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IDENTIFY FACTORS FOR LOWER HIERARCHICAL EMPLOYEE TURNOVER: A CASE STUDY FROM A HOSPITAL

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Dissertation submitted in partial fulfillment of the requirements for the degree Master of Science in Business Statistics

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DEDICATION

This dissertation is dedicated to my loving family for the sacrifice they made for me.

ACKNOWLEDGEMENT

It is my great pleasure to express my affectionate and deeply felt gratitude to Prof. T S G Peiris Head of the Department of Mathematics, University of Moratuwa and the course coordinator of MSc in Business Statistics. This dissertation would not have been possible without his guidance, invaluable suggestions and constant inspiration. His patience in reading, correcting and refining this work is commendable.

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Finally, special thanks go to my loving parents for their dedication, patience and faith shown on me.

ABSTRACT

Employee turnover is a significant challenge for Human Resource Management (HRM) and organizational performance. Employees are the key to success in the business world. Therefore, organizations invest considerable time and money to train and develop the employees. Though many studies were carried out to find the reasons for lower hierarchical employee turnover in many countries, no such work related to this study has been reported in Sri Lanka. The main purpose of this study is therefore to determine the factors that influence the lower hierarchical employee turnover in the healthcare industry and recommend strategies on how an organization can retain employees or reduce employee turnover. A sample size of 300 respondents was selected from five sections of the hospital to gather information through a structured questionnaire. It was allocated proportionally among five strata. Stratified random sampling technique method was used to pick up respondents for this study. Descriptive statistics, such as mean, median and mode was used to analyze data. In addition, factor analysis was used to analyze the collected data in order to outline the major factors supposed to be influencing on employee turnover in healthcare industry. Of the variables related to job attributes four sub factors namely "job satisfaction", "professional development", "work commitment" and "job descriptions" were found to be significant. Similarly, of the variables related to organizational attributes again four factors were identified namely "personal values", "reliable", "management" and "confidence" and that for environmental attributes, "stay factors", "push factors" and "still factors" were found to be significant on employee turnover. The results indicated that low salary and remuneration packages, lack of recognition, lack of opportunity to grow and poor working conditions were key factors in determining the employee turnover. It is therefore recommended that, the management should pay attention to both hygiene factors and motivation factors and start employee retention programs.

Keywords: Employee Turnover, Healthcare, Factor Analysis

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LIST OF ABBREVIATIONS

Abbreviation	Description
AIC	Akaike's information criterion
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
ET	Employee Turnover
FA	Factor analysis
KMO	Kaiser-Meyer-Olkin measure
MSA	Measuring of sampling adequacy
PCA	Principal Component analysis
SBC	Schwartz's Bayesian criterion

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Employee turnover (ET) or staff turnover is at which rate employer gains or losses employees. This has become a major issue, with the competition of the today's business world. Therefore today, it is an important management task to reduce the turnover for any organization. Thus the management has to take proactive decisions to manage the employee turnover. The ET rate can be varied from organization to organization, business to business. To understand the nature of the ET, it is important to define the term employee turnover. According to Philips and Connell (2003), ET refers to the percentage of employees leaving the organization for whatever reason(s) over a given period of time. The ET is also considered as a ratio comparison of the number of employees a company must replace in a given time period to the average number of total employees. A huge concern to most companies, employee turnover is a costly expense especially in lower paying job roles, for which the employee turnover rate is highest (Beam, 2010).

1.2 Factors Influence on ET of a Company

To identify the factors affect to ET, it is very important to study the human nature and their basic needs. Basically, people look for changes in their day to day life: seek for new things, challenges in jobs, good office environment and good remuneration packages. As aforementioned factors, such as wages, company benefits, employee attendance, job performance, job safety and job satisfaction play a vital role in ET rate of any company. According to Hema (2010) there are many factors that affect the ET rate. These factors are:

Economy: An employee may prefer to leave a job and accept another because he or she might be getting a better pay in another firm.

Organization Performance: If there is an economic slowdown the company may resort to layoffs. Hence, the employees also feel it is wise to leave the organization and seek another employment before being laid off.

Organization Culture: The kind of environment they are working, the leadership method used by leaders, the kind of reward and promotion system that prevails also affects the ET rate. It is organization responsibility to build a friendly atmosphere.

Job Uniqueness: Every job the employee does should inculcate an interest in them and should feel responsible for it. If this can be achieved then the turnover rate can be kept to the minimal.

Impracticable Expectations: There can be some applicants who may even lack general knowledge about the job. When they realize that they may offer to quit the job.

Personal Factors: This factor is totally depends on employee's personal factors such as family situation, traits, lagging to learn new skill or technologies or other job offers from other firms.

To provide these things to the employees in an economic way is very difficult. But it is important to retain organizations' talented and profitable employees. But with the blooming of new projects, constructions and investments a lot of job opportunities have arisen for the labor force and they are paid reasonable packages. Therefore, employees are very reluctant to work as a permanent employee and don't like to wait till the end of the month to have the monthly pay. Thus, organization has to take difficult and proactive decisions to retain its talented employees to minimize the ET.

As discussed above, ET has become a major problem faced by most of the organizations in today's context. Organizations spend considerable time and money to train and develop the employee into a valuable asset to the organization. Losing these trained employees regularly is a negative thing and it depicts a picture of a management that doesn't care much about their valuable asset. This could lead to brain drain, potential loss of clients and lower levels of loyalty. Therefore,

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organizations have to put extra effort to manage its ET successfully and keep the ET below the target.

However, sometimes there are advantages to a high ET. This will bring the new blood to the organization and it will inject new ideas, skills and more importantly they will bring new contacts with them. New employees are less resistant to change and they are excited about the new job. However, according to William (2013) costs due to a person leaving, recruitment costs, training costs, lost productivity costs, new hire costs and lost sales costs can be identified as cost involved with the employee turnover.

When calculating a company's turnover rate first we have to determine what type of employee separation need to be taken into consideration. Separations that cannot be handled by the organization will not be included in the turnover rate. Griffeth and Hom (1995) commented that unavoidable separation such as retirement, death, permanent disability, or a spouse changing jobs to a different community. These unavoidable terminations will not be considered for this study since they are not considered to the turnover rate.

An organization does not necessarily suffer from negative results due to ET. There are often positive and negative aspects, for both the employee and the organization, as per a study done by Randell et al., (2005). It is very often the nature of the turnover, functional or dysfunctional, that results in a negative or positive result for the organization. When poor performers leave, this results in a functional turnover and in the same manner when good performers leave it results in a dysfunctional turnover. Most organizations tend to focus on dysfunctional turnover, due to its negative impact, when looking to reduce existing turnover figures. What is most often overlooked yet is the most pressing issue is the loss of productivity that an organization experiences immediately after the loss of an employee. The fact that overall productivity decreases in a significant manner, mainly due to the lack of manpower to handle the existing or increased workload; especially in the areas of service delivery and customer loyalty, has been recognized by service industry related organizations. Losses in the form of reduced productivity and other direct

monetary costs have a large negative impact on an organization and are a direct result of ET. Therefore, properly identifying and understanding the causes of ET, and taking measures to correct these causes are essential for any organization.

1.3 ET in Healthcare Services

Healthcare services in Sri Lanka are mainly provided through a well-organized curative and preventive health network in the country. The provision of basic healthcare to citizens by the state free of charge has ensured almost universal access to at least basic health facilities in all parts of Sri Lanka. Yet insufficient public investments in the health sector in a context of increasing cost of labour, equipment and drugs have resulted in poor quality health care, overcrowding of large hospitals and inadequate services in rural areas. The situation changed often for the worse when private healthcare providers emerged following the introduction of liberal economic reforms in 1977. The rise of the private health sector enabled the well-to-do patients to rely entirely on private healthcare services, relegating the poor to often poor quality public health services.

Private providers of healthcare play a significant part in the health sector today. Though they make use of many medical specialists attached to public institutions, private healthcare institutions are run entirely as private enterprises. Therefore, it is required to manage the private sector employees as other organizations do.

In Sri Lanka, it is very important to manage turnover for both private and government healthcare sectors. In government sector though the jobs is secured the employees do not satisfy them sufficiently. But in private sector, though the salary and other benefits are high the job security is less. Therefore, the ET rate is very high in private sector compared to the government sector.

When it comes to the pattern of the business of a hospital the lower hierarchical employees play a major role and retaining employees is a challenge to be accomplished to run the business smoothly. Therefore, proactive strategies need to be taken in order to retain the valuable employee categories. A particular hospital has taken steps already as retention strategies and the aim of this study would be

measuring the effectiveness of the retention strategies have been taken and what should be developed and introduced in this hospital.

1.4 Significance of the Study

As the targeted employee categories are very important in order to carry out the basic day today and critical functions in the hospital human resource division should have a strategic vision to cater their needs to overcome the high ET. Most of the organizations carry out employee surveys to measure the employee satisfactory levels and take proactive measures to increase employee satisfaction or maintain employee satisfaction.

Neither an internal person nor an outsider has done study on the ET or retention strategies for the hospital so far. The management does not concentrate in this important issue because of less awareness. Therefore, this study will positively support the human resource division of the hospital to identify the main reasons for the ET and hospital management to run the business without any hesitation deviated from the ET.

1.5 Scope of the Investigation

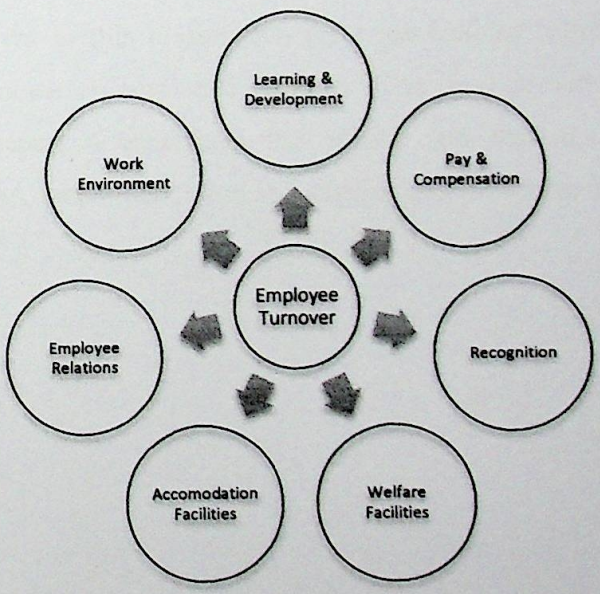

Figure 1.1: Scope of the investigation

The scope of the investigation is shown in Figure 1.1. ET is the main module which focuses on varied are as such learning and development, pay and compensation, recognition, welfare facilities, accommodation facilities, employee relations and work environment. These acts as the sub components of the main component ET and the entire study are scoped out within this boundary. As explained, above turnover is an additional cost to the company, so immediate actions need to be taken to avoid this additional cost. Initially the root causes for the turnover to be discovered and, then the solutions can be introduced. On top of the solutions for the causes, the existing retention strategies will be evaluated and amendments can be done, if necessary or new retention strategies can be implemented.

1.6 Objectives

On view of the above, the objectives of the present study are:

- To identify the current motivational techniques used by the organization.
- To identify the causes behind the turnover of lower hierarchical levels.
- To recommend new retention strategies to overcome ET issue in the hospital.

1.7 Outline of the Research

The rest of the chapters in this dissertation are organized as follows. Chapter 2 presents a literature review on employee turnover. Chapter 3 provides the research methodology and Chapter 4 represents the results and discussion. Chapter 5 discusses the conclusion, recommendation and suggestions for future research.

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CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Some of the past studies carried out on identification factors influencing on ET are reviewed and summarized here. The study is mainly focus on the ET and retention strategies.

2.2 Definition of Employee Turnover

ET is described as employees who have left, are leaving and will leave an institution for various reasons (Grobler et al., 2006). According to Philips and Connell (2003), ET refers to the percentage of employees leaving the organization for whatever reasons over a given period of time. According to Beam (2010), term ET is defined as a ratio comparison of the number of employees a company must replace in a given time period to the average number of total employees. A huge concern to most companies, ET is a costly expense especially in lower paying job roles, for which the ET rate is high. As suggested by Wood (1995), each time a position is vacated, either voluntarily or involuntarily, a new employee must be hired and trained and this replacement cycle is known as ET.

Voluntary and involuntary turnover are the two terms which turnover can be depicted into. In many occasions, when defining the term ET, it is considered only the voluntary turnover which is termed as avoidable. To understand the concept of employee turnover it is important to identify the types of turnover that impact on the organization.

2.3 Types of Employee Turnover

As reported on http://80-health.cch.com (2002), article the nature of employee turnover, there are four distinct categories of turnover that a company must consider:

(a) Voluntary separation: Termination of the employment relationship initiated by the employee.

(b) Layoffs: Suspensions from payroll that are initiated by the employer due to an economic slowdown.

(c) Discharges: Permanent termination of employment for disciplinary reasons.

(d) Other: Retirement, death, and permanent disability.

2.3.1 Voluntary Separation (Quit)

A quit is a termination of employment initiated by employee for any reason except to retire, to transfer to another establishment of the same firm, or for service in the armed forces (Hall and Lilien, 2000). Of these four categories, voluntary separation (quits) is the most problematic for organizations because employees control the separations, and often the company's investment in the employee is being lost to one of its competitors (Sexton et al. 2005).

2.3.2 Layoffs

According to Hall and Lilien (2000), layoff is a suspension from pay status initiated by employer without prejudice to the worker for such reasons as lack of orders, model changeover, termination of seasonal or temporary employment etc.

2.3.3 Discharges

Discharge is a termination of employment initiated by the employer for such reasons as incompetence, violation of rules, dishonesty, absenteeism, insubordination and failure to pass probationary period (Hall and Lilien, 2000).

2.3.3 Other

Include termination of employment for retirement, death, permanent disability, failure to meet required physical standards, and transfers to another section of the same organization (Hall and Lilien, 2000).

US Bureau of Labor Statistics (1980) classified above categories of turnover into voluntary and involuntary turnover as described below in sections 2.4 and 2.5.

2.4 Voluntary Turnover

According to Dess and Shaw (2001), when employees leave an organization at their own judgment is voluntary turnover. Shaw et al., (2001) defined the voluntary turnover as an instance of voluntary turnover, or a quit, reflects an employee's decision to leave an organization, whereas an instance of involuntary turnover, or a discharge, reflects an employer's decision to terminate the employment relationship. As defined by Lee and Mitchell (2004), it can be affected by a lack of job satisfaction, job stress and alternative opportunities. Therefore it can be assumed that, voluntary turnover is initiated by the employee and this type of turnovers can be avoided or controlled.

2.5 Involuntary Turnover

Employee turnovers due to any employer decisions can be identified as involuntary turnover. As stated by Shaw et al., (2001), involuntary turnover is defined as an instance of involuntary turnover, or a discharge that reflects an employer's decision to terminate the employment relationship. Cappelli (1992) defined involuntary turnover as restructure or downsize due to reasons which are independent of the affected employee(s). Ferguson and Ferguson (1986) explained this type of turnover can happen due to personal commitments such as to take care of a terminally ill family member or travel with the spouse to another area. These types of turnovers cannot be controlled.

2.6 Direct and Indirect Costs

Labor turnover has become a critical problem for any industry mainly because of its dependency on the human factor. Therefore, because of the financial and moral effects on organizations, many researchers have focused on these issues in the last few decades. ET increased operation cost and cost on induction and training (Ongori, 2007 and Amah, 2008). Smith and Watkins identified four major cost categories such as separation cost, vacancy cost, replacement cost and training cost (Pinkovitz et al., 1997). As defined by Smith and Watkins (1978), separation cost include exit interviews cost, separation pay and compensations. Vacancy cost includes additional

cost required to complete ongoing tasks. Replacement cost includes the cost of attracting new employees, testing, examinations and administrative expenses. Training cost includes all the formal and informal training costs. As mentioned by (Dess and Shaw, 2001) employee turnover plays an important role both in terms of company direct and indirect costs, direct costs involves replacement, recruitment and selection, temporary staff, management time while indirect costs involves morale, pressure on remaining staff, costs of learning, product/service quality, organizational memory, loss of cumulative skill and experience.

2.7 Effects of Macroscopic on Employee Turnover

At the beginning of the 20th century, few studies carried out for searching the factors influencing employees' turnover found that salary, common training, labour market structure, and job opportunities as most vital factors for the employee turnover. These types of primary studies laid the basic foundation for later construction of turnover theory (March and Simon, 1958; Burton, 1969; Chen, 1997; Porter and Steers, 1973).

2.7.1 Concept of Barnard on Employee Turnover

Regarding the integrative theory to maintain/turnover of employees, by Barnard (1938), in terms of the organization of society, personal psychology, and interacting economic interest, made deep discussions on factors specified as, individual goal, desirability, motivation, and other opportunities that may be imposed for people to join certain organizations, to attract members of the organization and maintain their commitment to contribute to the organization (theory on effectiveness of organizational inducement) and maintaining social structure of organizations to achieve the objectives of organization. In Barnard Executive function, described between material and non-marital incentives provided by the organizations, the relationship created by organizations to employees, makes a crucial position and plays a "determinant" role in the effective functioning of organizations. However, it only concerned economic and less clear how certain factors affect the ET behavior of workers (Zhang and Li, 2005).

2.7.2 Job attitude period

March and Simon (1958) introduced a general theory of organizational equilibrium in the classic work "organization", which stresses the importance of balancing work and their contributions to the organization and motivation. The organizational equilibrium theory indicates that movement desirability and perceived desirability are the factors for the employee turnover behavior (Lee et al., 2003). Classical models are constructed with a base psychological process. The models were increasingly generated and relationships between variables gradually complicated (Griffeth et al., 2000; Lee et al., 2004). Psychological process model of Price (1977) introduced job satisfaction as the mediator for voluntary employee turnover. Furthermore, Mobley (1977) introduced "Extension Media Chain" model and Steers and Mowday's (1981) model of turnover considered organizational commitment as the mediator. Price (1977), Mobley (1977) and Steers and Mowday (1981) regarded as typical attitude models in development research in the employees of the organization turnover in the monograph of Griffeth and Hom (1995).

Griffeth et al., (2000) conducted a review research in the model of element analysis and explained that related variables around attitude models shown in Figure 2.1 reached eleven kinds of demographics variables; sixteen kinds of variables related to job satisfaction and organization factors and work environment factors, such as expectations, pay satisfaction, distributive justice, supervisory satisfaction, leader-member exchange, work group cohesion, co- worker satisfaction, role clarify; six kinds of variables related to job content and external environment factors such as job scope, routinisation, job involvement, alternative job opportunities, comparison with present job etc; three behavioral factors; nine adjusting predictors for withdraw process.

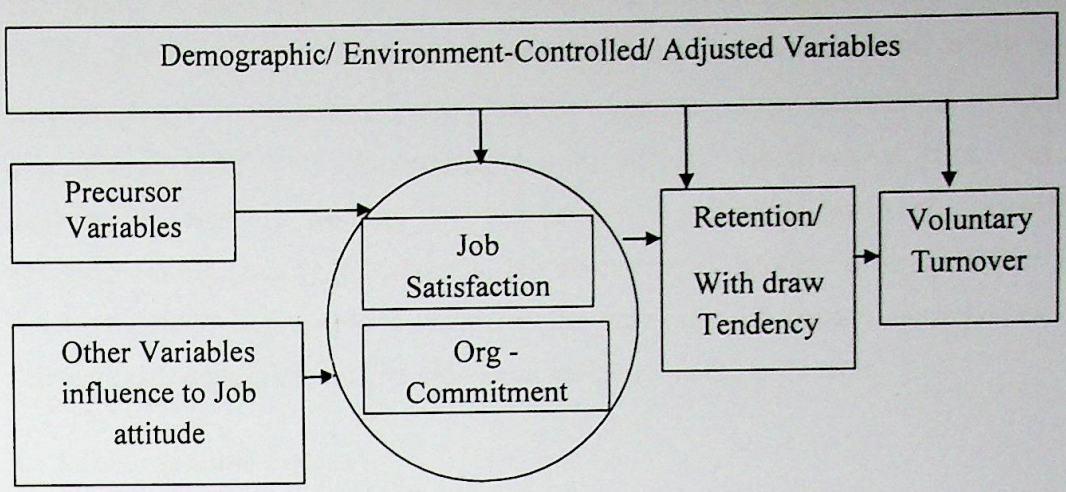

Figure 2.1: The traditional turnover model - Source: Griffeth et al., (2000)

2.8 Factors Impacting on Employee Turnover

The rate of ET can be varied from company to company as well as from region to region. According to (Ranking, 2006) the highest turnover is reported where the unemployment rate is lower and places where an employee to find another jobs very easily. Gordon Bowden (1952) introduced a simple solution to the turnover problem, that being to pay employees more than the competition. If it was only about money that would be a great solution, but it has a number of combined causes depending on a variety of issues dealing with work-related and non-work-related matters dealing. There are no commonly accepted factors for why people leave organizations (Lee and Mitchell, 1994). Mobley's (1977) study focused on the relationship between job satisfaction and turnover. Mohammad (2006) worked on the relationship between organization commitment and turnover. Tan et al., (2006) conducted another study in the Singapore workplace to show the relationship between work satisfaction, stress, and turnover. Steijn and Voet (2009) also showed the relationship between supervisor and employee attitude in their study. Zhou et al., (2009) another research was conducted in China to show the relationship between job satisfaction, organizational commitment or career commitment.

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The results of each study were different and various authors discussed different factors that impact on employee turnover. Employee turnover can often be conceptualized in terms of demographic (gender, age, educational level), occupational (skill level, experience, tenure, status), organizational (firm size, industry, job contents, working environments), and individual (pay scale, reward, advancement opportunity, job security, job involvement). Mobley et al., (1979) and Reichers (1985) attempted to examine the influence of certain demographic, occupational, organizational and individual variables on turnover rates.

2.8.1 Demographic factors

Age, gender, education level, tenure play a significant role in demographic factors. Van et al., (2004) reported the age and the organizational tenure are widely used as predictors of the turnover in the field of the turnover. The age is negatively correlated with the ET. Griffeth et al., (2000) showed younger employees are willing to take risks and accept positions that are below their abilities and expectations at the beginning of their career. Similarly, Blomme et al., (2010) showed age was more significant variable that influences the employees to leave the organization. In terms of tenure, a large number of voluntary turnovers occur first few months of employment (Grobler et al., 2006). Sturges and Guest (2001) stated that employees with long employment history are less tempted to move than the employees with short period of employment history. According to Nel et al., (2003) employees remain organization for a longer period because they have built up good relationships with other coworkers. In terms of gender, female workers traditionally have been seen as having lower attachment to the labour-force. According to Griffeth et al., (2000) women are slightly more likely to leave than men. However, Royalty (1998) found that turnover patterns of highly educated women and men are almost similar in behavior.

2.8.2 Occupational factors

Most of the researches have attempted to answer the question of why employees intend to quit (Kalliath and Beck, 2001; Kramer et al., 1995; Saks, 1996). Hospitality

organizations need to constantly ensure the satisfaction of their employees (Berry, 1997). Organizations tend to be more effective when they satisfy their employees (Robbins and Judge, 2007). Cavanagh and Coffin (1992) reported job satisfaction and participation at work to be important variables in the turnover process, and identified job satisfaction, pay and opportunity are most important variables in terms of stay.

A study conducted in South Korea by Lee et al., (2004) showed that the most frequently cited reasons for nurses leaving their jobs were exhaustion, rotating shifts and interpersonal conflicts revolution. In the same country, Yin and Yang (2002) found that individual and organizational factors associated with trading, nurses were job satisfaction, autonomy, and opportunities for promotion, stress, work, compensation, group cohesion, marital status and level of education. Apart from job satisfaction Stolte and Myers (1995) reported that salary and benefits, working hours, personal achievement, staff relationships and patient contact were among the most frequently mentioned reasons for female maternity nurses to leave. Iverson (1999) found that autonomy significantly explained nurses' decision to resign. Seo et al., (2004) suggested that the level of job autonomy and job growth of hospital nurses is further restricted by physicians, who have the power to decide the scope of nurses' work. Liebenberg (2003) mentioned that nurses who receive more recognition and autonomy are more inclined to stay with their employers. Aside from compensation and benefits, career development is another job characteristic that makes hospitality work an inferior choice of careers (Richardson, 2008).

Work stress is another factor which takes the researches attention. According to Banet et al., (2005) and Sharma et al., (2010) claimed that work stress, burnout, and labor turnover have become common words in the study of human resources. Researchers have asserted that there are direct and indirect costs of work stress which could lead to the crucial problems of labor, employers, and the community (Matteson and Ivancevich, 1982). Thus, some factors are associated with the stress; such as the lack of power, role ambiguity, and conflict (Burke, 1988; Nelson and Burke, 2000). Other researchers (Cooper and Cartwright, 1994; Ornelas and Kleiner, 2003; Varca, 1999) have identified stress as a critical issue in many organizations. On the other

hand, according to (Beehr et al., 1976; Cooper, 1991; Cordes and Dougherty, 1993; Dyer and Quine, 1998 and Ursprung, 1986), claimed that the role ambiguity occurs when an employee has a shortage of information about his work requirements.

Weinstein (1992) stated that responsibility is the single greatest motivator in business. In some instances even though the individual is willing to take the responsibility, yet, the management may never give them a chance. Responsibility is a major factor that can provide a lasting change of attitude (Herzberg, 1987). Rajiv et al., (2000) in his study claimed that to justify employee motivation has impact on ET. Researchers have recently directed their attention towards employee work motivation as predictors for ET (Richer et al., 2002) as motivational sources have been found to influence ET beyond job satisfaction and organizational commitment.

2.8.3 Organizational factors

Organizational stability plays an important role in employee turnover. Employees are more likely to stay when there is a predictable work environment and vice versa (Zuber, 2001). Alexander et al., (1994) reported where there is an unstable organization that leads to high level of staff turnover. Employees are willing to stay with stable organizations, because they would be able to predict their career advancement. Griffeth et al., (2000) stated that pay and pay-related variables effect on turnover. Griffeth and Hom (1995) examined the relationship between pays person's performance and turnover and came to the conclusion, when high performers are insufficiently rewarded, they quit. If employees are paid adequate financial incentives the more likely employees remain with organization.

Abassi and Hollman (2000) claimed that organization's poor hiring practices, managerial style, lack of recognition and lack of competitive compensation system increases the employee turnover. Blau and Boal (1987) focused conceptualization of how job involvement and organizational commitment could interact to affect turnover and absenteeism. The meta analysis by Boal and Cidambi (1984) suggests that job involvement is a better predictor of frequency of absence then duration. Workers with high levels of both job involvement and organizational commitment

should be the most motivated because they are attracted by both the job and the organization. As such, job involvement and organizational may function as interactive "orientations" (Angle and Perry, 1983).

Many firms have recently been emphasizing the use of nonfinancial measures such as customer satisfaction, product quality and employee satisfaction, as an integral part of their management control systems (Ittner et al., 1997; Banker et al., 2000). The service-profit chain concept examines that there are direct relationships between profitability, customer loyalty and employee satisfaction, loyalty and productivity (Heskett et al., 1994). A study of the "100 Best Companies to Work For" finds that the companies with the most satisfied employees had an above-average annual return to shareholders (Fortune, 1998). Another study finds positive significant correlation between employee satisfaction and financial performance (Economist, 1998). Also a survey of hospital employees finds significant correlations ($p<0.05$) between nursing-staff satisfaction scores and patient loyalty (Atkins et al., 1996).

2.8.4 Environmental factors

Environmental factors play a vital role on employee turnover. Factors that have an effect on employee turnover are geographical location, competition in the market place, environment turbulence, metropolitan area, economic conditions. According to QuaEnoo (2001) the above mentioned environmental factors are rarely under the control of the organization. If the organization is located in warm and cold area, this will have impact on employee turnover. Sindiwsa (2009) found that the area of the research, experienced extreme weather conditions and this could impact on employee turnover. Chief Executive Officer at Hewu hospital, Heat, (2008) supported this statement.

As reported on http://www.academia.edu (2014) article literature review on labour turnover and retention strategies, employment difficulties on non-metropolitan life was also contributing reason for nurses' decision to leave. It is further seen that 21 percent of the total respondents have looked for suitable employment or carrier development for their spouses. And 16 percent of total respondents identified the

importance of education, children facilities and access to medical expertise, etc. Several researches were carried out to find out the relationship between the transportation and the employee turnover. Sanchez (1999) stated that transport access is a significant determinant of employee turnover.

According to Sindiwsa (2009) dynamism of the environment, factor related to the metropolitan area, could also impact on employee turnover. According to the CEO Hewu hospital, Heat (2008) stated that employees during exit interviews explain various reasons to leave the job including going overseas due to security reasons, looking for better opportunities etc.

2.9 Summary

Employees are the backbone of organizations and human resource play a vital role for the success of the organization. In today's competitive business world job opportunities have arisen for the labor force and therefore they always look for new job opportunities. Therefore management has to plan the valuable labour force and need to take important decisions to retain the talented employees with the organization. However there is no universally accepted model for turnover and thousands of researches on employee turnover were carried out since 1950 and introduced number of employee turnover models. At the same time, no such work related to this study has been reported in Sri Lanka. Nevertheless, the results obtained from the research could help to achieve the objectives of this study.

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CHAPTER 3

MATERIALS AND METHODOLOGY

3.1 Introduction

This chapter will discuss about the collection of data and the statistical methodologies used in this study.

3.2 Research Design

In this study, a questionnaire is designed to acquire relevant information. The questionnaire was pre-tested to assess the strengths and weaknesses of the questionnaire and to ensure that all the variables were included. At this stage several modifications were made to the questionnaire and improved the flow of the questionnaire. The final version was distributed to the representatives of the sample and copy of a questionnaire is attached in Appendix A.

The questionnaire has five major sections:

Section A : Demographical data

Section B : Job related factors

Section C : Organizational factors

Section D : Environmental factors

Section E : Retention strategies

Section A, includes the demographic variables such as working department, gender, marital status, age, years of service and highest education qualification. Section B – Section D was designed as a five - point likert-type scale from 1- strongly disagree to 5 - strongly agree. The rating scale provides for a standardized response set, which can be easily applied for data analysis. Finally, three open ended questions included in Section E, related to reasons why the employees leave the hospital and the strategies need to be taken as the organization to retain the employees.

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3.3 Sampling Technique and Sample Size

In any research project, the ideal would be to include a complete population of interest when conducting a study. However, due to obvious reasons it is not possible to collect data from entire population. Therefore, correct sampling method sample size is very important in sampling such surveys (Saunders et al., 2009). A sample is defined as a segment that consists of the same characteristics as the population on whom the study is conducted (Burns and Grove, 1999).

3.3.1 Overview of Sampling Techniques

According to Saunders et al., (2009) the available sampling techniques can be divided into two types; (i) Probability sampling (Representative sampling) and (ii) Non-probability sampling (Judgmental sampling). In probability sampling, each case is being selected from the population is usually equal for all cases. In non-probability sampling, the probability of each case being selected from the total population is not known. Probability sampling technique includes simple random sampling, systematic sampling, stratified sampling and clustering sampling. On the other hand non-probability sampling includes convenience sampling, judgment sampling, quota sampling, and snowball sampling. However, as highlighted by Saunders et al., (2009) probability sampling is most commonly associated with survey-based researches in order to use statistical inferences. The process of probability sampling can be divided into four main categories, identify a suitable sampling frame, decide suitable sample size, select the most suitable sampling technique and validate that the sample represents the entire population.

3.3.2 Sample frame

The sampling frame for any probability sample is a complete list of all the cases in the population from which your sample will be drawn (Saunders et al., 2009). In the current study the population of interest was 1485 permanent lower level employees as obtained from human resource records.

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3.3.3 Sample size

As highlighted by Saunders et al., (2009) the larger the sample size the lower the likely error in generalizing to the population. Minimum number of sample size was derived using the formula suggested by Saunders et al., (2009).

$$S = \frac{X^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)}$$

Where

S = required sample size

X^2 = chi-square value for 1 degree of freedom at the desired confidence level (95%)

N = population size

P = the population proportion (assumed to be 0.5 since this would provide maximum sample size)

d = the degree of accuracy expressed as a proportion (0.05)

Appendix B provides a different minimum sample sizes required from different sizes of population given a 95% confidence level for different margins of error. According to Appendix B, it can be identified that with the number of population (1485) the minimum sample size should above 278 (Margin of error 5%). After applying the numerical values to above equation:

$$S = \frac{3.841^2 \times 1485 \times 0.5 \times 0.5}{0.05^2 \times 1484 + 3.841^2 \times 0.5 \times 0.5} \cong 300$$

It is found that sample size of 300 employees out of the total 1485 employee of the study population has to be selected. As it is intended to carryout factor analysis, the sample size 300 is sufficient according to Field (2005). Further, Tabachnick and Fidel (2001) suggested that about 300 cases for factor analysis will be sufficient.

3.3.4 Sampling Method

After having chosen suitable sampling frame and the required sample size, the next step is to decide the most appropriate sampling method. Saunders et al., (2009) defined stratified random sampling is a modification of random sampling in which you divide the population into two or more relevant and significant strata based on one or a number of attributes. So that variability among subjects within strata is more homogeneous. As the population interested in this study which a sample is to be drawn does not constitute a homogeneous group. Thus, the five strata identified in this population are shown in Table 3.1. After that the sample size of 300 was allocated proportionally among five strata. Thus the sampling technique used in this study is stratified random sampling technique.

Table 3.1: Distribution of the sample size

Strata	**Employees**	**Proportion with Respect to Total**	**Sample size**
Food and Beverage	250	16.83%	50
Laboratory	600	40.40%	121
House Keeping	300	20.20%	61
Wards and Theaters	135	9.09%	27
Out Patient Department	200	13.46%	41
Total	**1485**	**100%**	**300**

3.4 Statistical Techniques

Demographic data are very often used analyzed using mean, standard deviation and other descriptive analysis. However, the present study uses multivariate data analysis techniques in order to identify the factors for employee turnover. The two main statistical techniques used in this study are; (i) Principal component analysis (PCA) and (ii) Factor analysis (FA).

3.4.1 Principal Component Analysis (PCA)

Jollife (2002) stated that, PCA is probably the best and oldest of known techniques of the multivariate analysis. According to Jollife (2002), PCA was first introduced by Pearson (1901), and developed independently by Hotelling (1933). The aim of PCA is to reduce the dimensionality of a data set consisting of a large number of interrelated variables, while retaining as much as possible of the variation present in the data set (Jollife, 2002). According to Rencher (2002), PCA seek to maximize the variance of a linear combination of the variables.

3.4.1.1 Mathematical Frame of PCA

Suppose there is a matrix with p correlated variables and n sample. Each data point is denoted by x_i where i stands for $(i = 1, \ldots\ldots, p)$. Let it denotes transformation matrix a_{li} where l stands for components $(l = 1, \ldots\ldots, p)$ and it is of size $p \times p$. If y_i denote component scores, it can be expressed mathematically, $y_i = a_{li} \times x_i$ with a_{li} to be determined by PCA. In matrix notation, this can be written as $\mathbf{Y} = \mathbf{AX}$ and idea of independence can be expressed as $\mathbf{A^T A} = \mathbf{I}$ (Rencher, 2002).

$$[y_1 \quad y_2 \cdots \quad y_p] = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1p} \\ a_{21} & a_{22} & \ldots & a_{2p} \\ \vdots & \vdots & \ldots & \vdots \\ \vdots & \vdots & \ddots & \vdots \\ a_{p1} & a_{p2} & \cdots & a_{pp} \end{bmatrix} [x_1 \quad x_2 \quad \ldots \quad x_p]$$

The first principal component (y_1) is given by the linear combination of the variables$x_1, x_2, \ldots\ldots\ldots, x_p$.

$$y_1 = a_{11}x_1 + a_{12}x_2 + \ldots\ldots\ldots + a_{1p}x_p$$

$$Y_1 = a_1^T X$$

Similarly, second principal component is given by

$$y_2 = a_{21}x_1 + a_{22}x_2 + \ldots\ldots\ldots + a_{2p}x_p$$

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The first principal component is calculated such that it accounts for the maximum variance of the original data set. The second principal component is the linear combination with maximal variance in a direction orthogonal to the first principal component and so on. To prevent choosing large values for the weights $a_{11}, a_{12,\ldots,} a_{1p}$, weights are calculated with the constraints that their sum of squares is 1.

$$a_{11}^2+a_{12}^2+\ldots+a_{1p}^2 = 1$$

Similarly, this continues until the total of p principal component is calculated, equal to the total number of variables. At this point all of the original information has been explained. Therefore the sum of variances of all the principal components equals the sum of variances of all the original variables. All of these transformations of the original variables to the principal components is:

$$Y = AX$$

The rows of matrix A are called the eigenvector of matrix (S_x) representing the covariance matrix of original variables. Very often, in PCA data are standardized and consequently the matrix (S_x) represents the correlation matrix and eigenvalues are generally obtained from the correlation matrix. If there are p – variables, there are p – eigenvalues $(\lambda_1>\lambda_2> \ldots >\lambda_p)$ for the p – dimension correlation matrix. Due to orthogonal transformation of the initial system of S, the new system also has p – dimension vector. Elements of an eigenvector are known as loadings (a_{ij}). Variance/covariance matrix of principal components is known as the eigenvalues (λ_i) and it is the variance explained by each principal component. The score for the rth sample on the kth principal component is calculated as

$$y_{kr} = a_{k1}x_{k1} + a_{k2}x_{k2} + \ldots\ldots\ldots + a_{kp}x_{kp}$$

Correlation between variable x_i and principal component y_j is given by

$$r_{ij} = \frac{a_{ij}\sqrt{Var(y_j)}}{S_{ii}}$$

Proportion of variability explained by the ith PC

$$\frac{\lambda_i}{\sum_{i=1}^{n}\lambda_i} \times 100$$

3.4.1.2 Number of Components to retain

In general, a decision on the number of principal components is decided by the size of the eigenvalues (Rencher, 2002). If the covariance matrix is used for the analysis, then the average of the eigenvalues greater than 1 is selected. If the correlation matrix is used for this analysis eigenvalue greater than 1 is selected. However, it is generally try to acquire at least 70% of the total variability of the initial system. This is confirmed by the scree graph (a plot of $\lambda_i$vs i).

3.4.1.3 Selection of Variables

Jollife (2002) discussed eight selection methods and referred to the process as discarding variables. Eight method explained on selection method were based on three basic approaches; multiple correlation, clustering of variables and principal components. In the correlation method, variable that has the largest multiple correlations with other variables is deleted. However, when the correlation matrix is used, correlation is proportional to the eigenvalues. Thus, the variables having high eigen scores are selected for a given component. Eigen scores are compared within a principal component. Clustering methods partition the variables into groups or clusters and select a variable from each cluster. Rencher (2002) explained, Jollife's principal component methods in the context of selecting a subset of 10 variables out of 50 variables. One of his techniques associates a variable with each of the first 10 principal components and retains these 10 variables. Another approach is to associate a variable with each of the last 40 principal components and delete the 40 variables. As noted by Rencher (2002), several criteria have been suggested for selection and most of them were based on conditional covariance matrix of the variables not selected.

The principal components are initially obtained by rotating axes. As a result of that, the new variables become uncorrelated and reflect the directions of maximum variance. It can be further rotated, if the resulting components are difficult to explain. However, the newly rotated components are correlated and do not successively account for maximum variance. Therefore, the PCA is no longer useful. Therefore, for improved interpretation factor analysis are used to get rid of this problem (Rencher, 2002).

3.4.2 Factor Analysis (FA)

Factor analysis is a broad term representing a variety of statistical techniques that allow to identify reasons of having multicollinearity among observed variables (Gorsuch, 1983; Kim and Mueller, 1978). According to Johnson and Wichern (2007), its modern beginning lie in the early 20th century attempts of Karl-Pearson and Charles Spearmen and it was developed by scientists interested in psychometrics.

FA is an intricate representation of the covariance structure of a set of data (Johnson and Wichern, 2007). As stated by Johnson and Wichern (2007), FA is considered as an extension of principal component analysis. In this context, FA can be described as a statistical technique used for finding common factors, explains the correlation among variables. The difference between PCA and FA is discussed by Jollife (2002) and Rencher (2002). The main difference is in PCA, it is attempting to explain the variability of a system using fewer dimension of orthogonal components. In contrast in FA, it is attempting to explain covariance of the original system using unobservable factors.

There are two methods for factor analysis: Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). EFA does not require any prior knowledge of about the number of factors. CFA is commonly used for testing the identified FA models (Thompson, 2004). In this study Exploratory Factor Analysis, is used.

The basic idea underlying factor analysis is that p observed random variables, (X_1, X_2, . . . , X_p), can be expressed, except for an error term, as linear functions of m

(<p) hypothetical (random) variables or common factors, that is if $X_1, X_2, \ldots, X_p$ are the variables and $F_1, F_2, \ldots, F_m$ are the factors. Therefore the factor analysis model can be written as:

$$X_1 = \lambda_{11}F_1 + \lambda_{12}F_2 + \ldots\ldots + \lambda_{1m}F_m + \varepsilon_1$$

$$X_2 = \lambda_{21}F_1 + \lambda_{22}F_2 + \ldots\ldots + \lambda_{2m}F_m + \varepsilon_2$$

....

$$X_p = \lambda_{p1}F_1 + \lambda_{p2}F_2 + \ldots\ldots + \lambda_{pm}F_m + \varepsilon_p$$

Where, λ_{jk}, j = 1, 2, . . . , p; k = 1, 2, . . .,m are constants called the factor loadings, and ε_j, j = 1, 2, . . . , p are error terms, so the above equation can be rewritten in matrix form, as

$$X = \Lambda F + \varepsilon$$

There are number of assumptions associated with factor models (Jollife, 2002):

1. E(ε) = E(F) = E(X) = 0
2. E[εέ] = ψ (diagonal)
3. E[Fέ] = 0 (a matrix of zeros)
4. E[FF´] = I_m (an identity matrix)

If the factors are orthogonal, Var (F_i) = 1

Cov (F_i, F_j) = 0 and Cov (F_i, ε_j) = 0

$$\sigma_{ii}^2 = \underbrace{\lambda_{i1}^2 + \lambda_{i2}^2 + \cdots + \lambda_{im}^2}_{\text{Communality}} + \underbrace{\varepsilon_i^2}_{\text{V}(\varepsilon_i)\text{(Specific Variance)}}$$

V(X_i)

According to Jollife (2002), the fourth assumption can be relaxed. Therefore the common factors may be correlated (oblique) rather than uncorrelated (orthogonal). But many techniques in factor analysis have been developed for finding orthogonal factors. But some researches, argue that oblique factors are necessary in order to get a correct factor model.

According to Thompson (2004), there are different types of factor analysis, R factor analysis and Q factor analysis. It refers what is serving as the variables and what is serving as the observations respectively. According to Habing (2003), it does not make sense to use factor analysis if the variables are not interrelated. There are several tests that can be used to measure the variables are unrelated, such as Bartlett's test of sphericity for the measuring of sampling adequacy (MSA), and the Kaiser-Meyer-Olkin measure (KMO).

There are many different methods that can be used to extract factors namely principal component factor, maximum likelihood, generalized least squares and unweighted least squares (Jollife, 2002). Apart from that alpha factoring, image factoring and Rao's canonical factoring can also identified as different types of factor extraction methods. The most popular methods are principal component analysis and maximum likelihood method (Jollife, 2002).

3.4.2.1 Number of factors to be retained

Several methods have been proposed for determining number of factors that should be retained for further analysis. Kaiser (1960) has suggested dropping factors whose eigenvalues are less than one since they produced less information. Cattel (1966) suggested keeping factors before the breaking point after deriving the scree-plot. However, Field (2005) has suggested three rules of thumb for determining the number of factors to be retained.

1. Retain only the factors with an eigenvalues larger than 1 (Kaiser's Criterion)
2. Keep the factors which, account for about 70-80% of the variance
3. Keep all factors before the breaking point or elbow after deriving the scree-plot.

In practice it is very hard to stick to a single rule and combination of rules are used. According to Habing (2003), there are also other methods; such as likelihood ratio test, AIC (Akaike's information criterion), and SBC (Schwartz's Bayesian criterion).

3.4.2.2 Factor Rotation

Once the factor model has been extracted, it might be difficult to name the factors on the basis of factor loadings (Field, 2005). Most variables have high loadings on the most important factors and small loadings on all other factors (Field, 2005). Thus, interpretation of the factors can be difficult. Solutions from either principal component analysis or maximum likelihood method can be rotated in order to simplify the interpretation of factors (Jollife, 2002). Factor rotation redistributes variances among factors and makes it easier to interpret factors by investigating factor loadings (Thompson, 2004). There are a number of orthogonal rotation methods such as Varimax, Quartimax, Equamax and Orthomax. Among these rotation methods, according to Habing (2003), Varimax and Quartimax are the most popular orthogonal rotation methods. Both Varimax and Quartimax methods maximize the sums of the squared factor loadings; whereas Varimax focuses on columns and Quartimax focuses on rows.

3.4.3 Relationship of Factor Analysis to Principal Component Analysis

Both factor analysis and principal component analysis have the goal of reducing dimensionality (Jollife, 2002; Rencher, 2002; Phillips et al., 2005) and both have advantages and disadvantages (Table 3.2).

Table 3.2: Advantages and Disadvantages

	Advantages	Disadvantages
PCA	i. Lack of redundancy of data given the orthogonal components ii. Reduced complexity in images' grouping with the use of PCA iii. Smaller database representation since only the trainee images are stored in the form of their projections on a reduced basis iv. Reduction of noise since the maximum variation basis is chosen and so the small variations in the back-ground are ignored automatically	i. The covariance matrix is difficult to be evaluated in an accurate manner ii. Even the simplest invariance could not be captured by the PCA unless the training data explicitly provides this information
FA	i. Aggregation solution with high power of data reduction ii. Reduction of number of variables by combining two or more variables into a single factor iii. Identification of groups of inter-related variables, to see how they are related to each other iv. Deals well with measurement errors v. The factor loadings or component score can be saved and used in further analysis for inferences and model-testing	i. The final factors scores tend to be difficult to interpret ii. In confirmatory analysis, the construct validity of the final factors depends on the theoretical relevance of the chosen initial indicators iii. In most techniques, ordinal scale variables need to be interpreted in a cardinal sense

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

The aim of this chapter is to analyze and interpret the results obtained from data analysis using the methodologies as described in Chapter 3.

4.2 Response Rate

Of the 300 sample, only 285 were responding indicating the response rate was 95%. Table 4.1 indicates that distribution of responses among five departments.

Table 4.1: Number of questionnaires distributed among the department and their response

Department	Distributed	Received	Response Rate
Food and Beverage	50	48	96%
Laboratory	121	117	96.7%
House Keeping	61	59	96.7%
Wards and Theaters	27	24	88.8%
Out Patient Department	41	37	90.2%
Total	**300**	**285**	**95%**

According to results in Table 4.1, it can be seen that the response rate varies from 96.7% (Laboratory and House Keeping) to 88.8% (Wards and Theaters). According to Babbie and Mouton (2002), a response rate with a 70% is considered to be very good in such surveys and it is sufficient for statistical analysis.

4.3 Demographic Analysis

Demographic analysis described the personal characteristics of the population which were used to the research. The demographic variables used in the current study are gender, age, marital status, highest educational qualifications and length of the service.

4.3.1 Gender

The distribution of gender in the sample is shown in Table 4.2.

Table 4.2: Gender distribution of sample

Gender	Frequency	Percentage	Cumulative Percentage
Male	98	34.4%	34.4%
Female	187	65.6%	100%
Total	**285**	**100.0%**	

According to Table 4.2, it can be seen that more females (187) than males (98) participated in this study. The sample consisted of 66% females and 34% males, indicating that hospital industry is still dominated by female employees.

4.3.2 Age

The Table 4.3 indicates the frequency and the percentage distribution of the age of the respondents.

Table 4.3: Age distribution of the sample

Age Group (in years)	Frequency	Percentage	Cumulative Percentage
20 – 30	156	54.7%	54.7%
30 – 40	82	28.8%	83.5%
40 – 50	26	9.1%	92.6%
50 – 60	21	7.4%	100%
Total	**285**	**100.0%**	

According to results in Table 4.3, it can be seen that the percentage of age group varies from 54.7% (20 – 30 years) to 7.4% (50 – 60 years) indicating that the majority of the respondents, were aged between 20 and 30 years and consequently respondents are relatively younger. This could also indicates that the hospital involve in this study failed to retain more experienced work force.

4.3.3 Marital status

Table 4.4 presents the distribution of the sample by marital status.

Table 4.4: Marital status distribution of the sample

Marital Status	Frequency	Percentage	Cumulative Percentage
Married	113	39.7%	39.7%
Single	172	60.3%	100%
Total	**285**	**100.0%**	

The sample consisted of respondents of whom (60%) were unmarried, while the 40% of the respondents are married indicating that the majority of the respondents are single.

4.3.4 Highest education qualification

In terms of education qualification, Table 4.5 presents the distribution of education qualification in the sample.

Table 4.5: Education qualification distribution in the sample

Education Qualification	Frequency	Percentage	Cumulative Percentage
Grade 1 – 5	2	0.7%	0.7%
Up to GCE O/L	31	10.9%	11.6%
GCE O/L Pass	17	5.9%	17.5%
Up to GCE A/L	49	17.2%	34.7%
GCE A/L Pass	186	65.3%	100%
Total	**285**	**100.0%**	

An investigation of the distribution of the sample by educational qualification, as presented in Table 4.5, showed that 83% of the respondents were having educational qualification up to GCE A/L and 65% individuals have passed the exam. Respondents with other educational qualifications constitute 17%.

4.3.5 Length of service (years)

The Table 4.6 depicts the frequency and the percentage distribution of the respondents' length of service.

Table 4.6: Service length distribution in the sample

Service Length (Years)	Frequency	Percentage	Cumulative Percentage
< 2	57	20.00%	20.00%
2 – 5	98	34.38%	54.38%
6 – 10	93	32.63%	87.01%
11 – 15	21	7.36%	94.37%
16 – 20	9	3.15%	97.52%
> 20	7	2.48%	100.0%
Total	**285**	**100.0%**	

The results of Table 4.6 indicate that, 20% of the respondents are employed for less than 2 year, 34% of the sample is employed for 2 to 5 years, while 33% of the respondents are employed for 6 to 10 years. Only 13% of the respondents are employed for more than 11 years. Therefore, it is clear that 87% of the respondents are employed less than 10 years. Results in Table 4.6 indicate that organization has the stable work force between years 2 – 5.

4.4 Factors Influencing ET

A review of relevant literature led to an identification of three different factors namely job, organizational and environmental that impact on ET. Thus, descriptive analysis was carried out for each factor separately. Each factor has different variables which were acquired on likert scale. Though, some authors argue that descriptive statistic has no meaning, we strongly feel descriptive statistic is useful to get an idea of the importance of each variable within factors particularly when data are in ordinal scale.

4.4.1 Job Factors

This part of the questionnaire relevant data with respect to important factors that have an influence on the rate of employee turnover. Table 4.7 presents the descriptive analysis for job factors.

Table 4.7: Useful descriptive statistics for job factors

Statement	Mean	Median	Mode
I am paid fairly for the work I perform	2.8	3	3
I get recognition for my performance and management discusses my performance with me	3.2	3	3
My job provides me with the opportunity to develop my talent	3.8	4	4
I am clear of what is expected of me	4.0	4	4
My job entails a variety of tasks and are therefore interesting	3.4	3	3
I cope well with my workload	4.5	5	5
The work that I do is challenging	4.2	4	4
I am provided with the necessary resources to complete my task successfully	3.4	3	3
The job I am performing is satisfactory	3.5	4	4
I am responsible for making important decisions in my job	4.0	4	4
I have job security	3.6	4	4
My colleagues are supportive	3.7	4	4
My job allows me to grow professionally	3.9	4	4
I feel committed to the hospital where I am working	4.3	5	5
My management come forward to support when I am facing with critical situation	4.0	4	4
Aggregate Mean	**3.8**		

[5 = Strongly Agree, 4 = Agree, 3 = Unsure, 2 = Disagree, 1 = Strongly Disagree]

An analysis of the mean, median, mode and standard deviation of the variables in section B revealed in Table 4.7 and aggregate mean was 3.8. Statements that received high means were, statement four (I am clear of what is expected of me), six (I cope well with my workload), seven (The work that I do is challenging), ten (I am responsible for making important decisions in my job), fourteen (I feel committed to the hospital where I am working) and fifteen (My management come forward to support when I am facing with critical situation). As depicted on Table 4.7 statement one (I am paid fairly for the work I perform) received a low mean score (M=2.8), indicating disagree responses.

It is evident that respondents felt that they are satisfied with the work and duties they are allocated and they are clear of their job description. Respondents highlighted that they are not satisfied with what they are paid, even though satisfied with the job. Respondents also highlighted management issues, such as recognition and performance management.

4.4.2 Organizational Factors

This section of the questionnaire consists of statements related to organizational factors could impact on employee turnover. Table 4.8 presents the descriptive analysis for Section C.

Table 4.8: Useful descriptive statistics for organizational factors

Statement	Mean	Median	Mode
Organizational leaders build a multi-cultural climate that welcomes and accommodate people of different backgrounds	3.5	3	3
I am satisfied with the company rules and regulations	3.4	4	4
I find that my personal values and the values of the hospital are very similar	2. 9	3	3
I give a positive view of the hospital to outsiders	3.4	3	3
There is a feeling of trust among organizational members	3.3	3	3
The company has an appropriate grievance handling procedure	4.1	4	4
Policies & procedures within the company are applied equally to all the employees	4.4	4	4
There is a high morale among members of the organization	3.6	4	4
I believe that the management of the hospital is doing their best to manage the hospital well	3.6	4	4
Organization organizes enough trips, sports festivals, outbound events etc.	3.1	3	3
I feel proud to work at this hospital	3.1	3	3
Aggregate Mean	**3.5**		

[5 = Strongly Agree, 4 = Agree, 3 = Unsure, 2 = Disagree, 1 = Strongly Disagree]

An analysis of the mean and the standard deviation of the variables in section C revealed in Table 4.8. The aggregate mean of 3.5, indicates that the respondents are unsure about the statements in this section. Statement received high mean scores were, statement six (The company has an appropriate grievance handling procedure) and seven (Policies & procedures within the company are applied equally to all the employees).As presented on Table 4.8 statement three (I find that my personal values and the values of the hospital are very similar) received a low mean score (M = 2.9), indicating disagree responses. Respondents are unsure about the statement ten (M = 3.1) (Organization organizes enough trips, sports festivals, outbound events etc.) and eleven (M = 3.1) (I feel proud to work at this hospital).

It is evident that the respondents are proud to be a part of this hospital. As a result of this, they exhibits positive attitudes towards the organization and will give positive view of the organization to outsiders. But they highlighted that the organizational policies and procedures are not applied equally to all employees. Further, respondents who are involved in this survey are not satisfied with the entertainment provided and the grievance handling procedures.

4.4.3 Environmental Factors

Section D of the questionnaire consists of statements related to environmental factors could impact on employee turnover. Table 4.9 presents the descriptive analysis for section D.

Table 4.9: Useful descriptive statistics for environmental factors

Statement	Mean	Median	Mode
I enjoy working in this area of Sri Lanka	3.8	4	4
Employees stay in their jobs because it is hard to find another job	2.4	2	2
I will accept almost any type of job assignment in order to keep working for this hospital	2.6	3	3
I would prefer working in another hospital rather than here	2.5	2	2
I am willing to put in an above normal effort to help this hospital succeed	4.4	5	5
I am not considering leaving my job	3.4	4	4
Aggregate Mean	**3.2**		

[5 = Strongly Agree, 4 = Agree, 3 = Unsure, 2 = Disagree, 1 = Strongly Disagree]

An analysis of the mean and the standard deviation of the statements in section D revealed an aggregate mean of 3.2. As shown in above Table 4.9, statement five received the highest mean with 4.4 and respondents agreed to the statement that they are willing to put in an above normal effort to help this hospital succeed. Statements two (Employees stay in their jobs because it is hard to find another job), three (I will accept almost any type of job assignment in order to keep working for this hospital) and four (I would prefer working in another hospital rather than here) received low mean scores ($M<3$), indicating disagree responses. As presented in Table 4.9, statement two, four and six indicates that there was marginal disagreement among respondents in terms of their responses to the statements, as standard deviations are greater than 1.

It is evident that respondents felt that this area is suitable for working and they enjoyed working here in this area (M = 3.8). Respondents who are involved in this survey did not agree that employees stayed in their jobs because it was hard to find another job (M = 2.4). In statement five (M = 4.4), respondents agreed with the statement that they are willing to put in an above normal effort to help this hospital succeed. Statement six (M = 3.4), indicates that the respondents are unsure about the statement whether or not to leave their jobs.

4.5 Association among Variables with the three Factors

The results of correlation matrices among variables in each factor (job, organizational and environmental) obtained from SPSS are shown in Tables 4.10 – 4.12 respectively.

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Table 4.10: Correlation matrix among 15 variables for job factors

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
Q1	1	0.426 0.000	0.131 0.261	0.141 0.226	0.531 0.000	0.179 0.124	0.114 0.331	0.366 0.001	0.367 0.001	0.010 0.930	0.389 0.001	0.142 0.225	0.204 0.080	0.026 0.825	0.264 0.022
Q2	0.426 0.000	1	0.161 0.167	0.164 0.159	0.141 0.000	0.041 0.725	0.204 0.079	0.375 0.001	0.425 0.000	0.146 0.213	0.435 0.000	0.447 0.000	0.375 0.001	0.292 0.011	0.416 0.000
Q3	0.131 0.261	0.161 0.167	1	0.223 0.055	0.175 0.133	0.139 0.234	0.221 0.056	0.412 0.000	0.205 0.078	0.509 0.000	0.254 0.028	0.162 0.164	0.685 0.000	0.321 0.005	0.456 0.000
Q4	0.141 0.226	0.164 0.159	0.223 0.055	1	0.418 0.000	0.213 0.067	0.056 0.632	0.196 0.093	0.124 0.290	0.171 0.141	0.019 0.871	0.259 0.025	0.237 0.041	0.337 0.003	0.201 0.084
Q5	0.531 0.000	0.141 0.000	0.175 0.133	0.418 0.000	1	0.002 0.983	0.225 0.052	0.433 0.000	0.372 0.001	0.185 0.113	0.335 0.003	0.321 0.005	0.330 0.004	0.219 0.059	0.329 0.004
Q6	0.179 0.124	0.041 0.725	0.139 0.234	0.213 0.067	0.002 0.983	1	0.370 0.001	0.013 0.915	0.194 0.096	0.241 0.037	0.103 0.380	0.115 0.325	0.162 0.166	0.388 0.001	0.150 0.199
Q7	0.114 0.331	0.204 0.079	0.221 0.056	0.056 0.632	0.225 0.052	0.370 0.001	1	0.143 0.221	0.213 0.066	0.353 0.002	0.197 0.091	0.188 0.107	0.402 0.000	0.303 0.008	0.507 0.000
Q8	0.366 0.001	0.375 0.001	0.412 0.000	0.196 0.093	0.433 0.000	0.013 0.915	0.143 0.221	1	0.252 0.029	0.362 0.001	0.197 0.091	0.308 0.007	0.338 0.003	0.320 0.005	0.449 0.000

Q9	0.367 0.001	0.425 0.000	0.205 0.078	0.124 0.290	0.372 0.001	0.194 0.096	0.213 0.066	0.252 0.029	1	0.292 0.011	0.487 0.000	0.466 0.000	0.452 0.000	0.315 0.006	0.482 0.000
Q10	0.010 0.930	0.146 0.213	0.509 0.000	0.171 0.141	0.185 0.113	0.241 0.037	0.353 0.002	0.362 0.001	0.292 0.011	1	0.204 0.080	0.201 0.084	0.507 0.000	0.446 0.000	0.468 0.000
Q11	0.389 0.001	0.435 0.000	0.254 0.028	0.019 0.871	0.335 0.003	0.103 0.380	0.197 0.091	0.197 0.091	0.487 0.000	0.204 0.080	1	0.251 0.030	0.412 0.000	0.334 0.003	0.356 0.002
Q12	0.142 0.225	0.447 0.000	0.162 0.164	0.259 0.025	0.321 0.005	0.115 0.325	0.188 0.107	0.308 0.007	0.466 0.000	0.201 0.084	0.251 0.030	1	0.411 0.000	0.341 0.003	0.463 0.000
Q13	0.204 0.080	0.375 0.001	0.685 0.000	0.237 0.041	0.330 0.004	0.162 0.166	0.402 0.000	0.338 0.003	0.452 0.000	0.507 0.000	0.412 0.000	0.411 0.000	1	0.512 0.000	0.691 0.000
Q14	0.026 0.825	0.292 0.011	0.321 0.005	0.337 0.003	0.219 0.059	0.388 0.001	0.303 0.008	0.320 0.005	0.315 0.006	0.446 0.000	0.334 0.003	0.341 0.003	0.512 0.000	1	0.491 0.000
Q15	0.264 0.022	0.416 0.000	0.456 0.000	0.201 0.084	0.329 0.004	0.150 0.199	0.507 0.000	0.449 0.000	0.482 0.000	0.468 0.000	0.356 0.002	0.463 0.000	0.691 0.000	0.491 0.000	1

Table 4.11: Correlation matrix among 11 variables for organizational factors

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
Q1	1	0.392 0.001	0.236 0.042	0.214 0.065	0.326 0.004	0.281 0.014	0.338 0.003	0.233 0.045	0.422 0.000	0.401 0.000	0.202 0.082
Q2	0.392 0.001	1	0.481 0.000	0.354 0.002	0.329 0.004	0.527 0.000	0.339 0.003	0.176 0.132	0.598 0.000	0.170 0.145	0.412 0.000
Q3	0.236 0.042	0.481 0.000	1	0.600 0.000	0.323 0.005	0.320 0.005	0.233 0.045	0.211 0.069	0.364 0.001	0.320 0.005	0.517 0.000
Q4	0.214 0.065	0.354 0.002	0.600 0.000	1	0.527 0.000	0.261 0.024	0.144 0.217	0.481 0.000	0.381 0.001	0.386 0.001	0.543 0.000
Q5	0.326 0.004	0.329 0.004	0.323 0.005	0.527 0.000	1	0.267 0.021	0.392 0.001	0.404 0.000	0.443 0.000	0.426 0.000	0.450 0.000
Q6	0.281 0.014	0.527 0.000	0.320 0.005	0.261 0.024	0.267 0.021	1	0.566 0.000	0.278 0.016	0.394 0.000	0.179 0.124	0.303 0.008
Q7	0.338 0.003	0.339 0.003	0.233 0.045	0.144 0.217	0.392 0.001	0.566 0.000	1	0.379 0.001	0.322 0.005	0.165 0.158	0.212 0.068
Q8	0.233 0.045	0.176 0.132	0.211 0.069	0.481 0.000	0.404 0.000	0.278 0.016	0.379 0.001	1	0.341 0.003	0.291 0.011	0.301 0.009
Q9	0.422 0.000	0.598 0.000	0.364 0.001	0.381 0.001	0.443 0.000	0.394 0.000	0.322 0.005	0.341 0.003	1	0.376 0.001	0.394 0.000
Q10	0.401 0.000	0.170 0.145	0.320 0.005	0.386 0.001	0.426 0.000	0.179 0.124	0.165 0.158	0.291 0.011	0.376 0.001	1	0.538 0.000
Q11	0.202 0.082	0.412 0.000	0.517 0.000	0.543 0.000	0.450 0.000	0.303 0.008	0.212 0.068	0.301 0.009	0.394 0.000	0.538 0.000	1

Table 4.12: Correlation matrix among 6 variables for environmental factors

	Q1	Q2	Q3	Q4	Q5	Q6
Q1	1	0.124 0.290	0.244 0.035	0.104 0.373	0.112 0.340	0.290 0.012
Q2	0.124 0.290	1	0.401 0.000	0.407 0.000	0.191 0.100	0.334 0.003
Q3	0.244 0.035	0.401 0.000	1	0.031 0.791	0.349 0.002	0.363 0.001
Q4	0.104 0.373	0.407 0.000	0.031 0.791	1	0.023 0.847	0.062 0.594
Q5	0.112 0.340	0.191 0.100	0.349 0.002	0.023 0.847	1	0.244 0.035
Q6	0.290 0.012	0.334 0.003	0.363 0.001	0.062 0.594	0.244 0.035	1

As many pairs are significant ($p < 0.05$), it can be claimed that there is significant correlation among variables for each factor, and thus data sets can be used for factor analysis. In order to test whether the correlation matrix is significantly different from identity matrix, Bartlett's Test for Sphericity was carried out separately for each variable and results are shown in Table 4.13.

Bartlett's Test Hypothesis

H_0= Original correlation matrix is an identity matrix

H_1= Original correlation matrix is not an identity matrix

$H_0 = I_p$ vs $H_1 \neq I_p$

Table 4.13: Results of Bartlett's Test for Sphericity

Attribute	Test Statistic	Probability
Job Factors	430.3	0.000
Organizational Factors	307.3	0.000
Environmental Factors	60.8	0.000

Since Bartlett's test returned p – value of approximately 0, suggests that correlation matrix is not an identity matrix. As Bartlett's Test of Sphericity is highly significant

($p < 0.001$), it can be claimed that the correlation matrix is significantly different from the identity matrix, and therefore the factor analysis is appropriate for the original data. In order to identify underline variables those explain the pattern of correlation within a set of observed variables for the three attributes namely job factors, organizational factors and environmental factors, FA was carried out.

In order to perform the FA, the suitability of data for FA was assessed. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used to determine the sample size is sufficient, which is the ratio of the squared correlation between variables to the squared partial correlation between variables. It has been recommended to use data for FA, if KMO statistic is greater than 0.6 (Hutcheson and Sofroniou, 1999). Results are shown in Table 4.14.

Table 4.14: Results of KMO measure of sampling adequacy

Attribute	KMO
Job Factors	0.791
Organizational Factors	0.787
Environmental Factors	0.645

As presented in Table 4.14, the KMO statistics for the observed variables are 0.79, 0.78 and 0.65 (> 0.6) respectively. Therefore the present data sets are appropriate method for FA.

4.6 FA for Variables under Job Factors

Table 4.15: Results of eigen analysis for job factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.275	35.164	35.164	5.275	35.164	35.164
2	1.898	12.657	47.821	1.898	12.657	47.821
3	1.191	7.939	55.760	1.191	7.939	55.760
4	1.177	7.846	63.606	1.177	7.846	63.606
5	.906	6.037	69.643			
6	.812	5.416	75.060			
7	.678	4.520	79.580			
8	.609	4.062	83.641			
9	.521	3.472	87.113			
10	.455	3.036	90.149			
11	.417	2.777	92.926			
12	.343	2.289	95.216			
13	.308	2.051	97.267			
14	.241	1.606	98.873			
15	.169	1.127	100.000			

Results of the eigenvalues for the correlation matrix are shown in Table 4.15. Of the fifteen eigenvalues, only four eigenvalues are greater than 1. Thus the FA was started with 4–factor model. Results in Table 4.15 indicate that these four factors explain 63.6% the total variation of the initial system. Factor 1 contributed the highest variation of 35.1%. Factor 2, factor 3 and factor 4 explain 12.9%, 7.9%, 7.8% of total variance of the original system respectively. Therefore it is evident that, original system of 15 dimension system can be reduced to 4 dimension system with orthogonal axes.

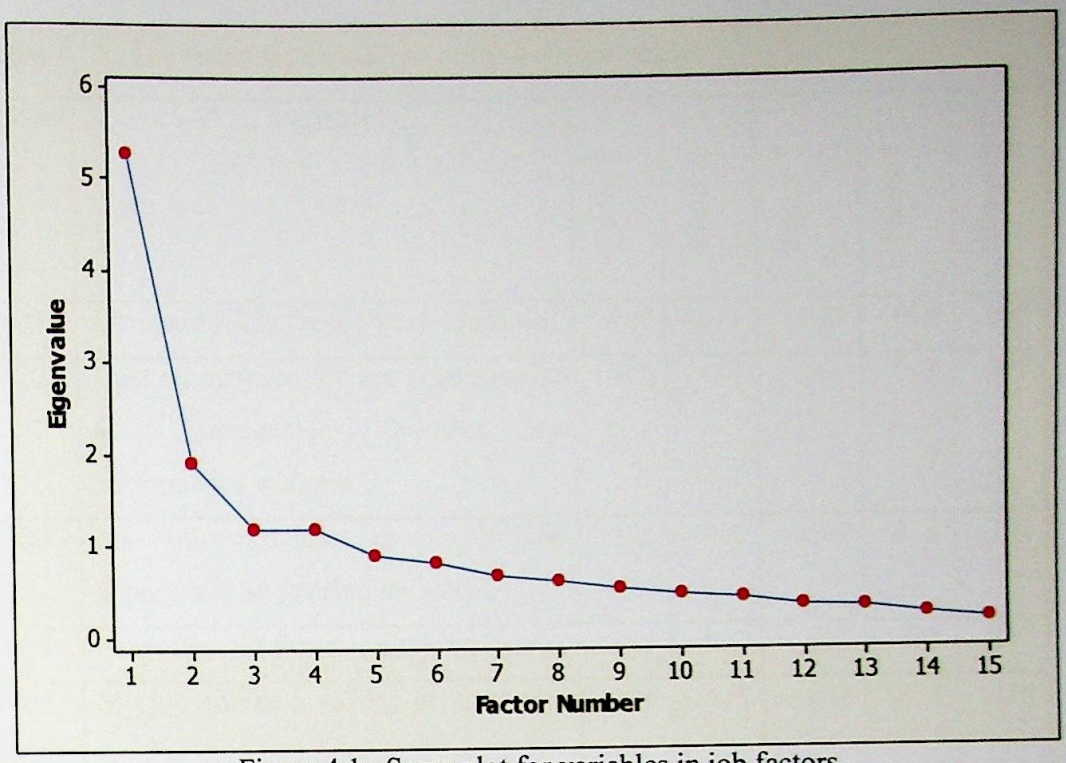

Figure 4.1: Scree plot for variables in job factors

As shown in Figure 4.1, curve begins to tail off after three factors, but there is another drop after the fourth factor before a stable plateau is reached. In other words the elbow shape in the scree plot occurred at the fourth component. Thus, it further justified to use four factors to explain the covariance of original system.

Table 4.16: Unrotated factor loading of the 4–factor model

Code	Variable	Factor 1	Factor 2	Factor 3	Factor 4	Communality
Q1	I am paid fairly for the work I perform	.441	-.671	-.079	-.056	.655
Q2	I get recognition for my performance & management discusses my performance with me	.615	-.437	.166	-.018	.597
Q3	My job provides me with the opportunity to develop my talent	.595	.300	-.514	-.213	.754
Q4	I am clear of what is expected of me	.389	.037	-.192	.792	.817
Q5	My job entails a variety of tasks and are therefore interesting	.596	-.449	-.089	.338	.679
Q6	I cope well with my workload	.269	.587	.432	.299	.693
Q7	The work that I do is challenging	.502	.325	.265	-.139	.447
Q8	I am provided the necessary resources to complete my task successfully	.598	-.171	-.439	.052	.583
Q9	The job I am performing is satisfactory	.656	-.191	.376	-.108	.620
Q10	I am responsible for making important decisions in my job	.592	.438	-.253	-.136	.624
Q11	I have job security	.576	-.243	.313	-.306	.582
Q12	My colleagues are supportive	.591	-.111	.247	.197	.461
Q13	My job allows me to grow professionally	.801	.209	-.140	-.208	.748
Q14	I feel committed to the hospital where I am working	.645	.355	.119	.198	.596
Q15	My management come forward to support when I am facing with critical situation	.801	.119	-.010	-.174	.686

The communalities shown in Table 4.16 (column 7), indicate the proportion of each variable that can be explained by the selected four factors. It can be seen that all communalities are between 0.6 and 0.8, with an exceptional for the variable Q7. It indicates that Q7 is not explained well by the four factors. However taking 5 – factor model the total variability does not increase significantly (only 6%) as shown in Table 4.15. Thus the factor model was taken as 4 – factor model.

Table 4.16 contains the unrotated factor loadings, which are the correlations between the variable and the factor. The factors were extracted using principal component method. The higher the absolute value of the loading, the more the factor contributes to the variable. The pattern loadings of each variables of the unrotated factor are not differentiable within the factors. Thus, it may be not easy to discard the variables within the factors. Consequently, it is not possible to give a meaningful name for the factors. Therefore, factors were rotated using three types of orthogonal transformation namely Varimax, Quartimax and Equamax. The factors loading resulting from these rotations are presented in Tables 4.17 to 4.19 respectively.

Table 4.17: Factor loadings of 4–factor model after Varimax rotated for section job factors

Code	Variable	Factor 1	Factor 2	Factor 3	Factor 4
Q1	I am paid fairly for the work I perform	**.668**	.082	-.394	.215
Q2	I get recognition for my performance and management discusses my performance with me	**.738**	.131	-.021	.185
Q3	My job provides me with the opportunity to develop my talent	.030	**.863**	-.007	.091
Q4	I am clear of what is expected of me	.007	.109	.212	**.872**
Q5	My job entails a variety of tasks and are therefore interesting	**.560**	.142	-.108	.477
Q6	I cope well with my workload	-.048	.054	**.821**	.116
Q7	The work that I do is challenging	.271	.341	**.495**	-.112
Q8	I am provided with the necessary resources to complete my task successfully	.299	**.549**	-.211	.384
Q9	The job I am performing is satisfactory	**.723**	.163	.267	.013
Q10	I am responsible for making important decisions in my job	.042	**.739**	.270	.056
Q11	I have job security	**.710**	.194	.119	-.159
Q12	My colleagues are supportive	**.521**	.126	.297	.292
Q13	My job allows me to grow professionally	.377	**.742**	.228	.058
Q14	I feel committed to the hospital where I am working	.223	.416	**.548**	.270
Q15	My management come forward to support when I am facing with critical situation	.480	**.620**	.258	.060

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Table 4.18: Factor loadings of 4–factor model after Quartimax rotated for section job factors

Code	Variable	Factor 1	Factor 2	Factor 3	Factor 4
Q1	I am paid fairly for the work I perform	**.671**	.026	-.436	.114
Q2	I get recognition for my performance and management discusses my performance with me	**.759**	.100	-.072	.079
Q3	My job provides me with the opportunity to develop my talent	.076	**.860**	-.078	.054
Q4	I am clear of what is expected of me	.141	.150	.182	**.861**
Q5	My job entails a variety of tasks and are therefore interesting	**.632**	.124	-.159	.489
Q6	I cope well with my workload	.015	.123	**.813**	.130
Q7	The work that I do is challenging	.293	.362	**.455**	-.153
Q8	I am provided with the necessary resources to complete my task successfully	.357	**.527**	-.276	.317
Q9	The job I am performing is satisfactory	**.737**	.149	.217	-.088
Q10	I am responsible for making important decisions in my job	.093	**.756**	.207	.026
Q11	I have job security	**.695**	.164	.072	-.259
Q12	My colleagues are supportive	**.576**	.132	.253	.217
Q13	My job allows me to grow professionally	.422	**.740**	.148	-.018
Q14	I feel committed to the hospital where I am working	.304	.454	**.496**	.229
Q15	My management come forward to support when I am facing with critical situation	.521	**.617**	.183	-.022

Table 4.19: Factor loadings of 4–factor model after Equamax rotated for section job factors

Code	Variable	Factor 1	Factor 2	Factor 3	Factor 4
Q1	I am paid fairly for the work I perform	**.622**	.092	-.373	.347
Q2	I get recognition for my performance and management discusses my performance with me	**.694**	.124	.001	.316
Q3	My job provides me with the opportunity to develop my talent	.008	**.858**	.040	.128
Q4	I am clear of what is expected of me	-.146	.062	.250	**.854**
Q5	My job entails a variety of tasks and are therefore interesting	**.675**	.124	-.072	.451
Q6	I cope well with my workload	-.071	.009	**.826**	.073
Q7	The work that I do is challenging	.282	.321	**.510**	-.070
Q8	I am provided with the necessary resources to complete my task successfully	.225	**.543**	-.165	.459
Q9	The job I am performing is satisfactory	**.707**	.149	.283	.133
Q10	I am responsible for making important decisions in my job	.026	**.722**	.309	.079
Q11	I have job security	**.725**	.194	.131	-.031
Q12	My colleagues are supportive	**.461**	.099	.320	.370
Q13	My job allows me to grow professionally	.355	**.727**	.271	.141
Q14	I feel committed to the hospital where I am working	.168	.378	**.581**	.297
Q15	My management come forward to support when I am facing with critical situation	.456	**.604**	.296	.158

The output contains the factor loadings of each variable onto each factor after Varimax, Quartimax and Equamax rotation. Comparison of factor loadings under Varimax, Quartimax and Equamax, it can be concluded that four common factors

can be selected, irrespective of factor rotation method. Considering critical values as 0.5 and not taking the same variables to be included for more than one factor, the selected variables for each factor under different rotation are show in Table 4.20.

Table 4.20: Summary of variables to be included in the 4–factor model

Variables to be included into 4 – factor model	Types of Rotation		
	Varimax	Quartimax	Equamax
Factor 1	Q1,Q2,Q5,Q9,Q11, Q12	Q1,Q2,Q5,Q9,Q11, Q12	Q1,Q2,Q5,Q9,Q11, Q12
Factor 2	Q3,Q8,Q10,Q13,Q15	Q3,Q8,Q10,Q13,Q15	Q3,Q8.Q10,Q13,Q15
Factor 3	Q6,Q7,Q14	Q6,Q7,Q14	Q6,Q7,Q14
Factor 4	Q4	Q4	Q4

Thus it can be concluded that identified variables for each factor are invariant of the type of rotation. However, as Varimax is more popular, factor loadings were chosen based on Varimax rotation. The four factors that emerged from this analysis can be labeled as; job satisfaction, professional development, work commitment and job description.

4.6.1 Details of the four factors

The results of factor score coefficients of the 4-factor model are shown in Table 4.21.

Table 4.21: Factor score coefficients for section job factor

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Q1	0.247	0.031	0.270	0.061
Q2	0.276	0.091	0.038	0.016
Q3	-0.171	-0.442	0.179	-0.023
Q4	-0.154	0.077	-0.100	0.667
Q5	0.132	0.073	0.104	0.351
Q6	-0.045	0.139	-0.516	0.079
Q7	0.075	-0.039	-0.254	-0.174
Q8	-0.036	-0.234	0.251	0.200
Q9	0.292	0.111	-0.144	-0.125
Q10	-0.133	-0.322	-0.025	-0.044
Q11	0.307	0.045	-0.045	-0.258
Q12	0.165	0.126	-0.165	0.129
Q13	0.016	0.266	0.001	-0.095
Q14	-0.021	0.038	-0.267	0.124
Q15	0.085	-0.175	-0.044	-0.095

Factor 1: Job Satisfaction

Job satisfaction is a psychological factor and can be described as a set of positive and /or negative emotions that the individual has of his/her work and is associated with employee's work and management control. As explained above, factor 1 explained 35.164% of the total variability of the initial system. Thus, it can be easily concluded factor 1 can be formed as a linear combination of six observed variables namely Q1, Q2, Q5, Q9, Q11 and Q12 and the coefficients are positive.

Factor 1 = 0.247Q1 + 0.276Q2 + 0.132Q5 + 0.292Q9 + 0.307Q11 + 0.165Q12

Factor 2: Professional Development

Professional development is the process of improving skills and knowledge both for personal development and for career development. Factor 2 explained 12.657% of

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the total variability and it can be formed as a linear combination of Q3, Q8, Q10, Q13 and Q15.

Factor 2 = 0.266Q13 - 0.442Q3 - 0.234Q8 - 0.322Q10 - 0.175Q15

Factor 3: Work Commitment

Work commitment can be defined as the feeling of the responsibility that an employee has towards the organizational objectives. This can be formed as a linear combination of Q6, Q7 and Q14 and all the coefficients are negative.

Factor 3 = - 0.516Q6 - 254Q7 - 0.267Q14

Factor 4: Job Description

Job description is a formal statement of employees' duties, responsibilities, qualifications and reporting structure.

Factor 4 = 0.667Q4

4.7 FA for Variables under Organizational Factors

According to the results in Table 4.14, KMO statistics for the observed variables is 0.787, which falls into the top of the scale, indicating high degree of sampling adequacy. FA was therefore conducted on the variables of organizational factors to identify the sub factors could affect on employee turnover. This was further justified by the Bartlett's Test of Sphericity (p = 0.000) as showed in Table 4.13.

Table 4.22: Results of eigen analysis for organizational factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Q1	4.573	41.576	41.576	4.573	41.576	41.576
Q2	1.349	12.262	53.837	1.349	12.262	53.837
Q3	1.046	9.507	63.345	1.046	9.507	63.345
Q4	.940	8.542	71.887			
Q5	.686	6.232	78.119			
Q6	.588	5.349	83.468			
Q7	.556	5.054	88.523			
Q8	.399	3.628	92.151			
Q9	.377	3.429	95.580			
Q10	.263	2.393	97.973			
Q11	.223	2.027	100.000			

The eigen value analysis of the correlation matrix of the eleven variables indicates the 11-D system can be reduced into 3–D system as the eigenvalues were greater than 1 only for the first three components as show in Table 4.21. Retaining only the eigenvalues greater than 1, these three factors explained almost 63% of the total variance of the initial system. Factor 1 contributed the highest variation of 41.5% while 12.2% of total variance is explained by factor 2 and 9.5% of the variance is explained by factor 3.

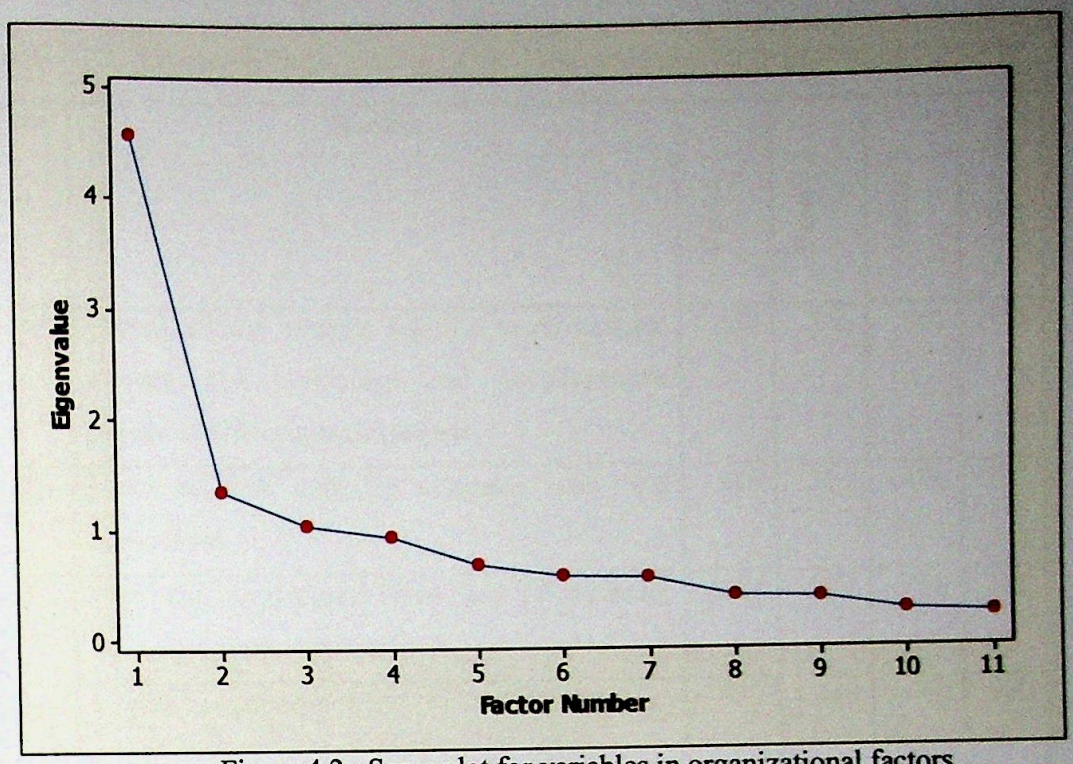

Figure 4.2: Scree plot for variables in organizational factors

As depicted in Figure 4.2, curve begins to tail off after three factors. In other words the elbow shape in the scree plot occurred at the third component. Thus, it further justified to use three factors to explain the original system.

Table 4.23: Unrotated factor loading of the 3–factor model for organizational factors

Code	Variable	Factor 1	Factor 2	Factor 3	Communality
Q1	Organizational leaders build a multi-cultural climate that welcomes and accommodate people of different backgrounds	.554	.246	.186	.403
Q2	I am satisfied with the company rules and regulations	.685	.315	-.474	.793
Q3	I find that my personal values and the values of the hospital are very similar	.663	-.229	-.456	.700
Q4	I give a positive view of the hospital to outsiders	.707	-.446	-.062	.702
Q5	There is a feeling of trust among organizational members	.697	-.150	.302	.600
Q6	The company has an appropriate grievance handling procedure	.609	.531	-.126	.669
Q7	Policies & procedures within the company are applied equally to all the employees	.556	.566	.292	.715
Q8	There is a high morale among members of the organization	.566	-.063	.534	.609
Q9	I believe that the management of the hospital is doing their best to manage the hospital well	.721	.150	-.092	.551
Q10	Organization organizes enough trips, sports festivals, outbound events etc.	.597	-.380	.251	.564
Q11	I feel proud to work at this hospital	.703	-.377	-.162	.663

The communalities shown in Table 4.23 (column 6), indicate the proportion of each variable that can be explained by the selected three factors. It can be seen that all communalities are between 0.6 and 0.8, with an exceptional for the variable Q1, Q9

and Q10 (<0.6). It indicates that Q1, Q9 and Q10 are not explained well by the three factors. Taking 4 – factor model the total variability increase 9% as shown in Table 4.22 and this further confirmed by the eigenvalue which is closed to 1 (0.940). In other words, as depicted in Figure 4.2, there is another drop after the fourth factor before a stable plateau is reached. Thus, it is further justified to use four factors and the results are shown in Table 4.24.

Table 4.24: Unrotated factor loading of the 4–factor model for organizational factors

Code	Variable	Factor 1	Factor 2	Factor 3	Factor 4	Communality
Q1	Organizational leaders build a multi-cultural climate that welcomes and accommodate people of different backgrounds	.554	.246	.186	-.599	.761
Q2	I am satisfied with the company rules and regulations	.685	.315	-.474	-.083	.800
Q3	I find that my personal values and the values of the hospital are very similar	.663	-.229	-.456	.153	.723
Q4	I give a positive view of the hospital to outsiders	.707	-.446	-.062	.277	.779
Q5	There is a feeling of trust among organizational members	.697	-.150	.302	.035	.601
Q6	The company has an appropriate grievance handling procedure	.609	.531	-.126	.227	.721
Q7	Policies & procedures within the company are applied equally to all the employees	.556	.566	.292	.224	.765
Q8	There is a high morale among members of the organization	.566	-.063	.534	.371	.746
Q9	I believe that the management of the hospital is doing their best to manage the hospital well	.721	.150	-.092	-.240	.608
Q10	Organization organizes enough trips, sports festivals, outbound events etc.	.597	-.380	.251	-.418	.739
Q11	I feel proud to work at this hospital	.703	-.377	-.162	.025	.663

After extracting the four factor model, it can be seen that all communalities are between 0.6 and 0.8. Thus, it is further justified to use four factors to explain to covariance of initial system and the factor model was taken as 4 factor model. Principal component method was used to extract the factors and Table 4.24 contains the unrotated factor loadings for organizational factors, which are the correlations between the variable and the factor. The pattern loadings of each variables of the unrotated factor are very much similar. Thus, to make factors more meaningful factors were rotated using three types of orthogonal transformation namely Varimax, Quartimax and Equamax. The corresponding factors loading resulting from each rotation are presented in Tables 4.25 to 4.27 respectively.

Table 4.25: Factor loadings of 4–factor model after Varimax rotation for organizational factors

Code	Variable	Factor 1	Factor 2	Factor 3	Factor 4
Q1	Organizational leaders build a multi-cultural climate that welcomes and accommodate people of different backgrounds	-.013	.319	**.809**	.065
Q2	I am satisfied with the company rules and regulations	.457	**.704**	.261	-.166
Q3	I find that my personal values and the values of the hospital are very similar	**.797**	-.290	.065	.001
Q4	I give a positive view of the hospital to outsiders	**.779**	.053	.088	.403
Q5	There is a feeling of trust among organizational members	.373	.150	.379	**.544**
Q6	The company has an appropriate grievance handling procedure	.174	**.804**	.051	.203
Q7	Policies & procedures within the company are applied equally to all the employees	-.087	**.695**	.139	.505
Q8	There is a high morale among members of the organization	.193	.153	.093	**.823**
Q9	I believe that the management of the hospital is doing their best to manage the hospital well	.355	.459	**.513**	.090
Q10	Organization organizes enough trips, sports festivals, outbound events etc.	.381	-.153	**.704**	.273
Q11	I feel proud to work at this hospital	**.736**	.089	.271	.198

Table 4.26: Factor loadings of 4–factor model after Quartimax rotation for organizational factors

Code	Variable	Factor 1	Factor 2	Factor 3	Factor 4
Q1	Organizational leaders build a multi-cultural climate that welcomes and accommodate people of different backgrounds	.124	.329	**.798**	.027
Q2	I am satisfied with the company rules and regulations	.488	**.670**	.183	-.282
Q3	I find that my personal values and the values of the hospital are very similar	**.800**	.249	-.053	-.136
Q4	I give a positive view of the hospital to outsiders	**.836**	.038	-.025	.280
Q5	There is a feeling of trust among organizational members	**.505**	.165	.320	.466
Q6	The company has an appropriate grievance handling procedure	.240	**.805**	.015	.121
Q7	Policies & procedures within the company are applied equally to all the employees	.038	**.728**	.140	.462
Q8	There is a high morale among members of the organization	.330	.192	.062	**.772**
Q9	I believe that the management of the hospital is doing their best to manage the hospital well	.451	.449	**.551**	-.004
Q10	Organization organizes enough trips, sports festivals, outbound events etc.	.506	-.150	**.645**	.210
Q11	I feel proud to work at this hospital	**.791**	.065	.163	.078

Table 4.27: Factor loadings of 4–factor model after Equamax rotation for organizational factors

Code	Variable	Factor 1	Factor 2	Factor 3	Factor 4
Q1	Organizational leaders build a multi-cultural climate that welcomes and accommodate people of different backgrounds	-.048	.309	**.811**	.076
Q2	I am satisfied with the company rules and regulations	.455	**.702**	.289	-.131
Q3	I find that my personal values and the values of the hospital are very similar	**.792**	.290	.099	.049
Q4	I give a positive view of the hospital to outsiders	**.749**	.050	.111	.450
Q5	There is a feeling of trust among organizational members	.325	.142	.386	**.572**
Q6	The company has an appropriate grievance handling procedure	.158	**.802**	.065	.218
Q7	Policies & procedures within the company are applied equally to all the employees	-.123	**.690**	.136	.505
Q8	There is a high morale among members of the organization	.140	.148	.090	**.835**
Q9	I believe that the management of the hospital is doing their best to manage the hospital well	.328	.453	**.530**	.120
Q10	Organization organizes enough trips, sports festivals, outbound events etc.	.337	-.163	**.712**	.304
Q11	I feel proud to work at this hospital	**.712**	.085	.297	.246

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The output contains the highest factor loadings of each variable onto each factor after Varimax, Quartimax and Equamax rotation. Comparison of factor loadings under aforementioned rotation methods, it can be concluded that four common factors can be selected, irrespective of factor rotation method. Considering critical value as 0.5 and not taking the same variable to be included for more than one factor, the selected variables for each factor under different rotation methods are summarized below in Table 4.28.

Table 4.28: Summary of variables to be included in the 4–factor model for organizational factors

Variables to be included into 4 – factor model	Types of Rotation		
	Varimax	Quartimax	Equamax
Factor 1	Q3,Q4,Q11	Q3,Q4,Q5,Q11	Q3,Q4,Q11
Factor 2	Q2,Q6,Q7	Q2,Q6,Q7	Q2,Q6,Q7
Factor 3	Q1,Q9,Q10	Q1,Q9,Q10	Q1,Q9,Q10
Factor 4	Q5,Q8	Q8	Q5,Q8

Thus, it can be concluded that the identified variables for each factor are invariant of the type of Varimax and Equamax rotation methods. However, as Varimax is more popular, factor loadings were chosen based on Varimax rotation. The four factors that emerged from this analysis can be labeled as; intrinsic factors of personal values, reliable, management and confidence.

The results of factor score coefficients of the 4-factor model are shown in Table 4.29.

Table 4.29: Factor score coefficients for section organizational factor

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Q1	-.245	.049	.638	-.127
Q2	.165	.367	.022	-.358
Q3	.436	.078	-.182	-.192
Q4	.374	-.124	-.187	.183
Q5	.022	-.084	.118	.314
Q6	-.039	.459	-.180	.037
Q7	-.260	.368	-.077	.342
Q8	-.072	-.042	-.140	.638
Q9	.026	.146	.264	-.136
Q10	.037	-.305	.504	.057
Q11	.339	-.105	.013	-.023

4.7.1 Details of the four factors

Factor 1: Personal values

A personal value is an absolute or relative and ethical value, the assumption of which can be the basis for ethical action (Wikipedia, 2014). Factor 1 can be formed as a linear combination of three observed variables namely Q3, Q4 and Q11.

Factor 1 = 0.436Q3 + 0.374Q4 + 0.339Q11

Factor 2: Reliable

Reliable is a conceptual factor and can be defined as able to be trusted or capable of being dependable. Factor 2 explained 12.3% of the total variability of the initial system. Thus, it can be concluded reliable factor can be formed as a linear combination of observed variables namely Q2, Q6 and Q7 and the coefficients are positive.

Factor 2 = 0.367Q2 + 0.459Q6 + 0.368Q7

Factor 3: Management

Management is the function that coordinates the efforts of people to accomplish goals and objectives using available resources efficiently and effectively (Wikipedia, 2014). This can be formed as a linear combination of Q1, Q9 and Q10 and all the coefficients are positive.

Factor 3 = 0.638Q1 + 0.264Q9 + 0.504Q10

Factor 4: Confidence

Confidence is a state of a mind or a feeling that someone think, he she is capable of doing something.

Factor = 0.314Q5 + 0.638Q8

4.8 FA for Variables under Environmental Factors

As presented in Table 4.14, KMO statistics for the observed variables is 0.645 (>0.6), which approached the range of average, indicating high degree of sampling adequacy. FA was therefore conducted on the variables of environmental factors to identify the sub factors could affect on employee turnover. This was further justified by the Bartlett's Test of Sphericity (p = 0.000) as showed in Table 4.13.

Table 4.30: Results of eigen analysis for environmental factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.134	35.566	35.566	2.134	35.566	35.566
2	1.265	21.085	56.650	1.265	21.085	56.650
3	.890	14.834	71.485			
4	.647	10.790	82.275			
5	.628	10.475	92.749			
6	.435	7.251	100.000			

The eigenvalue analysis of the correlation matrix of the eleven variables indicates the 6-D system can be reduced into 2–D system. Retaining only the eigenvalues greater than 1, these two factors explained almost 57% of the total variance of the initial system. Factor 1 contributed the highest variation of 35.5% while 21% of total variance is explained by factor 2.

Table 4.31: Unrotated factor loading of the 2–factor model for environmental factors

Code	Variable	Factor 1	Factor 2	Communality
Q1	I enjoy working in this area of Sri Lanka	-.444	.520	.468
Q2	Employees stay in their jobs because it is hard to find another job	.713	.459	.719
Q3	I will accept almost any type of job assignment in order to keep working for this hospital	.748	-.156	.583
Q4	I would prefer working in another hospital rather than here	.285	.836	.779
Q5	I am willing to put in an above normal effort to help this hospital succeed	-.550	.179	.334
Q6	I am not considering leaving my job	-.697	.171	.515

The communalities shown in Table 4.30 (column 5), indicate the proportion of each variable that can be explained by the selected two factors. It can be seen that four communalities (Q1, Q3, Q5 and Q6) are not explained well (<0.6) by the two factor model. However taking 3–factor model the total variability increase significantly (15%) as shown in Table 4.31 and this further confirmed by the eigenvalue which is closed to 1 (0.890). Even though 5–factor increase model the total variability significantly (up to 93%), it was not considered since the eigenvalue is less than 1. Thus the factor model was taken as 3–factor model.

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Table 4.32: Unrotated factor loading of the 3–factor model for environmental factors

Code	Variable	Factor 1	Factor 2	Factor 3	Communality
Q1	I enjoy working in this area of Sri Lanka	-.444	.520	-.552	.773
Q2	Employees stay in their jobs because it is hard to find another job	.713	.459	.127	.735
Q3	I will accept almost any type of job assignment in order to keep working for this hospital	.748	-.156	-.174	.614
Q4	I would prefer working in another hospital rather than here	.285	.836	.133	.797
Q5	I am willing to put in an above normal effort to help this hospital succeed	-.550	.179	.694	.816
Q6	I am not considering leaving my job	-.697	.171	-.294	.601

Results in Table 4.32, it can be seen that all communalities are between 0.6 and 0.8. Thus, it is further justified to use three factors to explain to covariance of initial system and the factor model was taken as 3 factor model.

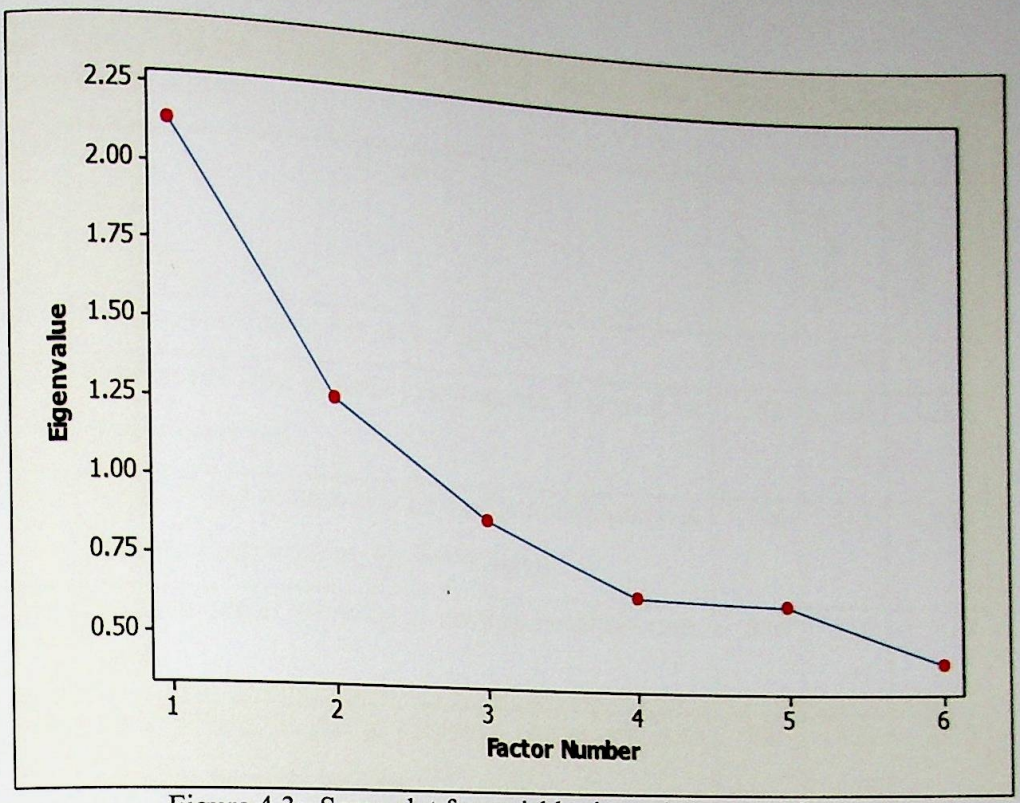

Figure 4.3: Scree plot for variables in environmental factors

As depicted in Figure 4.3, it can be seen that the curve begins to flatten between factor 4 and factor 5. In other words the elbow shape in the scree plot occurred at the fourth component. However, the eigenvalue analysis of the correlation matrix (Table 4.29) of the six variables indicates the 6–D system can be reduced to 3–D system by considering the eigenvalues (≥ 1). Thus, it further justified to use three factors to explain the original system.

Table 4.32 contains the unrotated factor loadings for environmental factors, which are the correlations between the variable and the factor. The factors were extracted using principal component method. Results in Table 4.31 indicate that there are no significant differences among the factor loadings of the variables. Thus, in such occasions in order to make factors more meaningful factor rotation is required and factors were rotated using three types of orthogonal transformation namely Varimax, Quartimax and Equamax. The corresponding factors loading resulting from each rotation are presented in Tables 4.33 to 4.35 respectively.

Table 4.33: Factor loadings of 3–factor model after Varimax rotation for environmental factors

Code	Variable	Factor 1	Factor 2	Factor 3
Q1	I enjoy working in this area of Sri Lanka	.121	**.870**	-.032
Q2	Employees stay in their jobs because it is hard to find another job	**.762**	-.286	-.269
Q3	I will accept almost any type of job assignment in order to keep working for this hospital	.196	-.415	**-.635**
Q4	I would prefer working in another hospital rather here	**.876**	.150	.079
Q5	I am willing to put in an above normal effort to help this hospital succeed	.020	-.022	**.903**
Q6	I am not considering leaving my job	-.231	**.628**	.326

Table 4.34: Factor loadings of 3–factor model after Quartimax rotation for environmental factors

Code	Variable	Factor 1	Factor 2	Factor 3
Q1	I enjoy working in this area of Sri Lanka	.133	**.867**	-.056
Q2	Employees stay in their jobs because it is hard to find another job	**.759**	-.304	-.259
Q3	I will accept almost any type of job assignment in order to keep working for this hospital	-.435	.193	**-.622**
Q4	I would prefer working in another hospital rather here	**.878**	.141	.078
Q5	I am willing to put in an above normal effort to help this hospital succeed	.003	.017	**.903**
Q6	I am not considering leaving my job	-.223	**.640**	.308

Table 4.35: Factor loadings of 3–factor model after Equamax rotation for environmental factors

Code	Variable	Factor 1	Factor 2	Factor 3
Q1	I enjoy working in this area of Sri Lanka	-.444	**-.552**	.520
Q2	Employees stay in their jobs because it is hard to find another job	**.713**	.459	.127
Q3	I will accept almost any type of job assignment in order to keep working for this hospital	-.176	-.156	**.748**
Q4	I would prefer working in another hospital rather here	.285	**.836**	.133
Q5	I am willing to put in an above normal effort to help this hospital succeed	-.550	.179	**.694**
Q6	I am not considering leaving my job	**-.697**	.171	-.199

The output contains the highest factor loadings of each variable onto each factor after Varimax, Quartimax and Equamax rotation. Comparison of factor loadings under aforementioned rotation methods, it can be concluded that three common factors can be selected, irrespective of factor rotation method. Considering critical value as 0.5 and not taking the same variable to be included for more than one factor, the selected variables for each factor under different rotation methods are summarized below in Table 4.36.

Table 4.36: Summary of variables to be included in the 3–factor model for environmental factors

Variables to be included into 3 – factor model	Types of Rotation		
	Varimax	Quartimax	Equamax
Factor 1	Q2,Q4	Q2,Q4	Q2,Q6
Factor 2	Q1,Q6	Q1,Q6	Q1,Q4
Factor 3	Q3,Q5	Q3,Q5	Q3,Q5

Thus, it can be concluded that the identified variables for each factor are invariant of the type of Varimax and Quartimax rotation methods. However, as Varimax is more popular, factor loadings were chosen based on Varimax rotation. The three factors that emerged from this analysis can be labeled as; push factors, stay factors and still factors.

In order to find the coefficients for the factors factor score coefficients were obtained and the results of the score coefficients of the 3-factor model are shown in Table 4.37.

Table 4.37: Factor score coefficients for section environmental factor

Variable	Factor 1	Factor 2	Factor 3
Q1	.130	.718	-.253
Q2	.499	-.115	-.036
Q3	.027	-.146	-.393
Q4	.657	.146	.154
Q5	.146	-.271	.775
Q6	-.086	.404	.066

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4.8.1 Details of the three factors

The emerged three factors can be formed as:

Factor 1: Push factors = 0.499Q2 + 0.657Q4

Factor 2: Stay factors = 0.718Q1 + 0.404Q6

Factor 3: Still factors = 0.775Q5 - 0.393Q3

4.9 Summary

This chapter presented the statistical results and findings related to the observed data. The findings were analyzed through descriptive analysis and factor analysis. Job factors can be further categorized into four sub factors; job satisfaction, professional development, work commitment and job description. Organizational factors can be further categorized into four sub factors; intrinsic factors of personal values, reliable, management and confidence. Sub factors that emerged from environmental factors can be labeled as push factors, stay factors and still factors.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The main purpose of this study is to determine the factors that influence the lower hierarchical employee turnover in the healthcare industry and recommend strategies on how an organization can retain employees or reduce the ET. This study identified significant factors that influence on ET. Of the demographic variables age, gender, marital status and educational qualification were identified as significant influential variables. ET tends to be higher among younger employees compared to their older employees. Also, turnover is more common among male employees than female employees. Further, married employees have relatively low turnover than the unmarried employees. Finally, the highly educated employees among lower hierarchy are likely to leave their jobs more often than those with lower qualifications. Therefore, this study confirmed that the skilled employees among the selected employee group tend to have higher turnover rate.

Further, it was found that job factors, organizational factors and environmental factors were the three main factors that effect on ET significantly. For each of the above identified factors sub factors were emerged. Job satisfaction, professional development, work commitment and job description were emerged as sub factors within job factors. Personal values, reliable, management and confidence were identified as significant sub factors within organizational factors. And similarly, push, stay and still were emerged as sub factors for environmental factors.

Low salary and remuneration packages, lack of recognition, lack of opportunity to grow and poor working conditions act to lower moral among the employees. Other factors that came out from the study that influence employees to leave their jobs include which does not match the organizational values and personal values and the lack of events organize by the hospital. Majority of the respondents were unhappy to work at this hospital and they would prefer working in another hospital. However,

employees keep working for the hospital mainly because of difficulty in searching for other jobs. Therefore, the output level of employees may go down because they tend not to give of their best at work. However, the hospital has been able to meet job expectations of their employees and they are satisfied with the management and the organizational rules and regulations.

5.2 Recommendations

It is recommended that the management should pay more attention to both hygiene factors such as; salary, working condition, healthcare benefits, vacation days and motivation factors such as; recognition, responsibility, potential for growth, relationship with management. In addition, the hospital management should monitor employee performance continuously, and that lead to get the required recognition and employees may grow as a professional. Management should provide appropriate staff training on cultural diversity as employees is not clear about organizational multi-climate culture. Management should arrange workshops, programs to create awareness of multi-climate culture and its benefits. In addition, the management has to understand that the people are different and need to respect these differences such as; nationality, age, tenure, service length and mental and health condition etc. Further, it is recommended, that the management has to redefine the organizational values, in line with personnel values. In addition, management should understand the organization rules and regulations are common to everyone, not only to the lower level employees, but also higher level employees. As per the findings, majority of the respondents would not like to give positive ideas to outsiders. Therefore resignations have negative impact on hospital's goodwill. Therefore, it is important that the management to organize workshops or programs to improve the positive ideas by providing hygiene and motivational factors. In terms of environmental factors, management need to improve the stay factors and meantime should reduce the push factors. Based on the results, management can start day care centers for children. Furthermore, management can request the urban council and the education department to improve facilities and schools in this area. Finally, improvement in salaries and other benefits, promotion, effective staff welfare, provide autonomy,

provide opportunities to grow, recognition and monitoring, improvement in working conditions will help to reduce turnover problems in the hospital.

5.3 Future Research

Though the results obtained in this study are useful for various decisions making, the respondents of this study were limited from 5 departments and primarily aimed at lower hierarchy employees. Thus it is recommended that the study to be extended to all the employee categories.

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Appendix A

QUESTIONNAIRE FOR IDENTIFY FACTORS FOR LOWER HIERARCHICAL EMPLOYEE TURNOVER: A CASE STUDY FROM A HOSPITAL

Section A: Biographical Data

Please supply the following information by making an "X" in the appropriate block where the options are provided.

A1. What is your department?

House Keeping	
Laboratory	
Food & Beverage	
Wards & Theatres	
Out Patient Department	

A2. What is you gender?

Male	
Female	

A3. What is your age group?

20 – 30	
30 – 40	
40 – 50	
50 – 60	

A4. What is your marital status?

Married	
Unmarried	

A5. Please indicate your highest educational qualification?

No Schooling	
Grade 1 – 5	
Up to GCE O/L	
GCE O/L Pass	
GCE A/L or Pass	

A6. How long have you been working for at this hospital?

Less than 2 years	
2 - 5 years	
6 - 10 years	
11 - 15 years	
16 – 20 years	
20 +	

Section B: Job Factors

Indicate the extent to which each of the following statements you agree in your organization using the five point scale by marking a tick mark [√]

	Job Factors	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
Q1	I am paid fairly for the work I perform					
Q2	I get recognition for my performance and management discusses my performance with me					
Q3	My job provides me with the opportunity to develop my talent					
Q4	I am clear of what is expected of me					
Q5	My job entails a variety of tasks and are therefore interesting					
Q6	I cope well with my workload					
Q7	The work that I do is challenging					
Q8	I am provided with the necessary resources to complete my task successfully					
Q9	The job I am performing is satisfactory					
Q10	I am responsible for making important decisions in my job					
Q11	I have job security					
Q12	My colleagues are supportive					
Q13	My job allows me to grow professionally					
Q14	I feel committed to the hospital, I am working					
Q15	My management come forward to support when I am facing with critical situation					

Section C: Organizational Factors

Please indicate the extent to which you agree with each statement by putting an "X" in the appropriate block

	Organizational Factors	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
Q1	Organizational leaders build a multi-cultural climate that welcomes and accommodate people of different backgrounds					
Q2	I am satisfied with the company rules and regulations					
Q3	I find that my personal values and the values of the hospital are very similar					
Q4	I give a positive view of the hospital to outsiders					
Q5	There is a feeling of trust among organizational members					
Q6	The company has an appropriate grievance handling procedure					
Q7	Policies & procedures within the company are applied equally to all the employees					
Q8	There is a high morale among members of the organization					
Q9	I believe that the management of the hospital is doing their best to manage the hospital well					
Q10	Organization organizes enough trips, sports festivals, outbound events etc					
Q11	I feel proud to work at this hospital					

Section D: Environmental Factors

Please indicate the extent to which you agree with each statement by putting an "X" in the appropriate block

	Environmental Factors	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
Q1	I enjoy working in this area of Sri Lanka					
Q2	Employees stay in their jobs because it is hard to find another job					
Q3	I will accept almost any type of job assignment in order to keep working for this hospital					
Q4	I would prefer working in another hospital rather than here					
Q5	I am willing to put in an above normal effort to help this hospital succeed					
Q6	I am not considering leaving my job					

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Section E: Retention Strategies

Please answer the following open ended questions:

1. Tell your opinion about major reasons for employees leaving (You can name more than one)

2. What inspires you to retain/leave most in your organization? (You can name more than one)

3. Are you satisfied with the service provided by the HR department? If not what should be the area of improvement.

Appendix B

Table: Required sample size for given margin of error and for a given population

Population	Margin of error			
	5%	3%	2%	1%
50	44	48	49	50
100	79	91	96	99
150	108	132	141	148
200	132	168	185	196
250	151	203	226	244
300	168	234	267	291
400	196	291	343	384
500	217	340	414	475
750	254	440	571	696
1000	278	516	706	906
2000	322	696	1091	1655
5000	357	879	1622	3288
10000	370	964	1936	4899
100000	383	1056	2345	8762
1000000	384	1066	2395	9513
10000000	384	1067	2400	9595

Source: Saunders et al., (2009)

Appendix C

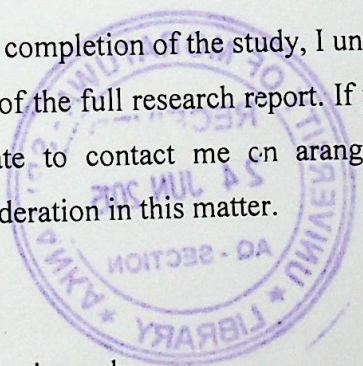
REQUEST FOR PERMISSION TO CONDUCT A RESEARCH ON EMPLOYEE TURNOVER

Dear Mr. Niranga Wijesooriya,

My name is H.M.ArangaWijesooriya, and I am a MSc student at the University of Moratuwa. The research I wish to conduct for my Master's dissertation involves "Identify factors for lower hierarchical employee turnover". This project will be conducted under the supervision of Prof. T S G Peiris (Faculty of Engineering).

I am hereby seeking your permission to undertake my dissertation in your organization and assume that the dissertation will help your organization to identify the aligned factors for employee turnover and the recommendation will certainly help you to keep your valuable employee resource with you.

Upon completion of the study, I undertake to provide your organization with a bound copy of the full research report. If you require any further information, please do not hesitate to contact me on arangaw@gmail.com. Thank you for your time and consideration in this matter.



Yours sincerely,

Aranga Wijesooriya

University of Moratuwa

