

JOB SATISFACTION FACTORS THAT INFLUENCE IT LECTURERS IN SRI LANKAN STATE UNIVERSITIES

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Thesis submitted in partial fulfillment of the requirements for the degree of Master of
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DECLARATION

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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ABSTRACT

The performance of the academic staff enormously impacts on students' learning and success. Therefore, motivation and satisfaction of the academic staff are crucial for the quality of higher education. Improving the effectiveness of the university education system will improve the growth of the country by producing highly educated and competent intellectuals. This research studies the job satisfaction factors of IT lecturers in Sri Lankan public universities with an intention of assisting policy formulation and implementation to strengthen the university education system.

Academic Job Satisfaction related literature sources were analyzed in formulating the conceptual framework. Six factors were identified as the most influential to the job satisfaction of IT Lecturers and were considered as independent variables. Job satisfaction was the dependent variable. Six hypotheses were formulated based on the six factors. Then an online survey was prepared and shared among IT lecturers in public universities. Thereafter collected data was statistically analyzed to validate the consistency and to test the hypothesis. Based on the analysis it was identified that Facility & Pay, Institution, and Opportunities had a positive correlation with job satisfaction. The outcome of the study reveals that 82.8% of IT lecturers are satisfied with their jobs.

However, lecturers are in the opinion that Opportunities and Facility & pay need to be improved while bringing down the present workload to a moderate level. Therefore it is recommended to formulate policies to ensure that IT lecturers are compensated in line with competitive remuneration packages and to develop a mechanism in recognizing their contributions. It is also recommended to consider in increasing the number of lecturers with the view of bringing down their present workload to a moderate level. These recommendations will ensure in having a group of IT lecturers with a high job satisfaction.

Keywords: Job Satisfaction (JS), IT Lecturers

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LIST OF ABBREVIATIONS

IT	-	Information Technology
JS	-	Job Satisfaction
SLASSCOM	-	Sri Lanka Association of Software and Service Companies
LMS	-	Learning Management Systems
HRM	-	Human Resource Management
OECD	-	Organization for Economic Co-operation and Development

CHAPTER 1 – INTRODUCTION

1.1 Introduction and Motivation

According to the Business Dictionary (2016), Job Satisfaction (JS) is contentment arising out of the interplay of employee's positive and negative feelings toward his or her work. It is a human emotion related to satisfaction which influences the person's decisions about his or her career. JS makes the employee work harder and increases their productivity, as well as influences the individual to remain on the job or leave otherwise. People are more committed to work when they are satisfied, therefore studying about JS has become an important area of study.

Information Technology (IT) is crucial in the development of a country. IT professionals easily adapt to new technology with their passion and IT can change any industry in faster and smarter ways. IT professionals are creating outstanding managerial solutions and they are radically restructuring the development of the country. Almost each and every organization both private and government have their own IT departments to fulfill the IT needs. Businesses have the ability to position their worldwide marketplaces quicker than they usually do with the help of IT.

After the end of the civil war, there was a growth observed in the Sri Lankan education sector. As a developing nation, there is a priority to promote education which will impact the quality of life and the economy of the country (Zazofsky, 2015). Tertiary education has always been seen as a driving factor for state economic development and is an important mechanism to understand the combined aspirations of society (World Bank, 2007). Sri Lanka is promoting IT to make university graduates more marketable (World Bank, 2005). The levels of education are important stepping-stones for the country's development (Zazofsky, 2015).

The students of today are the leaders, inventors, teachers, and businessmen of tomorrow (Quinonez, 2014). Without sufficient skills, these students will not have the motivation and ability needed to reach their goals as well as the goals of the industry. Therefore having fully qualified and skilled IT professionals are of an utmost importance.

Quality and skill level of these IT professionals depend mostly on the standard of the IT education provided by IT lecturers. The quality of higher education system can be looked at from an angle of lecturers' productivity and their degree of involvement. The level of contribution, effort, and proficiency of lecturers determine the success and the quality of the education system at a high level (Saba, 2001).

The demand for the IT workforce has increased in the past decade in Sri Lanka. In 2016, there was a stable growth in all segments of the Sri Lankan IT market with a market growth of 14.7% (Sri Lanka Information Technology Report Q1, 2016). At this phase, supply against the demand is a key concern. The universities should improve their academic standards and also the number of graduating students in IT. The skill level of successful graduates must aligns with the market requirements because it does not match the economic growth (Liyanage, 2014). A larger number of vacancies were unfilled by employees with the relevant skills like in IT. The National Education Commission (2003) found that the Sri Lankan academic system failed to improve the quality and the relevance skills needed to perform well in the industry. It is time to educate the young generation to match the skills and quality adequate for the current economy.

One aspect for enhance the contribution of the academic staff would be improving the Tertiary IT education system. Ensuring JS of the lecturers could boost the quality of Tertiary education. Compared to Western countries, there is still a gap in quality in Sri Lanka's education system. Since the level of unemployment is very low in the IT discipline, (Wikipedia, 2017) there is a need to focus on IT education development in Sri Lanka.

Even though Sri Lanka has a high literacy rate, the employers' evaluation of both cognitive and attitudinal skills of graduates are mainly negative (Liyanage, 2014). It is essential to observe the reasons for this and what is lacking in Sri Lankan education system while focusing on the academics' perspective.

1.2 Problem Definition

It has been experienced that, the lecturers always discuss the size of the class in comparison to the previous batch. They tend to prefer smaller classes than crowded classes. Most of them work extra hours at their home, unlike a normal employee. Administrative burdens may also affect lecturers' performance. These are some of the reasons that made an impact on the researcher resulting in a study on this particular area.

Plenty of studies were done to find the factors that are linked to JS in various environments with different assumptions. Yapa et al. (2014) did a study on demographic factors which influence non-academic staff in Sri Lankan universities. This study analyzed main aspects that may affect JS related to government universities. No prior research has been done with the universities in this particular area for academic staff. Mostly students' satisfaction has been studied in many countries in student's perspective (Doghonadze, 2012). It is important to analyze the JS in Lecturer's perspective if our goal is an efficient graduate education system. Because they are the facilitators for knowledge buildup process in universities. One of the responsibilities of higher education providers is to produce employable graduates according to the requirements in the IT industry.

Satisfied lecturers tend to deliver better results than the unsatisfied lecturers. Doghonadze described in her survey on "University Lecturer Job Satisfaction" that "Motivated lecturer teaches well, and good teaching does contribute to good learning" (2012).

Hence it has become important to study the factors that are contributing to the JS of IT lecturers. Thus a mechanism could be developed to ensure the availability of these JS factors at a satisfactory level at all times for IT lecturers. Therefore this research is focused on exploring the factors influencing the JS of IT lecturers who are lecturing in government universities for undergraduate degree programs or above.

Sri Lankan graduates feel that knowledge acquisition from public universities is in a satisfactory level than in private universities (Ambepitiya, 2016). It is therefore obvious to analyze the study with public university lecturers as targeted population.

The research questions plan to address would be:

1. What are the important factors that contribute to the satisfaction of IT Lecturers lecturing in government universities?
2. Is there any positive or negative correlation of each factor to the JS of IT lecturers lecturing in government universities?
3. Are the IT lecturers lecturing in government universities, satisfied with their present job conditions?

1.3 Research Objectives

While the significance of JS has been widely studied, still it is important to understand the factors that affect IT lecturers in Sri Lankan universities because they are identifying their specific needs will eventually help to improve the standard of the graduate level lecture programs and it will also significantly influence the studies of Graduate students. In answering the research questions, three research objectives had been initiated. The objectives that this plan to achieve could be stated as follows:

1. Identify the JS factors influencing the IT lecturers in government universities.
2. Measure the correlation of each factor to the JS of IT lecturers in government universities.
3. Identify suitable recommendations to improve the JS of IT lecturers in government universities.

1.4 Structure of the Thesis

This thesis contains five chapters and a brief description of each chapter is as follows.

1. Chapter one (*Introduction*) would introduce the significance of the research and the background study, problem statements, and the limitations.
2. Chapter two (*Literature Review*) presents the theory and the significant previous researches associated with the topic and also some valuable conclusions identified by the researchers to get the understanding about the overall intention of the study.
3. Chapter three (*Methodology*) would discuss the conceptual framework is created to approach the objectives as mentioned in the introduction. Variable identification and preparation for the data collection would be explained. A quantitative method was applied in the data collection.
4. Chapter four (*Data Analysis*) describes the data collection approach involved. It would provide the observations and results associated with the collected data presented statistically. Then it explains the demographic distribution of the sample and some interesting statistics in determining the factors influencing lecturers' JS.
5. Chapter five (*Survey findings: discussion, recommendation, and conclusion*) - presents the interpretation of the data collected are shown in this chapter with the findings. Furthermore, the information gathered from the data analysis would be discussed with the hypothesis test. The survey questions would be answered at a glance in the conclusion. As a continuation of chapter five, recommendations are suggested for the policy creation in the future.

CHAPTER 2 - LITERATURE REVIEW

2.1 Chapter overview

This chapter aims to review and comment on previous studies and analysis related to this research topic. The literature analyzed in the chapter is a mix of old, new, academic, non-academic related articles and research, to gather an idea of JS and influencing factors.

JS is a topic that's widely used by researchers and organizations because the importance of JS is closely linked to organizational behavior attributes such as attitude, motivation, productivity, performance, leadership, conflict, moral, turnover, the level of commitment and customer (in this case IT students) satisfaction. It caters to the needs of employees at the workplace. Human Resource Management directly affects the organization's operations and effective work that can be driven by employees who are motivated by JS. Universities are producing highly-educated graduates to the public and private sector to improve its economy, which will directly affect the growth of the country. Finding of demographic factors of university staff could improve the standards of the universities by improving their JS (Yapa et al., 2014).

In Australia, it was found that the academic staff has a sustainable impact in creating talented university graduates (Coates et al., 2009). University graduates strengthen the economy of the country's future, with a growing demand for high-quality education. All professional careers require an education background from a university. Graduates qualify further as professionals by enrolling themselves in professional institutions. The Australian educational field depends heavily on the Academic staff. There is a compelling necessity to improve the approach to planning and building the academic staff (Coates et al., 2009).

Amazta and Idrisa (2011) has stated that academic staffs are the backbone for learning output and help attain educational goals. Their performance depends on the level of motivation, which would lead them to take better decisions. Many researchers have found that better management including Human Resource Management (HRM) creates high employee JS.

JS factors could be derived from either the job or job environment, relation with managers and subordinates, organizational culture and methods of management. JS of academic staff depends on a good relationship among the co-workers, promotion opportunities, working environment, and financial benefits. A quality education system is possible via government policies with the consultation of academic staff. Faculty satisfaction, perseverance, and retention have a big impact on the policy making of education and administration. The higher education structure is changing substantially over time (Sabharwal and Corley, 2009). Minorities and women are more inspired to get a higher level of occupation. Quality work of faculty would be reduced if the level of JS is low among the members. Employees spend a major part of their life in the working environment.

Scientists love their work, their main concern is the unpredictability of the future (Russo, 2012). All career paths have their own drawbacks and people have various approaches to overcome them. Although the salary is not the important factor of satisfaction for scientists (Russo, 2012), it affects satisfaction indirectly. Scientists of various countries face issues with lack of guidance and funds for their research. They seek a degree of freedom in their jobs. India, Japan, and China show a lower satisfactory level of freedom, guidance and financial perks (Russo, 2012). Scientists are mostly occupied and delighted in their studies with the given salary and benefits. This sometimes creates instability about their jobs and their future. Global recession also affects the satisfaction level of scientists. Some surveys state that JS affects based on gender and there is an inequality of the salary levels of males and females. But Russo states (2012), that men and women feel the same level of satisfaction irrespective of difference of salaries paid to them.

Peck, Fox, and Morston (1977) shown that there is a correlation between teacher motivation and student self-esteem. Lecturers play a vital role in knowledge building. To create an effective study environment, it is necessary to study the factors relating to the JS of teachers (Doghonadze, 2012).

Academics help is required to produce excellent student results. Education is concentrated on intellectual work that is interesting and positioned on substantial concepts. It requires significant cognitive and academics' engagement with deep knowledge (NSW DET, 2003). Students are likely to be more focused on their lectures and perform well when the lessons are both exciting and interesting. Willms, Friesen, and Milton (2009) recommend that productive teaching leading to better academic results from students is evident through learning activities that are necessary. There must be a positive correlation between teachers' JS and students' performance. Apart from students' involvement, motivated teachers can do better to achieve students goals because when a person feels satisfied in his/her job, that feeling of gratification will drive them to perform their best output in their respective tasks. So a study of the influencing factors can highlight an area to improve with regard JS of teachers.

Human resources are very important in any organization and it is vital to track their performance, attitude, and feelings. If employees can significantly improve the performance of an organization they can have a positive impact (Dave & Raval, 2014). Each employee is a valuable asset of a company. Therefore, we need to satisfy their needs first and efficiently utilize the human resource. The two basic categories of JS are effective JS and cognitive JS. The feelings employees have about their job itself is known as effective JS. Cognitive job JS refers to individual components such as salary, benefits, workload, and facilities.

Employees in the USA feel that compensation or pay is what mostly affects the level of satisfaction. They give second preference to job security and the opportunity to use skills or abilities (Society for Human Resource Management, 2013). Apart from the above factors, there are a few more contributors; relationship with the immediate supervisor, the overall benefits package, the organization's financial stability and the

work itself. Relationship with the coworkers and supervisors is a significant fact in JS. All employees must be treated in a fair manner within the same company and everyone should have good communication among the co-workers.

When considering HR professionals, they always use their talent management to overcome challenges on HR problems. When there are more expectations in the job market, people expect more and seek other opportunities. But organizations do not always increase the salary whenever an employee demands it but, they use the different yardsticks called reward strategies. Experts suggest that this method could be used to encourage employees.

2.2 Job Satisfaction

JS describes an individual's general attitudes towards his or her job. There are several factors that can influence a person's level of JS. Some of these factors include the job itself, the level of pay, fringe benefits, the promotion system within a company, the quality of the working conditions, working group relationships, job security, and impartial reward schemes. JS within the organization will ensure positive outcomes with regard to productivity, turnover, absenteeism, customer satisfaction, organizational citizenship behavior, workplace misbehavior and the level of commitment. JS define a positive feeling about the employment, obtained from an assessment of its characteristic.

Kondalkar (2007) stated some of the important factors that define JS of the employees in the organizations, such as work condition, pay and promotion policy, supportive working conditions, work groups, and supervision. JS is an important factor to create healthy relationships between management and employees. The importance of JS is obvious.

The term JS refers to the attitudes and emotional level people have about the employment. Job indicates that JS connected with positive attitudes towards the job

(Armstrong, 2006). According to Ozdemir (2009), the influencing factors of JS are opportunities, stress, leadership, work standards, fair rewarding and adequate authority.

“The traditional model of JS focuses on all the feelings that an individual has about his/her job” (Sarwar & Abugre 2013). However, what makes a job satisfying or dissatisfying is not limited to the nature of the job but it also depends on the individual’s perception, attitude, and expectations towards the job itself (Hong Lu, et al 2005). Spector (1997) summarized the following facets of JS: appreciation, communication, co-workers, fringe benefits, job conditions, nature of the work itself, the nature of the organization itself, an organization’s policies and procedures, pay, personal growth, promotion, promotion opportunities, recognition, security and supervision (Hong Lu, et al. 2005). Luthans (2011) describes the JS is a result of employees’ perception of how well facilities are provided for their job. Further, he defines that comprehensive definition of JS as involving cognitive, effective, and evaluative reactions or attitudes and states it is “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience”.

Different researchers indicated different factors influencing JS. It refers to employee’s satisfaction with the general aspects of work situation such as pay, supervision, the firm (in this case the university) as a whole, the job itself, fellow employees and prospects of advancement. (Richardson, 1992, in Noordin 2009). This is an indication of the presence of job dissatisfaction and these may lead to negative consequences such as low productivity, voluntary turnover (among high performers), voluntary absenteeism, tardiness, apathy, low job performance, etc (Noordin, 2009).

The work of Maslow (Maslow, 1954) has played a vital role in developing and shaping many thoughts in organizational behavior including JS. (Sarwar & Abugre 2013). Thus JS has been defined and measured as a global construct and as a concept with multi-dimensions or ‘facets’ (Sarwar & Abugre 2013). Figure 2.1a shows Maslow's hierarchy of needs.

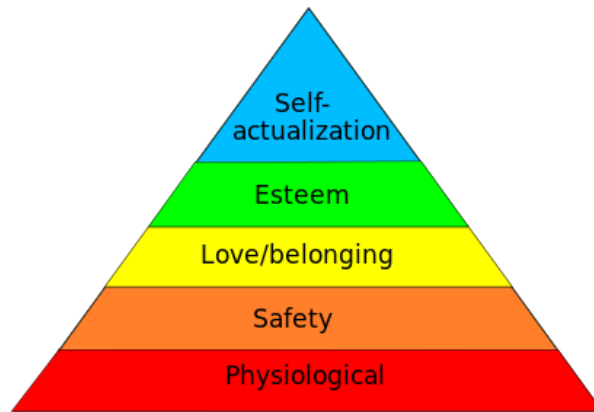


Figure 2.1a: Maslow's hierarchy of needs

In contrast to the traditional view, Herzberg and Mausner (1959) formulated the two-factor theory of JS and postulated that satisfaction and dissatisfaction were two separate, and sometimes even unrelated phenomena. Intrinsic factors which they named 'motivators' (i.e. factors intrinsic to the nature and experience of doing work) were found to be job 'satisfiers' and included: achievement, recognition, work itself and responsibility.

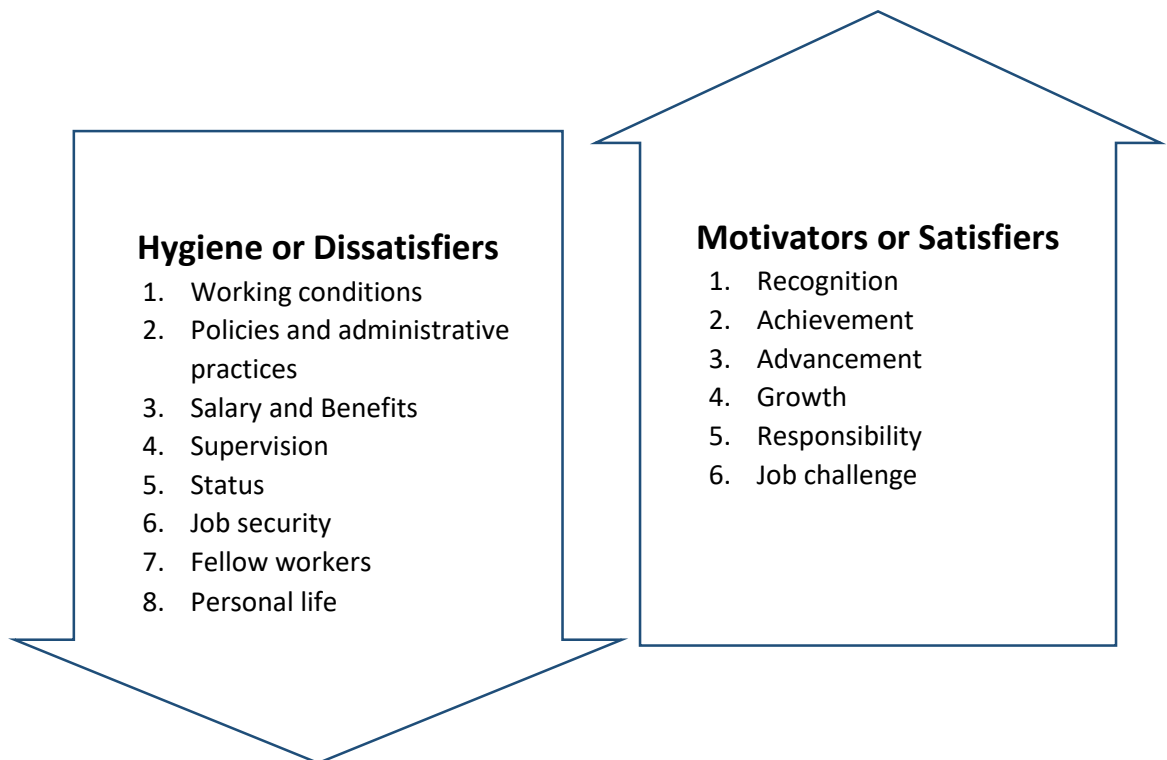


Figure 2.1b: Herzberg two factor theory

Figure 2.1b shows the Herzberg's two factor theory. Extrinsic factors which they named 'hygiene' factors were found to be job 'dissatisfiers' and included: company policy, administration, supervision, salary, interpersonal relations and working conditions.

There are also different theories that describe the concept of JS such as Discrepancy theory by Locke (1969) and equity theory by Mowday (1992). According to discrepancy theory the difference between the actual outcome and expected outcome tells us about the satisfaction level of the employee, if the actual result is greater than the predicted one, the employees would be more satisfied with their job and vice versa. According to equity theory employees associate their input/output with other employees. If the ratio of one employee equals to the other, the individual would be happier with his/her job. Fairness has been associated with satisfaction and unfairness with dissatisfaction. The work output of human resources subjected to their satisfaction level and satisfied employees remain within the organization for a longer time, while the productivity would be low if dissatisfaction causes, an individual wait for the opportunity to leave the organization. So there are several factors that influence the work satisfaction level of the academic staff (Saba 2011). Kondalkar (2007) describes the study of JS as one of the important factors in the study of human behavior in an organization. JS focuses on an employee's attitude towards his job.

2.3 Facility & Pay

If an IT lecturer is to obtain full satisfaction in the university there must be adequate facilities, good instructional materials, and a proper environment. Luthans (2011) described the amount of financial remuneration that is received and the degree to which this is viewed as equitable to that of others in the organization.

The benefits are of varied nature since remuneration, perks and rewards are all associated with the JS of employees. Salary scales and career advancement policy of

the organization must be just, unambiguous and it should be in line with the prevalent industry norms and employee expectations. Employee salary should ensure him/her the social status and be able to fulfill the expectations. Individuals should be confident that salary administration and promotion policy are just and fair. Apart from financial benefits, organizations must provide adequate salary and non-financial benefits so that they would be motivated and display the high level of satisfaction (Kondalkar 2007).

Pay is associated with global satisfaction and even more closely with the facet of pay satisfaction. As money is important to individuals, pay is an important factor affecting overall JS. University lecturers seem not to be dependent on salary (Russo, 2012). Globally scientists are tolerating modest salaries and benefits easily. Europe and North American academics are paid higher than their Asian counterparts. JS levels of Asian Academics are lower than that of other countries.

2.4 Opportunities (Promotion & Scholarly Pursuits)

Promotions are an incentive tools and it is a way of rewarding the workers to reach the organizational pre-defined goals. It aligns the organizational goals with personal goals (Lazear & Rosen, 1981). The promotion has its importance since the fact that it enables a significant adjustment in the remuneration package of an employee (Murphy, 1985). It follows a defined pattern which is outlined in the employment bond (Doeringer & Piore, 1971).

The promotion shows an employee in the external environment and appreciates his worth in the internal environment of the organization. According to Carmichael (1983) promotion increases the production of an organization when an employee progress the career ladder on the basis of his seniority and performance. The employees who are dissatisfied with the opportunity given for promotion show a higher intention to leave the organization. Pergamit and Veum (1989) shown that greater the chances of promotion, the higher the JS of employees. When employees perceive that there are

good chances for promotion they feel satisfied with their job prospects in the organization.

As suggested by Kosteas “promotion expectations also affect JS, workers who believe a promotion is possible in the next two-year report higher JS” (Saba 2011). Academics are more motivated and committed to deliver the lecture well, when they satisfied if promotional opportunities are available to them.

Employees may feel that poor working conditions will only provoke negative performance since their jobs are mentally and physically demanding (Parvin and Kabir 2011). Creating enjoyable working environments may be helpful in making the employee to avoid being dissatisfied in their jobs.

Employees require work environments that support personal comfort in order to do a proper job. Studies demonstrate that employees prefer physical surroundings that have relatively modern facilities, and have adequate tools and equipment (Robbins & Langton, 2007).

2.5 Attitude of supervisor

An immediate supervisor’s behavior is an important factor in JS (Lumley, et al 2011). Employees’ gratification increases when the direct supervisor is understanding, friendly, appreciative for good performance, pay attention to employees’ feelings and shows caring to them (Robbins & Langton 2007). The nature of the work may be influenced by the supervisor’s behavior. The nature of work satisfaction is defined as the employees’ satisfaction with the type of work that is handled (Lumley, et al 2011).

According to Luthans (2011) the capacity of the supervisor to deliver technical assistance and emotional support influences JS. The immediate supervisor support is important in organizational modifications. Although the support of a supervisor is not crucial for satisfaction, it has a positive impact on satisfaction (Parvin & Kabir 2011).

Kondalkar (2007) describes that supervision was one of the moderate factors that affected JS. Supervisors should be helpful by giving advice, guidance, and problem-solving. They must take care of the subordinates and their needs in both on a personal and official level. Such supervision improves the morale and JS of employees. The concept of supervision has changed. The group prefers more freedom in relation to working hours, time management, frequent breaks between working hours and autonomy as long as the job is completed on time. Satisfaction with superior dimension deals with the extent to which a worker is satisfied with the information or guidelines provided by the superior (Alam & Mohammad, 2011).

2.6 Institution (University & Administration)

The concept of a work group and work teams are more prevalent today. An organization of highly talented employees with a same goal will be able to function efficiently if they are friendly and co-operative. The employees serves as a source of support, comfort, advice and help to other individual employee. A group supportive employees make the job more enjoyable. The factor of administration support is essential for JS. If the reverse conditions prevail, the workers may not be able to get together with each other and the JS will be affected (Kondalkar, 2007).

Administrative staff are important to lecturers to support with their routine as policies of a university are significant for the lecturers. They are bound by the rules of the university. And hence the policy structure plays a vital role in JS of lecturers.

Employment tries to fulfill an individual's social need. Therefore, having friendly and supportive staff may lead to increased JS. According to the study conducted it was identified that management & friendly staff relationships influence to the level of JS. (Parvin & Kabir, 2011). Workers in employment obtain benefits in addition to the remuneration they receive from the employer.

CHAPTER 3 – METHODOLOGY

3.1 Chapter overview

This chapter presents the overall research method used in the study for the achievement of desired research objectives mentioned in the chapter 1. The conceptual framework was designed with the use of existing literature. As part of the methodology, variable identification, Research Instrument, preparation for the data collection, population, sample and data collection method would be explained. The impact of JS factors was measured by the online questionnaire. It was prepared and distributed to the respondents online. The data collection techniques and methods used to analyze the data presented are in the under mentioned sections.

3.2 Research design

The quantitative method was used, to identify the factors which influence the JS of IT lecturers in the public universities. Before conducting the online questionnaire survey, JS factors influence JS of IT lecturers were confirmed by interviewing the IT lecturers. The questionnaire checked with IT lecturers before sharing on the internet. The overall research method design is shown in the figure 3.2.1.

3.2.1 Research method

- I. The first step of the overall research method is of the research problem identification.
- II. In the second step literature survey was carried out to find the JS factors this is known as the primary data of the research, the purpose of the literature survey is to find the already identified factors in the academics' job satisfaction.
- III. Third step is to figure out the mostly analyzed factors and it has been checked by the IT lecturers in the interview conducted. A conceptual framework developed based on the hypotheses formulated regards to the factors identified

- IV. The online questionnaire was created to test the hypotheses in the fourth step.
- V. Fifth step was conducting the online survey form IT lecturers by sharing the questionnaire link through their email.
- VI. As the sixth step the responses collected by waiting for a substantial period by ensuring the adequateness of the numbers of sample.
- VII. Data analysis was done in the seventh part by using IBM SPSS & Ms Exel. In this step the survey responses were analyzed to filter out the influential factors and the conceptual framework was validated with the survey findings.
- VIII. The last step carried out to give the discussion conclusion with the recommendations.

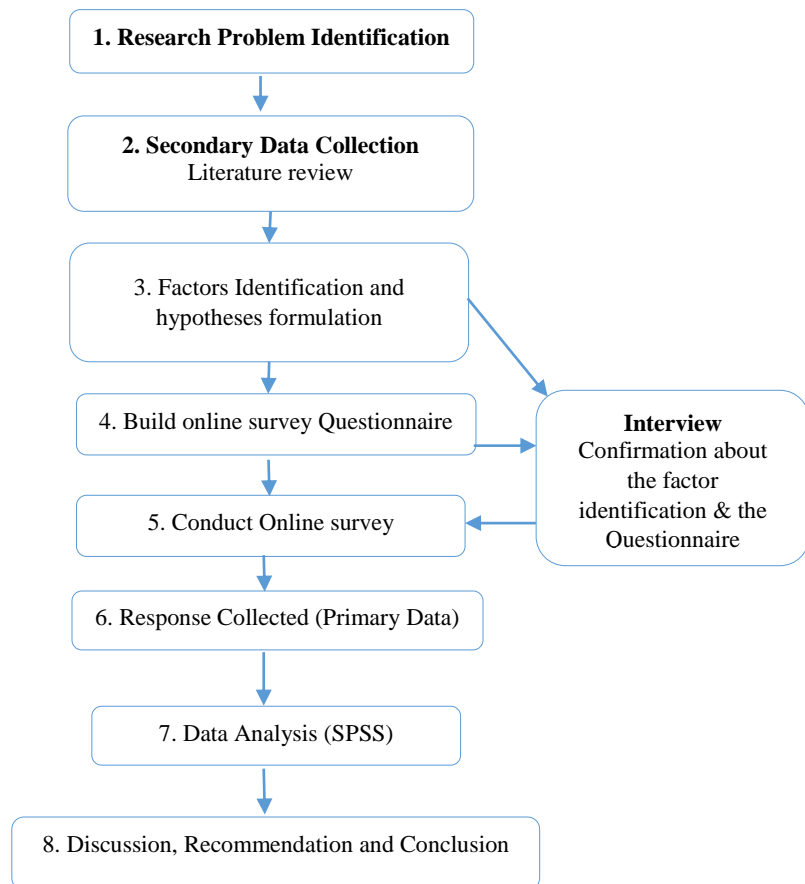


Figure 3.2.1: Research method

3.2.2 Variables

A literature survey was carried out by exploring various literature sources connected to JS, and most of them were related to the academic field. JS is the dependent variable of this research. There are six independent variables (also known as factors) identified through the literature survey of different literature sources. Sub factors which are very much interrelated to each other were combined to reduce the number of questions. e.g., the “Facilities & Salary” and “Workload & Life balance”. Facility and pay are external factors which were perceived as important factors of JS from the interviews. Same time it was identified that Quality of students and Institution are also affecting the lecturers’ JS. The lecturers interviewed mentioned regarding the administration and management regulation affecting their JS. The researcher combined the above factors into a single factor called the Institution factor. The figure 3.2.2 will illustrate the conceptual framework of the research and the factors involved in the study.

3.2.2 Conceptual framework

The conceptual framework of the study is simple as mentioned in the Figure 3.2.2 to find the relationship between the 6 identified factors with JS of the IT lecturers.

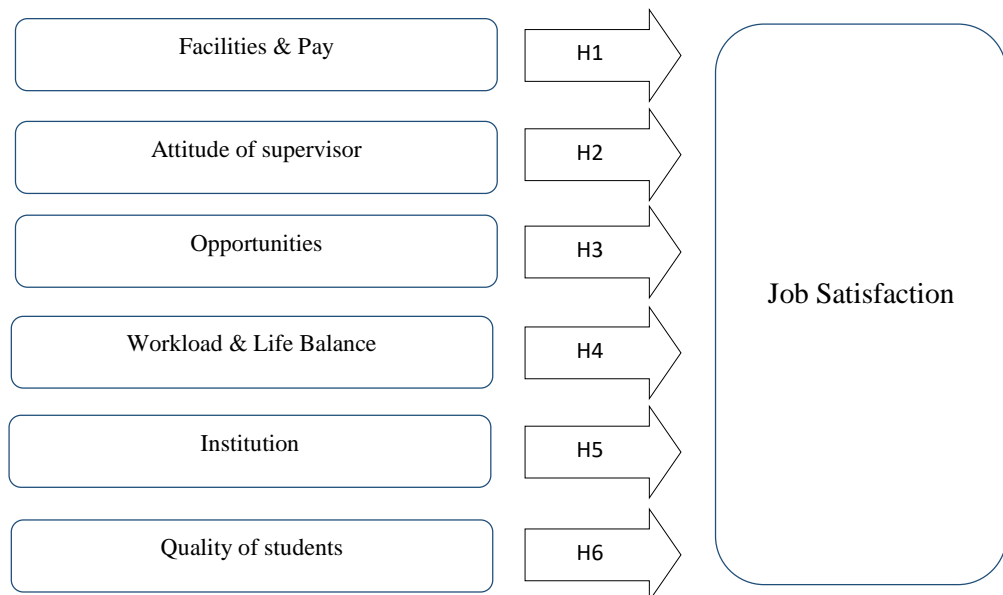


Figure 3.2.2: Conceptual framework

Following research hypothesis were tested, and analyzed with the discussion.

H1: There is a significant relationship between Facilities & Pay and IT lecturers' JS.

H2: There is a significant relationship between Attitude of supervisor and IT lecturers' JS.

H3: There is a significant relationship between Opportunities and IT lecturers' JS.

H4: There is a significant relationship between Workload & Life Balance and IT lecturers' JS.

H5: There is a significant relationship between Institution and IT lecturers' JS.

H6: There is a significant relationship between Quality of students and IT lecturers' JS.

The six hypotheses were tested and presented in chapter four.

3.3 Survey Method

3.3.1 Literature survey (Secondary Data)

The most discussed factors that affect the academic staff in different types of researches and other articles were identified. These were filtered and confirmed with IT lecturers during the interviews conducted.

3.3.2 Interview

Two lecturers from different universities were interviewed with unstructured questions in the beginning to identify the factors influencing the IT lecturers. The interviews were conducted over the phone with prior permission. The questions were asked to confirm the factors affecting to their JS with the identified factors in literature survey.

3.3.3 Random online survey within the study population (Primary Data)

However, the random survey method could be considered as a reliable approach for this study. The interview was probably not the most suitable method. Perhaps the academic staff might not have given a frank response. An online questionnaire survey was selected to approach the data collection. Due to the large sample size, interviewing a large number of people is not practical, and hence an online survey was considered.

Physical visits to the universities and distributing hard copy surveys and personally collecting the samples was not a feasible way in this research. This was due to the unavailability of the lecturers in the universities at times as some lecturers were visiting other universities and attending conferences overseas. Distributing and collecting the questionnaire was rather difficult within the given time frame and one was not sure if answers would be given to all the questions in the questionnaire. The online survey was better because lecturers are busy in the universities and it is difficult for them to read the question and answer them during work hours. They would response to an online survey when they were not busy, on their smart devices. The response rate is about ten times advanced with the online survey and data can be collected within minutes (Stiles, 2013). Generally, IT lecturers prefer a technical approach rather than the traditional method. “Typeform” online application was used to prepare the online survey.

3.4 Research Instrument

3.4.1 Questionnaire Structure

The total result of the research depended on the questionnaire. This is the instrument that was going to capture the feedback and opinion from the research IT lecturers. It should be statistically evaluated to make a decision. If we need to collect the valuable data from the responders, the quality of the questionnaire should be up to a certain standard. The questions should be easily understood by those who are answering them.

There were two main parts of the questionnaire. The first part contained 7 questions which were structured to identify the demographic information from the responders. The second part of the questionnaire contained 29 questions that were basically categorized under the main 6 factors which the researcher meant are the independent variables. These 29 questions were aligned with a five-point Likert scale. The targeted responders were IT lecturers in public universities. So the content of the questions was well defined and these were asked in a manner to get the answers related to the academic field. Questions were formatted and discussed with the lecturers in the same field to confirm that the questions were clearly understood. Each variable was tested with the minimum of 3 questions.

3.4.2 Likert scale question list

The table 3.4.2 shows the Likert scale questions shared online questionnaire. Questions asked to check the 6 independent variables and JS.

	Variable Name (factor)	Sub Factor	Questions
1	1) <i>Job Satisfaction (dependent variable)</i>		1. I am engaged in an exciting and interesting career.
2			2. I feel as my social status in public is higher than that of someone in the same academic level, but working different sector/ industry such as computer software industry.
3			3. I am clear about my responsibilities and targets in my career
4			4. I can do my work in my own way to the best of my abilities.
5	2) <i>Facilities & Pay (independent variable)</i>	<i>Workplace and Facilities</i>	1. I am satisfied with the academic resources and materials which I have been provided with, in order to perform my routine professional duties effectively.
6			2. I am satisfied with the facilities and workplace environment which I have been provided with, by my university faculty.
7		<i>Salary, Compensati</i>	3. I accept my salary is fair for my services when compared with the others in same level at other similar establishments.

8		<i>ons and benefits</i>	4. I believe the benefits such as health care aid, pension schemes, vehicle tax exemptions etc. to be improved apart from salary.
9	3) <i>Attitude of supervisor (independent variable)</i>		1. My superiors guide me in an effective manner
10			2. My superiors are open for my suggestions when implementing my work plans.
11			3. My superiors aren't usually hesitant to help me for further researches.
12	4) <i>Opportunities (independent variable)</i>	<i>Promotion</i>	1. Career advancements such as promotions are based on performances, there is no discriminations.
13			2. Time gaps between career advancements such as promotions are too long when compared with the others in same level at other similar establishments.
14		<i>Scholarly Pursuits</i>	3. I am continuously getting scholarship opportunities to pursue further developments in my career.
15			4. I am happy about the scholarship opportunities I get in this academic field
16	5) <i>Workload & Life Balance (independent variable)</i>	<i>Workload</i>	1. I feel emotionally good about the current workload I have and it is manageable
17			2. My department has sufficient staffs to do the works well and on time
18			3. I usually prefer classes with less students so that I don't have to put extra effort on the program.
19		<i>Life balance</i>	4. I have missed few personal family functions due to the tight schedules.
20			5. Most of the time I take my balance office (university) work home and do it in the night
21	6) <i>Institution (independent variable)</i>	<i>University</i>	1. I am proud to be an employee of this university.
22			2. I respect and adhere to the rules and policies of my university
23			3. Other faculty staff are cooperative and helpful in common works assigned among us.
24		<i>Administration</i>	4. Administrative staff are very helpful for our routine work
25			5. Management is not aware of our exact needs when I'm trying to implement some innovation.
26	7) <i>Quality of students (independent variable)</i>		6. The students who are selected for the higher studies are willing and actively participating in the lecture.
27			7. The student selection criteria need to be improved in government universities.
28			8. I believe I lecture to clever students

* The full questionnaire is attached in the Appendix.

Table1 3.4.2 Likert scale question list

3.5 Population

IT lecturers in public universities were the selected population for this research. There are 14 public universities which are providing IT degrees in Sri Lanka. It was difficult to obtain the number of IT lecturer in the universities. The number of IT lecturers were identified by visiting the official website of each university. However, it took a long time to find the number of lecturers who are conducting IT or computer studies leading to a degree program or above, as some universities are providing certificate and diploma level courses. It was a challenge for the researcher to email and call each university registrar, and confirm the number of IT lecturers in their university. This was because they have different faculties and campuses under each university.

There were 248 IT lecturers identified who are lecturing in the 14 universities mentioned below. IT lecturers involved in the survey are not in any particular order given below

1. University of Colombo
2. University of Peradeniya
3. University of Sri Jayewardenepura
4. University of Kelaniya
5. University of Moratuwa
6. University of Jaffna
7. University of Ruhuna
8. The Open University of Sri Lanka
9. Eastern University, Sri Lanka
10. South Eastern University of Sri Lanka
11. Rajarata University of Sri Lanka
12. Sabaragamuwa University of Sri Lanka
13. Wayamba University of Sri Lanka
14. Uva Wellassa University

3.6 Sample Size

For the population of 248, the research would involve a sample of 151 for statistically substantial outcomes, with the industry standard of 5% margin of error at a 95% confidence level, but it was decided to conduct the data collection with an accessible sample because of the most provocative nature of this research. The survey sample was obtained from 8 Universities, most of them have a separate faculty for IT and/or Computer Science subjects. Ultimately 90 responses were obtained through the online survey and 2 samples were rejected by cleaning the data. The collected sample had 8.3% margin of error at a 95% confidence level.

3.7 Data Collection

The expected sample size was 100 to find the impact of the JS factors and 90 responses were obtained through the online survey and the valid samples were 88. The structured questionnaire was sent to the study population through the email address mentioned on the official websites of each lecturer. Distributing the questionnaire through social media was not used so as to avoid the involvement of non-targeted people in the survey. Figure 3 interprets the number of data collected in 42 days starting from 23rd of January 2017 to 5th March 2017. The response progress went down at the start of February, Therefore the questionnaires were sent once again to the lecturers through email. As of the beginning of March, there was no response at all. The graph declined from 28th of February. It was decided to stop the survey on 5th of March 2017.

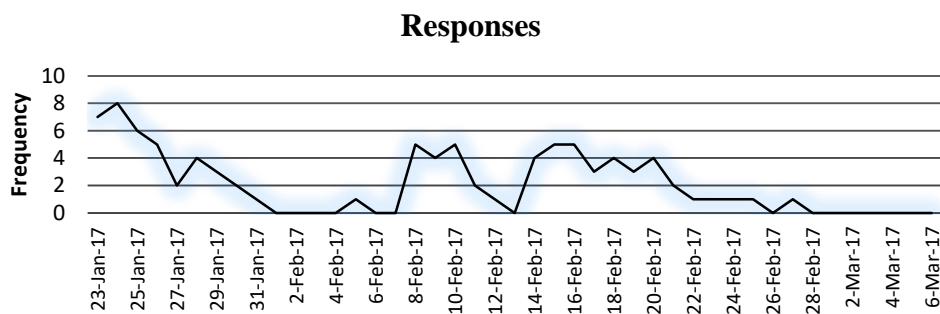


Figure 3.7: Response –Data collected

CHAPTER 4 - DATA ANALYSIS

4.1 Chapter overview

This chapter talks about the statistical approach of analyzing the data collected through the survey. Most of the analysis was done with SPSS software. The data collected was processed and analyzed with the mean value to assess the level of JS. In the preliminary stage, the reliability test was conducted by using KMO and Bartlett's Test of Sphericity and test of communalities. On the validating stage, the Cronbach's alpha coefficient method was used. Correlation analysis is used to find out the relationship between the variables and their relative strength. ANOVA was used to further talk about the null hypothesis rejection. Demographic information was analyzed by graphs and tables with the interpretation. The graphs and tables were created by frequency analysis and descriptive analysis options in SPSS software. Figure 4.1 shows the data analysis flow of the research.

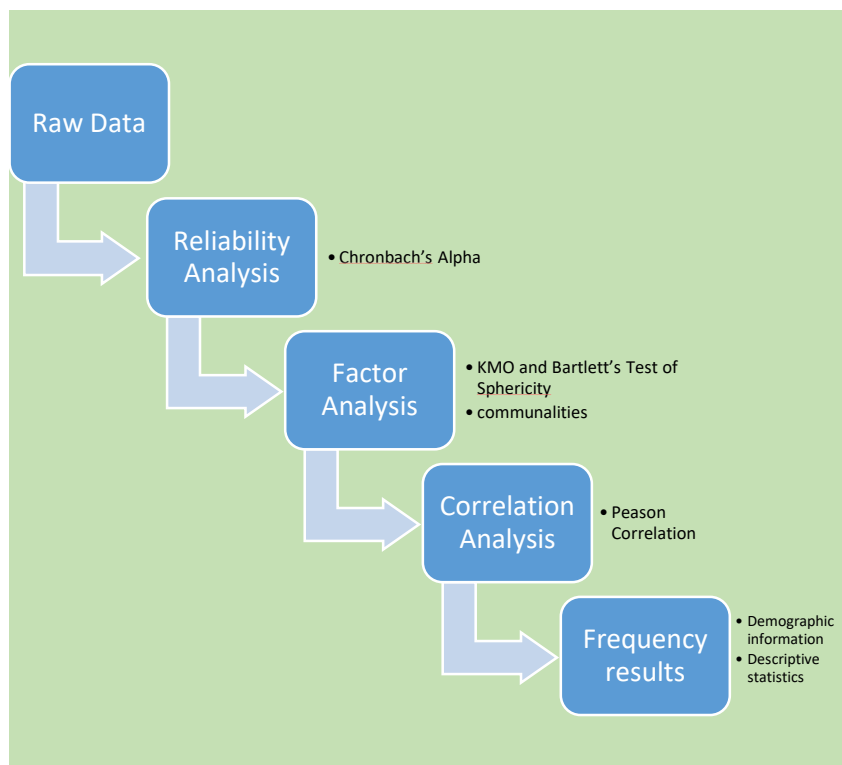


Figure 4.1 : Data Analysis flow

4.2 Reliability analysis

4.2.1 Cronbach's Alpha analysis

It is necessary to make sure the data set is reliable and adequately consistent before analyzing. The internal consistency measure was carried out by the Cronbach's Alpha analysis. This is one of the methods used to identify the reliability of the data set. This coefficient measures how well a set of variables measure a single construct (Smith, 2005). Values of Cronbach's coefficient Alpha tends to 0 indicate no or little correlation between the variables or items that make up a variable, whilst Cronbach's coefficient Alpha value close to 1 indicate high inter-item correlations. Nunnally (1978) preferred above 0.7 is an acceptable value for the internal consistency between the factors. The table 4.2.1a shows that all the independent variables have a high Cronbach's Alpha (.894) for the 29 questions asked in the survey. This shows that the data has a higher degree of consistency and reliability compared to other advanced analyses. As was proved by the results, there was no value below 0.7 which was the base value for consistency. The table 4.2.1b shows the number of different samples used in the survey.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.894	.903	29

Table 4.2.1a. Reliability Statistics

Case Processing Summary			
		N	%
Cases	Valid	88	100.0
	Excluded ^a	0	.0
	Total	88	100.0
a. List wise deletion based on all variables in the procedure.			

Table 4.2.1b: Case Processing Summary

4.2.2 Cronbach's Alpha if items deleted.

The Table 4.2.2 shows the value of Cronbach's alpha after a question is deleted from the questionnaire. It is a concern when we get low Cronbach's alpha value, but Table 4.2.2 shows a high value of Cronbach's alpha for all the questions. And it was important to keep the questions for other analysis as well.

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Satisfied with the Facilities & Pay	108.68	217.944	.628	.889
I am engaged in an exciting and interesting career as an IT Lecturer	108.05	212.917	.599	.888
I am clear about my responsibilities and target in my career	108.03	218.102	.604	.889
I feel as my public social status is higher than of someone on the same educational level, but working different sector/ industry.	108.40	219.829	.444	.891
I can do my work in my own way to the best of my abilities.	107.99	220.931	.558	.890
I am satisfied with the academic resources and materials which I have been provided with, in order to perform my routine professional duties effectively.	108.44	218.525	.522	.890
I am satisfied with the facilities and workplace environment which I have been provided with, by my university faculty.	108.56	214.939	.606	.888
I accept my salary is fair for my services when compared with the others in same level at other similar establishments.	109.18	222.610	.279	.895
I believe the benefits such as health care aid, pension schemes, vehicle tax exemptions, etc. to be improved apart from salary.	109.60	227.920	.148	.896
My superiors guide me in an effective manner.	108.64	220.188	.437	.891
My superiors are open to my suggestions when implementing work plans.	108.64	217.590	.542	.890
My superiors aren't usually hesitant to help me for further researches.	108.55	222.803	.356	.893
Career advancements such as promotions are based on performances, there is no any discrimination.	108.44	219.284	.438	.891
Time gaps between career advancements such as promotions are too long when compared with the others in same level at other similar establishments.	109.67	225.189	.266	.894
I am happy about the scholarship opportunities I get in this academic field.	109.01	216.126	.479	.891
I am continuously getting scholarship opportunities to pursue further developments in my career.	109.40	215.162	.576	.889
I feel emotionally good about the current workload I have and it is manageable	109.14	216.924	.512	.890
My department has enough staff to do its work well and on time.	109.49	216.919	.491	.890
I usually prefer classes with less students so that I don't have to put extra effort on the program.	109.25	230.006	.061	.899

Cronbach's Alpha if items deleted (Table 4.2.2 Continued).

I have missed few personal, family occasions due to the tight schedules.	109.68	224.380	.283	.894
Most of the time I take my incomplete office (university) work to homes and do it in the night.	110.00	227.264	.154	.897
I am proud to be an employee of this university.	107.84	216.434	.666	.888
I respect and adhere to the rules and policies of my university	107.70	223.176	.431	.892
Other faculty staff are cooperative and helpful in common works assigned among us.	108.33	221.534	.474	.891
Administrative (non-academic) staff are very helpful for our routine work.	108.84	223.745	.275	.894
Management do not aware of our exact needs when I'm trying to implement some innovation.	109.45	223.331	.327	.893
The students who are selected for the higher studies are willingly and actively participating in the lecture.	108.80	223.268	.324	.893
The student selection criteria need to be improved in government universities.	109.70	229.084	.128	.896
I believe I lecture for clever students.	109.10	230.829	.033	.899
Most of my students are very obedient.	108.47	223.746	.410	.892

Table 4.2.2 Cronbach's alpha value, if a question was deleted

4.3 Validating the data

4.3.1 Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin (KMO) test measures the compatibility of your data for Factor Analysis. This method measures sampling appropriateness for each variable in the whole research model. The statistic is a measure of the proportion of variance among variables that might be common variance. The lesser the proportion, more suitable the data is to Factor Analysis. The Bartlett's test associates the detected correlation matrix to the identity matrix and checks the redundancy among the variables.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy.		.649
Bartlett's Test of Sphericity	Approx. Chi-Square	204.803
	Df	21
	Sig.	.000

Table 4.3.1: KMO and Bartlett's Test

In most educational and commercial researches, KMO & Bartlett's tests take an important place to measure the adequateness of the sample. World Accepted KMO is greater than 0.6 and Bartlett's Test of Sphericity should be less than 0.05 (Sriram, 2012). Table 4.3.1 shows, the KMO test value in this study, was 0.649 and Bartlett's Test of Sphericity outcome was .0005, therefore, it shows the high applicability of factor analysis.

4.3.2 Communalities

Communalities show the variance of extracting components. If the communality is a very low value or less than 0.5, the item is not related to all the factors in the study. This may be the effect of a poorly designed questionnaire, in other words, the responders found it difficult to understand the questions made under the factor. After collecting responses from the responders, it was observed that one lecturer felt that, some question were unclear. Therefore the communalities were carried out to confirm the understandability of the questions. Table 4.3.2 shows the extraction values of all factors were higher than 0.6, therefore the questionnaire was understood by the participants.

Items	Initial	Extraction
Job Satisfaction	1.000	.771
Satisfied with the Facilities & Pay	1.000	.741
Satisfied with the Attitude of supervisor	1.000	.761
Satisfied with the Opportunities	1.000	.840
Satisfied with the Workload & Life Balance	1.000	.641
Satisfied with the Institution	1.000	.621
Satisfied with the Quality of students	1.000	.697

Table 4.3.2: Extraction Method: Principal Component Analysis.

4.4 Correlation analysis

Correlation method is used to determine the linear association between two variables giving a value somewhere between +1 and -1 inclusive (Hannagan 1997). In the research, all 6 independent variables and the dependent variable were tested to find the internal linear relationship. Values closer to zero are a sign of a weak relationship while values closer to +1 indicate a strong positive correlation between the two factors. Values of r closer to -1 indicated a strong negative correlation between the two factors measured. Table 4.4 shows the r -values with interpretation.

r-value	Interpretation
0.0 to 0.29	Negligible or little correlation
0.3 to 0.49	Low correlation
0.5 to 0.69	Moderate or marked correlation
0.7 to 0.89	High correlation
0.9 to 1.00	Very high correlation

Table 4.4: Guildford's rule of thumb correlation coefficient interpretation (Guildford, 1973)

Table 4.2 shows the coefficient of correlation between all the identified variables. The association between the total JSS with Facilities & Pay was significant at $r = .644$. As suggested in Chapter 2, IT lecturers also have a linear relationship with their Facilities & pay. This denotes that payment and the facilities are directly affecting the JS of IT lecturers. The relationship between the JS and Institution factor was significant with the $r = .582$. Very few studies have suggested that there is a linear relationship between JS and Institution. The Institution factor was tested with two dimensions, one was university and the other was administration. Five questions were used to test the factor in the questionnaire.

Correlations								
Variables		Job Satisfaction	Facilities & Pay	Attitude of supervisor	Opportunities	Workload & Life Balance	Institution	Quality of students
Job Satisfaction	Pearson Correlation	1	.664**	.252*	.386**	-.269*	.582**	.226*
	Sig. (2-tailed)		.000	.018	.000	.011	.000	.034
Facilities & Pay	Pearson Correlation		1	.162	.159	-.200	.485**	-.036
	Sig. (2-tailed)			.133	.140	.061	.000	.738
Attitudes of supervisor	Pearson Correlation			1	.748**	-.074	.128	.224*
	Sig. (2-tailed)				.000	.494	.233	.036
Opportunities	Pearson Correlation				1	-.159	.241*	.320**
	Sig. (2-tailed)					.139	.024	.002
Workload & Life Balance	Pearson Correlation					1	.245*	.054
	Sig. (2-tailed)						.021	.620
Institution	Pearson Correlation						1	.285**
	Sig. (2-tailed)							.007
Quality of students	Pearson Correlation							1
	Sig. (2-tailed)							
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								

Table 4.4.1: Pearson correlations

Attitude of supervisor and JS was negligibly correlated at $r = .252$, $p = .018$. The opportunities and JS show a low correlation with the r -value of .386. However, in the interview, it was suggested by the IT lecturers that they really depend on the opportunities provided by the university. Those are collaborations with foreign universities, promotions, scholarship opportunities and conference participations. There is a high correlation obtained between Attitude of supervisors and Institution at $r = .748$. IT lecturers perceive that they feel the same effect on attitude of the supervisor and the Institution factors, or both are giving the same level of satisfaction for the lecturers.

Workload and Life balance was negatively correlated with all the other variables with a very small r value. This indicates that the JS increases with the workload decrease.

Students' quality was negligibly correlated with JS. So we can say that lecturers are not really affected by the poor quality of students in government universities. As we know the students who are selected to the universities are processed under Z-score method, which is a really perfect method to filter the quality students. The researcher might have found a different result if the survey was done with private universities as well. The Pearson correlations were calculated between the variables and the result shows the following:

The **Facilities & Pay** (F) and JS are positively correlated at $r = .664$ ($p < 0.01$).

The **Institution** (I) and JS are positively correlated at $r = .582$ ($p < 0.01$).

The **Facilities & Pay** (F) and **Quality of students** (Q) are positively correlated at $r = .738$ ($p < 0.01$).

The **Attitude of supervisor** (S) and **Opportunities** (O) are positively correlated at $r = .748$ ($p < 0.01$).

From the Correlation analysis, the arguments below were confirmed. The same result obtained through ANOVA method is attached in the appendices.

H1	There is a significant relationship between Facilities & Pay and IT lecturers' JS	Confirmed
H2	There is a significant relationship between Attitude of supervisor and IT lecturers' JS	Not Confirmed
H3	There is a significant relationship between Opportunities and IT lecturers' JS	Confirmed
H4	There is a significant relationship between Workload & Life Balance and IT lecturers' JS.	Not Confirmed
H5	There is a significant relationship between Institution and IT lecturers' JS	Confirmed
H6	There is a significant relationship between Quality of students and IT lecturers' JS	Not Confirmed

Table 4.4.1.a: Hypothesis confirmation

4.5 Frequency results (Demographic Information)

4.5.1 Gender

The table 4.5.1 shows gender vice JS. The current population in Sri Lanka contains a 49.3% male and 50.7% female (Sri Lanka Population 2017), but the population involved in the study is very narrow, that is IT lecturers who lecture only in public universities. 56.8% of the responses were from males and 43.2% of the responses were from females.

	Frequency	Percent %	Valid Percent	Cumulative Percent
Female	38	43.2	43.2	43.2
Male	50	56.8	56.8	100.0
Total	88	100.0	100.0	

Table 4.5.1 Gender vice JS

SLASSCOM found “The female participation of the workforce in 2013 is 29.0%” for the ICT field. The results shown in the research highly contrasts with SLASSCOM’s data, the reason was surveyed participants being from a categorized area. And it might be, that females were willing to participate in surveys than males. Anyway, the survey was conducted without any gender bias.

4.5.2 Academic rank

53.4% of the responses obtained were from senior lecturers. The population had only two professors in the survey. 25% of the responders were in their probationary period. This was a random survey. The figure 4.5.2 reflects the IT lecturers’ rank for the population.

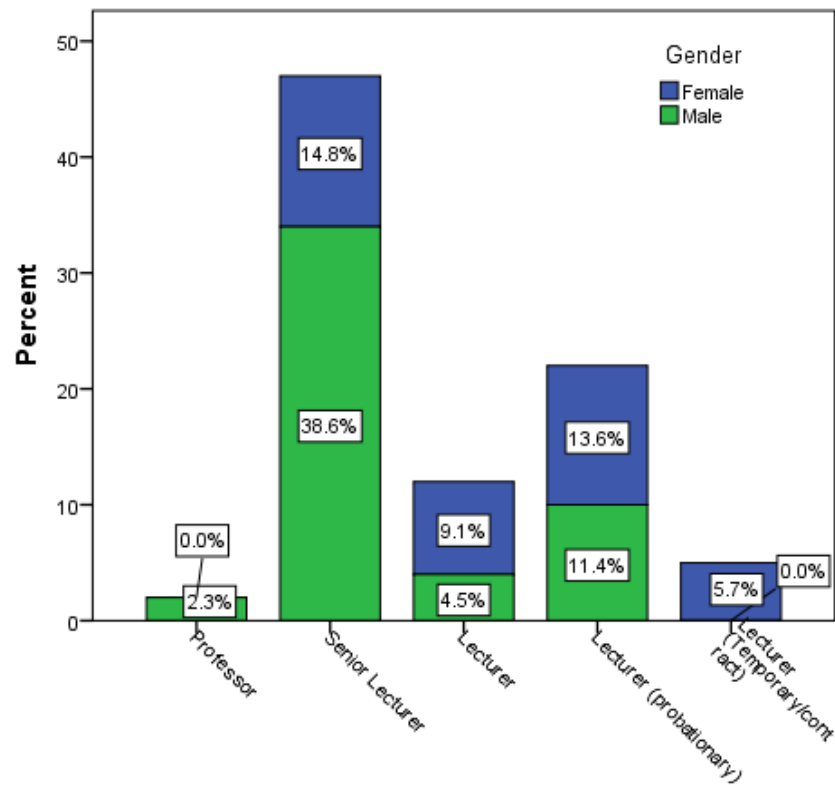


Figure 4.5.2: Academic rank

4.5.3 Academic rank Vs Gender Cross tabulation

It was interesting to point that the 2 professors who completed the survey were male and all the temporary lecturers involved in the survey were females. Figure 4.5.3 shows, 38.6% of the total responses obtained from male senior lecturers and female senior lecturers were only 14.8%. There is a trend in the number of female participation decreasing with the academic rank because of the nature of the population itself. Rutgers University (2008) states that in the US, the male professors vs female professors was 76%:24% in 2003. U.S. Department of Education, National Center for Education Statistics (2016) found that the percentage of male professors vs female professors was 69%:31% in 2013. Everywhere in the globe, the female professors vs male professors range is very low. So it is no miracle to see all the professors were male in this research sample.

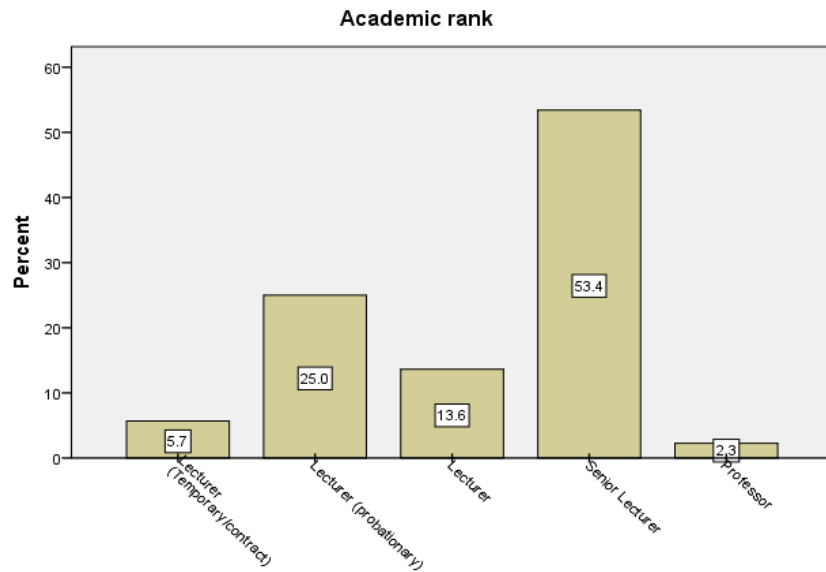


Figure 4.5.3: Academic rank vs Gender

4.5.4 Age

As per figure 4.5.4, there were 37.5% of the lecturers involved in the research and they were in their thirties and forties and only 8% of the lecturers were above fifty. It is obvious to have a histogram with a normal distribution like this, for age groups of the sample of this research.

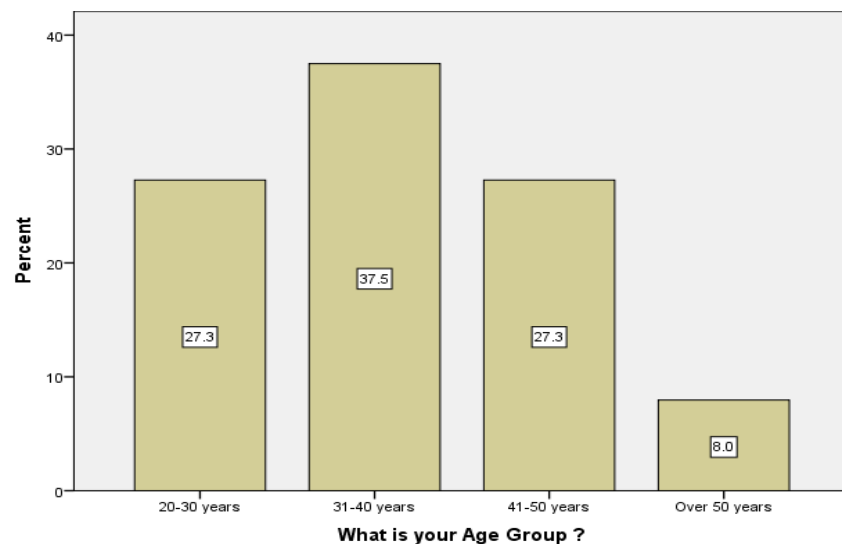


Figure 4.5.4: Age of the population

As per figure 4.5.4, there were 37.5% of the lecturers involved in the research and they were in their thirties and forties and only 8% of the lecturers were above fifty. It is obvious to have a histogram with a normal distribution like this, for age groups of the sample of this research.

4.5.5 Age vs Gender

Figure 4.5.5 shows, in the age category of 20-30 years, female lecturers were more than male lecturers. It was 15.9% and 11.4% respectively. In all the upper age limits male lecturers are more in the count than female lecturers. The number of female lecturers is reducing with the age in the sample. The reason for this is because of the nature of the population.

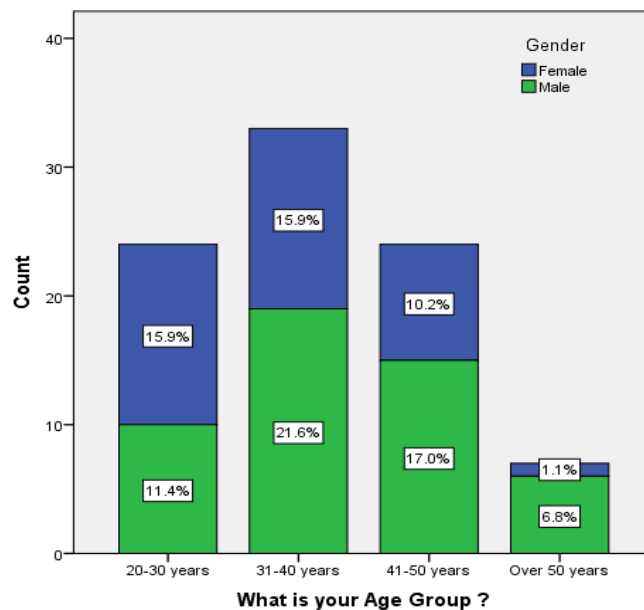


Figure 4.5.5: Age vs Gender

4.5.6 Experience

In the figure 4.5.6: Majority of the samples were obtained from those with less than 5 years' experience as lecturers. The second highest number of samples were collected

from 11-15 years experienced lecturers. This is related to the age and academic rank mentioned in the previous topics. The pattern of the graphs are nearly same.

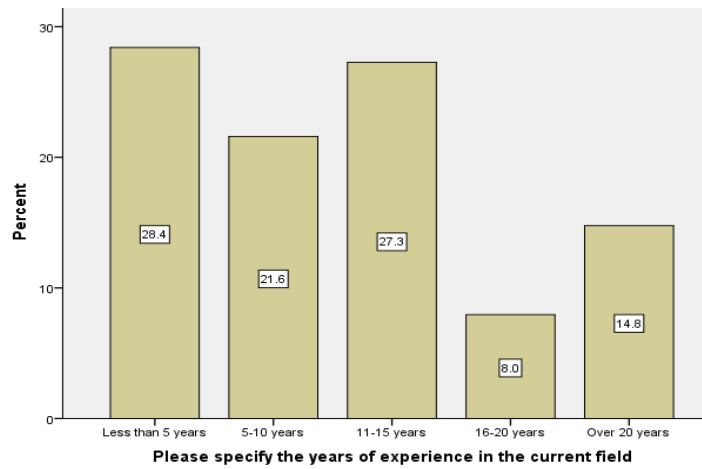


Figure 4.5.6: Experience

4.6 Job related factor analysis

4.6.1 Job Satisfaction

The total JS of the lecturer is with a mean value of 4.01 (Table 4.8), the figure 4.6.1 shows that IT lecturers were satisfied with their jobs. The bar chart shows the percentage of the responses with the gender differentiation. The disagreement part of the bar chart is not appearing, because there are no mean values of the response.

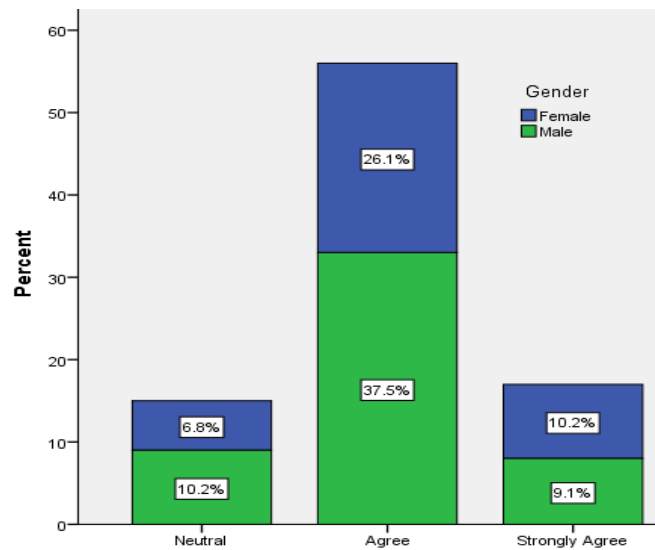


Figure 4.6.1: Gender wise JS

There were 4 questions asked and the total JS identified from the mean value of the 4 questions. Female lecturers felt more satisfied in their job than male lecturers. But the number of male lecturers were high in the count.

4.6.2 Job Satisfaction vs Age

Figure 4.6.2 shows, IT lecturers aged above 50 were totally satisfied with their job. The graph below shows that the response to the question “I am engaged in an exciting and interesting career as an IT lecturer” over the experience. The graph is getting negative skewness towards the experience increases. No of lecturers, increase with the disagreement on the interest about their career, while they are getting more experience.

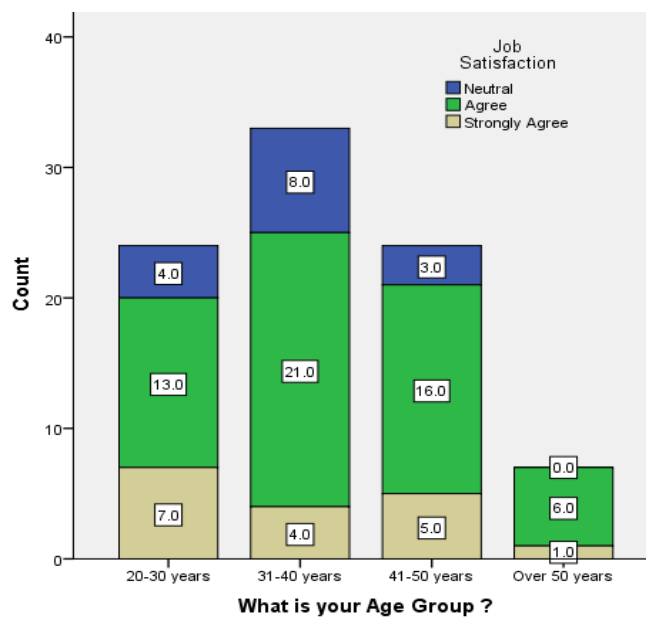


Figure 4.6.2 Job Satisfaction vs Age

4.6.3 Job Satisfaction vs Experience

The figure 4.6.3 shows the response from the lecturers, to the question “I am engaged in an exciting and interesting career as an IT lecturer”. Less experienced lecturers felt

more excited in their work than others. The convergence of the histogram is getting bigger with the experience. In other words, the narrow peak graphs obtained in the less experience edge.

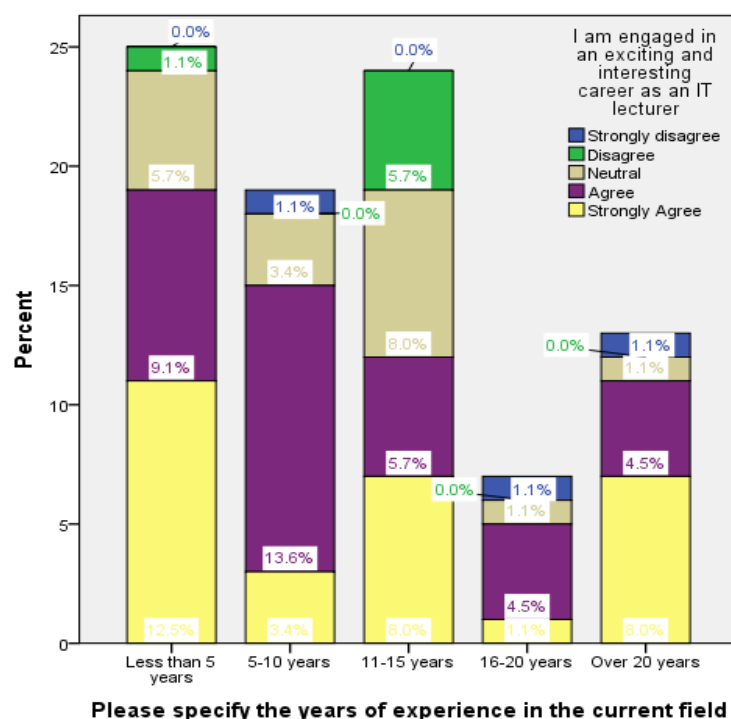


Figure 4.6.3 Job Satisfaction vs experience

4.7 Descriptive statistics

The JS has been measured by considering four items through a Likert scale of agreement in which (5) points represent strongly agreed and (1) point represents strongly disagree. If a negative question was asked in the positive factor to analyze, it was scaled in the other way around.

4.7.1 Job Satisfaction

Table 4.7.1 shows agree and strongly agree responses were the highest percentage 63.6% and 19.3% respectively. The mean value of the JS factor is 4.01. 82.8% of lecturers agreed, they are satisfied with their Jobs. The population had more satisfied

lecturers in their academic field. Both the mean and median value is 4 (Agree). This indicates that IT lecturers are satisfied with their job.

N	Valid	88			Frequency	Percent	Valid	Cumulative
	Missing	0					Percent	Percent
Mean	4.01	Valid	Neutral		15	17.0	17.0	17.0
Median	4.00		Agree		56	63.6	63.6	80.7
			Strongly Agree		17	19.3	19.3	100.0
Mode	4		Total		88	100.0	100.0	

Table 4.7.1: Job Satisfaction

4.7.2 Facilities & Pay

The mean value of the facility and pay factor is 3.24. Of this, 43.2% of lecturers were neutral about their pay and facility. The combination of facility and pay was near to neutral as the mean value (3.24), but the questions asked about the payments show a low mean value which is less than the neutral level (2.74). Lecturers don't accept that their salaries are fair compared to other similar establishments. The Median and the mode values are 3.

N	Valid	88			Frequency	Percent	Valid	Cumulative
	Missing	0					Percent	Percent
Mean	3.24	Valid	Strongly disagree		1	1.1	1.1	1.1
Median	3.00		Disagree		14	15.9	15.9	17.0
			Neutral		38	43.2	43.2	60.2
			Agree		33	37.5	37.5	97.7
			Strongly Agree		2	2.3	2.3	100.0
Mode	3		Total		88	100.0	100.0	

Table 4.7.2: Facilities & Pay

4.7.3 Attitude of supervisor

Table 4.7.3 shows, 43.2% of the lecturers in the sample think neutral about their supervisor's attitude. But 15.9% lecturers were not feeling good about the attitude of their supervisor. The mean value is 3.28, the median is 3 and mode is also 3.

N	Valid	88			Frequency	Percent	Valid Percent	Cumulative Percent	
	Missing	0	Valid	Strongly disagree	1	1.1	1.1	1.1	
				Disagree	13	14.8	14.8	15.9	
Mean		3.28		Neutral	38	43.2	43.2	59.1	
Median		3.00		Agree	32	36.4	36.4	95.5	
Mode		3		Strongly Agree	4	4.5	4.5	100.0	
				Total	88	100.0	100.0		

Table 4.7.3 : Attitude of supervisor

4.7.4 Opportunities

Table 4.7.4 shows, only 18.1% of the lecturers felt happy with the opportunities provided by the university, meaning they agreed that career opportunities make them happy. Opportunities include promotions and scholarly pursuits. The mean value is 2.89, the median is 3 and mode is also 3.

N	Valid	88			Frequency	Percent	Valid Percent	Cumulative Percent	
	Missing	0	Valid	Strongly disagree	4	4.5	4.5	4.5	
				Disagree	22	25.0	25.0	29.5	
Mean		2.89		Neutral	46	52.3	52.3	81.8	
Median		3.00		Agree	12	13.6	13.6	95.5	
				Strongly Agree	4	4.5	4.5	100.0	
Mode		3		Total	88	100.0	100.0		

Table 4.7.4 Opportunities

4.7.5 Institution

Table 4.7.5 shows, satisfaction with the institution is agreed by 65.9% of the lecturers in the research population. And the mean value was 3.68 which is close to agreeing, the median is 4 and mode is also 4. Only two lecturers in the survey disagreed on satisfaction over their Institution.

N	Valid	88	Valid		Frequency	Percent	Valid Percent	Cumulative Percent
	Missing	0		Strongly disagree	1	1.1	1.1	1.1
				Disagree	1	1.1	1.1	2.3
Mean		3.68		Neutral	28	31.8	31.8	34.1
Median		4.00		Agree	53	60.2	60.2	94.3
				Strongly Agree	5	5.7	5.7	100.0
Mode		4		Total	88	100.0	100.0	

Table 4.7.5 Institution

4.7.6 Quality of students

The table 4.7.6 shows the mean value is 3.19 and Median and mode are 3 for the factor “Quality of students”. 35.2% lectures only feel happy about their students’ quality. Rest of the lecturers feel neutral or disagree about students’ quality. The discussion results will be dealt with in detail during the discussion.

N	Valid	88	Valid		Frequency	Percent	Valid Percent	Cumulative Percent
	Missing	0		Strongly disagree	3	3.4	3.4	3.4
				Disagree	11	12.5	12.5	15.9
Mean		3.19		Neutral	43	48.9	48.9	64.8
Median		3.00		Agree	28	31.8	31.8	96.6
				Strongly Agree	3	3.4	3.4	100.0
Mode		3		Total	88	100.0	100.0	

Table 4.7.6 Quality of students

4.7.7 Workload & Life Balance

This table 4.7.7 shows there is poor satisfaction found in the Workload and Life Balance among the IT lecturers. The mean value is 2.34, the median is 2 and mode is also 2. Only 9.1% of the lecturers are satisfied with the workload they have and the family and work life balance. Rest of the lecturers feel unhappy about their workload and family life balance.

N	Valid	88			Frequency	Percent	Valid Percent	Cumulative Percent
	Missing	0	Valid	Strongly disagree	12	13.6	13.6	13.6
	Mean			Disagree	42	47.7	47.7	61.4
				Neutral	26	29.5	29.5	90.9
	Median			Agree	8	9.1	9.1	100.0
	Mode			Total	88	100.0	100.0	

Table 4.8.7 Workload & Life Balance

4.8 Statistics (Mean, Median and Mode)

Table 4.8 shows the Mean, Median and Mode of the response obtained for each question asked in the survey.

Questions	Positive (P) Negative (N)	Mean	Median	Mode
I am clear about my responsibilities and target in my career	P	3.90	4	4
I am engaged in an exciting and interesting career as an IT Lecturer	P	3.91	4	4
I feel as my public social status is higher than of someone on the same educational level, but working different sector/ industry.	P	3.55	4	4
I can do my work in my own way to the best of my abilities.	P	4.05	4	4
I am satisfied with the academic resources and materials which I have been provided with, in order to perform my routine professional duties effectively.	P	3.48	4	4
I am satisfied with the facilities and workplace environment which I have been provided with, by my university faculty.	P	3.36	4	4
I accept my salary is fair for my services when compared with the others in same level at other similar establishments.	P	2.74	3	2
I believe the benefits such as health care aid, pension schemes, vehicle tax exemptions, etc. to be improved apart from salary.	P	2.32	2	2
My superiors guide me in an effective manner.	P	3.28	3	4
My superiors are open to my suggestions when implementing work plans.	P	3.28	3	4
My superiors aren't usually hesitant to help me for further researches.	P	3.38	3	4
Career advancements such as promotions are based on performances, there is no discrimination.	P	3.48	4	4
Time gaps between career advancements such as promotions are too long when compared with the others in same level at other similar establishments.	N	2.25	2	3
I am happy about the scholarship opportunities I get in this academic field.	P	2.91	3	3
I am continuously getting scholarship opportunities to pursue further developments in my career.	P	2.52	3	3
I feel emotionally good about the current workload I have and it is manageable	P	2.78	3	3
My department has enough staff to do its work well and on time.	P	2.43	2	2
I usually prefer classes with less students so that I don't have to put extra effort on the program.	N	2.67	3	2
I have missed few personal, family function due to the tight schedules.	N	2.24	2	2
Most of the time I take my incomplete office (university) work to home and do it in the night.	N	1.92	2	1
I am proud to be an employee of this university.	P	4.08	4	4
I respect and adhere to the rules and policies of my university	P	4.22	4	4
Other faculty staff are cooperative and helpful in common works assigned among us.	P	3.59	4	4
Administrative (non-academic) staff are very helpful for our routine work.	P	3.08	3	4
Management do not aware of our exact needs when I'm trying to implement some innovation.	N	2.47	2	2

4.8 Statistics (Mean, Median and Mode)-(Table4.8 continued)

The students who are selected for the higher studies are willingly and actively participating in the lecture.	P	3.13	3	4
The student selection criteria need to be improved in government universities.	P	2.22	2	2
I believe I lecture for clever students.	P	2.82	3	3
Most of my students are very obedient.	P	3.45	4	4
Job Satisfaction	P	4.01	4	4
Satisfied with the Facilities & Pay	P	3.24	3	3
Satisfied with the Attitude of supervisor	P	3.28	3	3
Satisfied with the Opportunities	P	2.89	3	3
Satisfied with the Workload & Life Balance	N	2.34	2	2
Satisfied with the Institution	P	3.68	4	4
Satisfied with the Quality of students	P	3.19	3	3

Table 4.8: Descriptive Statistics

4.9 Some interesting facts from the survey results

Figure 4.9 shows 69.3% of IT lecturers didn't accept the salary they get, compared to other similar establishments.

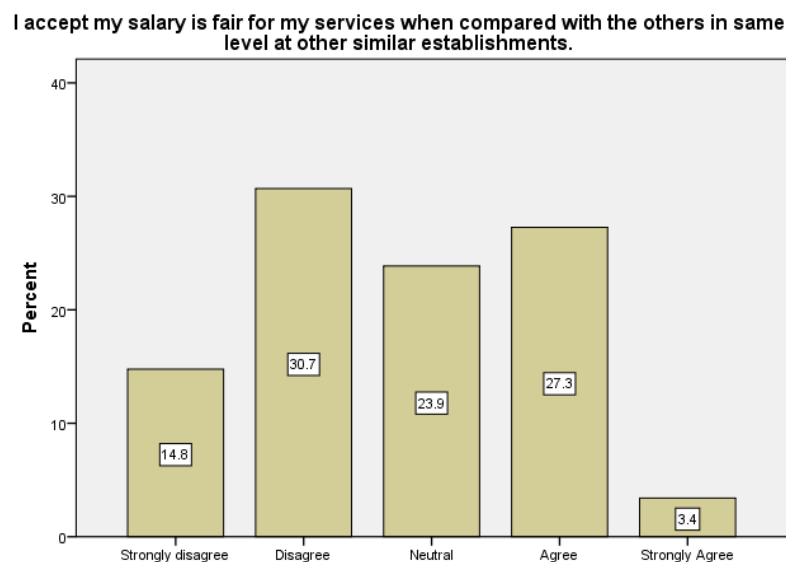


Figure 4.9: Salary is fair compared with other establishments

Figure 4.10 shows, more than the half (57.95%) of the IT lecturers accepted that their respect in society is higher than that of others in the same educational level, but working in different sectors, It can be an IT sector or any other.

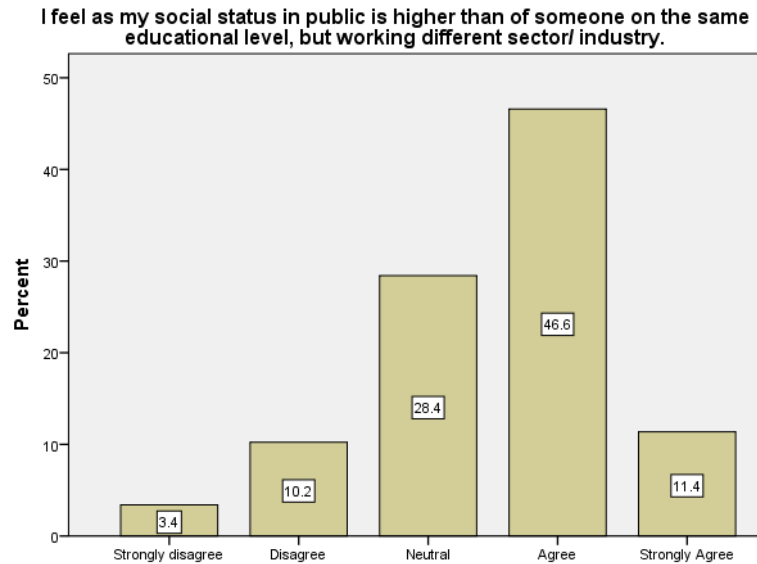


Figure 4.10 Social status as an IT Lecturer

Figure 4.11 shows, 23.86% of the lecturers strongly agree the gap between promotions is longer than in other establishments. More than half of the participants think that they need to wait for a long time to get the next promotion.

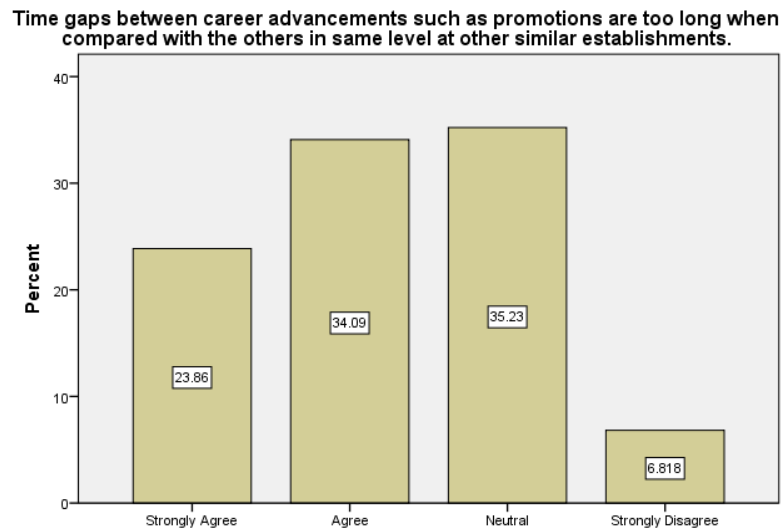


Figure 4.11: Time gap between promotions are long

Figure 4.12 shows, the researcher identified from the interviews that usually IT lecturers prepare the following days' work and lecture notes at home. Also, 77.3% of the responses agreed, they take their incomplete work home and do it in the night. Only a 10.3% of the lecturers disagreed with this statement.

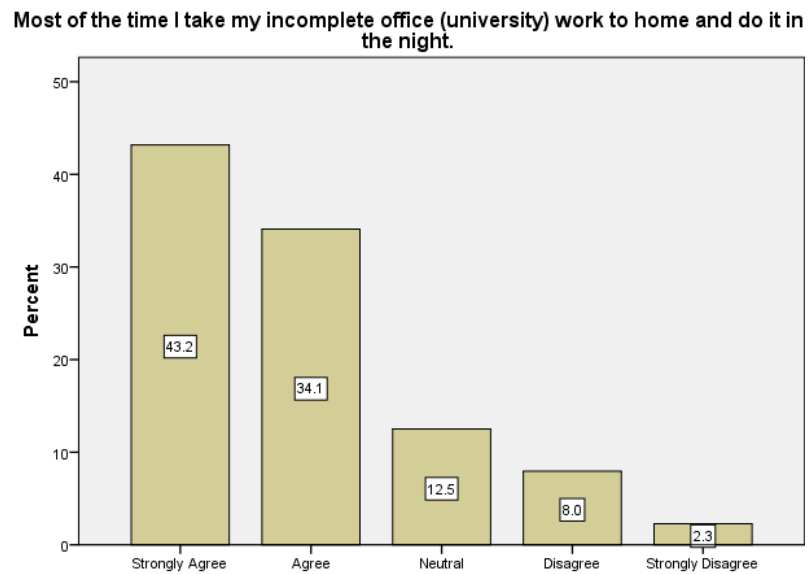


Figure 4.12: Taking incomplete work home

CHAPTER 5 – DISCUSSION, RECOMANDATION AND CONCLUSION

5.1 Discussion

The summary of the discussions will lead the future researchers to do further research on the area. The data collected via an online questionnaire and the data analysis was done with correlation analysis and descriptive statistical methods. The main aim of the study was to find the factors affecting JS and their impact. Six hypotheses were defined and tested in the methodology and data analysis respectively.

This chapter talks about the findings obtained from chapter 4 and the recommendation for all the issues identified. There were six factors identified in the literature survey and it was confirmed in the interviews. The six factors highly influence the IT lecturers or in other words, they depend on them. But the correlation analysis confirms only three hypotheses. They are,

H1: There is a significant relationship between Facilities & Pay and IT lecturers' JS.

H3: There is a significant relationship between Opportunities and lecturers' IT JS.

H5: There is a significant relationship between Institution and IT lecturers' JS.

5.1.1 Facilities & Pay

Two questions were asked to test the facilities and two more question was asked regarding salary and other benefits respectively. There was a moderate correlation found between JS and Facility & Pay. This shows that the JS increases with Facilities & pay increases and vice versa. The mean value of the facility and pay is 3.24 which is a moderate value, median and the mode are 3, and this shows the IT lecturers are neutral about the satisfaction level in Facility and pay. This is a shortfall in the JS of the IT lecturers since the hypothesis researcher has already proved that there is a

correlation between JS and Facility and Pay. Moloantoa (2015) also said that in his research, the majority of the academic staff at the National University of Lesotho weren't satisfied with their salaries. This study also derived the same result for the Facility & Pay.

Satisfied with the Facilities & Pay * Gender Cross tabulation					
		Count			
		Gender		Percent %	Total
		Female	Male		
Mean		3.42	3.10		3.24
Satisfied with the Facilities & Pay	Strongly disagree	0	1	1.1	1
	Disagree	4	10	15.9	14
	Neutral	16	22	43.2	38
	Agree	16	17	37.5	33
	Strongly Agree	2	0	2.3	2
Total		38	50	100.0	88

Table 5.1.1 Facilities & Pay and Gender cross tabulation

Salary may be a basic need as Maslow's law (1954) says, also remuneration is measured to be one of the hygiene factors as per Herzberg(1959). But Remuneration plays a big role in JS of an academic staff in the higher education system (Strydom, 2011). Academics are paid comparatively low in Asian countries, however, conflicts do take place when the needs of the IT lecturers in Sri Lanka are not closely aligned with their salary needs. Amzat and Idris (2010) state that low salaried employees normally cause serious disruptions, with regard to JS, across the world. In this study, the female lecturers were comparatively satisfied with their facility and Pay, but again it is in the middle of agree and neutral with the mean value of 3.42(Table 5.1.1a), and the mean value of male lecturers were 3.1 which is very close to neutral. Global recession affects the satisfaction level of the scientists (Russo, 2012). Some surveys say that JS has an effect gender wise and there is an inequality of the salary level of males and females. Russo (2012) said that men and women feel the same satisfaction level irrespective of the payment. Male and female IT lecturers have the same

perception towards the Salary and Facilities. Salary and Satisfaction Survey (Russo 2012) shows that most scientists feel involved and happy with their researches while bearing modest salaries and benefits.

Some of the IT lecturers believe only being a lecturer in a state university does not financially satisfy them. Most IT lecturers who are working in the universities are also involved as consultants to IT establishments, to obtain an additional income to be compatible with the current financial standards in the country. Only 17% of IT lecturers disagree that the salary they get is comparatively lower than the salary paid in similar establishments. The salary level dissatisfaction creates an uncertainty about the future of the lecturers, which means that they feel, they are being under paid in the academic field. This tends to change their career path to another field and most of the IT professionals are migrating to other OECD (Organization for Economic Co-operation and Development) countries because of the salary level and the facilities they obtain in Sri Lankan universities is not sufficient for them (Sunday Times, 4th May 2014).

The table 5.1.1.b shows 59.1% of IT lecturers think that they are satisfied with the academic resources and materials which have been provided to perform them to their duties effectively. 15.9% of them are not in favor while 25% of the lecturers are neutral on this subject. 25% of the IT lecturers feel that the facilities and workplace environment provided by the university are not satisfactory. In the comments given by the lecturers, they emphasized about the lack of resources and laboratory facilities.

I am satisfied with the academic resources and materials which I have been provided with, in order to perform my routine professional duties effectively.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	2.3	2.3	2.3
	Disagree	12	13.6	13.6	15.9
	Neutral	22	25.0	25.0	40.9
	Agree	46	52.3	52.3	93.2
	Strongly Agree	6	6.8	6.8	100.0
	Total	88	100.0	100.0	

Table 5.1.1.b: Satisfied about the resources

5.1.2 Attitude of supervisor

The supervisor has to appreciate and recognize the obligations and accomplishments of his/her subordinates. Stydom (2011) claims that appreciation does not only involve the HOD's (Head of Department), it also takes account of Human Resources department. Hinai (2013) indicates that, in order to give a sense of appreciation, their direct supervisors have to support the subordinates.

The hypotheses H2 were not confirmed by the Pearson correlation test, which doesn't show a linear relationship between Attitude of supervisor and JS. The table: 4.8.3 shows, only 40.9% of the lecturers agreed that they were satisfied with the attitude of the supervisor. But there was 15.9% of the IT lecturers who were not satisfied with their supervisors while 43.2% were non-committal. The mean value of the Attitude of the supervisor is 3.28 (Table 4.8) which is close to neutral. Table 5.1.2 shows, 19.3% of the lecturers disagreed with the question "My superiors guide me in an effective manner" and 36.4% of them were neutral on the same question. Lecturers are always working with their direct supervisors. So, overall view of the attitude of the supervisor factor needs to be considered deeply to resolve the issues.

My superiors guide me in an effective manner.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	3.4	3.4	3.4
	Disagree	14	15.9	15.9	19.3
	Neutral	32	36.4	36.4	55.7
	Agree	33	37.5	37.5	93.2
	Strongly Agree	6	6.8	6.8	100.0
	Total	88	100.0	100.0	

Table 5.1.2 Supervisor Guidance

5.1.3 Opportunities

Hypothesis 3 was confirmed by Pearson Correlation Test in chapter 4. The IT lecturers are influenced by the opportunities they have been provided by the universities. To keep them satisfied in their jobs as IT lecturers, universities must provide the opportunities in a fair manner to every one of them. The questions were divided in two categories. One was Promotion-related while the other was scholarship related and in each category there were two questions to identify the effects.

The gap between each promotion level was comparatively high in the academic field unlike other fields. In any industry the promotion levels are broken into several stages, but in academic there are only a few levels, and to become a professor stage from a senior lecturer, it takes a long time. There may be many eligible for a professorial post in the IT department, but only one person gets promoted to the professor level.

Promotion, Scholarship, research fund and attending conference are the sub-parts of the opportunities in this research. Comments on this were obtained in the survey and through interviews, IT lecturers depend highly on the foreign collaborations, and they keep expanding their knowledge by attending several conferences, technical programs, through funds available for their research and scholarships granted by foreign universities.

Opportunities available are inadequate for the lecturers according to the survey comments. They aren't happy about the scholarship opportunities as they are not frequent. The low mean value which is less than the neutral value 3.0 (table 4.8) was obtained as answers to the questions related to opportunities.

The mean value of the "Opportunities" is 2.89 (table 4.8) which clearly shows the IT lecturers feel that the opportunities are not what they have expected. According to Quality Assurance and Accreditation council, at present, Sri Lanka is highly dependent on foreign collaborations.

5.1.4 Workload & Life Balance

This was a highly commented topic in all the fields by the researchers. This research received several comments from the lecturers regarding the workload. But there was a negligible and negative correlation between JS and Workload & life Balance through the Pearson correlation test.

The perception of the Male & Female lecturers on the Workload & life balance was almost same, the total mean value of the factor being 2.34(Female: 2.39 Male: 2.3) and this was very much closer to dissatisfaction. We have to reduce the workload to keep them more involved in the given duties. Figure 4.12 shows, 65.91% of the IT lecturers agreed that they were mostly taking office work to their homes. This shows that they don't have enough time to finish their work at the universities. Three questions were asked to test the workload where by 48.9% (table 6.1) of the lecturers prefer classes with fewer students. But 26.1% of the IT lecturers disagreed to the comment that, it was not affecting to them. Due to the tight schedule 71% of them have said that they sometime have forgot attending their family functions. One IT lecturer felt that the semester system does not allow them to do any research. They are always busy with teaching and administrative workloads. Comments from the lecturers show that they have to do lectures to non-IT departments as well, and departments that are under staff. 2.43 mean value was obtained for the question "My department has enough staff to do its work well and on time". Only 20.4% of the IT lecturers agreed that the staff number were enough to perform their duties well and on time.

My department has enough staff to do its work well and on time.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	17	19.3	19.3	19.3
	Disagree	35	39.8	39.8	59.1
	Neutral	18	20.5	20.5	79.5
	Agree	17	19.3	19.3	98.9
	Strongly Agree	1	1.1	1.1	100.0
	Total	88	100.0	100.0	

Table 5.1.4 Department has enough staff

5.1.5 Institution

Institution factor contains two sub-factors namely university and administration. Five questions were asked. They were related to university policies, the staff of other faculties, collaboration with Administrative (non-academic) staff and management.

There was a moderate correlation found between the JS and the Institution. So it is a must to keep the Intuitional need to accomplish the JS of IT lecturers. The mean value of the Institution is 3.68 and it is a good value. The response is close to agreed satisfaction in Institution factor.

IT lecturers agreed that they are proud to be a part of the university team with the mean value of 4.08 and they respect the rules and policies. There was a positive effect found through the survey regarding Institution factor. An IT lecturer believes that the internal friction among staff members (both academic and non-academic) is a huge factor when considering the progress of public university system. Senior academic staff members are mostly divided into different groups based on various opinions and that affects their collective work to conduct the activities within the university system (teaching, research, and any other task). The researcher believes that this is the case in many public universities in Sri Lanka.

5.1.6 Quality of students

Hypothesis 6 wasn't confirmed in the correlation test, so there wasn't any significant impact between Quality of the students and JS of IT lecturers. For the question "I believe, I lecture to clever students", the mean value was 2.82, which is less than the neutral value. Sri Lanka has a most critical method to absorb highly ranked students to public universities according to Z-score.

There was a comment from an IT lecturer that He or She felt "The selection criteria should not only be based on A/L's but competency, attitude, and values as well". This comment was very much helpful to the researcher to find the answer for the low mean value obtained re above. At the same time 64.8% of the participants disagreed and 29.5% of them were neutral about the selection criteria improvement, and this was

because everyone knew about the A/L education system and that the selection process is done through the Z-score. 3.45 Mean value was obtained for the question “Most of my students are very obedient”. This shows that most of the students who get through to the campus are very clever and obedient.

5.2 Recommendations

The important element of the JS was remuneration though some were not willing to express it. There is a need to consider this, because the pay factor shows a positive correlation with JS. The salary scale is decided by the government. It would be best to increase the payment to a competitive scale, so that they would not find other avenues to increase their income. More than 50% of the Public university lecturers aren't financially satisfied according to the survey.

To compete with the current financial standard in our country, they involve in outside work, such as Consulting and conducting visiting lectures to other private educational institutes. This has obviously increase their workload. Already it was observed in the research, that the workload in the academic field for the lecturers is high. Even though the JS isn't correlated with the workload, the effect of the workload is seriously affecting the lectures up to some extent. We cannot compare the salary level of Sri Lankan lectures with foreign lecturers because the lifestyle and the economic situations differ in each country. But one has to analyze the salary scale of similar qualified people in other IT establishments. There are lecturers, who think their salaries are not fair for their services when compared to other IT establishments. We Know as a fact that the IT & computer fields are growing rapidly. So the salary scale in the industry is high compared with the government IT lecturers. IT lecturers are paid under the government salary scale of 2016.

A PhD-qualified senior lecturer earns monthly about USD 200-350 (World Bank, 2006). But nowadays it has increased by a certain percentage. The low earnings have made it hard to impress and retain highly qualified academic lecturers at Sri Lankan universities. The benefits provided by the government need to be improved for lecturers' perspective. There are many aspects that has to be taken into consideration.

That is i.e.; health care aid, pension schemes, vehicle tax exemptions, etc. Private institutes provide huge benefits but, they don't contribute to a pension. IT lecturers complain they are not provided with benefits other than salary. An in-depth survey has to be done regarding to the additional benefits that has to be given to them.

Sri Lankan government, universities provide good academic resources and workplace environment. It is at a satisfactory level for the IT lecturers to do their routine duties effectively. But there was a comment from an IT lecturer, that he/she felt the facility for the advanced researches are not available in the laboratory at the moment and foreign universities have better laboratory facilities than in Sri Lanka. We have to find the ways and means to improve the facilities. This would motivate the lecturers to perform out of their limit.

5.2.1 Attitude of supervisor

The hypotheses H2 was not confirmed by the Pearson correlation test in chapter 4, which doesn't show a linear relationship between Attitude of supervisor and JS. The mean value of the Attitude of supervisor is 3.28 which is close to neutral.

Regular meeting among the lecturers and supervisors should be held in order to have a better understanding between them. It is necessary to arrange some interactive sessions and collaborating activities among the academics as this will help to reduce the gap between the supervisors and the lecturers. The subordinates need to be very clear about their job role. All the decisions are perfect when all parties are involve together. The direct supervisor needs to be helpful and be a guide for the routine work.

Academics are always working with their direct supervisors. So it will create a good environment if the relationship is healthy among them. Furthermore, supervisors should conduct an appraisal of each lecturer and find innovative ways to improve their work, faculty members normally perform.

5.2.2 Opportunities

Some responders declared that they were not happy with their research activities and publications due to the lack of financial help from the university. Also few of them were not happy about their research, scholarship and promotion opportunities. The financial help from the university needs to be more flexible and fair with the technological improvement. This will increase the quality of the universities and it will motivate the lecturers to do further research.

The scholarship opportunities have to be more frequent and appropriate to the IT field than an added qualification. Universities must provide free training with up to date technology and other professional development opportunities during their working time.

The top management has to re-consider the promotion opportunities by reviewing its strategy and balance the lecturing, administration and research activities. The laboratory facilities in Sri Lankan universities are not as good as in foreign universities.

The computer Laboratories should be improved and upgraded so that advance research could be done with the available facilities. Knowledge sharing is very important at Ph.D. level studies. In such a case, there is a necessity to make the link between the professors at the Sri Lankan universities and the foreign universities. This would enable to publish high-quality researches and journals that would be recognized worldwide.

The time gap between the promotion levels are substantial, and this is true in the academic field. In foreign universities, promotions are carried out in a hierarchical way. Lecturers have to wait for a substantial period to get to the next academic rank with the qualifications required.

5.2.3 Workload & Life Balance

The workload is a main concern among the IT lecturers. They aren't feeling good about the workload they have at present. Overall output of the data analysis public that the workload given to the IT lecturers were not fair and they felt the number of academic staff need to be increased, to perform their duties efficiently.

The class size is also a concern, especially in subjects demanding collaboration and communication. Learning Management Systems (LMS) are now helping to collaborate with the students. However, this takes extra time for the lecturers to evaluate the students through assessment, exams and paper work. Universities should think about correct sizing the classes or divide the classes.

The lecturers must be consultants in preparing semester schedule and timetables. The management needs to be careful about the acting lecturer arrangements in the case of any unavoidable family situation. The lecture hours for a lecturer need to be limited, so that he/she can do the preparation for the lecture and paper works in the remaining working hours. This would reduce the official works that to be taken to home. Everyone have their own family life, and this must to be taken in to consideration.

The extra work that is not associated with the lecturing activities such as administration works has to be checked by the management (Paul and Phua, 2011). Both management and academic staff have the responsibility to cope the workload for an even working environment (Houston et al, 2006). Increasing the administrative staff number is another way of reducing the administration workload handled by the academic staff. But the number of lecturers recruiting each year must be increased to cope up with the total workload in IT and CSE departments apart from the administrative work.

5.2.4 Institution

Under this factor, the researcher had questions on university policies, the staff of other faculties, collaboration with administration (non-academic) staff and management.

IT lecturers are proud to be a part of the university team and they respect the rules and policies of the universities. Lecturers are mostly divided into different groups, but it is really important to work as a team, sharing the knowledge and collaborating in the academic field. There might be groups of lecturers according to rank, age, and demographic factor. To improve the collaboration among the academic staff, universities have to have activities often. It can be any type of collaborating events, such as tours, outbound training, group events, and social events. Etc...

5.2.5 Quality of students

The quality of the student doesn't affect the JS of the IT lecturers. But each and every lecturer likes to have clever students in their class. In Sri Lanka, public universities use a critical method (Z-score) in selecting students who had obtained high marks at the Advance Level examinations. But as an IT lecturer said in his / her comment, "The selection criteria should not only be based on A/Ls but also on competency, attitude, and values as well".

There are LMSs whereby students are not compelled attend lecturers at the universities. This could demotivate the lecturers. Course coordinators need to identify the issues mentioned above and find solutions to them.

Lecturers remain in the academic field because they have a passion being a lecturer. They could get a big salaries and fringe benefits if they move to a software or IT company. But there is a doubt on whether they could get the same status and appreciation from the society for their service or not? In the past educated Sri Lankan are moving to developed countries for several reasons. One of the main reasons are that they are dissatisfied with their job prospects. The investment on them by the Sri Lankan government is wasted in the scenario mentioned. It is a duty of our government to make the IT lecturers satisfied in their jobs so as to retain them in Sri Lanka.

5.3 Research Limitations

There was no direct statistics available about the number of IT lecturers. A population of 248 will require a sample size of 151 given the confidence level 95% and margin of error 5% (The research advisors, 2006). This research collected a sample size of 90 with 2 were rejected. This was increased the margin of error to 8.3%. The Margin of error used by survey researchers falls between 4% and 8% at the 95% confidence level (DataStar, 2008).

The participants of the research were IT lecturers in public universities. It was difficult to share the questionnaire with them. Official websites of the universities did not have the email address of some of the lecturers. This resulted a limited sample size. Since the participants were intellectuals, sharing the questionnaire in the social media or public was inappropriate. Few lecturers were on study leave, so the researcher could not reach them with the questions. As, there was no any confirmation of their participation in this survey. Lecturers in the interviews were suggested that it was rather sensitive to find out from the lecturers as to where they were lecturing. So the question optional one. Hence university wise satisfaction level was not identified.

5.4 Future Research

Since this study was conducted for public university IT lecturers, the job security was neglected as an affecting factor. But if future researchers could do a survey for the public and private universities, the perception of job security may be high in public universities and remuneration the other way around. Asian country lecturers obtain considerably lower salary than the American and European counterparts. This is a common issue for higher educational institutes in Sri Lanka.

Articles have rarely shown about the student relationship with the JS of the lecturers. Although there was no correlation with JS and Quality of students in this study, some of the previous articles claimed that the relationship and knowledge of their students had a major contribution to the JS of academics. This concern has to be investigated.

In future research further analysis could to be done relating to this study. There were some exciting ideas which gave further analysis idea relating to this study. All the under mentioned studies could be conducted in the future.

- Factors influence the Job satisfaction of lecturers in Public and private universities in Sri Lanka. *This research would analyze and compare the factors that affect public and private university lecturers.*
- Case study of opportunities that would affect IT lecturers' motivation in Sri Lanka. *This study would deeply analyze the opportunities that would positively effect and motivate IT Lecturers in Sri Lankan universities.*
- Correlation of lecturers' motivation with Student's performance in Sri Lankan universities. *This study would identify the correlation between students' performance with Lecturers' motivation in Sri Lanka.*
- Correlation between lecturers' Job Satisfaction and Students' output in Sri Lankan universities. *The study would find the linear relationship between Lecturers' Job satisfaction and student output.*

5.5 Conclusion

There were three research objectives in this study. The objectives created to answer the research questions stated in the chapter1.

The research question would be

1. What are the important factors that contribute to the satisfaction of IT Lecturers?

The six factors influencing the job satisfaction of IT lecturers in government universities are Facilities & Pay, Attitude of supervisor, Opportunities, Workload & life Balance, Institution and Quality of students. These factors were identified through the literature survey and from the confirmations received from IT lecturers during interviews.

2. What is the impact of those factors in IT lecturers' job satisfaction?

Based on the survey it was identified that Facility & Pay, Institution, and Opportunities had a positive correlation with job satisfaction of IT lecturers. Therefore it can be concluded that by providing these factors, job satisfaction of the IT lecturers can be enhanced. Further, it can be concluded that the correlation of the Attitude of supervisor, Quality of student and Workload & Life Balance are at a negligible level with the job satisfaction.

3. Are the IT lecturers lecturing in government universities, satisfied with their present job conditions?

The outcome of the study reveals that 82.8% of IT lecturers are satisfied with their jobs. However, lecturers are in the opinion that Opportunities and Facility & pay need to be improved while bringing down the present workload to a moderate level. Universities should be devoted, to supporting quality teaching and learning. They have

to offer a competitive salary and benefits to their lecturers while recognizing their achievements and their contributions to the economy. This commitment not only enhances academics' morale but also enhances their operative for academic quality and improvement.

Further, it can be considered in increasing the number of lecturers with a view of reducing the workload. This will increase the quality of the outcomes in the education system. The overall performance of a university has to depend on academics. They have to be motivated to perform the job well. According to Noordin (2009), successful educational programs rely on the important contributions made by academic staff. The recommendations and conclusions assist the government in finding root causes and in taking remedial actions by formulating policies.

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Appendix A: Statistics from the data analysis

Statistics								
		Satisfied with the Facilities & Pay	Satisfied with the Attitude of supervisor	Satisfied with the Opportunities	Satisfied with the Workload & Life Balance	Satisfied with the Institution	Satisfied with the Quality of students	Job Satisfaction
N	Valid	88	88	88	88	88	88	88
	Missing	0	0	0	0	0	0	0
Mean		3.24	3.28	2.89	2.34	3.68	3.19	4.01
Median		3.00	3.00	3.00	2.00	4.00	3.00	4.00
Mode		3	3	3	2	4	3	4
Variance		.621	.665	.746	.687	.426	.686	.379
Skewness		-.309	-.181	.224	.276	-.835	-.377	-.006
Std. Error of Skewness		.257	.257	.257	.257	.257	.257	.257
Kurtosis		-.275	-.162	.494	-.370	2.410	.438	-.281
Std. Error of Kurtosis		.508	.508	.508	.508	.508	.508	.508

Table A: Statistics of the factors

The student selection criteria need to be improved in government Universities.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	18	20.5	20.5	20.5
	Disagree	39	44.3	44.3	64.8
	Neutral	26	29.5	29.5	94.3
	Agree	4	4.5	4.5	98.9
	Strongly Agree	1	1.1	1.1	100.0
	Total	88	100.0	100.0	

Table B: Response for the question “The student selection criteria need to be improved in government Universities”

I usually prefer classes with less students so that I don't have to put extra effort on the program.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	12	13.6	13.6	13.6
	Agree	31	35.2	35.2	48.9
	Neutral	22	25.0	25.0	73.9
	Disagree	20	22.7	22.7	96.6
	Strongly disagree	3	3.4	3.4	100.0
	Total	88	100.0	100.0	

Table C: Response for the question "I usually prefer classes with less students so that I don't have to put extra effort on the program"

I have missed few personal, family occasions due to the tight schedules.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	17	19.3	19.3	19.3
	Agree	46	52.3	52.3	71.6
	Neutral	12	13.6	13.6	85.2
	Disagree	13	14.8	14.8	100.0
	Total	88	100.0	100.0	

Table D: Response for the question "I have missed few personal, family occasions due to the tight schedules."

APPENDIX B: ANALYSIS OF VARIANCE (ANOVA)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Facilities & Pay	Between Groups	18.947	2	9.474	22.981	.000
	Within Groups	35.041	85	.412		
	Total	53.989	87			
Attitude of supervisor	Between Groups	5.066	2	2.533	4.076	.020
	Within Groups	52.831	85	.622		
	Total	57.898	87			
Opportunities	Between Groups	7.600	2	3.800	5.640	.005
	Within Groups	57.264	85	.674		
	Total	64.864	87			
Workload and Life Balance	Between Groups	3.958	2	1.979	2.164	.121
	Within Groups	77.757	85	.915		
	Total	81.716	87			
Institution	Between Groups	6.712	2	3.356	9.390	.000
	Within Groups	30.379	85	.357		
	Total	37.091	87			
Quality of students	Between Groups	2.833	2	1.416	2.117	.127
	Within Groups	56.883	85	.669		
	Total	59.716	87			

Table E: One-way ANOVA (means of the factors and the JS)

**APPENDIX C: SOME OF THE COMMENTS FROM THE
LECTURERS THROUGH THE ONLINE SURVEY WITHOUT
ANY ALTERATION.**

No	Any other points you would like to add to my research?
1	My job satisfaction also depends on overseas links that I can develop with foreign Universities, research labs and professors. It is important for the University to support such activities. Also, better support must be given to publish in high quality journals (that require a publication charge to be paid) and also participate in conferences (that require a substantial financial support).
2	There is a Huge Overhead for Probationary Lecturers, since they have to complete their research degrees to get confirmed in the Job.
3	The administrative bottleneck hinders research and disappoints us as there is a tedious and long process to buy equipment, recruit researchers, etc. The semester system do not allow us to do effective research as we are always busy with teaching and administrative workloads.
4	Since our department is in computer field the workload is very high for us mainly we have to conduct lectures for non-IT department as well. So lack of resources is a huge problem. Sometimes even though we are Lecturers we have to do secretary's jobs also. So I suggest to recruit staff at least with a basic knowledge of English to reduce our workload. And scholarships provided for Lecturers are not in a satisfactory level
5	I am working in a newly established faculty so every one very helpful and friendly but have to maintain the hierarchy and have to wait to done works through hierarchy.
6	facilities should be improved
7	Am contended in my job.
8	In our faculty, lectures are not compulsory for students and most Lecturers upload the notes to the LMS after the lecture. Due to these reasons the student attendance is very low. This may demotivate the Lecturers.
9	Universities should not be mere Vocational training institutes but research hubs, also the selection criteria should not only be A/Ls but competency, attitude and values as well.
10	Ragging should be stopped in Universities.

11	This research is interesting. Though, I believe being only a Lecturer in a state University is not financially satisfying. Most intellects who are working in the Universities, especially in IT / ICT and Computer related fields are also involved in outside work / consulting to be compatible with the current financial standards in the country. If you could add that aspect to your research, the results would be much more explanatory in my opinion.
12	Lecturing is very interesting as well as more responsible compared to the other occupations. Almost all of the Lecturers are enjoying themselves after a successful deliver of a lecture and also by looking at the success of the students.
13	I believe that the internal frictions among staff members (both academic and non-academic) is a huge factor when considering the progress of state University system. I'm aware that senior academic staff members are mostly divided into different groups based on their various opinions and that affects their collective work to conduct the activities within the University system (teaching, research and any other task). I believe that this is the case in many state Universities in Sri Lanka. A study on such matters would be useful to find strategies how to eliminate them so that we can be as competitive as world-class Universities out there.

Table F: comments from the lecturers through the online survey

APPENDIX D: QUESTIONNAIRE

Honored Professors and Lecturers,

I am a postgraduate student at University of Moratuwa and currently reading for my Masters of Business Administration in IT.

As part of fulfilling my MBA, I am conducting a research study with the supervision of Dr. Amal Shehan Perera (shehan@cse.mrt.ac.lk) to analyse Job satisfaction factors that influence IT Lecturers in Sri Lankan Universities.

The research aims to explore and measure the factor that influences job satisfaction of lecturers who lecture IT subjects in Government universities. Your gentle contribution for this survey by completing the following questionnaire would be extremely appreciated and valued. The maximum duration to complete this questionnaire will be 10-12 minutes.

Kindly informed that, all the information gathered will be used only for this research purpose, and the survey is stipulated confidential and anonymous.

Questionnaire link <https://thaarun.typeform.com/to/nvIEnK>

Thank you for your valuable time.

Sincerely,

B I. Bavatharani

(bavatharani.15@cse.mrt.ac.lk)

Dept. of Computer Science and Engineering,
University of Moratuwa

Job satisfaction factors that influence IT Lecturers in Sri Lankan Universities

The job satisfaction of the lecturers determines and enhance the quality of higher studies. This survey will enable us to find ways and means to improve their job satisfaction and to formulate new policies to improve it.

Questionnaire

Your **honest** answers would be extremely appreciated

The maximum duration to complete this questionnaire is 8-10 minutes

Start :-)

press ENTER

1. What is your Gender?*
- A. Male
- B. Female

2. What age group are you in?*
- A. 20-30 years
- B. 31-40 years
- C. 41-50 years
- D. Over 50 years

3. Select your highest qualification*
- A. Bachelor's Degree
- B. Post Graduate Diploma
- C. Master's Degree
- D. PhD
- E. Other

4. Select the university you are lecturing(It is not compulsory to answer the question)

(You may select multiple options if you teach more than one university)

- A. University of Colombo
- B. University of Peradeniya
- C. University of Sri Jayewardenepura
- D. University of Kelaniya
- E. University of Moratuwa
- F. University of Jaffna
- G. University of Ruhuna
- H. The Open University of Sri Lanka
- I. Eastern University, Sri Lanka
- J. South Eastern University of Sri Lanka
- K. Rajarata University of Sri Lanka
- L. Sabaragamuwa University of Sri Lanka
- M. Wayamba University of Sri Lanka
- N. Uva Wellassa University
- O. Other

5. Please specify the years of experience in the current field*

- A. Less than 5 years
- B. 5-10 years
- C. 11-15 years
- D. 16-20 years
- E. Over 20 years

6. Subjects that you lecture (Only consider the area where you lecture degree or above)* Choose as many as you like

- A. Information Technology (IT)
- B. Computer science
- C. Software Engineering
- D. Computer Engineering
- E. Information Security
- F. Information Systems
- G. Information & Communication Technology (ICT)
- H. Management and Information Technology
- I. Industrial Information Technology
- J. Other

7. Academic rank/position/level/designation (select the category which best describes your position in your University)* Choose as many as you like
- A. Lecturer (Temporary/contract)
 - B. Lecturer (probationary)
 - C. Lecturer
 - D. Senior Lecturer
 - E. Assistant / Associate professor
 - F. Professor
 - G. Senior Professor
 - H. Other

Questions with the items through a 5 point likert scale of strongly disagree, Disagree, Neutral, Agree and Strongly Agree. And the “*” mark denote that this was a compulsory question.

8. I am satisfied with the academic resources and materials which I have been provided with, in order to perform my routine professional duties effectively.*

<input type="checkbox"/> A Strongly disagree	<input type="checkbox"/> B Disagree	<input type="checkbox"/> C Neutral	<input type="checkbox"/> D Agree	<input type="checkbox"/> E Strongly Agree
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9. I am satisfied with the facilities and workplace environment which I have been provided with, by my university faculty.*

<input type="checkbox"/> A Strongly disagree	<input type="checkbox"/> B Disagree	<input type="checkbox"/> C Neutral	<input type="checkbox"/> D Agree	<input type="checkbox"/> E Strongly Agree
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10. I accept my salary is fair for my services when compared with the others in same level at other similar establishments.*

<input type="checkbox"/> A Strongly disagree	<input type="checkbox"/> B Disagree	<input type="checkbox"/> C Neutral	<input type="checkbox"/> D Agree	<input type="checkbox"/> E Strongly Agree
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11. I believe the benefits such as health care aid, pension schemes, vehicle tax exemptions etc. to be improved apart from salary.*

<input type="checkbox"/> A Strongly disagree	<input type="checkbox"/> B Disagree	<input type="checkbox"/> C Neutral	<input type="checkbox"/> D Agree	<input type="checkbox"/> E Strongly Agree
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12. My superiors guide me in an effective manner.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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13. My superiors are open for my suggestions when implementing my work plans.

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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14. My superiors aren't usually hesitant to help me for further researches.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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15. Career advancements such as promotions are based on performances, there is no discriminations.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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16. Time gaps between career advancements such as promotions are too long when compared with the others in same level at other similar establishments.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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17. I am happy about the scholarship opportunities I get in this academic field.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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18. I am continuously getting scholarship opportunities to pursue further developments in my career.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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19. I feel emotionally good about the current workload I have and it is manageable.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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20. My department has sufficient staffs to do the works well and on time.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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21. I usually prefer classes with less students so that I don't have to put extra effort on the program.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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22. I have missed few personal family functions due to the tight schedules.

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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23. Most of the time I take my incomplete office (university) work home and do it in the night.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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24. I am proud to be an employee of this university.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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25. I respect and adhere to the rules and policies of my university.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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26. Other faculty staff are cooperative and helpful in common works assigned among us.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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27. Administrative (non-academic) staff are very helpful for our routine work.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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28. Management is not aware of our exact needs when I'm trying to implement some innovation.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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29. The students who are selected for the higher studies are willing and actively participating in the lecture.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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30. The student selection criteria need to be improved in government universities.

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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31. I believe I lecture to clever students.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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32. Most of my students are very obedient.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
---	----------------------------------	---------------------------------	-------------------------------	--

33. I am engaged in an exciting and interesting career as an IT Lecturer.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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34. I am clear about my responsibilities and target in my career*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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35. I feel as my public social status is higher than that of someone in the same academic level, but working different sector/ industry such as computer software industry.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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36. I can do my work in my own way to the best of my abilities.*

<input type="radio"/> A Strongly disagree	<input type="radio"/> B Disagree	<input type="radio"/> C Neutral	<input type="radio"/> D Agree	<input type="radio"/> E Strongly Agree
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37. Any other points you would like to add to my research?

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38. Could you please mention your email address if you have the interest to know about the survey results

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