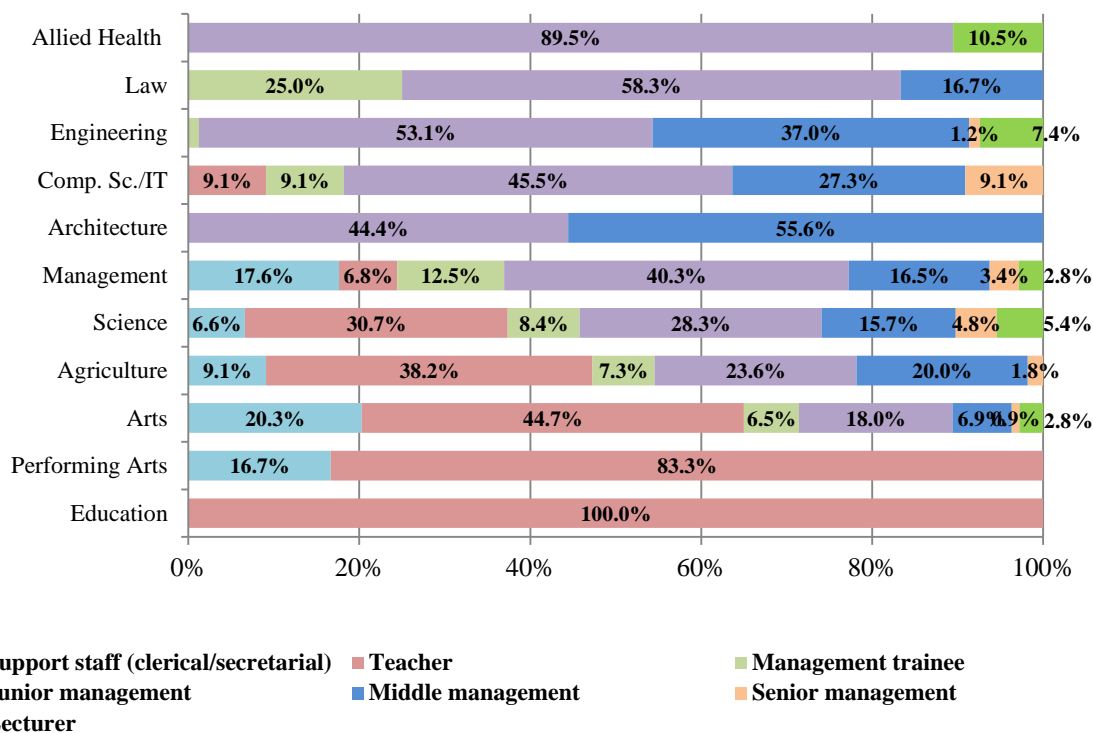
Figure 55: The Position of Employed Graduates by Academic Stream – State Universities

Further, the positions held by employed graduates were analyzed according to the academic stream. The results are reported in figure 55. According to the figure the highest percentage of lower level jobs such as support staff (Clerical/ Secretarial) are occupied by Arts graduates (20.3%). Also, there is a reasonable percentage of Performing Arts graduates employed in support staff positions (16.7%). The rest are employed as Teachers. It is important to mention that all Education graduates (100%) are employed as school teachers. Other significant point is that 25% of the Law graduates are working as management trainees. However, a relatively high percent (9.1%) of Computer Science/IT graduates are in senior management positions within 2 years of graduation.

3.4.5 Monthly Salary of Graduates

The employed graduates were further asked to furnish there salary levels in relation to the seven ranges provided in figure 56. The highest percentage (29.8%) of state-sector graduates drew a monthly gross salary in the range of Rs.35,000 – Rs.44,999 at the time of survey. The median monthly gross salary of a state sector graduate after two to three years of graduation is also in this range. The second largest group (25.2%) falls in the range of Rs. 25,000 – Rs.34,999 monthly gross salary. The

percentage of graduates in each of the other higher salary ranges is less than 10% except for the last range of Rs.75,000 or more. This group consists of 15.1% of the graduates. The proportion of graduates who earn a gross salary of less than Rs. 25,000 per month is 9.2%. Among the non-state sector graduates, a higher percentage (20%) earned a monthly gross salary in the range of Rs.45,000 – Rs.54,999.
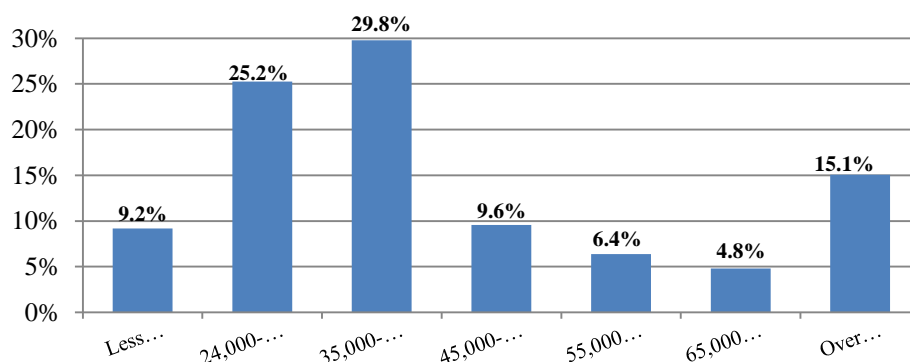
Figure 56: Distribution of Employed Graduates in terms of Monthly Gross Salary - State Universities

Further, the salary levels of graduates were analyzed with regard to gender. The results are shown in the figure 57 for both state and non-state sector graduates. Over 75% of state sector female graduates received less than Rs 45,000 as their monthly gross salary whereas only 45% of their male counterparts received the same amount. The disparity of salary between male and female graduates could be a reflection of salary disparity among graduates from different academic streams, i.e., Arts graduates are paid relatively low salaries and they consist of more females. The salary disparity between male and female is less among non-state graduates. Only about 60% of female graduates in the non-state sector draw a monthly gross salary below Rs. 45,000 while males in this category are less than 34%. On the other hand, a more significant percent of male graduates (66.3%) draw a monthly gross salary of Rs. 45,000 or more.
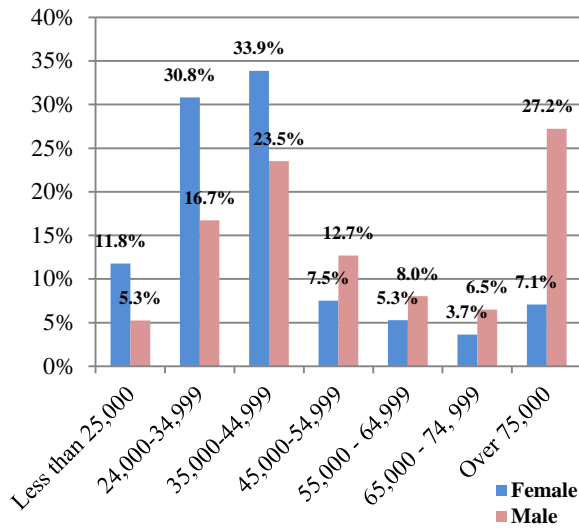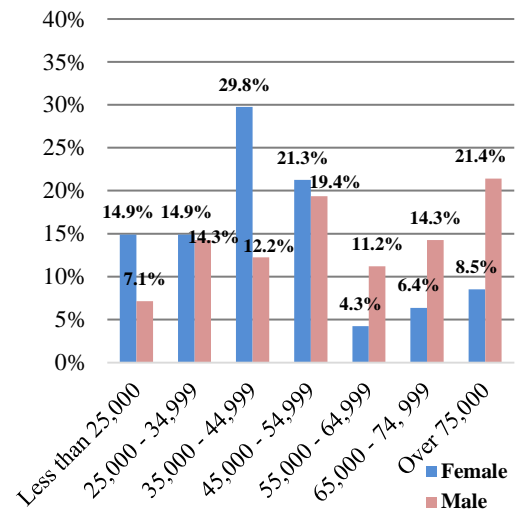
Figure 57: Distribution of Employed Graduates in terms of Monthly Gross Salary and Gender
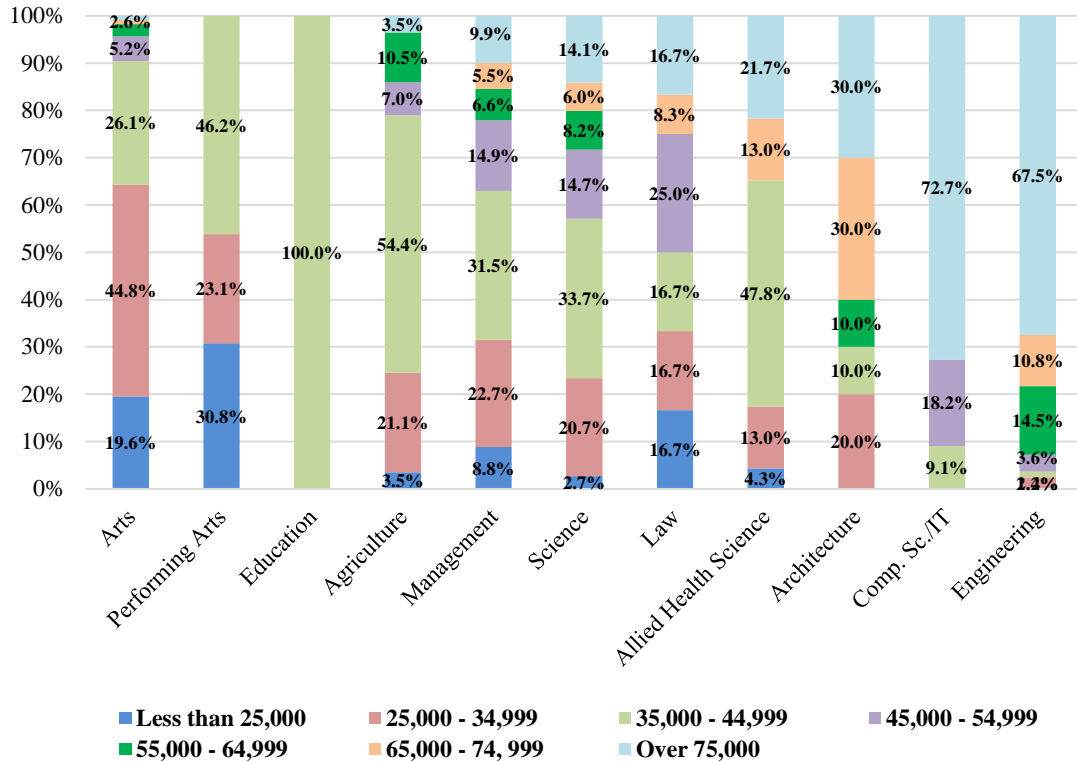
Figure 58: Distribution of Employed Graduates in terms of Monthly Gross Salary and Academic Stream – State Universities

The monthly gross salary of graduates was further analyzed by academic stream as given in the figure 58. According to the figure, the median monthly gross salary of Engineering and IT graduates is over Rs. 75,000 which is the best among all streams. About 70% of those graduates fall under this category. The next highest salaries are paid for Architecture graduates followed by the Allied Health Sciences. More than 60% of Architecture graduates receive a monthly gross salary over Rs. 65,000 whereas 35% of the graduates of Allied Health Sciences are at this salary level. Salaries of Law, Science and Management graduates are distributed within a wide range of levels. While the monthly salaries of some graduates of each of these three streams are as high as Rs. 75,000 (or above), some are paid less than Rs. 25,000 per month. Percentages of graduates of these three streams: Law, Science and Management getting a monthly gross salary of Rs. 45,000 or above are around 50%, 43% and 37% respectively. On the other hand, percentages of graduates of these three streams getting a monthly gross salary of less than Rs. 35,000 are around 33%, 23% and 32% respectively. Accordingly, salary dispersion is higher in relation to Law graduates. The median salary of Agriculture graduates belongs to the scale of Rs. 35,000 to Rs. 44,999 and the majority of Agriculture graduates (54.4%) are in this range. All graduates in the Education stream also belong to the range of Rs. 35,000 to Rs. 44,999 as monthly gross salary. The lowest median monthly salary which is in the range Rs. 25,000 to Rs. 34,999 is paid to Arts and Performing Arts graduates. Percentages of graduates getting less than Rs. 35,000 as monthly gross salary in the Arts and Performing Arts streams are around 64% and 54% respectively. According to this study, graduates of these two streams belong to the lowest paid among the entire sample.

3.5   Unemployed Graduates - State Universities

It is important to understand the issue of unemployed graduates in any graduate tracer study as it is not an isolated issue faced by the graduates. It could be a reflection of multi-faceted socio-economic problems including the larger problems associated with the system of higher education in the country. As we described at the beginning of this chapter, almost 40% of female and 18% of male graduates of the state universities are still unemployed after 2 to 3 years of graduation. These ratios related to the non-state sector graduates are 48% and 24% respectively. Issue of graduate unemployment is a complex one and those who have contributed this debate have highlighted, inter alia, three reasons for this situation:

1. Skills mismatch: mismatch between the skills possessed by the graduates and the skills required by the employers from graduates.

2. Mismatch of expectations between graduates and the employers in terms of employment status: relatively high expectations of graduates may create this issue.

3. Failure of the economy to create sufficient number of employment opportunities: this is directly related to the level of economic growth.

In this study, the problem is analyzed from the perspective of unemployed graduates. To this end, we have summarized the answers provided by 407 (32%) unemployed graduates in the sample to particular questions raised at the survey as to what reasons, in their opinion, were the reasons for their unemployment.

3.5.1 General Profile of Unemployed Graduates

The vast majority (83%) of unemployed graduates are females. This is partly a reflection of the high unemployment rate of graduates produced by Arts and Performing Arts streams. We should not forget the fact that the majority of students entering to these faculties are females. On the other hand, the highest annual student enrolment in state universities is taking place in Arts faculties. As per the sample, unemployment rate among the Performing Arts and Arts graduates is 57.1% and 50.4% respectively. The third largest unemployment rate is observed among the Management graduates (27.7%). Unemployment rates related to the academic streams of Agriculture, Science and Law are around 15%. A small rate of unemployment was found with Engineering (6.7%) and Allied Health Science graduates (4.3%) while no unemployed graduates were found in the Education, Computer Science and Architecture streams.
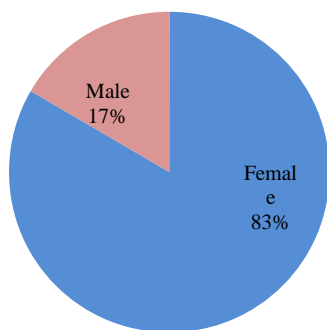
Figure 59: Unemployed Graduates by Gender
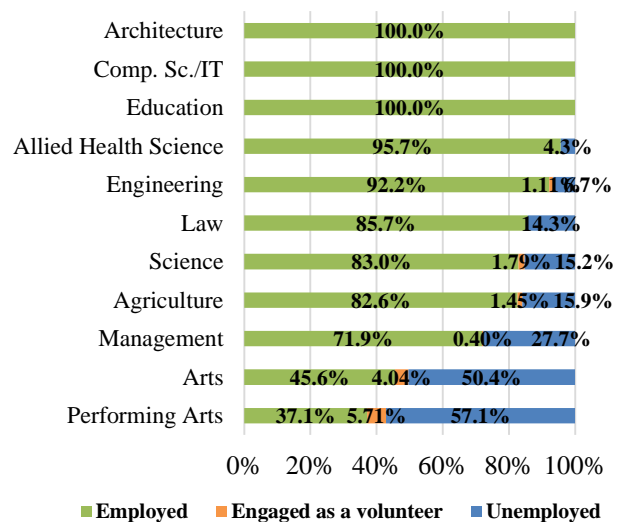
Figure 60: Employment Status by Academic Stream

3.5.2 Reasons for Graduate Unemployment: Unemployed Graduates' Perspectives

The reasons for graduates' unemployment are complex and multi-faceted. As described in the chapter two, out of 5,000 graduates (potential sample), the number who responded to the survey was 1,265 (sample). Out of those respondents, 407 (32.2%) graduates were unemployed at the time of this survey. Of the unemployed graduates, 8.9% were unemployed because they were engaged in further studies, i.e., following postgraduate programmes, and 7.6% of unemployed were not interested in an employment. Also, it should be noted that 10.8% of the unemployed graduates had not mentioned any reasons for their unemployment. Once these three groups are taken out, the number of unemployed graduates in the sample comes down to 296 graduates. This is only 23% of the sample. Reasons for their unemployment, as described by the respondents themselves, are reported in figure 61. Accordingly, majority (29.5%) believe that they are unemployed due to lack of work experience. The next three crucial factors are the inability of finding a suitable job (28.2%), lack of professional qualifications (25.5%) and lack of connections with employers (23.6%). Interestingly, about 12.9% of unemployed graduates were waiting for a job in the state sector.
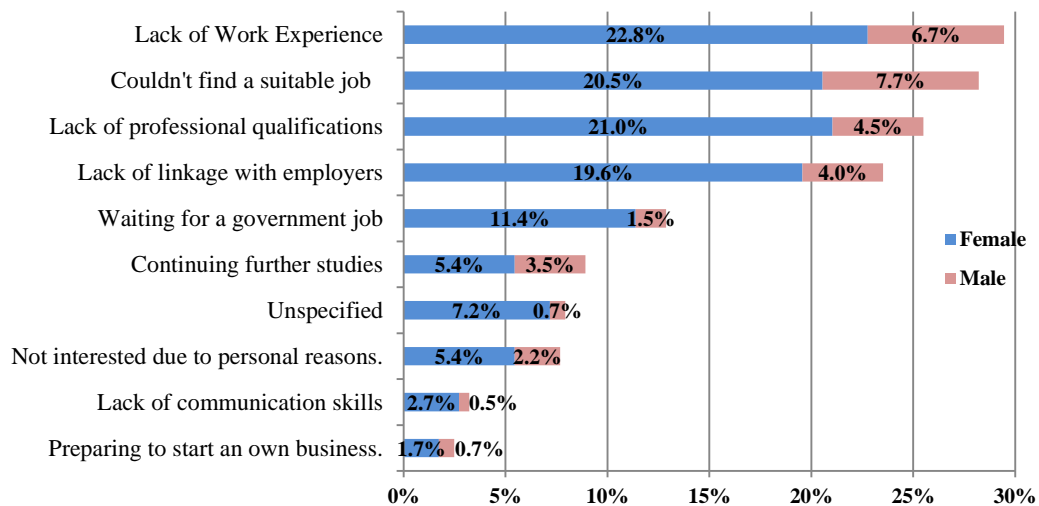
Non Respondents rate - 10.8%

Figure 61: Possible reasons for Unemployment – Unemployed Graduates' Perspective

3.6 Graduates' Perceptions on Quality of Education received from the University- State Universities

As a part of this survey, the perceptions of the state university graduates were examined. This was to study the quality of education they received, and relevance of the subject matter studied to the labour market. Also, the employed graduates' views on education and relevant skills in securing their employability were further discussed. This section studies only the state university graduates' perspectives.

3.6.1 Quality of Education

To start with, we examined their perceptions regarding eight different aspects that would affects the quality of education including factors related to teaching learning environment of the University. Graduates were asked to mark one of the five qualitative scales (*Excellent, Good, Average, Fair, Poor*) against each factor (aspect). Figure 62 is constructed based on the answers provided by them. As an average, more than 50% of graduates felt that the quality of education received from the University in relation to eight factors was "*good*" or "*excellent*" while around 5% felt that the quality of education received was "*poor*". According to the results, the majority of the students (80.6%) felt that the library facilities of state universities were either "*excellent*" (41.8%) or "*good*" (38.8%). According to the opinion of the graduates, the second best aspect of university education is the quality of lecturers. As per the figure, 66.7% of the sample feels that the quality of lecturers of the state universities is either "*excellent*" (16.3%) or "*good*" (50.4%). Responses received in relation to the other factors are not much different from each other perhaps due to the average outcomes. Therefore, still, there can be differences of opinion among graduates coming from different universities and academic streams. On average, the areas that the improvements needed are student recreational facilities, quality of class rooms and opportunities for consultation with the academic staff.

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Student recreational facilities in university	14.4%	38.8%	29.2%	10.3%	6.5%
Quality of buildings	18.5%	43.3%	25.1%	9.2%	3.6%
Quality of labs & technical equipment	15.3%	43.8%	25.5%	9.2%	5.0%
Library facilities	41.8%	38.8%	12.3%	5.5%	1.6%
Quality of class room	16.8%	40.4%	28.5%	9.5%	4.6%
Opportunities for consultation with lecturers	18.5%	40.5%	26.5%	10.1%	4.3%
Teaching quality of lecturers	16.3%	50.4%	23.0%	8.7%	1.5%
Quality of teaching methods	11.1%	48.5%	27.4%	9.8%	3.1%

■ Excellent ■ Good ■ Average ■ Fair ■ Poor

Non Respondents rate - 0.5%

Figure 62: Graduates' Perceptions on Quality of Education received from the University

3.6.2 Graduates' Perception on Quality of Teaching

Though the findings in this regard varies across the different academic programmes, more than 50% of graduates in almost all programmes felt that the quality of teaching was good in the academic programmes that they had followed. Teaching quality variation seems to range from "*excellent*" to "*poor*" in Agriculture, Science, Arts, Engineering, Performing Arts, Law and Management programmes. This may be a reflection of university-wise variation in this regard especially due to the varied distribution of qualified staff among universities. It is interesting to note that this variation is low in some disciplines such as Education and Computer Science/IT as only a few universities offer these programmes. Though none of the graduates in the fields of Architecture, Allied Health Science and Computer Science/IT rated their programme as "*excellen*t" viz-a-viz teaching quality, a majority of them rated their programs as "*good*" in this regard. On the other hand, none of the Architecture, Computer Science/IT, Allied Health Science, Law or Education graduates rated the teaching quality of their academic programmes under the "*poor*" category.
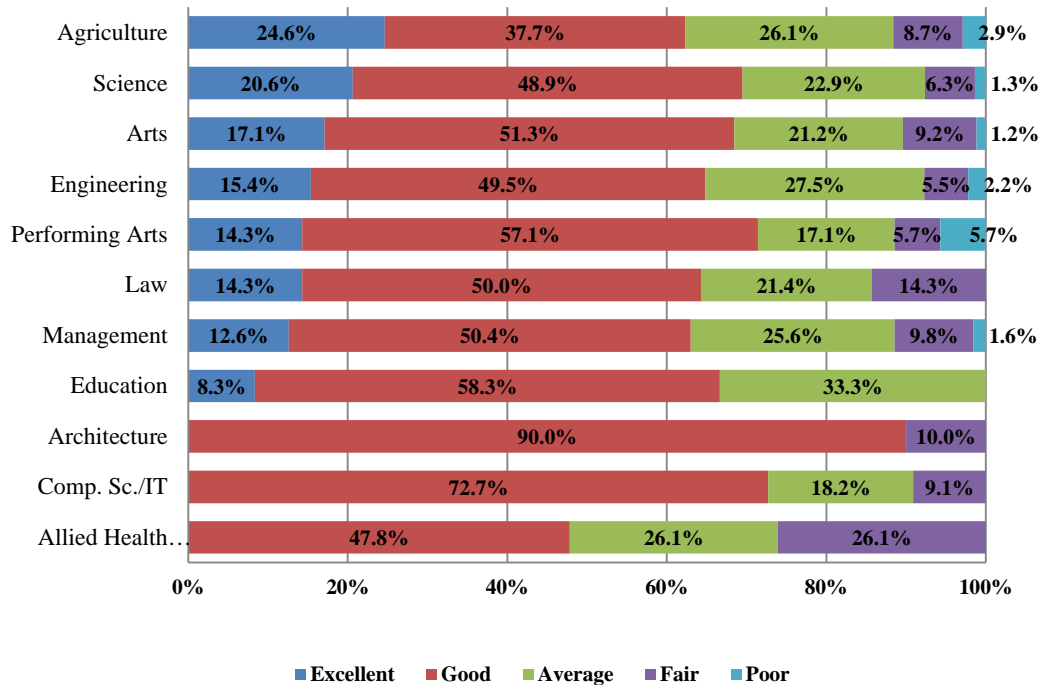
Figure 63: Graduates' Perception on Quality of Teaching by Academic Stream

3.6.3 Graduates' Perception on Opportunities for Consultation with the Teaching Faculty

Any good academic programme provides opportunities for its students to consult with the teaching faculty. As learning habits varies across students, this accessibility is considered an essential aspect of the teaching learning process. Further, since most of the students had switched over to English medium instruction for the first time at the University, the majority of the students may have needed some consultation with their teaching faculty. Graduates who followed the Architecture degree programme felt that they had the best opportunity for consultation with their teaching faculty. According to figure 64, 90% of them felt that they had "*excellent*" (40%) or "*fair*" (50%) opportunity in this regard. The majority of graduates in Law (64.3%), Engineering (62.7%), Arts (61.6%), Performing Arts (60%), Science (57.9%), Management (57.1%) and Agriculture (56.5%) also felt that they had an "*excellent*" or "*good*" opportunity in this regard. Graduates from study programmes in Education, Computer Science/IT and Allied Health Sciences did not, in their view, have a reasonable opportunity to consult their teaching faculty.
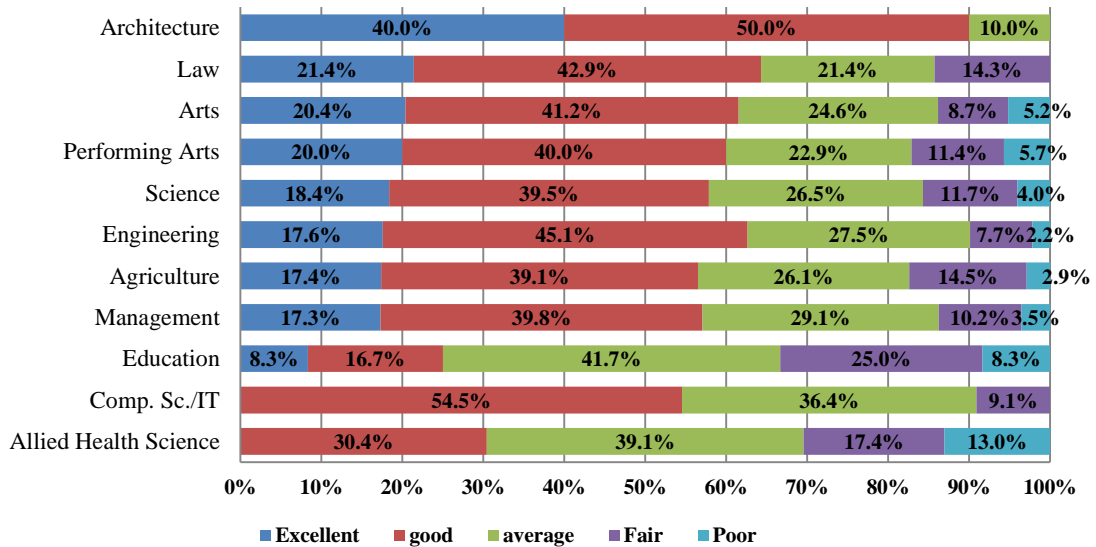
Figure 64: Opportunities for Consultation with the Teaching Faculty by Academic Stream

3.6.4 Graduates' Perception on Balance between the Theory and Practice with regard to Study Programmse of the Universities

The objective of this question is to understand the graduates' views on the standing of the academic programmes that they had followed at the University regarding the balance theory and practice: whether the degree programmes were highly theoretical or balanced theory and practice effectively. As per figure 65, out of the total, 61% of graduates (last three categories; _sometimes, rarely and never_) felt that the study programmes that they followed at the University are not balanced regarding theory and practice. Only about 39% of the graduates felt that their programmes were balanced in this regard. This finding gives a strong message to universities about the need for changing the orientation of their academic programmes to suit current market requirements.

Non Respondents rate - 11.5%
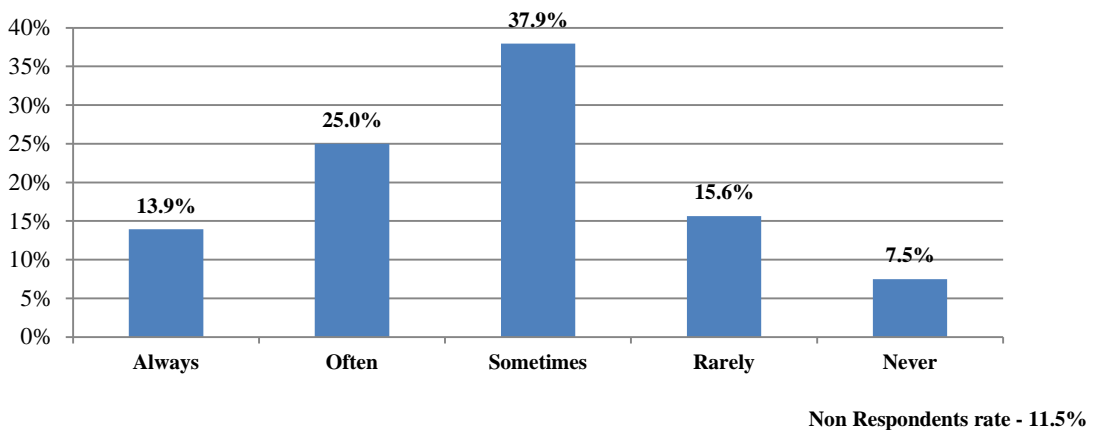
Figure 65: Graduates' Perception on balance between Theory and Practice in relation to Study Programme

3.6.5 Employed Graduates' Views on the relevance of University Education to Current Employment

It's a global phenomenon that graduates are not strictly employed in sectors or jobs that have direct relevance to their studies at university. It also needs to be remembered that some degree programmes do not train their students for a particular job or sector, such as Arts degrees. Conversely, if employment of graduates deviate from the specific training they have undergone at the University, it could be considered as a waste of resources and time, especially since some of the degree progrmmes are expensive, i.e., Veterinary Science, Agriculture, etc. Therefore, the employed graduates who were part of this study were asked to state the level of agreement about the relevance of their university degree/specialization to the current occupation on a five alternative rating scale. The results are reported in figure 66. A large percentage of graduates (62.7%) stated that the current job is related to their university education while 29.2% of graduates did not think so. The results are not as discouraging as the views expressed about this issue in general society.
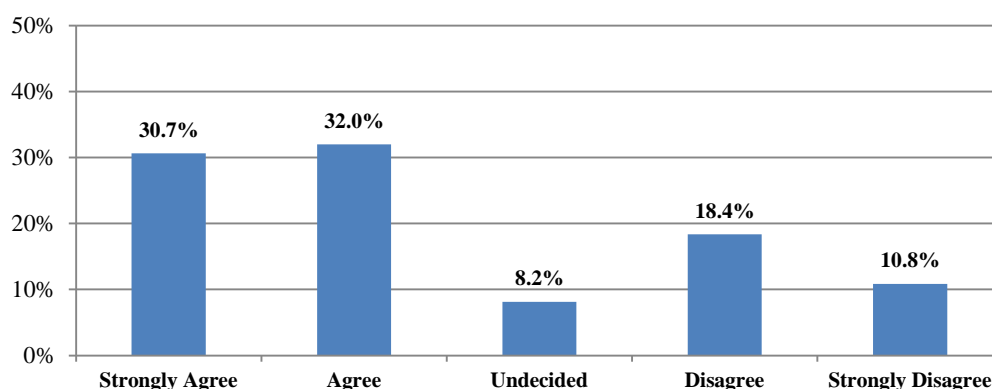
Figure 66: Relevance of University Education to Current Employment

Graduates who did not agree that their current employment was relevant to the education received from the University were further analyzed by their academic stream, and the results are given in figure 67. The highest percent (44.7%) of employed Arts graduates replied that their present employment is not relevant to their university education, followed by Agriculture (33.3%), Performing Arts (30.8%) and Management (27.5%). Concerning the other disciplines, the ratio is below 25%. The lowest percent in this regard is found among the Allied Health Science graduates (4.3%). As we know, Arts degrees are not generally employment oriented. A significant percentage of Agriculture graduates are employed in unrelated jobs compared to their training at university. This could be considered a serious issue that needs the immediate attention of the policy makers as the Agriculture degree is one of the most expensive programmes.
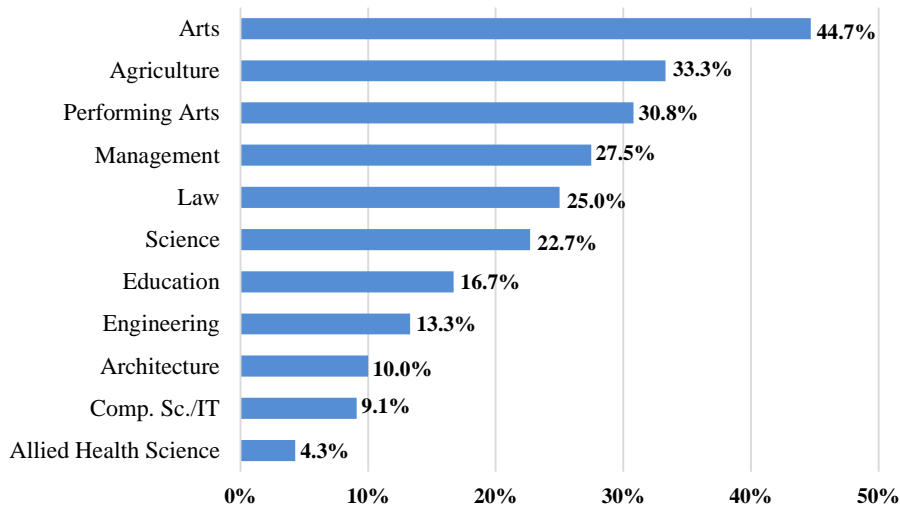
Figure 67: Percentage of Graduates Employed in irrelevant jobs with their University training according to the Academic Stream

3.6.6 Employed Graduates' Views on the "Importance of soft skills in securing a job"

The skills mismatch has been highlighted as one of the major causes for the graduate unemployment problem by many studies on the subject. Such studies have focused mainly on the technical skills, soft skills or socio-emotional skills of the graduates. In this study, employed graduates' views on the importance of four specific soft skills (English language skills, communication skills, presentation skills, leadership skills) in securing a job were examined. The respondents were asked to answer this question based on their experience. The greater majority, about 84%, of the employed graduates agreed that the soft skills they possessed were instrumental in secure the current job while only 7% did not agree with this view. This finding gives an important message to the university authorities to revisit the teaching-learning content and process of their academic programmes with a view to producing an able graduate who fits the market requirements.
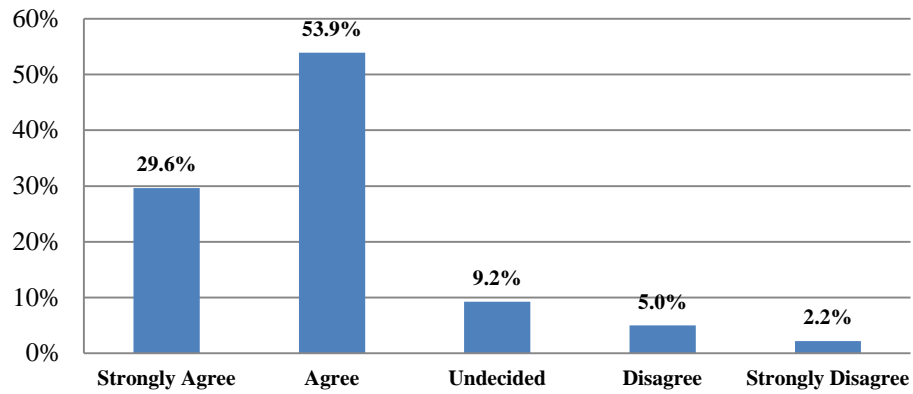
Figure 68: Importance of Soft Skills in Securing the Current Job: Employed Graduates' Perspective -State Universities

Out of those who agreed with the importance of soft skills, 52% highlighted that English Language proficiency was the key factor for them to secure their current job, followed by communication skills (20.3%) and presentation skills (17.8%). This confirms the findings reported under the proficiency of English language: the high correlation between the level of proficiency of English and the employability of graduates.
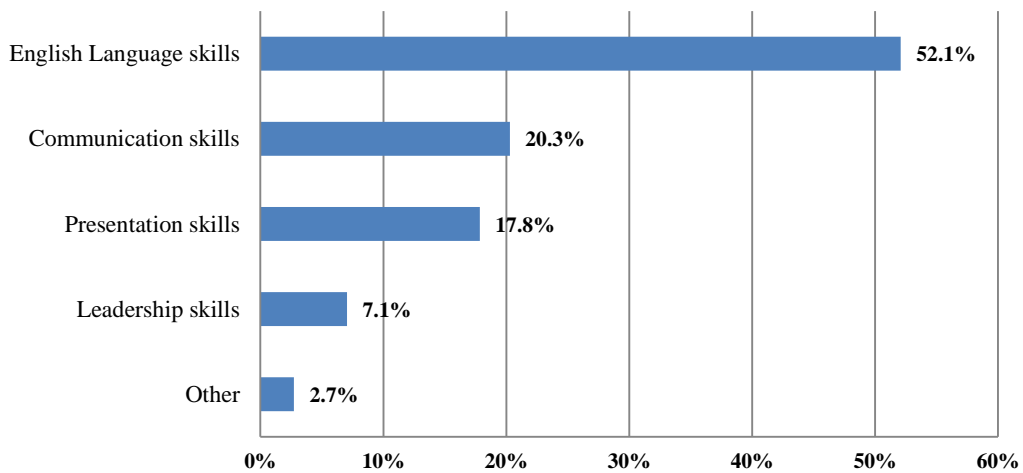
Figure 69: The most Important Soft Skills Instrumental in Securing the Current Job : Employed Graduates' Perspective –State Universities

Chapter 4

Employers' Perception on Graduates of state Universities

4.1 Introduction

This part of the study is novel in Sri Lankan context as none of the previous tracer studies did not attempt to examine the employer perception on graduate employability. Numerous studies have highlighted that graduate employability has become an issue since there is a substantial mismatch between the skills acquired by the graduates from university and the skills required by employers. On the other hand, employers generally complain that graduates coming from university do not meet their expectations in today's volatile environment and urge them to produce employable graduates who can compete and contribute to the current requirements of the industry. Therefore, as a part of this study, an employer survey was conducted with the expectation of understanding the perceived gap between essential dimensions of graduate attributes and that of the industry expectations. In particular, the qualities sought in potential employees and the perceived benefits to organizations that result from the employment of graduates were examined.

For this purpose, the study team has identified 79 companies gained the reputation among university faculties as the significant internship providers training opportunities for university undergraduates. Out of them, 47 companies responded positively to the request made to participate in the employers' survey and structured discussion was conducted by the research team with them in two sessions. As the group of companies invited covered the major employers of graduates in the country, they openly shared their experience and expectations about the graduates they have hired and are willing to hire in the future. Further, to the discussions, a structured questionnaire survey was conducted to ascertain employers' perception about graduates regarding their knowledge, skills, and attitudes in contrast to the expectations of the employers in more concrete terms. The rest of the chapter section discusses the findings of both the discussions and the questionnaire survey.

Out of 47 companies participated in the survey, 11 (23%) companies were represented by the CEOs (Chief Executive Officers/Managing Directors/General Managers) in the survey representing their companies. On behalf of the balance 36 (68%) companies, Head of Human Resource (Directors/Managers) participated in the survey. The largest group of employers participated in the survey represented the private sector (79%) corporates followed by semi-government sector (13%) and the government sector (8%). Moreover, employers participated from both government and semi-government sectors were represented by the organizations with commercial

interest. Concerning industrial sectors, the most significant number of Employers participated from IT sector (28%) followed by manufacturing and sector (15%), bank, finance, and insurance sector (15%). Each professional, scientific/technical, and conglomerate or diversified business sectors had about 11% participation. All companies participated in the survey had recruited graduates for their firms during the last three years, and they were also looking forward to hiring graduates in next three years.

4.2   Graduates Recruitments in terms of Study Streams
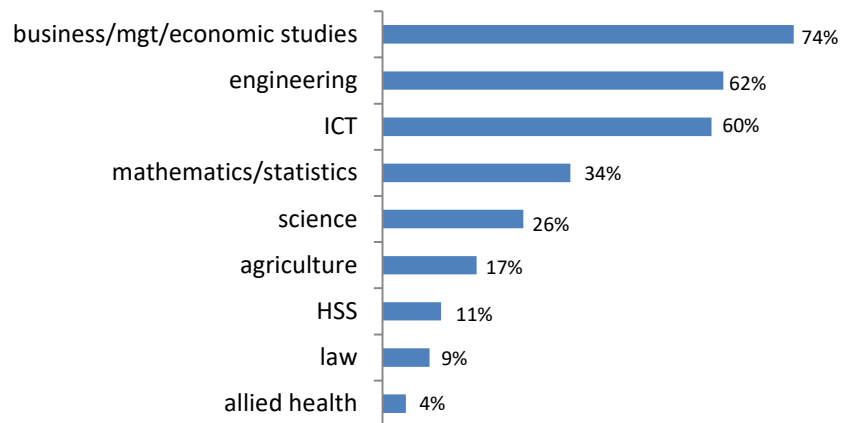
Figure 70: Field of Study of Graduates recruit

As most of the employers participated in this survey recruit graduates from a variety of fields, the[8] most frequently mentioned fields were Business Management and Economics (74%), Engineering (62%) and ICT (60%). Domination of Business Management and Economics graduates in recruitments may be due to the types of the employment opportunities created in the economy with the rapid expansion of service sector and the applicability of training of management graduates to a wide range of organizations. Next, highest frequency was observed for various branches of natural science graduates (mathematics/statistics - 34% and science - 26% subjects). Only about 11% of employers recruited Graduates of Humanities & Social Sciences. Allied Health Sciences (4%), Law (9%), seems to have the least employment opportunities in the corporate sector as per the views expressed by the employers. It is worth to mention that employment requirements of the public sector (especially public sector Ministries and Departments) are not represented in this survey. Further, this analysis does not show the real demand for different categories of graduates in the economy.

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[8]employers were free to mention more than one field about graduate recruitments based on their experience. Percentage given shows the frequency that each field had been mentioned by the employers.

4.3 Skills and Competencies Valued by the Employer in Graduate Recruitments

It is understandable that there are characteristics, skills and knowledge and intellectual capability elements that are required to perform specific roles with different employments. Besides, combinations of transferable skills/competencies are also deemed necessary particularly in many employment contexts. With the purpose of understanding their importance in graduate recruitments, in this study, employers were presented with 11 categories of such skills/competencies as indicated in figure 71. Further, they were asked to rate the importance of having such attributes by the graduates looking for employment opportunities with them. As per the figure 71, all 11 skills/competencies seem to be playing a vital role in graduates recruitments. Out of them, over 70% of employers have rated skills related "communication," "teamwork" and "reading/writing" under the category of very important skills. Over 60% of employers have rated "ability to adapt to and act in new situations" and "analytical and problem-solving skills" in the very important category. Further, over 50% of employers agreed that "effective use of IT", "English language skills", "decision-making skills" and "sector-specific skills" in the category of most important skills. All these 11 skills/competencies listed have been identified as important attributed in graduate recruitments by more than 90% of employers.

Moreover, some employers stated at the meeting had with them by the research team that graduates should possess leadership skills, knowledge in changing business environment and current affairs in addition to the skills listed in the figure 71. They further highlighted that the importance of possessing these skills by the teaching faculty of the University beyond their knowledge about subject matter.

communication skills	74%		23%	2%	
team working skills	70%		28%	2%	
good reading/writing skills	70%		23%	2%2%2%	
ability to adapt to & act in new situations	66%		32%	2%	
analytical & problem solving skills	64%		34%	2%	
effective use of IT	57%		40%	2%	
English language skills	57%		40%	2%	
decision making skills	53%		40%	4%2%	
sector specific skills	51%		38%	6%2%2%	
good with numbers	47%		51%	2%	
planning & organisational skills	40%		51%	2% 6%	

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

■ very important ■ rather important ■ rather unimportant ■ not important ■ not responded

Figure 71: Skills and competencies valued by employers in Graduate recruitments

4.4 Employer Satisfaction with the Skills and Competencies Possessed by the Graduates

It is equally important to understand the employers' perception of the skills possessed by graduates recruited. Therefore, employers were asked to rate their level satisfaction with graduates recruited during the last three years on each of 11 skills/competencies presented. The results are reported in figure 72. According to it, a large percentage of employers are satisfied with graduates recruited about three specific skills they possessed; "good with numbers" (83%), "effective use of IT" (74%), and "team working skills"(64%). Employers' responses were mixed about "sector-specific skills", "planning and organizational skills", "analytical and problem-solving skills" and "reading and writing skills". However, only a relatively small percentage of employers were happy about "communication skills" (28%), "English language skills" (28%) and "decision-making skills" (40%) of graduates recruited.

good with numbers	21%	62%	11%	6%
effective use of IT	17%	57%	19%	6%
team working skills	17%	47%	23% 9%	4%
sector specific skills	13%	40%	36% 4%	6%
planning & organisational skills	6%	49%	36% 4%	4%
analytical & problem solving skills	6%	45%	38% 4%	6%
good reading/writing skills	4%	40%	40%	11% 4%
decision making skills	2%	38%	43%	13% 4%
English language skills	2%	26%	55%	13% 4%
communication skills	28%	57%	11%	4%

■ very satisfied   ■ rather satisfied   ■ rather not satisfied   ■ not satisfied   ■ not responded

Figure 72: Satisfaction in terms of Skills & Competencies

4.5   Challenges faced by the Employers in Recruiting Graduates

Recruitment of graduates may be more complicated compared to the other level of recruitments as their training and exposure would be varied from discipline to discipline as well as from institution to institution that they come from and also due to their socio-economic backgrounds. Therefore, many employers invest time and money (or use employment agencies) to attract the best graduate talents. Thus, as a part of employer survey of the study, we studied the challenges faced by the employers in recruiting graduates. Employers' responses in this regard are presented in a summary form in figure 73. About 74% of the employers stated that finding graduates with relevant "soft skills" particularly, English language, communication and interpersonal skills, leadership and influencing skills is the greatest challenge they faced. Next, 40% employers stated that it is difficult to find graduates with "right attitudes" and 38% listed that "lack of skills in applying theory to practice" as one of the major problems in graduate recruitments. Further, about 26% of employers stated that the lack of "general knowledge" as another challenge that they face in graduate recruitments. Moreover, "lack of commitment" (21%) and "lack of ethical consideration" (17%) were also mentioned as challenges they faced with graduates recruitments.
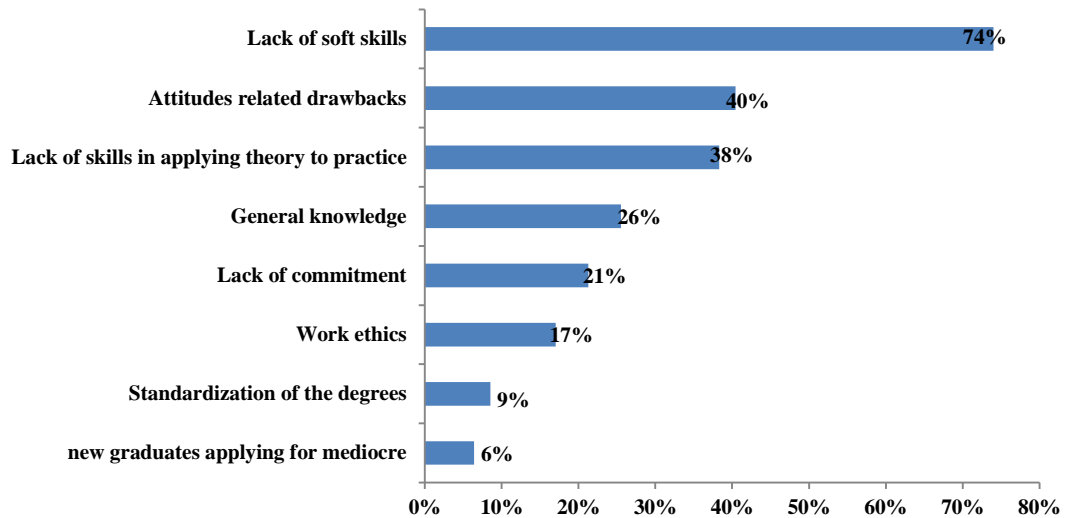
Figure 73: Challenges faced by Employers in recruiting Graduates mediocre

4.5.1 Importance of Having Internship Training, Work Experience and Professional Qualifications by New Graduate Recruits
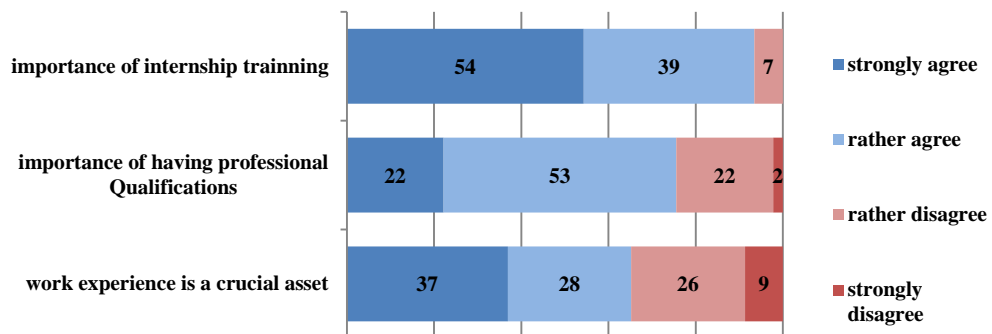
Figure 74: Importance of internship training, experience and professional qualifications by new graduates-Employers' perspective

Graduates generally claim that they failed in the job search because employers disdain them due to their lack of experience. Therefore, universities today tend to offer internship (one or several) as an integral part of the degree programme. However, in the academia, there is no complete agreement in this regard. In contrast, some degree programmes are not employment oriented due to the nature of the subject matter being taught. Given these circumstances, we examined the views of the employers in this regard. Among the employers participating in the survey, 54% strongly agreed while 39% rather agreed with the statement that importance of

internship training in graduate recruitments. This shows 93% of employers in total agree. The proportion of employers disagreed with this statement is only a mere 7%.

Though it is unrealistic to expect work experience form fresh graduates, it is generally argued that having work experience is beneficial in job search and also for better employment. In this study too, employers have highlighted the importance of recruits having work experience. For the statement "work experience is a crucial asset for recruits" given in this regard has been rated as "strongly agreed" by 37% of employers and 28% of employers rated it under the category of "rather agreed" making total agreed proportion for the statement 65%. Employers seem to place rather high value on the professional qualifications too. In the sample of employers, 22% strongly agreed, and 53% of them rather agreed for the 22% employers strongly agreed while 53% of them rather agreed for the statement that suggested the importance of having professional qualifications before joining the industry. This indicates that 77% of employers in total are in agreement. However, 24% disagreed with this statement.

4.5.2 Factors Influencing the Employability of Graduates – Employers' Perspective

Industry inputs are vital when designing and realigning study programmes offered by Universities. In any part of the world, employers would prefer if fresh graduates arrived better prepared when they come knocking on the job-market door. Industry inputs would help to reduce the skill gap and the perception gap in this regard among different stakeholders (employers, educators, and students). Therefore, the survey team was interested in gathering the employers' perspective as to what factors would influence or rather improve the employability of graduates.

They were requested to list out the actions to be taken by universities to improve the employability of graduates. A large percentage (43%) of employers' suggested the need for introducing extra modules to improve the soft skills; such as communication, English language, interpersonal and attitudinal development, etc. of graduates. They have also highlighted the importance of empowering student-centered learning environment to make a Graduate with a well-rounded personality. A sizable group of employers (36%) stated the need of students getting exposed to the working environment through compulsory industrial training/internship training for them to apply/ understand what they learn in the classroom. According to them, maintaining a good working relationship between corporate/private sector is very important in this regard. About one-fourth of them (26%) highlighted the importance of having a continuous dialog with the industry as the business world is rapidly changing.

According to them, it allows university system to understand the requirement of the industry and the market trends.

Among the other thing they have underscored, creating more practical and application-oriented learning culture, obtaining professional qualifications, having experts from the private sector in the lecturer panel are worth mentioning. Some have highlighted the need of restructuring the university curriculums to align them more to the industry needs and the world of work. Some employers also highlighted the importance of introducing more case studies into the curriculum. Some suggested value of allowing students get involved in diverse areas of interest and exposed to a variety of knowledge for them to find their passion and follow their goals. Even some participants highlighted the significance of academics getting exposed to the practical situation through industry collaborations.
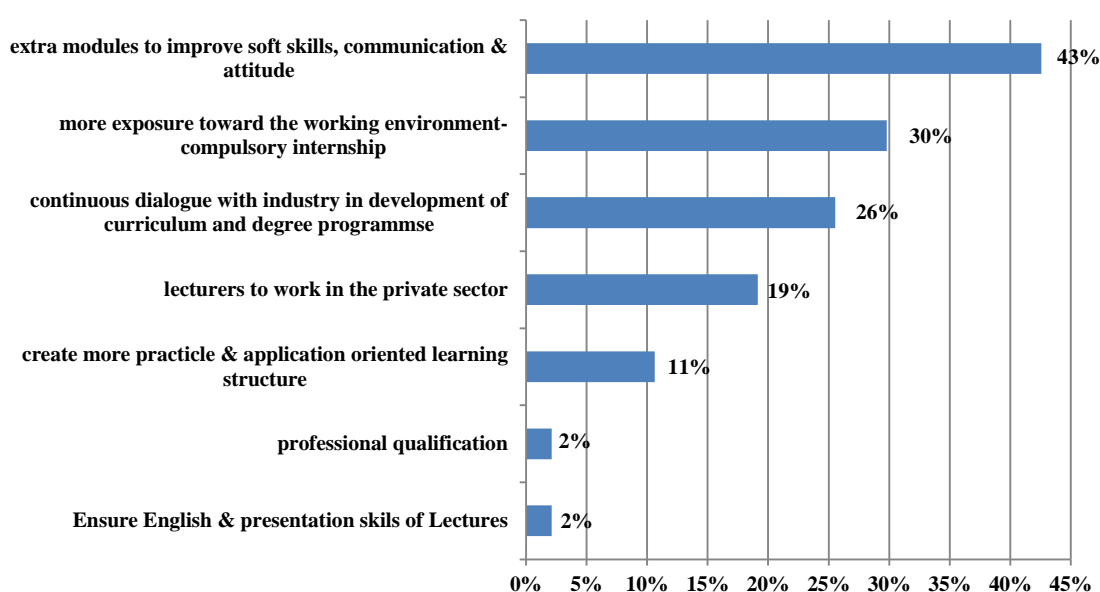
Figure 75: Employers' suggestion on improving the employability of graduates

Views expressed by the industry experts may not be equally applicable to all the degree programmes. It would be somewhat difficult to incorporate these suggestions to non-professional degree programmes, i.e., degree programmes in Humanities and Social Sciences. For some degree programmes especially in the field of Humanities and Social Sciences, some of these suggestions would be remote from their curriculum. However, socio-emotional skills and transferable skills may be equally important and applicable to all degree programme irrespective of the subject stream.

Chapter 5

Findings and Recommendations

5.1   Introduction

This study was undertaken with the aim of understanding the destination of Sri Lankan State-University graduates after completing their studies. The study has provided a new learning experience for the UGC as it has been the first one of its kind conducted directly by the UGC covering all conventional universities under it. The study team believes that the findings of the study will be useful to stakeholders in their decision-making processes regarding the responsiveness of our university education, on the side of the supply, to the condition of the employment market, on the side of demand. The findings of the study are based mainly on the data collected through a questionnaire survey from a representative sample of state university graduates who completed their studies two to three years ago (graduated in the years 2014 and 2015). For comparative purposes the survey was extended to a small sample of graduates of non-state sector institutions too. The study was supplemented with an employer survey with the purpose of understanding any perceived skills mismatch between the skills possessed by the graduates and the expectations of employers. The main findings of the study are summarized in the rest of this chapter under subheadings.

5.2   Overall Employment Status of Fresh Graduates

As per the study, the overall employment status of fresh graduates is not very satisfactory in Sri Lanka. Out of 1,265 graduates traced from state universities after two to three years of graduation, only 65.5% was employed, 32.2% were unemployed while 2.3% were engaged as volunteers at the time of the survey. The statistics related to the non-state sector sample in this regard are not very different from those of the state sector universities. Out of 238 graduates drawn from the non-state sector, the employed rate was 66.2% while the remaining 33.8% were unemployed. However, the statistics presented here do not adequately characterize the graduate unemployment problem in the country as the external graduates produced by the system are not represented in the sample. If they were traced in the study, the results would have been more severe than what is reported here.

In Sri Lankan employment market, male graduates can secure employment more often than women. As per the study, when the employment rate of male graduates in the state

university sample was 81%, the same rate that of the female graduates was only 58%. A similar disparity was observed among non-state graduates too. One has to understand this disparity in the light of the increasing number of female enrollments in Sri Lankan Universities.

Among graduates, those who possess degrees of four-year duration (special or honors degrees) are more employable, compared to those who possess three-year degrees (general degrees). Despite the argument that academic grades are rewarded in the labour market because employers regard them as an expression of valuable skills or an indicator of other sought-after attributes, the Sri Lanka labour market for graduates seems to be less interested in academic performance or the grades of the graduates. In this study, we did not find a significant relationship between rates of employment and performance (grades) of graduates at the university expressed in terms of classes (first class, second class upper division etc.).

It is vital for universities and the other stakeholders to know the destination of graduates once they complete their studies at university. According to the responses received from employed graduates, 46.2% of them were employed in the private sector while only 44% were engaged in public sector employment. Mainly, graduates in the fields of Computer Science/IT, Engineering, Law, Management and Architecture are more likely to work in the private sector. As these statistics represent the data gathered in 2017 based on graduations in the year 2014 and 2015, they represent a natural pattern of employment of graduates in the country as the government did not have any significant rescue programmes to absorb unemployed graduates as in the past since 2015 until this survey. However, it is essential to recognize that a sustainable solution for the graduate unemployment problem, in the long run, lies on the level of economic development that takes place in the country which determines the capacity of the economy to absorb the unemployed youth on the one hand and the ability of the universities to produce market ready able graduates which influences the percentage of graduates absorbed into the workforce, on the other. The economic sector which tends to absorb a higher percentage of graduates is the education sector (34.4%). A higher percentage of employed Arts (55.1%), Agriculture (40.4%) and Science (39.3%) graduates were employed in the education sector, probably as teachers. It is surprising to see that only 29.8% of Agriculture graduates were attracted to agriculture-related jobs. Management graduates were attracted by many sectors in the economy. A higher percentage of them (26.9%) were employed in the Banking and Finance sector. A large percentage (82.0%) of Engineering graduates were emplolyed in enginering fields such as Construction, Manufacturing, and IT.

It was observed that from the employed Arts and Performing Arts graduates, a higher percentage (about 20%) was underemployed.

The expansion of higher education in the country has, in some respects, created as many challenges as it has resolved. We find a considerable discrepancy between the output of graduates and the absorptive capacity of the labour market, leading, in turn, to unemployment and under-employment in relation to certain disciplines. The question being raised in this regard is whether the content and performance of systems of higher education can meet the changing needs of society, including the new and changing methods of production in the labour market. According to the findings, the STEM graduates are more employable compared to the HEMS graduates. Among the STEM disciplines, graduates from the fields of Architecture, Computer Science/IT, Engineering and Allied Health Sciences had reached the full or almost full employment level at the time of the survey. Among the HEMS disciplines, only Education graduates had reached the full employment level. The other two disciplines within HEMS that had achieved reasonably high employment rates were Law and Management. These graduates had reached employment rates of 86% and 72% respectively. Among the HEMS disciplines, Arts and Performance Arts graduates in the sample reported the lowest employment rates of 46% and 37% respectively.

The disparity of employment rates among universities was high within HEMS disciplines probably reflecting the quality variation of academic programmes offered by different universities. The variation between the two universities that recorded the highest (64%) and the lowest (12.5%) employment rates in the Arts discipline was as high as 51.5%. Out of the 10 Universities which offered Arts degree programmes, only graduates produced by three universities had exceeded the 50% employment rate. Within HEMS disciplines, the employment status of Management graduates is much higher than to Arts and Performing Arts graduates. The continuous expansion of the service sector of the economy could be considered as the main reason for this. A high variation of employment levels of graduates produced by the different universities was observed in this study. When the highest recorded employment rate by a university in this discipline was as high as 92%, the lowest in that regard was as low as 28%. Within STEM disciplines, relatively higher disparities of employment rates of graduates of different Universities were observed among Science and Agriculture graduates.

5. 3   Graduates' Attributes Rewarded in the Employment Market

The country's employment market for graduates is annually supplied a large number of graduates of varying quality competing for various jobs openings. Though the majority of such jobs are not discipline-specific, employers generally specify various attributes expected from prospective applicants. As a result, the employment market has become competitive and demanding. Further, the trends in the graduate employment market are shaped by changing forces such as the expansion of higher education provision within the country, the increasing number of graduates entering the employment market with foreign qualifications; unprecedented change in technology; globalization, and the expansion of the global economy. These change agents influence the hiring needs of employers. Therefore, the decision to hire a graduate by an employer is based on the graduate's qualities and abilities in addition to the discipline-specific knowledge and skills. Brown and Hesketh (as cited in Tomlinson 2008) note that employers relate the employability discourse to behavioral competence and a wider range of personal, performative and organizational abilities. In this context, it is important for both management of higher education institutions and students to be aware of the changing nature of the employment patterns and the required employability attributes expected by the employers. Mapping industry needs and redesigning the study programmes accordingly would help universities to equip their graduates with the employability attributes needed by the employers.

In this study, we looked at the issue from the perspectives of employers and graduates. Among the graduate attributes, the most valued attribute in the Sri Lankan employment market is, without dispute, proficiency in the English language. The majority of the employed graduates, especially in the private sector, believe that their skills in the English language were central for them securing the current employment. The employers who participated in the survey too stressed the role of English language proficiency of graduates in securing the employment opportunities available in today's business environment. In the absence of an independent common tool to measure the level of English literacy of graduates, we examined the relationship between the graduates' performance at the English Language paper of the G.C.E. (A/L) and G.C.E. (O/L) examinations and the level of employability. We found that 88% of graduates who secured an "*A* grade" for G.C.E. (A/L) General English were employed irrespective of their subject discipline. However, from among those who failed the subject, only 49% had secured employment after two to three years of graduation. A somewhat similar relationship was observed with the performance of G.C.E. (O/L) English Language too. The sad truth is that from the university graduates traced, more than 38% had failed General English at the G.C.E. (A/L) and only about 9% could secure "*A* grades".

Computer literacy of graduates is generally believed to be an essential attribute that helps them to find employment. We observed that a high percentage of graduates who responded to the current survey had been exposed to computers both at home and at the university. Further, the employer survey revealed that a large percentage of employers were happy about the level of computer literacy of the contemporary graduates. However, this is different from the fact that the market needs more IT graduates with advanced knowledge in computing.

The possession of both additional professional qualifications and work/industry experience gained through an internship are rewarded in the employment market. Having an additional professional qualification is an added advantage for job seeking graduates. Notably, a higher percentage of employed Management graduates possessed one or more professional qualifications. About 25% of unemployed graduates believe that the lack of professional qualifications is as one of the reasons for their unemployment. Experience acquired through internship training is also rewarded in the employment market. The survey results indicated that a high percentage of graduates who had undergone internships as a part of their degree programmes were employed. Sadly, internship training is not available for more than 57% of the graduates of the state universities. Especially students of Faculties of Arts and Performing Arts get hardly any opportunities to follow internships programmes during their university career.

Today employers are interested in recruiting people with the right socio-emotional skills. Socio-emotional (SE) skills include the knowledge, attitudes, and skills necessary for youth to recognize and control their emotions and behaviors. These skills help to establish and maintain positive relationships, make responsible decisions, face challenging situations, and set and achieve positive goals. Sometimes these skills are labeled as 21st-century skills, soft skills, non-cognitive skills, or as character attributes. Socio-emotional skills are linked to academic, career, and life success. Understandably, almost all the job offers open to graduates expect the set of socio-emotional skills that are important to perform the job effectively. As per the current survey around 85% of the employed graduates believe that the soft skills they possessed were instrumental in securing the current employment. Among such skills highlighted by the employers in this study are "communication skills" (74%), "teamwork skills" (70%), "good reading/writing skills"(70%), "ability to adapt to and act in new situations"(66%) and "analytical and problem solving skills"(64%). Further, in the employer survey, the employers were asked to express whether they are satisfied with the

recently recruited graduates in relation to a set of pre-identified skills. The percentage of employers satisfied with graduates' "communication skills" (28%), "English language skills" (28%), "decision-making skills" (40%) and "reading/writing skills" (44%) was relatively low. Further, the employers were appreciative of graduates' theoretical knowledge, numerical skills, and IT skills. However, they were not pleased with the graduates' skills in creative problem-solving capacity, initiative and enterprise ability, critical and analytical thinking, and ability to apply discipline-related knowledge and concepts to practical situations.

5.4.   Reducing the Gap between Industry and Academia

Joining the workforce as an effective worker in society is probably the first step for a graduate to demonstrate his/her ability, and the transition from student's to work life after graduation is an important part of the cycle essential for a sustainable society. Contrary to this, more than one-third of the graduates are unemployed in Sri Lanka even after two to three years of graduation. Graduate unemployment in a country is a grave concern, and it can be attributed to multiple factors like slow economic and industrial growth, lack of investments, skills mismatch, etc. The paradox in this regard is when academia is complaining about slow job generation in the economy and the industry is complaining about the non-availability of quality human resources. The employers who participated in the current survey too highlighted the mismatch between the competencies of the newly recruited graduates and the competency requirements of the labour market for graduates. According to them, the industry has tried to bridge this gap with additional training. However, they stated that it is expensive and also kills productivity. Invariably this means that university graduates are not adequately prepared for work with respect to the skills demand of the labor market. While the skills and competencies required from graduates may vary depending on the field of study and the intended employment, academia should be mindful that the employers require a set of generic skills irrespective of the field of study and the intended field of employment. Among the most listed such skills by numerous authors are literacy and numeracy, time management and organization, oral and written communication, teamwork, capacity for creative problem-solving, initiative and enterprise, critical and analytical thinking, ability to apply discipline-related knowledge and concepts, information gathering, evaluation and synthesis, emotional intelligence and interpersonal skills, and adaptability. As per the views expressed by the employers in the survey, most of the Sri Lankan graduates do not possess these skills adequately. In certain instances, they are not updated with the emerging trends, issues and challenges in relation to their respective fields as well.

It is a challenge for universities to produced readily employable graduates with the right skills. Universities alone might not be able to address the issue. System-wide interventions are required to address the macro-level mismatches between the types of graduates being produced and the types of graduates required by the economy, i.e., what percentage of STEM graduates and HEMS are to be produced or how many IT graduates are to be produced. Together with macro-level projections, new investments are required to achieve such broader higher educational objectives. At the institution level, university authorities have to take the challenge of producing able graduates with the right skills required by the employers. Irrespective of the discipline, our universities will have to think of revisiting their curricula together with methods of teaching, learning and assessments for students to be equipped with knowledge, skills, and values so that learners could achieve their full intellectual, personal, emotional and social potential. Teaching-learning progression and assessment methods at the university should encourage and facilitate learners to acquire and practice skills that will assist them to become effective in responding to future challenges in their lives and to play active and responsible roles in society after graduation. Such reforms are particularly urgent for disciplines coming under Humanities and Social Sciences including Visual and Performing Arts based disciplines. Conventional lecture-based delivery together with assessment via exams and essays will not necessarily nurture the required skills among students. Therefore, it is important to bring some novelty and diversity to the teaching-learning process so that the required skills can be cultivated among students. For example, principles of experiential learning can be incorporated to delivery and assessment methods of university courses so that the students can learn through real-world experience or a real world like simulated environment with numerous engagements. Problem-based learning is also highly recommended in this regard as it develops learner autonomy and other key employability skills alongside the application of content knowledge (Martin, West, and Bill, 2008).

It is essential for universities to map their academic programmes regularly with the requirements of the potential employment opportunities available for their graduates. Usually, employers have very specific job related expectations, while universities expect students to pursue academic excellence. Mapping academic programmes with the requirements of the potential employment opportunities is important to reduce these expectation gaps. However, this is not going to be an easy exercise. With regard to professions such as law, accountancy, medicine, nursing etc., there are clear sets of definable competencies regarding performance expectation from qualified graduates. In relation to most of the other fields, performance expectation from a graduate may vary depending on the employer and the nature of the employment. Any such graduate may end up with a job completely unrelated to what he or

she has studied at the university. As we have realized from the employer survey, the ability to take a critical approach to a problem and then choose and implement the right strategy to solve it and patterns of thinking are equally or more important than functional competency. Further, it is important for each university to trace their graduates after some time from graduation (i.e., after one or two years from graduation). This would help them to understand potential employment paths for their graduates and the skill requirements of such employment. As stated by Egesah and Mary (2016) if universities are to improve their teaching and training of graduates, this should be preceded by learning from the experiences of graduates during their transition from the university to the job market through tracer studies. Many developed countries have made considerable progressed in this regard. For example, the UK Government conducted an Employer Skill Survey[9] in 2015 in order to understand the changing skills requirements in different industries and professions in the country. Such survey reports help universities and other training institutions to reorient their programmes so that they are in line with the changing industry requirements. If such a survey is conducted in the country at least once in several years (4 to 5 years) covering the major industries, it would be a great boon for universities and other higher education providers in the country in planning and reorienting their academic programmes.

5. 5   Other Recommendations

The aspirations of the youth and their parents with regard to higher education have not been able to meet by the country's higher education system vis-à-vis university education due to insufficient growth in the provision of higher education during the last several decades. However, mere expansion of higher education by setting up universities and campuses would not be the right solution in this regard. The findings of the current study also prove it this. The expansion of higher education should be based on proper projections of local and international labour market requirements. That would help to minimize the problem of the macro-level mismatch of the types of the graduates being produced by the system and the types of graduates required by the economy. The current practice of expansion of enrolment in priority disciplines (Technology, Engineering, Medicine, etc.) in terms economic development and ready employability and more investment to revitalize the existing degree programmes in other disciplines by the Ministry of Higher Education and the UGC is needed

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[9] As highlighted by the *Employer Skills Survey 2015: UK Results*, the employer Skills Survey is a vital source of data on skills and the labour market. It offers a unique insight into the micro decisions that employers make about factors such as recruitment, training investment and use of skills in the workplace, which underpin the macro-level trends that drive UK economic growth and productivity levels.

in this regard. However, it would be difficult to achieve the intended results in the long run without subjecting the entire system to a full-scale revision. It is essential to devise a system that drives/motivates the   university authorities to make more responsible decisions with regard to the public money spent on the higher education sector through the state universities.

In Sri Lanka, establishing and locating new state-sponsored universities can be viewed as key political decisions taken by the government in power. Except in a few instances, sporadic decisions taken in the past in this connection have aggravated the quality issues in the university system. The disparities of employment levels among different universities witnessed in this study could be considered as a direct reflection of quality variation of the graduates being produced by these institutions. This disparity was high in HEMS disciplines compared to that of STEM disciplines. Universities located in peripheries, underperform in this regard. Due to location-related disadvantages, peripheral universities face numerous in particular, problems. The most serious among them is the inability to attract quality staff with required qualifications due to the remoteness. For the same reason, these universities cannot attract quality students. In addition, there are quality issues associated with academic programmes. The environment of most of these universities is not conducive for many study programmes as these institutions are removed from the centres of industry and commerce. It is equally essential to ensure that any newly established university is managed by a qualified and experienced set of teachers and administrators. Such practices would enable the newer institutions to introduce best practices from the beginning. Otherwise, it will affect the quality of the graduates being produced by these institutions. The expansion of university education in a haphazard manner is counterproductive and will invariably invite unforeseen outcomes such as youth unrest.

Conventionally, universities are seen as places of learning and research. As Purcell (2008) stated, universities as autonomous institutions have been perceived as 'ivory towers', for many years, slightly removed from the responsibilities of society, with researchers and academics working towards the greater good and the pursuit of knowledge and learning for the sake of knowing. Most of the state universities in Sri Lanka which run as supply-driven entities are not much different from how universities are viewed by Purcell in 2008. In the case of Sri Lankan state universities, the resources required to run these institutions are not dependent on the performance of these institutions or student demand. University cadre and their salaries are centrally determined like in the public service. Students too are allocated to the Universities centrally. In this supply-driven top-down system of allocation, there is no

motivation for the university management and teachers to deliver what the country anticipates from the universities and to run them as cost-effective entities. Therefore, any subsidies for higher education should target the entitled students, i.e., enrolment based funding, and students should be allowed to target the institutions that will in their view, fulfill their expectations. Enrolment-based funding can further be improved to an outcome-based funding model. The system of higher education needs to ensure society that the students are getting the best without compromising academic freedom and standards. Retaining academically rigorous quality standards while delivering professionally relevant courses is a challenge for our universities. At the same time, it is vital for universities to preserve their autonomy while serving the needs of society. Stakeholders may agree that the system of higher education in the country will not achieve these noble goals without changing the current funding and governance model to a performance-based one that aligns the goals of the universities with those of the wider society. Such reforms will help reduce the current skills mismatch in the long run.

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