

**WORK OVERLOAD AND JOB
SATISFACTION:
IN PUBLIC SERVICE ORGANIZATIONS
(ADDIS ABABA)**

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This is to certify that the thesis prepared by Mulu Miesho, entitled: Work Overload and Job Satisfaction in Public Service Organizations (Addis Ababa) and submitted in partial fulfillment of the requirements for the Degree of Masters of Business Administration in Management complies with the regulations of the university and meets the accepted standard with respect to originality and quality.

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Abstract

This research investigates the state and relationship between work overload and job satisfaction in five selected public service organizations (Ethiopian Electric Power Corporation, Ethiopian Shipping and Logistics Services Enterprise, Ethiopian wholesale and Import Trade Enterprise, Industry Project Service Enterprise, and Public Procurement Services Enterprise), in Addis Ababa. Work overload is defined as “incompatibility between the work requirements and the amount of time and resources available to comply with requirements”. Job satisfaction has been defined as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience”. So as to achieve the objectives of this study, information was gathered through self administered questionnaire from a sample of 334 respondents. These respondents were selected using stratified sampling technique. The data collected from the questionnaire were analyzed using statistical tools such as mean, standard deviation, correlation, and simple linear and multiple regression analysis. The results of this study indicate that, firefighting to be dominant indicator of work overload; whereas job pressure and, inadequate selection and training of personnel as major causes of work overload. The study also showed that, both the signs and causes of work overload could significantly and positively predict work overload. Employees were found to be most satisfied with relationships that they have with their co-workers, and least satisfied with the pay that they earn; and they enjoy average level of overall job satisfaction. The findings of the study further indicate that, the facets of job satisfaction may significantly and positively explain the variation in job satisfaction. Moreover, low, negative and statistically significant relationship was found between work overload and job satisfaction; and work overload could negatively and significantly predict the variation in job satisfaction. Based on the findings of the study, the researcher forwards some recommendations to the management of the service public organizations considered in this study.

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Acronyms

JDI: Job Descriptive Index

JDS: Job Diagnostic Survey

JIG: Job-In-General Scale

JSS: Job Satisfaction Survey

MSQ: Minnesota Satisfaction Questionnaire

PSQ: Pay Satisfaction Questionnaire

CHAPTER ONE

1. Introduction

1.1. Back ground of the study

Organizations today are pursuing complex objectives that are often difficult to reconcile: those of becoming more competitive, more productive and more profitable. To attain these objectives, they must constantly evolve (change how they organize production and work; introduce technological innovations, new human resources management policies, and innovative forms of work organization, etc.) (De Coninck & Gollac, 2006). The speed at which changes are taking place in organizations is resulting in work intensification, with consequences for workers and organizations alike. For individuals, the increased workload has adverse effects on their health and safety at work, such as musculoskeletal disorders, psychological distress, fatigue and accidents (Du Tertre, 2006; Grumberg, 1986; Krause, Scherzer, & Rugulies, 2005; Sarazin, 2001). For organizations, the consequences mainly involve increased absenteeism, presenteeism, staff turnover and poorer quality (Beech-Hawley, Wells, & Cole, 2004; Rochefort, 2000) (as cited by Pierre-Sebastien Fournier et al., 2011).

While the concept of workload is not new, in the current context, it has become a subject of renewed interest for researchers and of concern for organizations. More specifically, organizations are looking for efficient ways to evaluate workload. While many instruments measure the intrinsic aspects of workload (e.g. mental workload), they offer only a fragmented understanding of the phenomenon (Theureau, 2002). The traditional concept of workload, which can be broken down into its physical and mental

components, is now becoming obsolete. A broader approach encompassing the complexity of the work activity in a dynamic environment is now required. The concept of workload must be examined holistically, i.e. through activity analysis, which takes into account the overall work activity seen as the result of a combination of factors present in the work situation and possibly engendering a cost (psychological and physiological) for the individual. From this standpoint, making changes in the workload implies making changes in the working conditions (Theureau, 2002) (as quoted by Pierre-Sebastien Fournier et al., 2011).

As described by Frank M. Gryna (2004), one of the consequences of work overload is reducing job satisfaction which eventually leads to turnover. In Ethiopia, public sector organizations play a major role in providing wide range of services to the society. As mentioned by George A. (2002), the main conventional distinction between public and private organizations is their ownership (Rainey et al., 1976). Whereas private firms are owned by entrepreneurs or shareholders, public agencies are owned collectively by members of political communities. This distinction is associated with two further public/private contrasts. First, unlike their private counterparts, public agencies are funded largely by taxation rather than fees paid directly by customers (Niskanen, 1971; Walmsley and Zald, 1973). Secondly, public sector organizations are controlled predominantly by political forces, not market forces. In other words, the primary constraints are imposed by the political system rather than the economic system (Dahl and Lindblom, 1953) as cited by George A. (2002).

Effectiveness of public organization services is, therefore, determined partly by the satisfied employees the organizations maintain. According to Bram (2002), if job

satisfaction is going down among workers in the public sector, it will have negative effects on the quality of the services. Not only because lesser motivated workers will deliver services of a lower quality, but also because it will make the public sector less attractive as an employer. This certainly will have adverse repercussions in a tight labor market.

This study, therefore, investigated the state and relationship of work overload and job satisfaction among Ethiopian public service enterprises.

1.9. Statement of the problem

Rapidly changing global scene is increasing the pressure of workforce to perform maximum output and enhance competitiveness. Indeed, to perform better to their job, there is a requirement for workers to perform multiple tasks in the workplace to keep abreast of changing technologies (Cascio, 1995; Quick, 1999). The ultimate results of this pressure have been found to one of the important factors influencing job stress in their work (Chan et al., 2000). A study in United Kingdom indicated that the majority of the workers were unhappy with the culture where they were required to work extended hours and cope with large workloads while simultaneously meeting production targets and deadlines (Townley, 2000). Reich (2001), also reports that Americans work 350 hours per year more than Europeans as cited by Frank M. Gryna (2004).

Several studies have highlighted the deleterious consequences of high work load or work overload. According to Wilkes et al. (1998), work overloads and time constraints were significant contributors to work stress for employees. Employees that perceive work overload show reluctance to come to work and feeling constant pressure accompanied by

general physiological, psychological and behavioral stress symptoms (Nilufar Ahsan et al., 2009). Gemelch et al. (1984) identified that work overload to be among one of the stressful aspects of employees careers. According to Pelletier (1992), work overload poses a threat to the employee in performing his or her work and also increases withdrawal behavior patterns from the employing organization – early retirement, striking, leaving, absenteeism, and more. Glisson et al. (2006) and Kahn & Byosire (1992) also investigated that work overload results in sick days, feelings of anxiety, frustration, depression, decrease in self confidence, job burnout, attention and concentration problems and work accidents.

According to Frank M. Gryna (2004), one of the major consequences of work overload is reducing job satisfaction which in turn leads to turnover. Job satisfaction and dissatisfaction have been found to be predictors of retention and turnover (Timmereck 2001).

Research indicates that employee satisfaction is important to an organisation's success. It is a widely studied construct in organisational behaviour as it influences other organisational variables like productivity, turnover and absenteeism. Many organisations are spending much time on employee satisfaction initiatives in an effort to reduce turnover, improve productivity and help organisations succeed. The popularity of this field of study is also due to its relevance to the physical and mental well-being of employees. Furthermore, managers have a humanistic responsibility to provide employees with jobs that are challenging, rewarding and satisfying (Robbins (1998, p. 2).

According to Alavi and Askaripur (2003, p. 591), there are at least three reasons why managers must focus on the job satisfaction of its employees:

1. Evidence suggests that unsatisfied individuals leave organisations.
2. Satisfied employees are in better health and have longer life expectancy. Connolly and Myers (2003) further maintain that a lack of job satisfaction has been associated with symptoms like anxiety, depression and poor physical and psychological health, which have concomitant consequences for absenteeism and commitment.
3. Job satisfaction in the work place also affects individual's private life which in turn has an effect on absenteeism and other important work related attitudes and behaviours.

The attempt of this study was, therefore, to address employees' perceived work overload problems in relation to job satisfaction in public service organizations. Several Studies have tried to determine the link between work overload and job satisfaction. According to Vinokur-Kaplan (1991), organizational factors such as work overload and working conditions were negatively related with job satisfaction. Work overload is negatively associated with job satisfaction (Rita and Stephanie, 2008); there is significant negative relationships between work overload and job satisfaction (Nufar et al., 2009). As described by Nurit et al. (2008), dissatisfaction at work is caused by burnout, work overload and poor health. As such, this research investigated the state and relationship of work overload and job satisfaction in public service enterprises in Ethiopian context, specifically in Addis Ababa.

To this effect, the study addressed the following research questions: What major signs and causes of work overload are observed in the public service organizations? How do

the signs and causes of work overload explain the variation in work overload? What is the employees' level of satisfaction with the selected facets of job satisfaction such as pay, working condition, policies and administration, supervision, promotion opportunities, recognition, the work itself, responsibility, and relationship with co-workers? What is employees' perception on their level of overall job satisfaction? How do selected facets of job satisfaction predict the variation in job satisfaction? How does work overload predicts job satisfaction?

1.10. Objectives of the study

❖ **General objective:** The general objective of this study was to assess the state and relationship of work overload and job satisfaction among employees of public service organizations.

❖ **Specific objectives:**

The specific objectives of the study are to:

- Prioritize the dominant signs and causes of work overload;
- Determine how the signs and causes of work overload explain the variation in work overload;
- Identify which facets of job satisfaction such as work itself, responsibility, recognition for work well done, advancement, working conditions, supervision, relations with co-workers, pay, policy and administration lead to job satisfaction;
- Access employees' perception on their level of overall job satisfaction;
- Determine how the selected facets of job satisfaction explain the variation in job satisfaction;
- Determine how work overload predicts job satisfaction.

1.11. Hypothesis of the study

In light of the objectives articulated above, the following objectives were investigated:

Hypothesis 1

H01: The signs of work overload will not significantly explain the variation in work overload.

Hypothesis 2

H02: The causes of work overload will not significantly explain the variation in work overload.

Hypothesis 3

H03: The selected facets of job satisfaction will not significantly explain for job satisfaction.

Hypothesis 4

H04: Work overload will not negatively and significantly predict for job satisfaction.

1.12. Significance of the Study

In addition to fulfilling the academic requirement of the researcher, the results of the study will have the following benefits. Primarily, the results of this study will be of benefit to the selected organizations in particular (Ethiopian Electric Power Corporation, Ethiopian Shipping and Logistics Enterprise, Merchandise wholesale and Import Trade Enterprise, Industry Project Service Enterprise, and Public Procurement Services Enterprise) and governmental service organizations in general; by understanding the state of work overload and its effect on job satisfaction it will help the organizations to take corrective measures. Furthermore, it will be used as reference for other researchers who

are interested to conduct study related to this problem. Finally, any interested party can use the result of the study as a reference.

1.13. Scope of the Study

The spatial and temporal coverage of this paper is limited to public service enterprises, among which five sample enterprises (Ethiopian Electric Power Corporation, Ethiopian Shipping and Logistics Enterprise, Merchandise Whole and Trading Enterprise, Industry Project Service Enterprise, and Public Procurement Services Enterprise) have been selected (in Addis Ababa city) to investigate the state and relationship between work overload and job satisfaction at the current period. Further, this study investigated the major indicators and causes of work overload and how they explain work overload in the organizations. The sample respondents were employees from the selected organizations who are working on a permanent basis. This study again focuses on nine facets of job satisfaction such as work itself, responsibility, recognition for work well done, advancement, working conditions, supervision, relationship with co-workers, pay, policy and administration to see how they predict the variation on the overall job satisfaction.

1.14. Limitation of the Study

The study was only conducted in five public service enterprises which limits the generaliability of the research findings. Moreover, employees were assessed their perceived overload on general basis rather than based on the two dimensions of work overload (quantitative and qualitative work overload), and the variation of work overload due to demographic variables was not assessed.

1.15. Organization of the Paper

The study is divided into five chapters. The first chapter is an introduction which consists of background of the study, statement of the problem, objectives, hypothesis, significance, scope and limitation of the study. The second chapter presents review of related literature which is divided in to two main sub-sections; literature review for work overload and job satisfaction. Chapter three presents research design and methodology employed to investigate the problem under study while data collected from respondents is presented, analyzed, interpreted and discussed in the fourth chapter. The last section chapter five of the thesis contains summary of results, concluding remarks and recommendations used for the enterprises.

CHAPTER TWO

3. Literature Review

1.2. Work Overload

1.2.1. Definition and Concept of Work Overload

According to Rizzo et al. (1970), work overload is defined as incompatibility between the work requirements and the amount of time and resources available to comply with these requirements. Work overload occurs when an individual's work role is characterized by too much work, time pressures, deadlines, and lack of necessary resources needed to fulfill duties, commitments, and responsibilities associated with work role (Beehr and Glazer, 2005). Work overload happens when job demands exceed the time and resources available (Frank M. Gryna, 2004).

Overload occurs where multiple demands exceed resources, and may be either qualitative or quantitative. Qualitative overload refers to a situation where a task is too difficult to complete, while quantitative overload is experienced when there are too many tasks that need to be done. Most authors discuss overload in terms of the latter. A consequence of dual-career couples undertaking multiple roles is that they may become more susceptible to overload in the home and work environment. While the two sets of overload may be independent, there may also be reciprocal relationships between them, as a combination of tensions between career and domestic demands (David et al., 2003). According to Linda (2004) quantitative work overload occurs when an employee is assigned too great a volume of work to accomplish in a specified timeframe. It is very

prevalent in our achievement oriented society and is associated with job tension, job dissatisfaction and various physical and psychological strain symptoms. Linda also described that qualitative work overload occurs when the work requires skills, abilities, and knowledge beyond what the person has. It occurs when employees feel that they lack the ability to do the job regardless of the amount of time available to them to complete the job. It may also result when performance standards are set so high as to appear unattainable.

Overloading employees with unreasonable work expectations (e.g. undue pressure, impossible deadlines, and unnecessary disruptions) is a form of workplace bullying or abusive supervision. It commonly involves placing undue pressure on employees, setting impossible deadlines for the completion of work, or excessive unnecessary disruptions. The potential costs of treating employees in this manner are considerable. For instance, overloaded employees are more likely to make mistakes, feel anger or resentment toward their employers or coworkers, experience high levels of stress, have poorer health and work-family balance, and seek employment elsewhere (Derek et al., 2009).

Given such potential repercussions, the act of over loading employees has not received as much scholarly attention as one might expect. Though the popular press (e.g. Yang, 2008) is actively covering the subject, academic research has focused on more general forms of abusive supervision (Tepper, 2007) while neglecting work overload.

1.2.2. Predicting work overload

The number of employees experiencing and reporting work overload is increasing, particularly in certain job sectors (e.g, nurses, salespersons)(Cartwright and Cooper,

1997; Mulki et al., 2008; Rauhala et al., 2007). Objective work overload, defined as having too much work and too little time, is a psychological stressor (Claessens et al., 2004; Roberts et al., 1997) that is cited most frequently as an employee's source of job stress (Robinson and Griffiths, 2005). Perceived work overload is an employee's perception of objective work overload, or an employee's belief that they have too much to do (Leiter and Schaufeli, 1996; Schaufeli et al., 1995) or too little time to finish assigned tasks (Greenglass et al., 2003).

A number of consequences of objective and perceived work overload are discussed across various literatures (e.g. psychology, management, stress literatures). The overwhelming consensus of these studies is that the consequences of work overload are more often than not negative for both employees and organizations (Jex and Beeheer, 1991; Spector et al., 1998). First, work overload is related to psychological outcomes in employees. For example, work overload has been shown to be the most important predictor of burnout (Brantely, 1993; Shirom et al., 1997) and is also related to work-life and work-family conflict (Skinner and Pocock, 2008), work exhaustion and personal strain (Ahuja et al., 2007). Second, work overload also has been shown to affect employees' physical health. Specific health outcomes associated with employee work overload include increased cholesterol and triglycerides levels (Shirom et al., 1997). Additionally, direct organizational factors such as commitment, occupational stress job dissatisfaction and sickness absenteeism often are investigated as consequences of work overload. Thus, the consequences of work overload, whether it is objective or perceived, negatively affect organizations directly through a variety of avenues and indirectly

through the psychological and health problems that it causes employees (Derek et al., 2009).

1.2.3. Who Suffers From Work Overload?

As described by Frank M. Gryna (2004), nothing is duller than people talking about their overload at work until someone burns out and resigns. Gryna also mentioned that work overload can occur for any members of our working society. The working society includes the following:

- Upper management, for example, president executive.
- Managers in operations functions – the heart of any manufacturing or service organization.
- Managers in other functions, for example, product development, purchasing, marketing, and customer service.
- Managers of staff departments, for example, human resources, finance, accounting, quality.
- Individual professional contributors in all functional areas – The highly educated and skilled people who provide the expertise for our business and society.
- The hourly work forces, for example, bank tellers, call center operators, operations floor workers, manufacturing workers.

1.2.4. Causes of Work Overload

Frank M. Gryna (2004) identified the following causes of work overload.

- **Insufficient resources:** includes the short term and long term actions to obtain resources to handle the normal work load and the effort that could be saved by reducing the amount of wasted resources in a process errors, corrections and non value added steps.

- **Fire fighting:** every organization does firefighting, reacting to unexpected problems that arise during day-to-day (or even hour-to-hour) business. The problems include: computer breakdown, missing or wrong inputs from internal or external suppliers, absent employees, and so on. In theory, if we do a better job of planning or anticipating our activities then we can prevent firefighting. In practice, that simply doesn't happen.

According to Gryna's investigation, resource and firefighting cause 40% of work overload.

- **Lack of control of the work process/ Lack of control in setting priorities, Deciding work methods, and the use of resources:** includes how priorities are set and work methods are decided, and the extent workers participate in planning work methods.
- **Work process not compatible/ The work process is not capable of meeting the quantity and quality requirements:** includes the way resources of wasted effort are identified in a process and determining if the process is capable, and deciding from where to bring the resources to redesign the work process to make it capable.

As investigated by Frank M. Gryna the above four causes (resources, fire fighting, lack of control of the work process and work process not compatible) cause a 60% of the overload problem.

- **Unclear performance goals and responsibilities:** includes issues such as identification of the parameters that need performance goals, whether the set of goals is required to limit work overload, and the way how the vague subject of

“responsibility” is translated into specific actions and reach agreement on who should take which actions.

- **Inputs from internal/ external suppliers:** includes actions to be taken to prevent problems with internal and external suppliers, and the help of upper management on problems with external suppliers.
- **Inadequate selection and training of personnel:** includes the way job requirements is to be matched to employee skills, the special approaches to be taken to recruit new personnel, particularly at low salary levels, verifying the adequacy of training, and the actions taken when positions cannot be fulfilled to minimize work overload on other employees.
- **Information overload:** includes how priorities are set to respond information arriving at work place (pushed information) such as emails, letters, memos, telephone calls, journals and the like, the way how retrievable (pulled) information can be best acquired and used (this information resides on the web, in online journals, in discussions with colleagues, and other sources), and the method of handling the priority nightmare of emails be handled etc.
- **Computer hardware or software problems:** includes identifying chronic hardware and software problems and present information to information technology management to assure action, and how computer system downtime contributes to work overload.
- **Other problems causing work overload:** includes addressing changing priorities and strategies in an organization to minimize overload, determining the relationship between insufficient resources to meet requirements and the mental

demands required in jobs, and the technique of discovering the reason for work overload that are unique to the organization.

Galinsky et al. (2001) identified those who experience greater pressure on the job feel much more overworked. In addition to this, Galinsky et al. investigated that technology, poor quality jobs and internal labor market such as downsizing contribute to work overload.

1.2.5. Signs of Work Overload

According to Frank M. Gryna (2004) and Galinsky et al. (2001) the following are the common warning signs/symptoms of work overload.

- ✓ Long work days, often with the eyes of half mast.
- ✓ Unwanted overtime, paid or unpaid.
- ✓ Inability to meet goals with available time resources.
- ✓ Difficulty in taking vacation time.
- ✓ Responding to work problems during non work time, including taking work home.
- ✓ “Add on” tasks making it difficult to focus on the core job.
- ✓ Lost work days due to illness.
- ✓ Frequent interruptions, and
- ✓ Errors caused by tired employees.

Frank M. Gryna (2004) further reported that frequent and unexpected “firefighting”, borrowing employees from other activities to fill in for absent employees common signs of work overload.

Moreover, Galinsky et al. (2001) studied that employees feel overworked and overwhelmed by the work demands placed on them.

Many managers and professionals are “on call” 24 hours a day, 7 days a week. Those extra are usually not recorded and lead to productivity figures that are overstated. The above symptoms snowball when managerial style involves criticism without help, threats, intimidation, ((both direct and subtle) and bullying (Frank M. Gryna, 2004).

1.2.6. To What Extent is Work Overload Common?

Work overload is serious problem in some companies and jobs; and it is not a problem in other companies or jobs. Those organizations that design jobs and provide sufficient resources prevent work overload. But many other organizations suffer from work overload, and the problem is particularly serious in industries where customer contact is intensive and continuous and where communication is superfast and essential (Frank M. Gryna, 2004).

Work overload is perception (opinion) of people and perceptions are not physical facts, but they are psychological facts. When people feel they have work overload, then the stress is threatening (Frank M. Gryna, 2004).

1.2.7. Reasons for Work Overload

Frank M. Gryna (2004), states that work overload is due to the following reasons.

- ❖ **Competitiveness among companies:** companies must become “lean” to meet competition- but how lean can they get?

- ❖ **Globalization:** Developed countries like America benefit from lower wage rate in foreign countries because they can purchase their goods at lower prices. But this puts pressure on firms of the developed countries to reduce costs and can result in work over load.
- ❖ **Customer expectation:** customers expect faster and faster service, and technology makes that service possible.
- ❖ **Mergers, acquisition and downsizing:** this leads to reduction in jobs and likely work overload for those surviving the job reductions.
- ❖ **Expansion of family activities:** relatives' affluence enables individuals (workers) to enjoy sports and other activities for their children and themselves. But these activities add to the workers' time commitment.
- ❖ **The ever-present desire to improve individuals' standard of living:** this desire puts economic pressure on the wage earner(s) to earn sufficient salary to meet family needs. Workers then work longer hours to achieve a promotion or just to provide job security. Moonlighting (two jobs) may be necessary to achieve the needed income level.

1.2.8. Consequences of Work Overload

The key effect of work overload is the increase in stress (mental and physical) on individuals and their families. In addition to this other penalties such as reduction in job satisfaction, errors in products and services, and errors that can result in injuries to employees and customers emerge (Frank M. Gryna, 2004).

Work overload reduces job satisfaction and eventually leads to turnover- particularly of key middle managers. Further, when these managers switch to another organization, they hire away some of their former colleagues who still suffer from work overload. Work overload also causes errors in products and services. Finding and correcting these errors reduces productivity and increases costs. In addition overload of frontline employees who deal face to face with customers can result in unpleasant encounters with customers. Also, frustration sets in when employees at all levels observe the poor quality of work. Furthermore, work overload causes errors that can result in injuries to employees and customers. It is not just an accident on the job, but it is also the accident that occurs when an overworked employee drives home from work (Frank M. Gryna, 2004).

1.3. Job Satisfaction

1.3.1. The concept and definition of job satisfaction

Job satisfaction is an important element from organizational perspective, as it leads to higher organizational commitment of employees and high commitment leads to overall organizational success and development (Feinstein, 2000, as cited by Ahmed et al 2010) additionally growth, effectiveness and efficiency of the organization and low employees' intentions to leave the organization (Mosadeghard 2000, as cited by Ahmed et al 2010). Dissatisfied individuals leave the organization and negatively influence the motivation of those staying there (Feinstein, 2000) and as a result workers loose performance and efficiency and might sabotage the work and leave the job (Sonmezer and Eryaman, 2008, as cited by Ahmed et al 2010).

Human resources research has well established the importance of job satisfaction for retention (Arthur 2001). Defining and measuring job satisfaction has been a challenging process, which has been refined through decades of research and is still occurring. The study of job satisfaction grew out of several schools of management theory dating back to Taylor's early applications of the scientific method to factory problems in the first part of the 20th century (Locke, 1976). According to Cranny et al. (1992), job satisfaction is generally agreed upon by researchers to be an affective reaction to a job that results from the employee's comparison of actual outcomes with those that are desired.

Job satisfaction has been defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976: 1300). Locke (1976 as cited in Luthans 2005) forwarded that; although, theoretical analyses have critically accepted job satisfaction as being too narrow conceptually, there are three generally accepted dimensions to job satisfaction. First, job satisfaction is an emotional response to a job situation. Second, job satisfaction is often determined by how well outcomes meet or exceed expectations. Third, job satisfaction represents several related attitudes (Luthans, 2005).

Extensive research has been conducted about the relationship between job satisfaction and other work related behaviors or attitudes such as job performance, stress and health, general life satisfaction, commitment to the organization, pro-organizational behaviors and ultimately the concept of employee turnover. Improving job satisfaction thus appears to be instrumental in decreasing employee turnover (Zeytinoglu et al. 2007). Organizations with satisfied employees have satisfied customers/clients. This results in organizations with satisfied employees having higher levels of customer retention, which

increases overall profitability (Reichheld and Sasser, 1990). Satisfied workers have been found to be more committed to organizations, have more favorable attitudes towards work and the organization, more conscientious, more likely to help co-workers, to have greater willingness to report unethical behaviors, and to be less likely to leave their jobs than dissatisfied workers. George and Jones (1996) accede to this opinion when they posit that there is a weak to moderate negative relationship between job satisfaction and turnover. Cranny et al. (1992) further note that job satisfaction has been shown to influence attendance at work, pro-organizational behaviors, voting for or against union representation, decisions to leave the organization or to retire, and psychological withdrawal behaviors. The findings of research have been inconsistent over a period of time. This very well may be due, however, to the wide variation in definitions of job satisfaction and in the validity of methods used to measure it (Cranny et al., 1992). However, an even more widely accepted relationship is the link between employee job satisfaction and employee turnover. Employee job satisfaction is perhaps the most critical factor in job retention.

1.3.2. Theories of Job Satisfaction

Although there are many different approaches to understanding job satisfaction, four particular ones stand out as providing the best insight into this very important attitude the two factor theory of job satisfaction, the dispositional model, value theory and social information processing model (Greenberg et al, 2009).

A. Two factor theory of Job Satisfaction

According to Luthans (2005), Herzberg's two factors is a set of motivators that drives people to achieve. He asserts that Herzberg's theory consists of two dimensions known as "hygiene" factors and "motivator" factors. The hygiene factors are preventive and environmental and they are the parts of the jobs which create dissatisfaction but, if not present, only return the worker to a neutral point of job satisfaction. These job factors include company policy and administration, supervision, interpersonal relations, benefits, job security, salary and working conditions. Herzberg states that hygiene issues cannot motivate employees but can minimize dissatisfaction and serve as a point of departure for motivation. On the other hand, satisfying motivator needs which are related to job tasks, job content, achievement, recognition, responsibility, advancement and other intrinsic aspects of the job can lead to job satisfaction, but the absence thereof cannot lead to job dissatisfaction (Luthans, 2005).

Job satisfaction and Motivator-Hygiene Factors

This section presents findings of previous reports as to the relationship between overall job satisfaction and the job satisfying (the work itself, responsibility, recognition for the work well done, and advancement) and dissatisfying (working conditions, supervision, relations with co-workers, salary, company policy and administration) factors.

There is significant positive relationship between job satisfaction and pay as investigated by Castillo, Conklin, and Cano (1998), Bowen (1980) (as cited by Mcwatts, 2005).

Researchers such as Bowen (1980); and Castillo et al (1998) found positive and significant relationship between job satisfaction and working condition. On the contrary, some researchers (Aebi, 1972; Ballyeat 1968; Herzberg, Mausner, and Snyderman, 1959;

McLaughlin and Montgomery, 1976; Morris, 1972; reported that job dissatisfaction was correlated with working conditions (as cited by Castillo, 1999).

Bowen (1980) reported that there is a positive and significant relationship between job satisfaction and policy and administration. On the contrary, Castillo et al. (1998) found no significant relationship between job satisfaction and policy and administrative agricultural teachers in Ohio (as cited by Castillo, 1999).

Salancik and Pfeffer's (1978); Chen, (2001:625); Chen, Farh and Tsui (1998); Rowley (1996); Luddy (2005) and Enders (1997), reported a positive and significant relationship between job satisfaction and supervision (as cited by Mcwatts, 2005).

Findings by Bowen (1980) indicated a positive significant relationship between job satisfaction and opportunity for advancement (as cited by Castillo, 1999).

Several studies have reported a positive significant relationship between job satisfaction and recognition. Among them Bowen (1980), Moxley (1997), reported a significant relationship between job satisfaction and recognition. Padilla-Velez (1993), reported a low level of relationship between job satisfaction and the recognition aspects of their job for vocational teachers in Puerto Rico. However, Bowen and Radhakrishna (1990), Cano and Miller (1992) failed to find a significant relationship between job satisfaction and recognition (as cited by Castillo, 1999).

Research findings by Padilla-Velez (1993); Bowen (1980); and Bowen and Radhakrshna (1990) reported a positive and significant relationship between job satisfaction and the work itself. Cana and Miller (1992) reported positive relationship between job satisfaction and the work itself, although the relationship was not significant. Castillo,

Conklin, and Cano (1998) reported a positive significant relationship for female teachers in Ohio, but not for the male teachers (as cited by Castillo, 1999).

Several researchers and authors like (Oshagbemi, 2001), Lacy and Sheehan (1997) said that, individuals who perceive that they have better interpersonal friendships with their co-workers and immediate supervisors report higher job satisfaction (as cited by Mcwatts, 2005). Furthermore, Padilla-Velez (1993); Bowen (1980); and Bowen and Radhakrishna (1990) found a positive and significant relationship between co-workers and job satisfaction. On the contrary, some researchers (Aebi, 1972; Ballyeat 1968; Herzberg, mausner, and Snyderman, 1959; McLaughlin and Montgomery, 1976; Morris, 1972; reported that job dissatisfaction was correlated with working conditions (as cited by Castillo, 1999).

Research results by Padilla-Velez (1993); Bowen (1980); and Bowen and Radhakrishna (1990) indicate positive and significant relationship between responsibility and job satisfaction. On the other hand, Cano and Miller (1992) and Castill, Canklin, and Cana (1998) failed to discover significant relationship between job satisfaction and responsibility for female and male agricultural teachers in Ohio (as cited by Castillo, 1999).

B. The Dispositional model of Job Satisfaction

This approach says that job satisfaction is a relatively stable characteristic that stays with people over various situations. According to this conceptualization, people who like the jobs they are doing at one time also tend to like the jobs they may be doing at another time, even if the jobs are different (Greenberg et al. 2009).

Supporting this approach, researchers have found that people are consistent in liking or disliking their jobs over as long as a 10-years period, although they have had several different positions during that time. Such evidence is in keeping with the idea that job satisfaction operates much like the stable dispositions toward positive and negative affect (Greenberg et al. 2009).

C. Value theory of job satisfaction

Another approach to job satisfaction, known as value theory of job satisfaction, takes a broader look to the question of what makes people satisfied. This theory argues that almost any factor can be a source of job satisfaction so long as it is something that people value. The less people have of some aspect of the job (e.g., pay, learning opportunities) relative to the amount they desire, the more dissatisfied they will be – especially for those facets of the job that are highly valued. Thus, value theory focuses on discrepancies between what people have and what they want: the greater those discrepancies, the more dissatisfied they will be (Greenberg et al. 2009).

According to Greenberg et al (2009), this approach to job satisfaction implies that an effective way to satisfy workers is to find out what they want and, to the extent possible, give it to them. However, because it often is unknown what employees want, this is easier said than done.

D. Social information processing Model

The idea that people's attitudes towards their job is based on information they get from other people is inherent in the social information processing model. This approach specifies that people adopt attitudes and behaviors in keeping with the cues provided by

others with whom they come in contact. The social information processing model is important as it makes sense for managers to pay careful attention to what workers are thinking and feeling about their job. This approach also suggests that managers should be careful about what they say. A few well-chosen remarks may go a long way toward raising employees' job satisfaction. By the same token, a few off-hand slips of the tongue may go a long way toward lowering morale (Greenberg et al. 2009).

1.3.3. Facets of Job Satisfaction

In recent years there has been an increase in the literature on the facets of job satisfaction (Groot, 1999). According to Lam (1995, p.73), research findings suggest that job satisfaction is "...not a static state but is subject to influence and modification from forces: within and outside an individual, that is his or her own personal characteristics and the immediate working environment", which suggests that the facets of job satisfaction can be thus divided primarily into extrinsic and intrinsic sources of job satisfaction (as cited by Mcwatts, 2005).

i) Extrinsic Sources of Job Satisfaction

Extrinsic sources of job satisfaction originate from the individual's environment. Smith et al. (1969) have identified five facets that represent the most important characteristics of a job about which people experience affective responses and constitute external sources of satisfaction. Advancement, Company Policy and administration, Compensation, Recognition, Supervision –human relations, and Supervision – technical are some examples of extrinsic source of job satisfaction mentioned by Weiss et al. (1967).

ii) Intrinsic Sources of Job Satisfaction

Vecchio (1988) maintains that intrinsic source of job satisfaction originate from within the individual and have intrinsic and psychological value because of what they symbolize, but because they originate from an individual's physical environment, it can also be seen as an extrinsic source. The following are examples of intrinsic sources of job satisfaction mentioned by Weiss et al. 1967: Ability Utilization, activity, achievement, authority, independence, moral value, responsibility, security, creativity, social service, social status, and variety.

1.3.4. Measuring job satisfaction

Although people have many different attitudes toward various aspects of their job, they are not particularly easy to assess. Not only can't you directly observe an attitude all we noted, you cannot accurately infer its existence on the basis of people's behavior, so for the most part, we have to rely on what people tell us to determine their attitude. However, people may not be entirely open about their attitudes and keep much of what they feel to themselves. Moreover, sometimes our attitudes are so complex that it's difficult to express them in any coherent fashion-even if we are willing to do so. In view of these challenges, social scientists have worked hard over the years to develop reliable and valid instruments designed to measure job satisfaction systematically. Several useful techniques have been developed, including questionnaires, critical incidents and interviews (Greenberg et al. 2009). Measuring job satisfaction is mostly assessed by asking people how they feel about their jobs, either through a questionnaire or an interview. There are a few measures of satisfaction that are widely used in research which will be briefly discussed.

Job Descriptive Index (JDI)

One of the most popular instruments is the job Descriptive Index (JDI), a questionnaire in which people indicate whether or not each of several adjectives describes a particular aspect of their work. Questions on the JDI deal with five distinct aspects of jobs: the work itself, pay, promotion opportunities, supervision, and coworkers (Greenberg et al. 2009).

Minnesota Satisfaction Questionnaire (MSQ)

Another popular job satisfaction measure is, the Minnesota Satisfaction Questionnaire (MSQ) which uses a different approach. People completing this scale rate the extent to which they are satisfied or dissatisfied with various aspects of their job. Higher scores reflect higher degree of job satisfaction (Greenberg et al. 2009).

MSQ has the advantage of versatility in the fact that long and short forms are available. It also makes provision for faceted as well as overall measures. The long form contains 100 items and the short form contains 20 items measuring different facets of job satisfaction (Spector, 1997).

Pay Satisfaction Questionnaire (PSQ)

Although, the JDI and the MSQ measure many different aspects of the job satisfaction, other scales focus more narrowly on specific facets of satisfaction. For example, as its name suggests the Pay Satisfaction Questionnaire (PSQ) is concerned with attitudes

toward various aspects of the pay. The PSQ provides valid measures of such critical aspects as satisfaction with pay level, pay raises, fringe benefits, and the structure and administration of the pay systems (Greenberg et al. 2009).

Job Diagnostic Survey (JDS)

The Job Diagnostic Survey was developed to study the effects of job characteristics on people (Hackman & Oldham, 1975 as quoted by Spector, 1997). The JDS covers several areas of job satisfaction, such as growth, pay, security, social, supervisor as well as global satisfaction.

Job Satisfaction Survey (JSS)

The Job Satisfaction Survey is another common measure of job satisfaction and it was used in the present study to elicit data on the job satisfaction levels of participants.

The JSS has been tested for reliability and validity across different studies (Spector, 1997). It assesses nine facets of job satisfaction as well as overall satisfaction. The nine facets are listed in the Table 2.1 below.

Table 2.1–Facets of Job Satisfaction Survey (JSS)

Dimensions of job satisfaction	Description
<ol style="list-style-type: none"> 1. Pay 2. Promotion 3. Supervision 4. Fringe benefits 5. Contingent rewards 6. Operating conditions 7. Co-Workers 8. Nature of work 9. Communication 	<p>Satisfaction with pay and pay raises</p> <p>Satisfaction with promotion opportunities</p> <p>Satisfaction with immediate supervisor</p> <p>Satisfaction with fringe benefits</p> <p>Satisfaction with rewards (not necessarily monetary) for good performance</p> <p>Satisfaction with rules and procedures</p> <p>Satisfaction with co-workers</p> <p>Satisfaction with type of work done</p> <p>Satisfaction with communication within the organization</p>

Source: Spector (1997: 8)

Job-In-General Scale (JIG)

The Job-In-General Scale has been designed to measure overall job satisfaction rather than facets. According to Ironson et al. (1989) as quoted by Spector (1997, p. 18),

“overall job satisfaction is not the sum of individual facets, it should rather be managed by using a general scale like the JIG.”

1.3.5. The consequences of job satisfaction

Numerous authors have highlighted that job satisfaction impacts on employee productivity, turnover, absenteeism, physical and psychological health (Johns, 1996; Luthans, 2005; Mullins, 1996) as cited by Nezaam (2005).

Productivity

As mentioned by Nezaam (2005), research findings indicate that the relationship between satisfaction and productivity is positive, but very low and inconsistent (Johns, 1996). According to Luthans (2005), although a relationship between job satisfaction and productivity exists, the relationship between these variables is not strong as quoted by Nezaam (2005). The author maintains that the most satisfied employee will not necessarily be the most productive employee. At an individual level the evidence is often inconsistent in terms of the relationship between satisfaction and productivity, but at an organizational level a strong relationship exists between satisfaction and productivity (Robbins et al., 2003) as cited by Nezaam (2005).

Physical and psychological health

Spector (1997) states that individuals who dislike their jobs could experience negative health effects that are either psychological or physical. On the other hand, Luthans (2005) mentions that employees with high levels of job satisfaction tend to experience better mental and physical health.

Turnover

As mentioned by Nezaam (2005), a number of studies strongly support the view that turnover is inversely related to job satisfaction (Griffon, Hand, Meglino & Mobley (1979) and Price (1977) cited in Robbins et al., 2003). According to French (2003), a high employee turnover rate is often prevalent in an environment where employees are highly dissatisfied. Greenberg and Baron (1995) contend that employees lacking job satisfaction often tend to withdraw from situations and environments as a means of dealing with their dissatisfaction. A major form of employee withdrawal is voluntary turnover. By not reporting for duty, or by resigning to seek new job prospects, individuals might be expressing their dissatisfaction with their jobs or attempting to escape from the unpleasant aspects they may be experiencing. Phillips, Stone and Phillips (2001) concur that employee turnover is the most critical withdrawal variable. A study conducted by Steel and Ovalle (1984) established a moderately strong relationship between job satisfaction and turnover, indicating that less satisfied workers are more likely to quit their jobs. According to Lee and Mowday (1987), a moderate relationship exists between satisfaction and turnover. The researchers posit that high job satisfaction will not necessarily contribute to a low turnover rate, but will inadvertently assist in maintaining a low turnover rate as described by Nezaam (2005).

Absenteeism

As described by Nezaam (2005), research indicates that job satisfaction levels are related to absenteeism (Hellriegel, Slocum & Woodman, 1989). Nel et al. (2004, p. 548) maintain that “absenteeism is regarded as withdrawal behavior when it is used as a way

to escape an undesirable working environment.” According to Luthans (2005), various studies conducted on the relationship between satisfaction and absenteeism indicates an inverse relationship between the two variables. Thus, when satisfaction is high, absenteeism tends to be low. The converse indicates that when satisfaction is low, absenteeism tends to be high. Contrary to this, the findings of a study undertaken by Johns (1996) found the association between job satisfaction and absenteeism to be moderate. Robbins (1993) supports the view of a moderate relationship existing between satisfaction and absenteeism. According to Robbins et al. (2003), the moderate relationship between these variables could be attributed to factors such as liberal sick leave, whereby employees are encouraged to take time off. The afore-mentioned could ultimately reduce the correlation coefficient between satisfaction and absenteeism as quoted by Nezaam (2005).

1.4. The Relationship between Work Overload and Job Satisfaction

Several Studies have tried to determine the link between work overload and job satisfaction. According to Vinokur-Kaplan (1991), organizational factors such as work overload and working conditions were negatively related with job satisfaction. Frank M. Gryna (2004) also stated that work overload is one of the several factors that have an impact on job satisfaction. Work overload is negatively associated with job satisfaction (Rita and Stephanie, 2008); there is significant negative relationships between work overload and job satisfaction (Nufar et al., 2009). As described by Nurit et al. (2008), dissatisfaction at work is caused by burnout, work overload and poor health.

In this section, some studies related to work overload and job satisfaction are evaluated chronologically, starting from the recent studies.

A study conducted by Ahmed et al. (2011), examined the relationship between work overload and job involvement with the two dimensions of work-family conflict [work interference with family and family interference with work].

The study was carried out in 19 public hospitals in Peninsular Malaysia comprised a sample of 391 doctors working full time. The doctors selected were married, have at least one child, having a working spouse, and work under the supervision of a head of department. The response rate for the study was 17.77%.

Results of the study indicated that work overload was positively related to both work interference with family and family interference with work. On the other hand, job involvement was found to have no significant impact on the two forms of work-family conflict.

The current study, however, was concerned with the relationship and state of work overload and job satisfaction. The study conducted by Ahmed et al. (2011), didn't assess the effect of work overload on job satisfaction even if the finding revealed the prevalence of work overload and its relationship with interference with family and family interference with work. The study was also conducted on sample of doctors and the result may not be conclusive for other workers in other public service organizations as to the existence of work overload; its low response rate also limits generalisability of the study results. For this reason, the current study investigated the situation of work overload and job satisfaction in public service organizations in Addis Ababa.

Nilufar et al. (2009), attempted to investigate the relationship between job stress and job satisfaction. The determinants of job stress that have been examined under the study include, management role, relationship with others, workload pressure, homework interface, role ambiguity, and performance pressure. The sample consists of a public university academician from Klang Valley area in Malaysia.

The study used close-ended questionnaire and personal interviews for collecting from a total 300 respondents come from various faculties selected using non-probability technique. The response rate was 67.66%, which was very much acceptable in social science research (Fowler, 1988) as stated in the study.

The results showed there is a significant relationship between four of the constructs tested. The results also showed that there is significant negative relationship between job stress and job satisfaction and the prevalence of unhealthy job stress among the employees of the university.

The sample consisted of one public university in Klang Valley may limit the generalisability of the results as only one public university may not represent all other public service organizations. The study determined the relationship between job stress and job satisfaction, however the current study focuses on the relationship between work overload and job satisfaction. Even though work overload is a component of job stress, this study specifically assessed different work overload problems and contributing factors in relation to the level of job satisfaction with respect to the facets of job satisfaction in detail. As to the findings of Nilufar et al. (2009), there is negative relationship between work overload (as component of job stress) and job satisfaction, but this may not be true

in the Ethiopian context. As such, this study addressed the relationship between work overload and job satisfaction in public service organizations in Ethiopian context, specifically in Addis Ababa.

Nor Liyana and Mansor Abu (2009), in Malaysia determined the level of occupational stress, job satisfaction and relationship between occupational stress and job satisfaction facets.

The study employed self-administered questionnaire for a sample of 40 male officers and non-officers selected using multistage random sampling.

The study indicated that majority of the male Navy personnel reported moderate levels of job satisfaction in the favorable nature of work facet. High occupational stress on the other hand, was related to an unknown superior's evaluation of one's workplace performance. Correlational analyses found that occupational stress was associated with overall job satisfaction and in eight of its facets.

The finding of the preliminary study was made on small sample size and may not be generalized to the larger population. It was concerned with the general occupational stress and job satisfaction specifically to male Naval employees. This study, however, concentrates on work overload and job satisfaction (by taking similar facets of job satisfaction) by taking larger sample size of male and female employees of public service organizations in Addis Ababa, Ethiopia.

Another study conducted by Jasmani et al. (2009), in public hospitals within the northern states of Malaysia investigated the relationship among work overload and role overload with emotional exhaustion, depersonalization, self accomplishment, and burnout

The study was conducted in four hospitals using questionnaire survey from sample of 2400 nurses out of 3000 staff yielding 93% response rate.

The findings of the study shows that nurses who underwent high work overload will undergo high depersonalization, there are relationship between work overload and emotional exhaustion, depersonalization and self accomplishment, there is relationship between role overload and burnout, there are relationship between role overload and emotional exhaustion, depersonalization and self accomplishment and lastly role overload have relationship with emotion exhaustion, depersonalization and self accomplishment.

The current study and the study conducted by Jasmani et al. (2009) are similar in that they both assess about the situation of work overload. But this study investigated the relationship and state of work overload and job satisfaction. This study did not examine the other variables studied by Jasmani et al. As to the existence of work overload on public hospitals in Malaysia has been identified, this finding may not represent the situation in other public service organizations and even in other countries. As such, this was aimed at assessing the situation of work overload in public service organizations, in Addis Ababa.

A study conducted by Nurit et al. (2008), at Israel examined the characteristics of the paramedics' work, the quality of their working lives, the factors that keep them in the profession, or conversely, draw them away from it.

The study was conducted through a telephone survey using a closed questionnaire of a random sample of 50% of the graduates of paramedic courses in Israel (excluding conscripted soldiers).

The result of the study showed that pressures at work result from having to cope with a lack of administrative support, paperwork, long hours, imbalance between work and family life, and salary. According to the study, pressures at work do not come from having to cope with responsibility, the pressure of working under uncertain conditions, and the sudden transition from calm situations to emergencies. Furthermore, the study-investigated dissatisfaction at work is caused by burnout, work overload, and poor health.

This paper is different from the above study in such a way that it addresses only work overload and job satisfaction. The other variables such as burnout and poor health were not addressed. Further more, the study conducted by Nurit et al. was limited to a single profession of paramedics and the variables of work overload assessed are not the same with current study. Similar facets of job satisfaction are taken in both studies. The negative relationship found between work overload and job satisfaction in the paramedics employees may not be applicable in all public service organizations and the objective this paper was to assess the relationship of the two variables in public service organizations, in Addis Ababa.

Olugbenga Jelil and Joseph Mubo (2007) examined the main and interactive effects of work overload and self-efficacy on emotional exhaustion and job performance of extension personnel in Southwest Nigeria.

The study employed questionnaires that were administered to 167 extension personnel of Agricultural Development Program in Southwest Nigeria. The response rate was above the limit of 80.0% and non-response error is not a likely threat to the external validity of the study findings (Lindner & Wingenbach, 2002) as described by the study.

Results of the study revealed positive relation between work overload and emotional exhaustion and not with job performance; and efficacy beliefs is positively associated with job performance. The interaction term between efficacy beliefs and work overload is unrelated to emotional exhaustion and job performance as hypothesized.

Since satisfaction has an effect on performance, this study focused on the relationship between work overload and job satisfaction instead of emotional exhaustion and performance. The study conducted in Nigeria was limited to only one sector, Agricultural Development Program which may not be representative of any other public sector with respect to work overload problem. The current study, therefore, investigate the situation of work overload in Ethiopian public service organizations, more specifically in Addis Ababa.

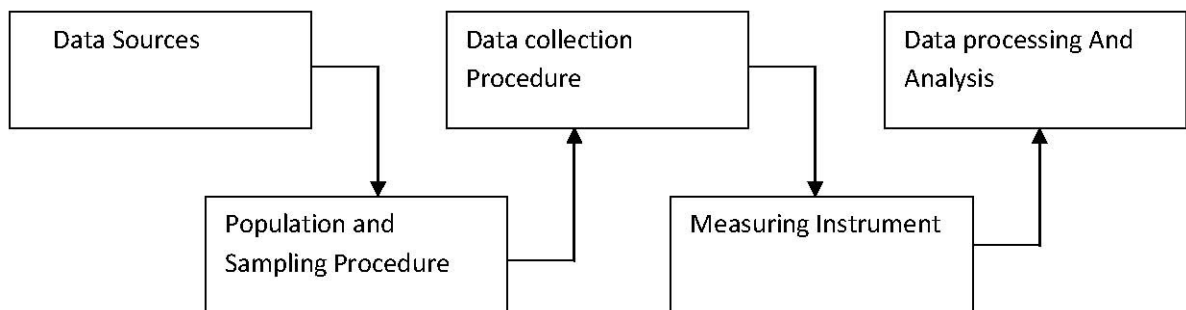
CHAPTER THREE

2. Research Design and Methodology

2.1. Introduction

The main objective of this chapter is to give an overview of the research design and methodology used to investigate the research problem. Thus, research design, the data sources, population and the sampling technique, measuring instrument, data processing and analysis using statistical tools will be discussed. Diagrammatically, the outline of the research methodology is described below.

Fig. 3.1: Outline of research methodology



Source: Developed for this research

2.2. Research Design

Explanatory/inferential, cross sectional study design using quantitative method was used to analyze for data collected from respondents. The rationale behind using inferential study design is to determine how the independent variables explain the dependent variables of the study. The study is cross-sectional in the sense that relevant data was collected at one point in time.

2.3. Data Sources

For proper achievement of the objectives of the study; the researcher used primary data sources. A questionnaire which has three sections such as background information, work overload and Minnesota Satisfaction was distributed to the target respondents.

2.4. Population and sampling procedure

2.4.1. Population and sample size

The population of this study, as organizations, consists of all public service enterprises in Addis Ababa city. Among these enterprises, five were selected. The five enterprises were selected on the assumption to represent all the service public enterprises in Addis Ababa based on their capital as reported in Access Capital, Ethiopian Macroeconomic Handbook 2001-12. The rationale behind using the amount of capital was to select enterprises representing the huge and medium ones proportionally. As described in access capital 2011-12, there are 23 public enterprises that provide pure services; among which the five enterprises are categorized as the “BIG five” state enterprises. To this effect, one enterprise (Ethiopian Electric Power Corporation) was selected from the “BIG five” service enterprises; and four enterprises [namely: Ethiopian Shipping and Logistics Services Enterprise (The Logistics Sector), Merchandise Wholesale and Import Trade Enterprise, Industry Project Service Enterprise, and Public Procurement Services Enterprise] were selected from the remaining 18 public service enterprises on proportion basis. That is, when one organization is selected from the “BIG 5”, four are selected from 18 proportionally.

Therefore, the population of this study are all permanent employees of the five selected public service enterprises. The sample size selected here is considered as representative of the target population and also large enough to allow for precision, confidence and generalisability of the research findings.

The researcher used the following sample size determination formula developed at University Park by Jeff Watson, Research Assistant, and Cooperative Extension & Outreach for calculating the sample size required.

$$n = \frac{\left(\frac{P[1-P]}{\frac{A^2}{Z^2} + \frac{P[1-P]}{N}} \right)}{R}$$

(Watson, Jeff: 2001)

Where:

n: sample size required-352

N: number of people on the population-3334

P: estimated variance in population - 50%

A: precision desired – 5%

Z: Based on confidence level – 95%

R: Estimated response rate- 98%

By using the above formula, 352 respondents were selected from the total population of 3334 of the five samples enterprises. The 352 respondents were selected from each service enterprise on proportion basis. The number of samples taken from each enterprise is indicated in table 3.1 below.

Table 3.1: Number of employees and proportion of samples taken from each public service organization

Organization	Number of employees	Proportion of sample size
Ethiopian Electric Power Corporation	1754	$[(1754/3334) \times 352] = 185$
Ethiopian Shipping and Logistics Enterprise	220	$[(220/3334) \times 352] = 23$
Merchandise Wholesale and Import Trade Enterprise: The Logistics Sector	1240	$[(1240/3334) \times 352] = 131$
Industry Project Service Enterprise	52	$[(52/3334) \times 352] = 6$
Public Procurement Services Enterprise	68	$[(68/3334) \times 352] = 7$
Total	3334	352

Source: Developed for this research

2.4.2. Sampling technique

The sample enterprises from the two stratum (the “BIG 5” and others) category were selected using simple random sampling for each organization will have equal chance of being selected. Hence, the organizations were selected using stratified random sampling and head offices from each enterprise were selected as representatives of each organization. After selecting the head offices, respondents from each office were selected by using simple random sampling technique because each member of the population will have equal chance of being selected.

2.5. Data Collection Procedure

Prior to conducting the study permission was obtained from each organization. After permission was granted, the questionnaires which have three parts – background information, work overload and job satisfaction was distributed to the respondents. For the questionnaire to be easily understandable by respondents, it was translated in to Amharic language. So as to capture the same meaning of the questionnaire in both languages, it was revised by two language professionals. The purpose of the study, cooperation from respondents, ethical issues (confidentiality and participation on voluntary basis was also included in the introduction part of the questionnaire.

2.6. Measuring instruments

2.6.1. Background Information

Self administered questions were used to obtain background information of respondents relevant to the study. Participants were asked to furnish information with regard to their sex, age, and educational level.

2.6.2. Work Overload

Closed ended questions about the causes and signs of work overload were asked for respondents. The variables and questions for work overload questionnaire were taken from Gryna (2004) literature and self assessment questions on work overload; and from Glalinsky et al. (2001) findings on work overload. The questionnaire consists of 22 items and based on these items respondents were asked to indicate the extent of their agreement/disagreement with each of the 22 statements. Accordingly, each statement is

rated on a 5 point Likert response scale which includes strongly disagree (1), disagree(2), neither agree nor disagree (3), agree (4) and strongly agree (5).

2.6.3. Minnesota Satisfaction Questionnaire (MSQ)

The Minnesota Satisfaction Questionnaire was developed by Weiss, Dawis, England and Lofquist (1967) and represented the result of research conducted on the Work Adjustment Project in studies conducted at the University of Minnesota. The theory underlying the basis for the Work Adjustment Project stated that "...work adjustment depends on how well an individual's abilities correspond to the rein forcers available in the work environment" (Weiss et al. 1967, p. v). The MSQ consists of long and short form and the researcher used the long form to obtain information on how satisfied the employees are on their current job. Each long form of MSQ consists of five response choices weighted in the following manner.

Response choice scoring weight

Very Dissatisfied (VDS).....	1
Dissatisfied (DS)	2
Neither (N)	3
Satisfied (S)	4
Very Satisfied (VS)	5

Scale scores are determined by summing the weights for the responses chosen for the items in each scale (Weiss et al. 1967).

Weiss et al. (1967) reported that the most meaningful scores to use in interpreting the MSQ are the percentile scores for each scale obtained from the most appropriate norm group for the individual. Ordinarily, a percentile score of 75 or higher indicate a high degree of satisfaction; a percentile score of 25 or lower would indicate a low level of satisfaction; and, the scores in the middle range that is from 26 to' 74 of percentiles indicate average satisfaction.

Modification of Minnesota Satisfaction questionnaire

The long form of MSQ contains 100 questions which are under the 20 facets of job satisfaction. However, these all 100 statements are not equally meaningful for all employees in the organizations. As such, the researcher modified the MSQ by selecting 50 statements to assess the level of satisfaction of the respondents.

2.6.4. Reliability and Validity of the Instruments

Bless and Higson-Smith (1995) highlight that reliability is “concerned with the consistency of measures”, thus, the level of an instrument’s reliability is dependent on its ability to produce the same score when used repeatedly (Babbie and Mouton, 1998). According to Bryma and Bell (2003), the Cronbach’s Alpha result of 0.7 and above implies acceptable level of internal reliability. To meet consistency reliability of the instrument, the questionnaires was distributed to 35 individuals who are workers of

Commercial Bank of Ethiopia and Cronbach's alpha was found to be 0.745 and 0.946 for work overload questionnaire and job satisfaction questionnaire, respectively; which is above 0.7.

Validity on the other hand refers to whether an instrument actually measures what it is supposed to measure, given the context in which it is applied (Babbie and Mouton, 1998; Bless and Higson-Smith, 1995). To assure validity, questionnaires were designed on the basis of previous studies' questionnaires and review of related literatures. Furthermore, this study deduces hypothesis from a theory that is relevant to the concept.

2.7. Data processing and analysis

2.7.1. Data Processing

The method of data processing in this study was manual and computerized system. In the data processing procedure editing, coding, classification, and tabulation of the collected data were used. The researcher edited the collected raw data to detect errors, omissions, checking that there is an answer for each question, and the questions are answered accurately and uniformly. The process of assigning numerical or other symbols came next which was used by the researcher to reduce responses into a limited number of categories or classes. After this, the processes of classification or arranging large volume of raw data into classes or groups on the basis of common characteristics were applied. Data having the common characteristics was placed together and in this way the entered data were divided into a number of groups. Finally, tabulation were used to summarize the raw data and displayed in the compact form (in the form of statistical table) for further analysis.

2.7.2. Data Analysis

This is the further transformation of the processed data to look for patterns and relationship between and/or among data groups by using descriptive or inferential (statistical) analysis.

3.7.2.1. Descriptive Analysis: The researcher used descriptive analysis to reduce the data in to a summary format by:

- Tabulation -the data arranged in a table format.
- Measure of central tendency – minimum and maximum values, mean and standard deviation were used for the sake of explaining signs and causes of work overload, facets of job satisfaction and overall job satisfaction of the sample respondents.

3.7.2.2. Inferential Analysis: According to Sekaran (2000:401), “inferential statistics allow researchers to infer from the data through analysis the relationship between two variables; differences in a variable among different subgroups; and how several independent variables might explain the variance in a dependent variable.” The following inferential statistical methods are used on this research.

The Pearson Product Moment Correlation Coefficient

Cohen and Swerdlik (2002) posit that the Pearson Product Moment Correlation Coefficient is a widely used statistical method for obtaining an index of the relationships between two variables when the relationships between the variables is linear and when

the two variables correlated are continuous. To ascertain whether a statistically significant relationship exists between signs of work overload and work overload, causes of work overload and work overload, facets of job satisfaction and job satisfaction, work overload and job satisfaction, the Product Moment Correlation Coefficient was used. According to (McDanail and Gates, 2006), correlation coefficient can range from -1.00 to +1.00. The value of -1.00 represents a perfect negative correlation. While a value of +1.00 represents a perfect positive correlation. A value of 0.00 correlations represents no relationship. The results of correlation coefficient may be interpreted as follow:

Correlation coefficient	Interpretation
(-1.00 to -0.8]	High
(-0.8 to -0.6]	Substantial
(-0.6 to -0.4]	Medium
(-0.4 to -0.2]	Low
(-0.2 to 0.2)	Very low
[0.2 to 0.4)	Low
[0.4 to 0.6)	Medium
[0.6 to 0.8)	Substantial
[0.8 to 1.00)	High

On this study Pearson's Product moment correlation Coefficient was used to determine the following relationships for the sample respondents.

- The relationships between each sign of work overload and work overload.

- The relationships between each cause of work overload and work overload.
- The relationships between each facet of job satisfaction and job satisfaction.
- The relationship between work overload and job satisfaction.

Multiple Regression Analysis

Multiple regression analysis takes into account the inter-correlations among all variables involved. This method also takes into account the correlations among the predictor scores. Multiple regression analysis more than one predictor is jointly regressed against the criterion variable. (Cohen & Swerdlik, 2002). This method is used to determine if the independent variables will explain the variance in work overload and job satisfaction.

Regression functions

The equation of multiple regressions on this study is generally built around two sets of variable, namely dependent variables (work overload and job satisfaction) and independent variables (signs of work overload, causes of work overload, and facets of job satisfaction). The basic objective of using regression equation on this study is to make the researcher more effective at describing, understanding, predicting, and controlling the stated variables.

Independent Variables

- A. Signs of Work overload:** working long hours (S2), unwanted overtime (S3), inability to meet goals (S4), difficulty to take vacation (S5), Respond to work at non work time (S6), face firefighting (S7), do additional tasks (S8), lost work

days due to illness (S9), borrowing employees (S10), work interruptions (S11), errors occur (S12), feel overworked (S13), and feel exhausted (S14).

B. Causes of work overload: insufficient resources (C2), unclear responsibilities (C3), incompatible work process (C4), unclear performance goals (C5), difficulties with inputs (C6), inadequate selection and training (C7), mental intensity and pressure (C8), difficulties with technology (C9), downsizing (C10).

C. Facets of job satisfaction: pay (X2), working conditions (X3), policy and administration (X4), supervision (X5), opportunity for advancement (X6), recognition (X7), the work itself (X8), co-workers (X9), and responsibility (X9).

Dependent Variables

A. Work overload (Y)

B. Job satisfaction (Z)

Regress work overload on signs of work overload

$$Y_i = \beta_1 + \beta_2 S_2 + \beta_3 S_3 + \beta_4 S_4 + \beta_5 S_5 + \beta_6 S_6 + \beta_7 S_7 + \beta_8 S_8 + \beta_9 S_9 + \beta_{10} S_{10} + \beta_{11} S_{11} + \beta_{12} S_{12} + \beta_{13} S_{13} + \beta_{14} S_{14} + E$$

Where:

Y is the dependent variable-work overload

S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, and S14 are the explanatory variables (or the regressors)

β_1 is the intercept term-it gives the mean or average effect on Y of all the variables excluded from the equation, although its mechanical interpretation is the average value of Y when the stated independent variables are set equal to zero.

$\beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}, \beta_{12}, \beta_{13},$ and β_{14} refers to the coefficient of their respective independent variable which measures the change in the mean value of Y, per unit change in their respective independent variables.

E = Error term

Regress work overload on causes of work overload

$$Y_i = \beta_1 + \beta_2 C_2 + \beta_3 C_3 + \beta_4 C_4 + \beta_5 C_5 + \beta_6 C_6 + \beta_7 C_7 + \beta_8 C_8 + \beta_9 C_9 + \beta_{10} C_{10} + E$$

Where:

Y is the dependent variable-work overload

$C_2, C_3, C_4, C_5, C_6, C_7, C_8, C_9,$ and C_{10} are the explanatory variables (or the regressors)

β_1 is the intercept term-it gives the mean or average effect on Y of all the variables excluded from the equation, although its mechanical interpretation is the average value of Y when the stated independent variables are set equal to zero.

$\beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9,$ and β_{10} refers to the coefficient of their respective independent variable which measures the change in the mean value of Y, per unit change in their respective independent variables.

E = Error term

Regress job satisfaction on selected facets of job satisfaction

$$Z_i = \beta_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + E$$

Where:

Z is the dependent variable-job satisfaction X2, X3, X4, X5, X6, X7, X8, X9, and X10 are the explanatory variables (or the regressors)

β_1 is the intercept term-it gives the mean or average effect on Z of all the variables excluded from the equation, although its mechanical interpretation is the average value of Z when the stated independent variables are set equal to zero.

$\beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9,$ and β_{10} refers to the coefficient of their respective independent variable which measures the change in the mean value of Z, per unit change in their respective independent variables.

E = Error term

Accordingly, this statistical technique was used to explain the following relationships.

- ✚ Regress work overload (as dependent variable) on the signs of work overload (as independent variable) for sample respondents.
- ✚ Regress work overload (as dependent variable) on the causes of work overload (as independent variable) for sample respondents.
- ✚ Regress job satisfaction (as dependent variable) on facets of job satisfaction (as independent variable) for sample respondents.

Simple Linear Regression

Simple linear regression was used to determine how work overload explains job

satisfaction.

Regression Function

Independent variable: work overload (A)

Dependent Variable: job satisfaction (B)

Regress job satisfaction on work overload

$$B = \alpha + \beta A$$

Where:

B is the dependent variable - job satisfaction, A is the explanatory variable – work overload (or the regressor)

α is the intercept term-it gives the mean or average effect on B when the stated independent variable is set equal to zero.

β refers to the coefficient of the independent variable which measures the change in the mean value of B, per unit change in the independent variable.

Accordingly, this statistical technique was used to explain the following relationship.

✚ Regress job satisfaction (as dependent variable) on work overload (as independent variable) for sample respondents.

CHAPTER FOUR

4. Data Analysis, Interpretation and Discussion of Results

4.1. Introduction

This chapter presents the results of the study based on the empirical analysis of the data collected from the research respondents and discussion of results with respect to previous research findings and literature. In this chapter, both descriptive and inferences on the data analysis and procedures are presented.

4.2. Data Analysis and Interpretation

To facilitate ease in conducting the empirical analysis, the results of the descriptive analysis are presented first, followed by the inferential analysis.

The first phase involved editing, coding and the tabulation of data. This assisted in identifying any anomalies in the responses and the assignment of numerical values to the responses in order to continue with the analysis. The data was then checked for possible erroneous entries and corrections made appropriately. The statistical program used for the analyses and presentation of data in this study is the Statistical Package for the Social Sciences (SPSS) version 20. The descriptive statistics utilized are based on frequency tables to provide information on the demographic variables. Through tables, summary statistics such as means, standard deviations, minimum and maximum are computed for each signs and causes of work overload, and each facets of job satisfaction in this study.

This is followed by presentation of inferential statistics based on each hypothesis formulated for the study. All statistical test results were computed at the 2-tailed level of

significance. The alpha levels of .05 and .01 selected a priori for test of significance for correlations, multiple regression analysis, and simple linear regression.

Three hundred fifty two questionnaires were distributed to the respondents and out of 352 questionnaires, 334 of them were collected that accounts 94.6% response rate. Accordingly, the analysis of this study is based on the number of questionnaires collected.

4.2.1. Descriptive Statistics

4.2.1.1. Background Information of Respondents

Table 4.1: Background information of Respondents

No	Items	Frequency	Percentage
1	Sex of Respondents		
	a. Male	216	64.7
	b. Female	118	35.3
	Total	334	100
2	Age of Respondents		
	a. 18-26 years	73	21.9
	b. 27-35 years	101	30.2
	c. 36-45 years	79	23.7
	d. Above 45 years	81	24.3
	Total	334	100
3	Educational Level of Respondents		
	a. Certificate	33	9.9
	b. Diploma	104	31.1
	c. Degree	178	53.3
	d. Above Degree	19	5.7
	Total	334	100

Source: Developed for this research

Table 4.1 above indicates background information of respondents participated in the study. Sex, age and educational level of the sample respondents are displayed in the table.

As shown from the table item number 1 sex distribution of the sample, 216 (64.7%) of the total respondents are male, 118 (35.3%) are female. This implies that the proportion of male employees is much larger than that of female employees in the sampled five public service enterprises.

As far as age of respondents is concerned, 73 (21.9%) of the respondents are in the range of 18-26 years, 101 (30.2%) of the respondents are in the range of 27-35 years, 79 (23.7%) are in the range of 36-45 years and 81 (24.3%) are above 45 years, as revealed from item number 2 of the table. From this, it can be understood that the public service enterprises under study consist of all age groups with majority of 27-35 years.

Item number 3 of the table further indicates educational level of respondents. From the table, 33 (9.9%) of the respondents are certificate holders, 104 (31.1%) of the respondents are diploma holders, 178 (53.3%) of the respondents are degree holders and 19 (5.7%) of the respondents are above degree. From this one can understand that most of the respondents are diploma and above holders, therefore, they would have the ability to fill the questionnaire by having know how about work overload and job satisfaction of the organizations.

4.2.1.2. Results of measures of central tendency and dispersion

This part explains the descriptive statistics calculated on the basis of the variables included in the work overload and job satisfaction questionnaires. The measures of central tendency and dispersion for the signs of work overload, causes of work overload,

facets of job satisfaction and overall job satisfaction results obtained from the sample respondents are shown in tables 2, 3 and 4.

Table 4.2: Results of signs of work overload for sample respondents

	N	Minimum	Maximum	Mean	Std. Deviation
Work long hours	334	1	5	2.49	1.195
Unwanted overtime	334	1	5	2.27	1.172
Inability to meet goals	334	1	5	2.43	1.386
Difficulty to schedule vacations	334	1	5	3.79	1.135
Respond to work during non work time	334	1	5	3.74	1.147
Face firefighting	334	1	5	3.53	1.310
Do additional tasks	334	1	5	2.25	1.185
Lost work days due to illness	334	1	5	2.09	1.150
Borrowing employees to fill absent	334	1	5	2.42	1.310
Work interruptions	334	1	5	2.49	1.299
Errors occur when tired	334	1	5	2.13	1.178
Feel overworked	334	1	5	3.94	1.108
Feel exhausted	334	1	5	2.11	1.051

Source: Developed for this research

Table 4.2 reveals the arithmetic mean of the signs of work overload considered in this study. As shown from the table, feeling overworked by the work demands seemed to be the highest indicator of work overload with a mean and standard deviation of 3.94 and 1.108 respectively followed by difficulty in taking vacation with mean 3.79 and standard deviation of 1.135, responding to work problems during non work time with mean 3.74 and standard deviation of 1.147, and firefighting with mean 3.53 and standard deviation of 1.310, as indicators of work overload. Working long hours, inability to meet goals with the available resources, borrowing of employees from other activities to fill absent employees, and work interruptions at work could be lesser symptoms of work overload. Working unwanted overtime, doing additional tasks, lost work days due to illness, occurrence of errors when employees are tired, and feeling exhausted by work demands may be least indicators of work overload, as employees perceive.

Table 4.3: Results of causes of work overload for sample respondents

	N	Minimu m	Maximu m	Mean	Std. Deviation
Insufficient resources	334	1	5	2.15	1.213
Unclear responsibilities	334	1	5	1.97	.911
Incompatible work process	334	1	5	2.16	1.066
Unclear performance goals	334	1	5	2.18	1.052
Face difficulties related to inputs	334	1	5	1.96	.923
Inadequate selection and training	334	1	5	3.59	1.339
Mental intensity and pressure	334	1	5	3.77	1.104
Difficulties with technological materials	334	1	5	2.17	1.035
Downsizing	334	1	5	2.06	1.021

Source: Developed for this research

From Table 4.3, mental intensity and pressure such as information overload seemed to be the major contributing factor to work overload with mean and standard deviation of 3.77

and 1.104, respectively; this is followed by inadequate selection and training of personnel with mean and standard deviation of 3.59 and 1.339, respectively.

Table 4.4: Results of facets of job satisfaction and overall job satisfaction

	N	Minimum	Maximum	Mean	Std. Deviation
Pay	334	1.00	5.00	2.1341	.90496
Working conditions	334	1.00	5.00	3.2293	1.04447
Policy and administration	334	1.00	5.00	2.3467	.85032
Supervision	334	1.00	5.00	2.8527	.99861
Opportunity for advancement	334	1.00	5.00	2.4398	.95898
Recognition	334	1.00	5.00	3.0246	.95982
The work itself	334	1.00	5.00	2.8587	.96729
Co-workers	334	1.00	5.00	3.6554	1.08085
Responsibility	334	1.00	5.00	2.9216	1.02554
Job satisfaction	334	1.00	5.00	2.8125	.66258

Source: Developed for this research

As far as the selected facets of job satisfaction assessed through Minnesota Satisfaction Questionnaire is concerned, Table 4.4 exhibits that the arithmetic means for the work itself, pay, working conditions, company policy and administration, supervision, opportunity for advancement, recognition for the work done, relations with co-workers, and responsibility was calculated for sample respondents. From Table 4.4, therefore, it may be concluded that respondents are most satisfied with the relations that they have with their co-workers with a mean and standard deviation of 3.6554 and 1.08085, respectively. This is followed by working conditions, recognition, responsibility, the work itself and supervision they receive. Moreover, sample respondents could be less satisfied with opportunity for advancement with a mean 2.4398 and standard deviation of .95898, and company policy and administration with a mean 2.3467 and standard deviation of .85032. However, respondents seem to be least satisfied with pay of the organizations with a mean and standard deviation of 2.1341 and .90496, respectively.

Weiss et al. (1967) reported that the most meaningful scores to use in interpreting the MSQ are the percentile scores for each scale obtained from the most appropriate norm group for the individual. Ordinarily, a percentile score of 75 or higher indicate high degree of satisfaction; a percentile score of 25 or lower would indicate a low level of satisfaction; and, the scores in the middle range that is from 26 to 74 of percentile indicate average satisfaction.

Accordingly, the level of overall job satisfaction of the sample respondents of the public service enterprises selected, as measured by the Minnesota Satisfaction Questionnaire (MSQ), represents a percentile score of 56 and arithmetic mean score of 2.8125. Hence, it

may be concluded that the sample respondents of the organizations have an average satisfaction level towards their job.

4.2.2. Results of Inferential Statistics

The following sections demonstrate the results of inferential statistics employed in this study. So as to assess the objectives of the study, Pearson's Product Moment Correlation Coefficient was computed, and multiple regression analysis was conducted. With the help of these statistical tools, conclusions are drawn with regard to the sample and decisions are made with respect to the research hypotheses.

4.2.2.1. Pearson's Product Moment Correlation Coefficient

On this study, Pearson's Product Moment Correlation Coefficient was used to determine the following relationships.

- The relationships between each signs of work overload and overall work overload.
- The relationship between each causes of work overload and overall work overload.
- The relationship between each facets of job satisfaction and overall job satisfaction.
- The relationship between work overload and job satisfaction.

Correlation between signs of work overload and work overload for sample respondents

So as to determine whether there are significant relationships between the signs of work overload and work overload, Pearson's Product Moment Correlation was computed. Table 4.5 below demonstrates the results of Pearson's Product Moment Correlation on the relationship between signs of work overload and overall work overload for the sample respondents. It shows that, the correlation coefficients for the relationship between work overload and its signs are linear and positive ranging from very low to medium correlation coefficients. From the table, there is medium and statistically significant relationship between working long hours and work overload ($r = 0.412$, $p < 0.01$), working unwanted overtime and work overload ($r = 0.450$, $p < 0.01$), inability to meet goals with available time and work overload ($r = 0.511$, $p < 0.01$), firefighting and work overload ($r = 0.480$, $p < 0.01$), and work interruptions and work overload ($r = 0.463$, $p < 0.01$).

Table 4.5: The relationship between each sign of work overload and work overload

				Work overload
Work long hours	Pearson Correlation Sig. (2- tailed) N			.412** .000 334
Unwanted overtime	Pearson Correlation Sig. (2- tailed) N			.450** .000 344
Inability to meet goals	Pearson Correlation Sig. (2- tailed) N			.511** .000 334
Difficulty to schedule vacations	Pearson Correlation Sig. (2- tailed) N			.123* .024 334
Respond to work during non work time	Pearson Correlation Sig. (2- tailed) N			.052 .344 334
Face firefighting	Pearson Correlation Sig. (2- tailed) N			.480** .000 334
Do additional tasks	Pearson Correlation Sig. (2- tailed) N			.302** .000 334
Lost work days due to illness	Pearson Correlation Sig. (2- tailed) N			.192** .000 334
Borrowing employees to fill absent	Pearson Correlation Sig. (2- tailed) N			.209** .000 334
Work interruptions	Pearson Correlation Sig. (2- tailed) N			.463** .000 334
Errors occur when tired	Pearson Correlation Sig. (2- tailed) N			.357** .000 334
Feel overworked	Pearson Correlation Sig. (2- tailed) N			.080 .146 334
Feel exhausted	Pearson Correlation Sig. (2- tailed) N			.315** .000 334

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Developed for this research

Results of table 4.5 further reveal that, there is, low, still statistically significant relationship between working additional tasks and work overload ($r = 0.302, p < 0.01$), borrowing of employees from other activities and work overload ($r = 0.209, p < 0.01$), occurrence of errors at work and work overload ($r = 0.357, p < 0.01$), and feeling exhausted by work demands and work overload ($r = 0.315, p < 0.01$).

Moreover, there is a very low, though statistically significant relationship between difficulty to schedule vacation and work overload ($r = 0.123, p < 0.05$), and lost work days due to illness and work overload ($r = 0.192, p < 0.01$).

On the other hand, a very low positive, but not statistically significant relationship was found between responding to work problems during non work time and work overload ($r = 0.052, p > 0.05$), and feeling overworked by the work demands and work overload ($r = 0.080, p > 0.05$).

Correlation between causes of work overload and work overload for sample respondents

Table 4.6 below exhibits that, the Pearson's Product Moment Correlation Coefficient for the association between causes of work overload and work overload that conspicuously indicate the coefficient ranging from low to medium. More specifically, medium positive relationship was found between insufficient resources and work overload ($r = 0.417, p < 0.01$), incompatible work process and work overload ($r = 0.450, p < 0.01$), unclear performance goals and work overload ($r = 0.458, p < 0.01$), and difficulties with technological materials and work overload ($r = 0.416, p < 0.01$) which are statistically significant at 99% confidence level.

Table 4.6: The relationship between each cause of work overload and work overload

		Work Overload
Insufficient resources	Pearson Correlation	.417**
	Sig. (2-tailed)	.000
	N	334
Unclear responsibilities	Pearson Correlation	.380**
	Sig. (2-tailed)	.000
	N	334
Incompatible work process	Pearson Correlation	.450**
	Sig. (2-tailed)	.000
	N	334
Unclear performance goals	Pearson Correlation	.458**
	Sig. (2-tailed)	.000
	N	334
Face difficulties related to inputs	Pearson Correlation	.293**
	Sig. (2-tailed)	.000
	N	334
Inadequate selection and training	Pearson Correlation	.379**
	Sig. (2-tailed)	.000
	N	334
Mental intensity and pressure	Pearson Correlation	.297**
	Sig. (2-tailed)	.000
	N	334
Difficulties with technological materials	Pearson Correlation	.416**
	Sig. (2-tailed)	.000
	N	334
Downsizing	Pearson Correlation	.325**
	Sig. (2-tailed)	.000
	N	334

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for this research

Moreover, the results of on the table 4.6 above presents that, there is low, still statistically significant relationship between unclear responsibilities and work overload ($r = 0.380$, $p < 0.01$), difficulties related to inputs and work overload ($r = 0.293$, $p < 0.01$), inadequate selection and training and work overload ($r = 0.379$, $p < 0.01$), mental intensity and pressure and work overload ($r = 0.297$, $p < 0.01$), and downsizing and work overload ($r = 0.325$, $p < 0.01$).

Correlation between facets of job satisfaction and overall job satisfaction for sample respondents

As displayed in table 4.7 below, Person's Product Moment Correlation was computed so as to determine whether there are significant relationships between facets of job satisfaction and overall job satisfaction. Thus, the result of the table illustrates there is linear and positive relationship between the facets of job satisfaction and job satisfaction ranging from medium to substantial correlation coefficients.

Findings from the correlations in table 4.7 below, therefore, indicate that, there is moderate and positive relationship between pay and job satisfaction ($r = 0.497$, $p < 0.01$), working condition and job satisfaction ($r = 0.578$, $p < 0.01$), policy and administration and job satisfaction ($r = 0.593$, $p < 0.01$), and relationship with their co-works and job satisfaction ($r = 0.556$, $p < 0.01$) which are statistically significant at 99% confidence level.

Table 4.7: The relationship between each facet of job satisfaction and overall job satisfaction

		Job satisfaction
Pay	Pearson Correlation	.497**
	Sig. (2-tailed)	.000
	N	334
Working conditions	Pearson Correlation	.578**
	Sig. (2-tailed)	.000
	N	334
Policy and administration	Pearson Correlation	.593**
	Sig. (2-tailed)	.000
	N	334
Supervision	Pearson Correlation	.629**
	Sig. (2-tailed)	.000
	N	334
Opportunity for advancement	Pearson Correlation	.663**
	Sig. (2-tailed)	.000
	N	334
Recognition	Pearson Correlation	.734**
	Sig. (2-tailed)	.000
	N	334
The work itself	Pearson Correlation	.619**
	Sig. (2-tailed)	.000
	N	334
Co-worker	Pearson Correlation	.556**
	Sig. (2-tailed)	.000
	N	334
Responsibility	Pearson Correlation	.694**
	Sig. (2-tailed)	.000
	N	334

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for this research

Furthermore, correlation results of the table 4.7 above demonstrate that, there is substantial, positive and statistically significant relationship between supervision and job satisfaction ($r = 0.629$, $p < 0.01$), opportunity for advancement and job satisfaction ($r = 0.663$, $p < 0.01$), recognition and job satisfaction ($r = 0.734$, $p < 0.01$), the work itself and job satisfaction ($r = 0.619$, $p < 0.01$), and responsibility and job satisfaction ($r = 0.694$, $p < 0.01$).

Correlation between work overload and job satisfaction for sample respondents

Table 4.8: The relationship between work overload and job satisfaction

	Job satisfaction
Pearson Correlation	-.391**
Work overload Sig. (2-tailed)	.000
N	334

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for this research

As it is observed from table 4.8 above, negative, weak and statistically significant relationship was found between work overload and job satisfaction. This would imply that, as the perceived work overload for employees change their satisfaction towards their job may change to the opposite direction to some extent.

4.2.2.2. Multiple Regressions

In order to determine the extent to which the explanatory variables explain the variance in the explained variable, multiple regression analysis was performed.

Multicollinearity Test: in multiple regression analysis, multicollinearity refers to the correlation among the independent variables. According to the rule of thumb test, multicollinearity is a potential problem if the absolute value of the sample correlation coefficient exceeds 0.7 for any two of the independent variable, (Anderson et al., 2011). Before conducting the multiple regression analysis, the researcher examined the result of multiple correlations among the independent variables and found that, the pair wise correlation between the independent variables is below 0.7, as shown in appendices A, B and C.

The following subsections present the results of multiple regression analysis.

Regress work overload (as dependent variable) on the signs of work overload (as independent variable)

Hypothesis 1

H01: The signs of work overload will not significantly explain for work overload

Ha1: The signs of work overload will significantly explain for work overload

The results of multiple regression analysis regress work overload, as dependent variable, on the signs of work overload are displayed in Table 4.9 below.

Table 4.9: Regress work overload on the signs of work overload

Multiple R	.800
R Square	.640
Adjusted R Square	.626
Standard error	.24699
Degree of freedom	
Regression	13
Residual	320
F	43.799
Sig. F	.000**

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. error	Beta		
Constant	1.241	.093		13.296	.000**
Work long hours	.053	.013	.156	4.129	.000**
Unwanted overtime	.046	.014	.132	3.330	.001**
Inability to meet goals	.071	.011	.243	6.162	.000**
Difficulty to schedule vac.	.017	.012	.047	1.345	.180
Respond to work	.008	.013	.024	.668	.504
Face firefighting	.079	.012	.255	6.706	.000**
Do additional tasks	.025	.013	.072	.941	.053
Lost work days	.046	.012	.131	3.712	.000**
Borrowing employees	.012	.011	.039	1.084	.279
Work interruptions	.063	.012	.202	5.026	.000**
Errors occur	.049	.013	.142	3.760	.000**
Feel overworked	-.005	.013	-.01	-.414	.679
Feel exhausted	.079	.014	.20	5.805	.000**

** p < 0.01

Source: Developed for this research

As it is observed from table 4.9 above, the coefficient of multiple correlations R which is the degree of association between work overload and its signs is 0.800. Given the R square value of 0.640 and adjusted R square of 0.620, the model summary reveals that the proportion of the variation in work overload explained by the signs of work overload jointly is 64%. The remaining 36% of the variance is explained by other variables not included in this study.

The F-statistic of 43.799 at 13 and 320 degrees of freedom further shows that the explanatory variables-signs of work overload considered in this study can significantly explain the variation on the dependent variable-work overload at 99% confidence level. Moreover, table 4.9 indicates that, when the other variables are controlled, eight of the explanatory variables are statistically significant at 99% confidence level, and firefighting is the best predictor of work overload with Beta-value of 0.255. This is followed by inability to meet goals; feeling exhausted, and work interruptions with Beta-values of 0.243, 0.206, and 0.202, respectively. From the table, neither difficulty to schedule vacation, responding to work problems during non work time, doing additional tasks, borrowing employees from other neither activities, nor feeling overworked are statistically significant, at even 95% confidence level.

Hence, it may be concluded that, the null hypothesis is rejected; so, the signs of work overload (working long hours, working unwanted overtime, inability to meet goals, difficulty to schedule vacation, responding to work problems during non work time, firefighting, doing additional tasks, lost work days due to illness, borrowing employees from other activities to fill absentees, work interruptions, occurrence of errors when

employees tired, and feeling overworked and exhausted by the work demands) may significantly explain at 99% confidence level for work overload in the service public organizations considered in this study.

Regress work overload (as dependent variable) on the causes of work overload (as independent variable)

Hypothesis 2

H02: The causes of work overload will not significantly explain for work overload.

Ha2: The causes of work overload will significantly explain for work overload.

The results of multiple regressions, as presented in Table 4.10 below, revealed that the correlation between work overload and causes of work overload combined is 0.792, as indicated by multiple R. Besides, given the R square value of 0.627 and adjusted R square value of 0.617, it may be realized that 62.7% of variation in work overload can be accounted by the causes of work overload considered in this study. The remaining 37.3% of the variation in work overload can be explained by other variables not considered in this study.

Table 4.10: Regress work overload on the causes of work overload

Multiple R	.792
R Square	.627
Adjusted R Square	.617
Standard error	.24985
Degree of freedom	
Regression	9
Residual	324
F	60.571
Sig.	.000**

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. error	Beta		
Constant	.058	.074		14.316	.000**
Insufficient resources	.067	.013	.202	5.366	.000**
Unclear responsibilities	.078	.017	.176	4.660	.000**
Incompatible work process	.045	.015	.120	2.981	.003**
Unclear performance goals	.074	.015	.193	4.991	.000**
Difficulties with inputs	.029	.016	.067	1.795	.074
Inadequate selection and train.	.069	.011	.228	6.371	.000**
Mental intensity and pressure	.090	.013	.247	7.085	.000**
Difficulties with techno. Mat.	.077	.014	.197	5.309	.000**
Downsizing	.087	.014	.221	6.256	.000**

** p < 0.01

Source: Developed for this research

Furthermore, it was observed that, the F-Statistic of 60.571 at 9 and 324 degrees of freedom is statistically significant at 99% confidence level which suggests all the independent variables of causes of work overload together significantly predict the variation in work overload.

As it is indicated from Table 4.10, when one variable (difficulties related to inputs from suppliers) is controlled, eight of the other predictor variables of work overload are statistically significant determining the variation in work overload, at 99% confidence level. From these, mental intensity and pressure is the highest predictor of work overload with Beta-value of 0.247. This is followed by inadequate selection and training, downsizing, and insufficient resources with Beta-values of 0.228, 0.221, and 0.202, respectively. A difficulty related to inputs from suppliers, however, was not found to be statistically insignificant to explain the variation in work overload.

The null hypothesis may therefore be rejected; thus, the causes of work overload (insufficient resources, unclear responsibilities, incompatible work process, unclear performance goals, difficulties related to inputs, inadequate selection and training, mental intensity and pressure, difficulties with technological materials and downsizing) may significantly explain for job satisfaction at 99% confidence level in the service public organizations.

Regress job satisfaction (as dependent variable) on the selected facets of job satisfaction (as independent variable)

Hypothesis 3

H03: The selected facets of job satisfaction will not significantly explain for job satisfaction.

Ha3: The selected facets of job satisfaction will significantly explain for job satisfaction.

Table 4.11 summarizes the results of regressed the dependent variables (job satisfaction) on the selected facets of job satisfaction.

The results shown in Table 4.11 suggest that the multiple correlation between job satisfaction and the nine facets of job satisfaction for the sample respondents is, as indicated by multiple R is 0.948.

Table 4.11: Regress job satisfaction on selected facets of job satisfaction

Multiple R	.948
R Square	.898
Adjusted R Square	.896
Standard error	.21157
Degree of freedom	
Regression	9
Residual	324
F	318.352
Sig.	.000**

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. error	Beta		
Constant	.030	.056		.539	.590
Pay	.125	.015	.173	8.506	.000**
Working condition	.105	.013	.167	8.025	.000**
Policy and administration	.114	.017	.148	6.613	.000**
Supervision	.103	.015	.158	7.036	.000**
Promotion	.099	.017	.145	5.898	.000**
Recognition	.114	.018	.166	6.428	.000**
The work itself	.117	.016	.173	7.562	.000**
Co-workers.	.123	.013	.203	9.498	.000**
Responsibility	.083	.016	.129	5.068	.000**

** p < 0.01

Source: Developed for this research

The amount of variation in the dependent variable – job satisfaction that is accounted for by the optimal linear combination of the entire set of independent variables – the nine facets of job satisfaction – is expressed by R square which is 0.898, and adjusted R square is 0.896. The F-statistic of 318.352 at 9 and 324 degrees of freedom is statistically significant at 99% confidence level. This indicates the regression, expressed through the R square is statistically significant where the percentage of variation in job satisfaction explained by the nine variables accounts for 89.8%, and other unexplored variables may explain the variation in job satisfaction which accounts for 10.2%, indicated in table 4.11.

Furthermore, table 4.11 above shows that all the explanatory variables; pay, working condition, policy and administration, supervision, promotion, recognition, the work itself, co-workers, and responsibility; may significantly explain the variation in job satisfaction. The highest Beta-value was computed for variable co-workers (0.203), followed by the Beta value calculated for pay (0.173), the work itself (0.173), working condition (0.167), and recognition (0.166). Responsibility was obtained with the lowest Beta-value of 0.129.

Since all the coefficients of the explanatory variables are different from zero and statistically significant at 99% confidence level, they may explain to the dependent variable that is job satisfaction. As such, the researcher may reject the null hypothesis.

4.2.2.3. Simple Linear Regression

So as to determine how work overload explains job satisfaction, simple linear regression was used.

Regress job satisfaction (as dependent variable) on work overload (as independent variable)

Hypothesis 4:

H04: Work overload will not negatively and significantly explain for job satisfaction.

Ha4: Work overload will negatively and significantly explain for job satisfaction.

Table 4.12: Regress job satisfaction on work overload

R	.391
R Square	.153
Adjusted R Square	.151
Standard error	.60345
Degree of freedom	
Regression	1
Residual	332
F	60.006
Sig.	.000**

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. error	Beta		
Constant	4.464	.216		20.664	.000**
Work overload	-.635	.082	-.391	-7.746	.000**

** p < 0.01

Source: Developed for this research

From table 4.12 above, correlation between work overload and job satisfaction is given by 0.391. Additionally, R square and adjusted R square value of the simple linear regression is given by 0.153 and 0.151, respectively. This is interpreted as 15.3% of variance in job satisfaction is explained by work overload, while 84.7% of variation in job satisfaction is explained by other variables not considered in this study. The F-statistic of 60.006 at 1 and 332 degrees of freedom is statistically significant at 99% confidence level; which implies the variation in job satisfaction that is explained by work overload expressed by R square is statistically significant.

The Beta-value of -0.391 indicates that there is inverse relationship between work overload and job satisfaction which is statistically significant at 99% confidence level. This reflects that as employees perceive overworked, the level of satisfaction towards their job diminishes. As such, the null hypothesis is rejected.

4.3. Discussion of Results

This section presents the results of the statistical analysis in relation to the previous research and literature.

4.3.1. Signs of work overload, causes of work overload and work overload

Results of this study from the descriptive statistics showed that, feeling overworked by the work demands, difficulty to take vacation, responding to work problems during non-work time, and firefighting were found to be major indicators of work overload. In consistent with this finding, study by Galinsky et al. (2001) and Gryna (2004) shows that, difficult to take vacation and responding to work problems at non-work time including talking work home as indicators of work overload. Gryna (2004) also reported that

firefighting as sign of work overload where as Galinsky et al. (2001) found feeling overworked by the work demand is an indicator of perceived work overload.

Findings from the descriptive statistics further revealed that, mental intensity and pressure, and inadequate selection and training of personnel as causes of work overload. Similarly, Gryna (2004) and Galinsky et al. (2001), reported that mental intensity and pressure at work to be causes of work overload. Besides, Gryna (2004) indicated that inadequate selection and training of personnel as a factor contributing to work overload.

The correlation results of this finding suggested that, all signs and causes of work overload have direct and statistically significant relationship with work overload; that range from very low to moderate for the signs and from low to moderate for the causes of work overload. These variables (causes and signs) were also found to be statistically significant to explain the variations in work overload. In consistent to the results of the descriptive statistics, findings from the multiple regression analysis showed that, firefighting, inadequate selection and training of personnel, and mental intensity and pressure exist to be major predictors of work overload with the highest Beta-value. Unluckily, these findings could not be compared to literature and research findings, due to lack of similar studies.

4.3.2. Facets of job satisfaction and job satisfaction

The results of this study showed that respondents are most satisfied with the relationship that they have with their co-workers and conversely are least satisfied with the pay that they earn. Moreover, average level of overall job satisfaction was found in the sample respondents of the service public organizations considered in this study. This result is

supported by Nor Liyana and Mansor Abu (2009), who reported a moderate level of job satisfaction among the Navy personnel.

The correlation analysis results of this study revealed; there was linear positive relationship between the facets of job satisfaction and job satisfaction, ranging from moderate to substantial.

The research results indicate a significant positive relationship between job satisfaction and pay. This finding is supported by Castillo, Conklin, and Cano (1998), Bowen (1980) (as cited by Mcwatts, 2005).

The association between job satisfaction and working condition was found direct which is statistically significant at 99% confidence level. This finding is supported by Bowen (1980); and Castillo et al (1998) who found positive and significant relationship between job satisfaction and working condition. On the contrary, some researchers (Aebi, 1972; Ballyeat 1968; Herzberg, Mausner, and Snyderman, 1959; McLaughlin and Montgomery, 1976; Morris, 1972; reported that job dissatisfaction was correlated with working conditions (as cited by Castillo, 1999).

A positive association was found between job satisfaction and policy and administration in the sample respondents. This finding is supported by Bowen (1980) who reported a positive and significant relationship between job satisfaction and policy and administration. On the contrary, Castillo et al. (1998), found no significant relationship between job satisfaction and policy and administrative agricultural teachers in Ohio (as cited by Castill, 1999).

The research result further indicates that a positive relationship between job satisfaction and supervision was found in the sample respondents. This finding is supported by Salancik and Pfeffer's (1978); Chen, (2001:625); Chen, Farh and Tsui (1998); Rowley (1996); Luddy (2005) and Enders (1997), who reported a positive and significant relationship between job satisfaction and supervision (as cited by Mcwatts, 2005).

A direct and significant relationship was found between job satisfaction and opportunity for advancement. This result is consistent with the findings presented by Bowen (1980) who found a positive significant relationship between job satisfaction and opportunity for advancement (as cited by Castilo, 1999).

A substantial positive and significant relationship between job satisfaction and recognition was found in this study. Similarly, several studies have reported a positive significant relationship between job satisfaction and recognition. Among them, Bowen (1980), Moxley (1997), reported a significant relationship between job satisfaction and recognition. Padilla-Velez (1993), reported a low level of relationship between job satisfaction and the recognition aspects of their job for vocational teachers in Puerto Rico. However, Bowen and Radhakrishna (1990), Cano and Miller (1992) failed to find a significant relationship between job satisfaction and recognition (as cited by Castillo, 1999).

Moreover a substantial positive and significant relationship between job satisfaction and the work itself was found in this study. This finding is supported by Padilla-Velez (1993); Bowen (1980); and Bowen and Radhakrshna (1990) who reported positive and significant relationship between job satisfaction and the work itself. Cana and Miller

(1992) reported positive relationship between job satisfaction and the work itself, although the relationship was not significant. Castillo, Conklin, and Cano (1998) reported a positive significant relationship for female teachers in Ohio, but not for the male teachers (as cited by Castillo, 1999).

This study indicates a significant positive relationship between job satisfaction and co-workers. This finding was supported by several researchers and authors like (Oshagbemi, 2001), Lacy and Sheehan (1997) said that, individuals who perceive that they have better interpersonal friendships with their co-workers and immediate supervisors report higher job satisfaction (as cited by Mcwatts, 2005). Furthermore, Padilla-Velez (1993); Bowen (1980); and Bowen and Radhakrishna (1990) found a positive and significant relationship between co-workers and job satisfaction. On the contrary, some researchers (Aebi, 1972; Ballyeat 1968; Herzberg, Mausner, and Snyderman, 1959; McLaughlin and Montgomery, 1976; Morris, 1972; reported that job dissatisfaction was correlated with working conditions (as cited by Castillo, 1999).

Results of this study indicate that a substantial statistically significant and direct relationship was found between job satisfaction and responsibility from the sample respondents. This finding is supported by Padilla-Velez (1993); Bowen (1980); and Bowen and Radhakrishna (1990) who found positive and significant relationship between responsibility and job satisfaction. On the other hand, Cano and Miller (1992) and Castillo, Conklin, and Cano (1998) failed to discover significant relationship between job satisfaction and responsibility for female and male agricultural teachers in Ohio (as cited by Castillo, 1999).

The results of the multiple regression analysis regressing job satisfaction, as dependent variable, on facets of job satisfaction indicate that the explanatory variables significantly explain the variation in job satisfaction for the sample respondents. Unluckily, the findings on regressing job satisfaction against the selected facets of job satisfaction cannot be compared to literature and research findings, due to a lack of similar studies.

4.3.3. Work overload and job satisfaction

The findings of this study showed that there is negative and significant relationship between work overload and job satisfaction. Similarly, several studies found a negative significant relationship between work overload and job satisfaction. Among them, Vinkur-Kaplan (1999), reported work overload is negatively related with job satisfaction; Rita and Stephanie (2008) reported work overload is negatively associated with job satisfaction. Nilufar et al. (2009), found significant relationship between work overload and job satisfaction. Moreover, Nurit et al. (2008), reported dissatisfaction at work is caused by work overload.

Results of this study further indicated work overload significantly and negatively explains the variation in job satisfaction.

CHAPTER FIVE

5. Summary, Conclusion and Recommendations

5.1. Summary

This study was aimed at investigating the state and relationship of work overload and job satisfaction in public service organizations in Addis Ababa based on the questionnaire consisting of 334 randomly selected employees of five enterprises.

In descriptive part of the analysis, the results indicated that majority of the total respondents (64.7%) are male, (30.2%) aged in the range of 27-35 years, (53.3%) are degree holders. The results of the central tendency also showed that, the most indicator of work overload is feeling overworked by the work demands followed by difficulty in taking vacation, responding to work problems during non work time, and firefighting while mental intensity and pressure such as information overload seemed to be the major contributing factor to work overload followed by inadequate selection and training of personnel. As far as the facets of job satisfaction is concerned, the results of central tendency revealed that respondents are most satisfied with the relations that they have with their co-workers followed by working conditions, recognition, responsibility, the work itself and supervision they receive. However, respondents seem to be least satisfied with pay of the organizations. Sample respondents of the organizations have an average satisfaction level towards their job with a percentile score of 56.

Results from Pearson's Product Moment Correlation Coefficient revealed that, there is medium and statistically significant relationship between working long hours and work overload, working unwanted overtime and work overload, inability to meet goals with

available time and work overload, firefighting and work overload, and work interruptions and work overload while medium positive relationship was found between insufficient resources and work overload, incompatible work process and work overload, unclear performance goals and work overload, and difficulties with technological materials and work overload which are statistically significant at 99% confidence level. Furthermore, correlation results demonstrated that, there is substantial, positive and statistically significant relationship between supervision and job satisfaction, opportunity for advancement and job satisfaction, recognition and job satisfaction, the work itself and job satisfaction, and responsibility and job satisfaction. On the other hand, negative, weak and statistically significant relationship was found between work overload and job satisfaction.

The model summary of multiple regression analysis revealed that the proportion of the variation in work overload explained by the signs of work overload jointly is 64% (from R value) which is statistically significant at 99% confidence level, as indicated from F-statistic. Moreover, when the other variables are controlled, nine of the explanatory variables are statistically significant at 99% confidence level, and firefighting is the best predictor of work overload with Beta-value of 0.255. This is followed by inability to meet goals; feeling exhausted, and work interruptions with Beta-values of 0.243, 0.206, and 0.202, respectively.

The R square value of 0.627, demonstrates that 62.7% of variation in work overload can be accounted by the causes of work overload considered in this study. The F-Statistic suggests that all the independent variables of causes of work overload together significantly predict the variation in work overload at 99% confidence level. When one

variable (difficulties related to inputs from suppliers) is controlled, eight of the other predictor variables of work overload are statistically significant determining the variation in work overload, at 99% confidence level. From these, mental intensity and pressure is the highest predictor of work overload with Beta-value of 0.247. This is followed by inadequate selection and training, downsizing, and insufficient resources with Beta-values of 0.228, 0.221, and 0.202, respectively.

The amount of variation in job satisfaction that is accounted for by the optimal linear combination of the nine facets of job satisfaction – is expressed by R square which is 0.898. The F-statistic of 318.352 at 9 and 324 degrees of freedom is statistically significant at 99% confidence level which means the regression expressed through the R square is statistically significant where the percentage of variation in job satisfaction explained by the nine variables accounts for 89.8%. The highest Beta-value was computed for variable co-workers (0.203), followed by the Beta value calculated for pay (0.173), the work itself (0.173), working condition (0.167), and recognition (0.166). Responsibility was obtained with the lowest Beta-value of 0.129.

The R square value of the simple linear regression given by 0.153 reveals that 15.3% of variance in job satisfaction is explained by work overload which is statistically significant at 99% confidence level, as indicated by the F-statistic. The Beta-value of -0.391 indicates that there is inverse relation relationship between work overload and job satisfaction which is statistically significant at 99% confidence level. This reflects that as employees perceive overworked, the level of satisfaction towards their job diminishes.

5.2. Conclusion

The study was conducted to investigate the state and relationship of work overload and job satisfaction among employees of public service organizations in Addis Ababa among which five were selected, namely: Ethiopian Electric Power Corporation, Ethiopian Shipping and Logistics Service Enterprise (logistics sector), Merchandise Whole Sale and Import Trade Enterprise, Industry Project Service Enterprise, and Public Procurement Service Enterprise.

In this specific study, firefighting is found to be a major indicator of work overload. Mental intensity and pressure, and inadequate selection and training of personnel are the major causes of work overload investigated in this study.

The finding for job satisfaction indicated that there is an average level of overall job satisfaction; where employees are most satisfied with the relationship that they have with their co-workers, but least satisfied with the pay that they earn.

With respect to the specific hypotheses, the following empirical findings emerged from the investigation. There exists significant relationship between the signs and causes of work overload, and work overload. The signs and causes of work overload may significantly explain the variation in work overload. Statistically significant relationship was also found between facets of job satisfaction (pay, working conditions, policy and administration, supervision, opportunity for advancement, recognition, the work itself, co-workers and responsibility) and job satisfaction; and these facets of job satisfaction could significantly explain the variation in job satisfaction.

Moreover, work overload and job satisfaction found to be inversely and significantly related. Work overload also statistically and negatively predicts the variation in job satisfaction.

5.3. Recommendations

Based on the findings and conclusions of the study, the researcher forwards the following recommendations to the management of the public service organizations considered in this study.

Frequent and unexpected firefighting was the most dominant sign of work overload that employees of the public service organizations face. Effective time management is one of the many ways to address firefighting. Effective time management could be achieved through prioritization and organizing of activities. To minimize firefighting, the concerned body should create a conducive environment to do the most important things first (prioritization of activities) and organize activities such as automating calendar, schedule and repetitive manual tasks.

Higher job pressure (information overload and irate customers) was found to be one of the most important factors causing work overload. This could be avoided by prioritization of activities, having consistent schedule, defining the work space, centralizing communications and avoiding multi tasking.

Furthermore, the findings of this study show that, inadequate selection and training of personnel to be another most important factor for work overload to prevail. The selection problem could be addressed by designing a selection system that accounts knowledge, personality, interests, aptitude and skills of the candidate. To Tackle work overload due

to inadequate training, the training programs should be given in small classes so that sufficient people will remain in the department to handle the normal activity without work overload and the training time should be fragmented (e.g. three-hour segments) instead of leaving departments for one or more full days to attend training.

Pay was considered to be one of the most important factors influencing employee job satisfaction. However, the employees of the public service organizations considered in this study were found less satisfied with pay. To retain talented employees, therefore, the management of the organizations should design a compensation system that satisfies pay adequacy and pay equity of employees. Pay adequacy is the degree to which an individual's pay level satisfies his or her financial needs while pay equity is the degree to which an individual perceives that his or her pay level is fair in comparison to others.

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APPENDICES

The following appendices (A-C), show correlation matrix test for multicollinearity.

Appendix A

	Work long hours	Unwanted overtime	Inability to meet goals	Difficult to schedule vacations	Respond to work problems during non work time	Face firefighting	Do additional tasks	Lost work days due to illness	Borrowing of employees to fill absent	Work interruptions	Errors occur	Feel overworked	Feel exhausted
Work long hours	1	.332**	.295**	.136*	.071	.221**	.035	.008	.020	.097	.154**	.027	.151**
Unwanted overtime	.332**	1	.362**	.067	.056	.278**	.266**	.077	.163**	.220**	.002	.119*	.115*
Inability to meet goals	.295**	.362**	1	.144**	-.075	.204**	.174**	.048	.088	.346**	.195**	.044	-.005
Difficult to schedule vacations	.136*	.067	.144**	1	-.058	.087	.006	-.146**	.041	.056	-.024	.028	.001
Respond to work problems during non work time	.071	.056	-.075	-.058	1	.199**	.046	.121*	-.080	-.017	-.128*	.153**	-.062
Face firefighting	.221**	.278**	.204**	.087	.199**	1	.265**	-.021	.005	.133*	.087	.028	.194**
Do additional tasks	.035	.266**	.174**	.006	.046	.265**	1	-.017	.156**	.289**	.099	.158**	.016
Lost work days due to illness	.008	.077	.048	-.146**	.121*	-.021	-.017	1	.018	.108*	.168**	.085	.019
Borrowing of employees to fill absent	.020	.163**	.088	.041	-.080	.005	.156**	.018	1	.321**	.157**	.063	.111*
Work interruptions	.097	.220**	.346**	.056	-.017	.133*	.289**	.108*	.321**	1	.334**	.069	.011
Errors occur	.154**	.002	.195**	-.024	-.128*	.087	.099	.168**	.157**	.334**	1	-.058	.105
Feel overworked	.027	.119*	.044	.028	.153**	.028	.158**	.085	.063	.069	-.058	1	.101
Feel exhausted	.151**	.115*	-.005	.001	-.062	.194**	.016	.019	.111*	.011	.105	.101	1

Correlation matrix for the signs of work overload

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Note: a pair wise correlation below 70% indicates the absence of serious problem of multicollinearity in the regression equation as indicated in the

above correlation matrix.

Appendix B

Correlation matrix for the causes of work overload

	Insufficient resources	Unclear responsibilities	Incompatible work process	Unclear performance goals	Face difficulties related to inputs	Inadequate selection and training	Mental intensity and pressure	Difficulties with techno. materials	Downsizing
Insufficient resources	1	.159**	.179**	.248**	.340**	.213**	-.017	.148**	.092
Unclear responsibilities	.159**	1	.342**	.297**	.249**	-.009	.001	.194**	.089
Incompatible work process	.179**	.342**	1	.371**	.100	.126*	.083	.357**	.162**
Unclear performance goals	.248**	.297**	.371**	1	.161**	.112*	-.008	.146**	.247**
Face difficulties related to inputs	.340**	.249**	.100	.161**	1	.083	.006	.204**	.041
Inadequate selection and training	.213**	-.009	.126*	.112*	.083	1	.191**	.126*	-.021
Mental intensity and pressure	-.017	.001	.083	-.008	.006	.191**	1	.076	-.062
Difficulties with techno. materials	.148**	.194**	.357**	.146**	.204**	.126*	.076	1	.101
Downsizing	.092	.089	.162**	.247**	.041	-.021	-.062	.101	1

Appendix C

Correlation matrix for the selected facets of job satisfaction

	Pay	Working condition	Policy and administration	Supervision	Opportunity for advancement	recognition	The work itself	Co-workers	Responsibility
Pay	1	.170**	.340**	.279**	.379**	.223**	.343**	.050	.304**
Working condition	.170**	1	.362**	.292**	.306**	.378**	.272**	.354**	.427**
Policy and administration	.340**	.362**	1	.305**	.515**	.437**	.264**	.253**	.248**
Supervision	.279**	.292**	.305**	1	.443**	.484**	.262**	.375**	.482**
Opportunity for advancement	.379**	.306**	.515**	.443**	1	.531**	.463**	.168**	.402**
Recognition	.223**	.378**	.437**	.484**	.531**	1	.475**	.450**	.570**
The work itself	.343**	.272**	.264**	.262**	.463**	.475**	1	.215**	.539**
Co-workers	.050	.354**	.253**	.375**	.168**	.450**	.215**	1	.402**
Responsibility	.304**	.427**	.248**	.482**	.402**	.570**	.539**	.402**	1

** Correlation is significant at the 0.01 level (2-tailed).

Note: a pair wise correlation below 70% indicates the absence of serious problem of multicollinearity in the regression equation as indicated in the above correlation matrix.

Appendix D

Addis Ababa University

School of Graduate Studies

Masters of Business Administration

Questionnaire

This questionnaire is designed on the thesis title of “Work overload and Job satisfaction”: in the case of public service organizations in Addis Ababa for the partial fulfillment of Masters of Business Administration. Therefore, your cooperation in fulfilling the questions is vital for the successful accomplishment of this study. Your response will be kept confidential and it is only for academic purpose.

Thank you for your cooperation!

I. Background Information

Directions: Please circle from the alternative that is the most applicable answer to you in respect of each of the following items.

1. Sex- A) Male B) Female
2. Age- A) 18-26 B) 27-35 C) 36-45 D) above 45 years
3. Educational level: A) Certificate B) Diploma C) Degree D) above degree

II. Work Overload

With respect to your own feelings about the work overload situation, please indicate the degree to which you agree or disagree with each of the following statements by ticking (✓) under the number which is most applicable to you.

1 for Strongly Disagree, 2 Disagree, 3 Neither Agree nor Disagree, 4 Agree and 5

Strongly agree.

Question	1	2	3	4	5
1. I am working long and difficult working hours and days					
2. There is pressure to work unwanted overtime (paid and unpaid)					
3. Inability to meet goals with available time resources					
4. Work demands make it difficult for me to schedule vacations					
5. I respond to work problems during non work time, including taking work home/ receive work related calls at home					
6. I face frequent and an expected firefighting					
7. I do additional, often inappropriate tasks making it difficult to focus on the core job					
8. There are lost work days due to illness					
9. There is frequent borrowing of employees from other activities to fill in for absent employees					
10. There is frequent work interruptions					
11. Errors occur at work when I am tired					
12. I feel overworked by the demands placed on me					
13. I feel exhausted by the demands placed on me					
14. My department does not have enough resources to handle a normal workload					
15. My responsibilities are unclear, and I don't have control of setting priorities, deciding work methods, and use of resources					
16. The work process provided to me cannot meet the job requirements on quantity and/quality that I am expected to achieve					
17. I deal with unclear performance goals and responsibilities					
18. I face difficulties related to inputs from internal/ external suppliers					

19. There is inadequate selection and training of personnel in the organization					
20. My job has high degree of mental intensity and pressure (for example, internal/external forces, production goals, irate customers, information overload)					
21. I have difficulties with computer and other technological materials					
22. I feel overworked due to downsizing					

III. Minnesota Satisfaction Questionnaire (MSQ)

— If you feel that your job gives you more than you expected, check the box under “**Very Sat.**” (Very Satisfied),

— If you feel that your job gives you what you expected, check the box under, “**Sat.**” (Satisfied),

— If you cannot make up your mind whether or not the job gives you what you expected, check the box under “**N**” (Neither Satisfied nor Dissatisfied),

— If you feel that your job gives you less than you expected, check the box under, “**Dissat.**” (Dissatisfied),

— If you feel that your job gives you much less than you expected, check the box under, “**Very Dissat.**” (Very Dissatisfied).

On my present job, this is how I feel about...	1	2	3	4	5
1. The amount of pay for the work I do					
2. The chance to make as much money as my friends					
3. How my pay compares with that for similar jobs in other organizations					
4. My pay and the amount of work I do					

5. The benefits I received					
6. The physical surroundings where I work					
7. The working condition on this job					
8. The pleasantness of the working conditions					
9. The physical working conditions of the Job					
10. The working conditions					
11. Policies and practices toward employees of this organization					
12. The organizational policies and the way in which they are administered					
13. The way employees are informed about the organization's policies					
14. The way the organization's policies are put into practice					
15. The way the organization treats its employees					
16. The way my supervisor and I understand each other					
17. The technical knowhow of my supervisor					
18. The way my boss handles his/her employees					
19. The competence of my supervisor in making decisions					
20. The way my boss backs up his/her employees (with top management)					
21. The way my boss delegates work to others					
22. The way my boss takes care of the complaints of his/her employees					
23. The way my boss provides help on hard problems					
24. The personal relationship between my boss and his/her employees					
25. The way my boss trains his/her employees					
26. The opportunities for advancement on this job					
27. The chances of getting ahead on this job					

28. The way promotions are given out on this job					
29. The chances for advancement on this job					
30. My chances for advancement					
31. Being able to see the result of the work I do					
32. Being able to take pride in a job well done					
33. Being able to do something worthwhile					
34. The chance to do my best at all hands					
35. The feeling of accomplishment that I get from the job					
36. The variety on my job					
37. The chance to do different things from time to time					
38. The routine on my job					
39. The chance to do something different every day					
40. The chance to do many different things on the job					
41. The chance to be responsible for Planning on my work					
42. The chance to make decision on my own					
43. The chance to be responsible for the work of others					
44. The freedom to use my own judgment					
45. The responsibility of my job					
46. The spirit of cooperation among my coworkers					
47. The chance to develop close friendship with my coworkers					
48. The friendliness of my co-workers					
49. The way my coworkers are easy to make friends with					
50. The way my coworkers get along with each other					

Appendix E

አዲስ አበባ ዩኒቨርሲቲ

የድህረ ምረቃ ትምህርት ቤት

የቢዝነስ አስተዳደር ትምህርት ክፍል

መጠይቅ

እኔ በአዲስ አበባ ዩኒቨርሲቲ የMBA ተማሪ ስሆን በአሁኑ ሰዓት የመመረቂያ ጥናት የማደርገው በአዲስ አበባ ከተማ የመንግስት አገልግሎት ሰጪ ድርጅቶች ባሉ ቋሚ ሰራተኞች የሥራ ጫና እና የስራ እርካታ (work overload and job satisfaction) ላይ የሚያተኩር ሲሆን የእርስዎ መረጃ ለጥናቱ በጣም አስፈላጊ ስለሆነ፣ እርስዎ ይህንን መጠይቅ በመሙላት አስፈላጊውን ትብብር እንዲያደርጉልኝ በአክብሮት እጠይቃለሁ። እርስዎ የሚሰጡት መረጃ በሚስጢር እንደሚያዝና ለጥናቱ ብቻ የሚያገለግል መሆኑን ላረጋግጥሎት እወዳለሁ።

ለትብብርዎ በቅድሚያ አመሰግናለሁ!

I. የግል መረጃን የሚመለከት መጠይቅ

ከሚመለከቱት አማራጮች ለእርስዎ የሚስማማዎት መልስ የያዘ ፊደል ላይ ያክብቡበት።

- 1. ያታ ሀ. ወንድ ለ. ሴት
- 2. ዕድሜ ሀ. 18-26 ለ. 27-35 ሐ. 36-45 መ. ከ45 ዓመት በላይ
- 3. የትምህርት ደረጃ ሀ. ስርተፍኬት ለ. ዲፕሎማ ሐ. ዲግሪ መ. ከዲግሪ በላይ

II. የሥራ ጫናን የሚመለከት መጠይቅ

የዚህ መጠይቅ አላማው በድርጅቱ የሚገኙ ሰራተኞች በአሁኑ ጊዜ የሥራ ጫና ምልክቶችና ምክንያቶች የሚዳስስ ሲሆን እርስዎ የሚሰማዎትን ሃሳብ በሚከተለው መስፈርት ሳጥኑ ላይ የራይት (✓) ምልክት ያድርጉ።

- 1. በጣም አልስማማም 2. አልስማማም 3. ምንም አይመስለኝም
- 4. እስማማለሁ 5. በጣም እስማማለሁ

ጥያቄ	1	2	3	4	5
1. ረዥምና አስቸጋሪ ሰዓታት (ቀናት) እሰራለሁ					
2. ከመደበኛ ጊዜ ውጪ እንድሰራ ጫና ይደረግብኛል					
3. ባለኝ ጊዜ ግቦችን አላሳካም					
4. ባለኝ የሥራ ጫና ምክንያት የአመት እረፍት አልወጣም					
5. ያላለቁና ሌሎች የድርጅቱ ሥራዎች ቤቴ ውስጥ እሰራለሁ					
6. ያልታሰቡና በጥድፊያ የሚሰሩ ስራዎች በተደጋጋሚ ያጋጥሙኛል					
7. በዋናው ስራዬ ላይ ተፅዕኖ የሚያሳድሩ ተጨማሪ ስራዎች እሰራለሁ					
8. በመታመሜ ምክንያት ከስራ እቀራለሁ					
9. ከስራ የቀሩትን ሰራተኞች ለመተካት ከሌላ የሥራ ክፍል ሰራተኞች ይመደባሉ					
10. የሥራ መቆራረጥ (work interruptions) ብዙ ጊዜ ያጋጥማል					
11. ሲደክመኝ በምሰራው ሥራ ስህተቶች ይከሰታሉ					
12. በሚሰጠኝ ሥራ የሥራ ጫና ይሰማኛል					
13. በሚሰጠኝ ሥራ ድካም ይሰማኛል					
14. ያለሁበት የሥራ ክፍል ተመጣጣኝ ለሆነ የሥራ ድርሻ በቂ ግብአት (resources) የለውም					
15. የሥራ ድርሻዬ ግልፅ ባለመሆኑ፣ ስራዎችን ቅደም ተከተል ማስያዝ፣ በግብአት (resources) አጠቃቀምና በአጠቃላይ የአሰራር ሂደቶች እቸገራለሁ					
16. የሚሰጠኝ የሥራ ሂደት ከስራው የሚጠበቀውን ውጤት አያስገኝም					
17. ግልፅ ባልሆኑ የሥራ ኃላፊነቶችና ግቦች እሰራለሁ					
18. ከውስጥ ወይም ከውጭ አቅራቢዎችን በተመለከተ ችግሮች ያጋጥሙኛል					
19. የድርጅቱ የቅጥርና የስልጠና ሂደት አጥጋቢ አይደለም					

20. ሥራዬ ከመረጃ ጫና፣ ከተከፋ ደንበኞች፣ ከሚጠበቀው ግብና ሌሎች ምክንያቶች የተነሳ ከፍተኛ ጫና አለው					
21. ከኮምፒውተርና ከሌሎች የቴክኖሎጂ መሳሪያዎችን ምክንት የሥራ ጫና ይሰማኛል					
22. ድርጅቱ ሰራተኞች በመቀነሱ ምክንያት የሰራ ጫና ይሰማኛል					

የሥራ እርካታ መጠይቅ

የዚህ መጠይቅ አላማው በድርጅቱ የሚገኙ ሰራተኞች በአሁኑ ጊዜ ያለውን የሥራ እርካታ የሚጻጸስ ነው። ስለዚህ እርስዎ መጠይቁን በአግባቡ በመረዳት ያለምንም ፍራቻ የሚሰማዎትን ሃሳብ በሚከተሉት እርከኖች መሰረት የሥራ እርካታዎን በተሰተው ሳጥን የራይት (✓) ምልክት ያድርጉ። የእርካታዎ መስፈርት የሚከተሉት ናቸው።

1. በጣም አያረካኝም 2. አያረካኝም 3. ምንም አይመስለኝም 4. እረካለሁ 5. በጣም እረካለሁ

ተ.ቁ	በአሁኑ ሥራዬ የሚሰማኝ ስሜት.....	1	2	3	4	5
1	ለሰራሁት ስራ የሚከፈለኝ ክፍያ					
2	እንደሌሎች ጓደኞቼ ገንዘብ ወይም ጥቅማጥቅም እንዳገኝ የሚፈጠረው እድል					
3	ለኔ የሚከፈለኝ ክፍያ ሌላ ተመሳሳይ ተቋም ከሚከፈለው አንጻር					
4	የምሰራው ሥራ እና የሚከፈለኝ ክፍያ ተመጣጣኝነት					
5	እስካሁን ከዚህ ተቋም ያገኘሁት ጥቅማጥቅም					
6	የምሰራበት ቦታ (አካባቢ) ያለው ለሥራ ተስማሚነት					
7	የምሰራበት ቦታ ያለው ለሥራ አመቺነት					
8	የምሰራበት ቦታ የሚሰጠኝ ደስታ					
9	ሥራዬ የምሰራበት ሁኔታ					
10	የምሰራበት የሥራ ሁኔታዎች በአጠቃላይ					
11	በተቋሙ ውስጥ ያሉ ፖሊሲዎችና አፈፃፀም ሰራተኛን የሚያማክልበት ሁኔታ					

12	የተቋሙ ፖሊሲዎችና አፈፃፀማቸው					
13	ለሰራተኞች ስለተቋሙ ፓሊሲዎች የሚገለፅበት መንገድ					
14	የተቋሙ ፖሊሲዎችና በተግባር የሚፈፀምበት መንገድ					
15	ተቋሙ ሰራተኞቹን የሚያስተናግድበት መንገድ					
16	አለቃዬ እና እኔ የምንግባባበት መንገድ					
17	አለቃዬ ያለው የሙያ እውቀት ወይም ብቃት					
18	አለቃዬ ሰራተኛን የሚይዝበት መንገድ					
19	የአለቃዬ የመወሰን ችሎታ (ብቃት)					
20	አለቃዬ ሰራተኞችን የሚረዳበት መንገድ					
21	አለቃዬ ሌሎች ስራውን የሚወክልበት መንገድ					
22	አለቃዬ የሰራተኞች ቅሬታ የሚያስተናግድበት መንገድ					
23	ከቦድ ያለ ስራ ላይ አለቃዬ የሚረዳበት (የሚያግዝበት) መንገድ					
24	አለቃዬ ከሰራተኛው ጋር ያለው የግል ግንኙነትና መደጋገፍ					
25	አለቃዬ ለሰራተኛው ስልጠና የሚሰጥበት መንገድ					
26	የምሰራበት ስራ ለእድገት (ለመሻሻል) ያለኝ ዕድል					
27	በዚህ ስራ ላይ ኃላፊ ለመሆን ያገኘሁት እድል					
28	ዕድገት የሚሰጥበት መንገድ					
29	በዚህ ስራ ለማደግ ያገኘሁት እድል					
30	በስራዬ ለማደግ ያለኝ ዕድል					
31	የሥራዬን ውጤት ለማየት ያለኝ ዕድል					
32	ጥሩ ሥራ በመስራቴ (ውጤታማ በመሆኔ) የተሰጠኝ ሽልማት					
33	ለተቋሙ ጠቃሚ ነገር መስራት በመቻሌ					
34	ሙሉ አቅሜን ተጠቅሜ እንደሰራ ያለኝ ዕድል					
35	የተሰጠኝ ሥራ በአግባቡ ስጨርስ የሚሰማኝ ስሜት					
36	የእለት ተእለት ስራዬ አለመደጋገም					
37	ከጊዜ ወደ ጊዜ የተለያዩ ሥራዎችን ለመሥራት የተሰጠኝ					

	ዕድል					
38	የዕለት ተዕለት ሥራዎ ተደጋጋሚ መሆን					
39	በየጊዜው የተለያዩ ነገሮችን የመሥራት ዕድል					
40	ስራዎ በብዙ (በተለያዩ) መንገዶች እንድሰራው ያለኝ ዕድል					
41	ለሥራዎ ዕቅድ ለማውጣት የሚሰጠኝ ኃላፊነት					
42	በሥራዎ ላይ በራሴ እንድወስን የሚሰጠኝ ዕድል					
43	የሌሎች ሰዎችን ሥራ ለመስራት በውክልና የሚሰጠኝ ዕድል					
44	በሥራዎ ላይ በራሴ እንድወስን የሚሰጠኝ ነፃነት					
45	ለሥራዎ ያለኝ ኃላፊነት					
46	በሥራ ባልደረቦቼ መካከል ያለ የመደጋገፍ መንፈስ					
47	ከሥራ ባልደረቦቼ ጋር ያለኝ መቀራረብ					
48	በሥራ ባልደረቦቼ መካከል ያለ መቀራረብ					
49	የሥራ ባልደረቦቼ ለመቀራረብ የሚያደርጉት ጥረት					
50	የሥራ ባልደረቦቼ እርስ በርሳቸው ያላቸው ግንኙነት					