Examining Teachers’ Job Satisfaction at Aksum University from the Perspectives of Herzberg’s Two Factors Theory

Kelemnesh Seifu Badeg
Lecturer at the University of Gondar, Gondar
kelemnesh2020@gmail.com

Abstract
The purpose of this study was to examine teachers’ job satisfaction at Aksum University from the perspectives of Herzberg’s Two Factor Theory. Descriptive survey research design was employed. The size of the population was 833. Of these, 360 teachers were selected as a sample using purposive and simple random sampling techniques. The result of standard regression indicated that 6.5% of teachers’ job satisfaction was predicted by hygiene factors with significant model at $F(7,352) = 3.476, p<0.05$. But, 7.1% teachers’ job satisfaction was explained by the combination of motivation factors at significant model with $F(6,353) = 4.476, p<0.05$. The result of stepwise regression indicated that 6.2% of teachers’ job satisfaction was predicted by recognition and possibility of growth with a significant model at $F(2, 357) = 17.513, p<0.05$. The result of stepwise regression showed that motivation factors were more contributed to teachers’ job satisfaction than hygiene factors.

The result of MANOVA indicated that teachers were not differed in their satisfaction with respect to hygiene and motivation factors due to sex while they were differed in qualification and experience. Thus, the result of Univariate test also indicated that hygiene factors discriminate teachers in their job satisfaction across qualification and experience. Therefore, the findings of this study were partially supported the assumptions of Herzberg’s two factors theory due to the fact that teachers were partially satisfied with both hygiene and motivation factors. Thus, educational leaders need to design incentive strategies based on the context of the workplace.

Key words: Job satisfaction; Motivation factors; Hygiene factors; Aksum University
1. Introduction

1.1 Background of the study

Many scholars argued that increasing interest in human resources due to the assumptions that employees and the way they are managed are critical to the success of the organizations (Kamoche, 1996). However, with the advent of globalization, one of the leading challenges leaders faced in managing human resources to increase the performance of the organization. As a result, the worth of satisfied employees becomes more indispensable. Employee satisfaction and retention have always been an important issue for most employees around the world.

There are numerous definitions given to the term job satisfaction. That is, job satisfaction is the state in which employees feel the situation of pleasure from his or her job as a result of the appraisal of his or her job and performance. In the same way, Oshagbemi (2000) also defines job satisfaction as an emotional response that occurs as a result of the interaction between employee’s values he/she gained from his/her job. Similarly, Robbins (2000) explains job satisfaction as the overall feelings of employees towards the job they perform. Since there is no single definition for the concept of job satisfaction though many scholars have studied it for a long time (Zembylas & Papanastasiou, 2006). In this study, however, the term job satisfaction can be defined as the pleasurable feelings that teachers have towards their job.

Several research findings indicated that working towards employees’ job satisfaction helps to enhance the performance of workers and increases the efficiency and productivity of the organizations. Related to this, Jenner (1994) also stated that increasing employee’s job satisfaction is an important technique for eliminating absenteeism, reducing turnover, and eventually raising productivity. In the same way, greater absenteeism and higher turnover rates occur if employees dissatisfied with their job (Barber, 1986). With high job satisfaction, employees who tended to show strong organizational commitment and higher intention to remain with the organization. Similarly, Purcell et al. (2003) believe that discretionary behavior which helps the firm to be successful is most likely to happen when employees are well motivated and feel committed to the organization as well as the job gives them high levels of satisfaction.

This study used Herzberg’s two factory theory as a framework to identify factors that contribute to teachers’ job satisfaction. Herzberg, Mausner, and Synderman (1959) formulated the two-factor theory of job satisfaction so that he postulated that satisfaction and dissatisfaction are the result
of two different set of factors. Herzberg and his associates considered “motivators” as intrinsic factors i.e. achievement, recognition, responsibility, advancement, growth and work itself while working conditions, salary, interpersonal relations, job security, company policy and administration, service conditions, supervision are considered as “hygiene” or extrinsic factors (Herzberg, et al., 1959). Hence, factors leading to job satisfaction “motivators” when present are different from those leading to job dissatisfaction “hygiene” factors when absent (Herzberg, 1966).

Accordingly, the presence of motivators lead to generate job satisfaction, positive attitude towards the work situation and improve productivity but its absence reduce the level of job satisfaction (Herzberg, 1966). On the other hand, hygiene factors lead to increase job dissatisfaction when they are absent while their presencereduce job dissatisfaction but do not necessarily result job satisfaction, positive job attitude and superior performance and effort (Herzberg, et al., 1957) argued that the opposite of job satisfaction is not job dissatisfaction, but no satisfaction. Thus, based on this theory, the two feelings can’t be treated as opposite to each other.

Although Herzberg and his colleagues (1959) concluded that factors that contribute to job satisfaction are different from factors that cause job dissatisfaction, number of scholars argued the findings in the field. For example, Armstrong (2006) explained that the level of job satisfaction is affected by intrinsic and extrinsic factors; perceived quality of supervision, social relationships with the work group, career opportunities, job influence, challenging job and the degree to which individuals succeed or fail in their work. In addition, Lawler (1973) confirmed that employees can satisfy with the type of supervision, pay, or the work itself, and it is expected that the extent which an individual satisfied with his/her work directly depends on the presence of pay, bonus, perks, and other circumstances that motivate them (Furnham & Eracleous, 2009).

Moreover, many research findings proved that pay, working condition, work itself, supervision, relationships with co-workers and opportunities for promotions were found to be the most important factors which led to job satisfaction (Locke, 1969, Price, 1997 cited in Lund, 2003). Therefore, monetary incentive has a great significance on employees’ job satisfaction. Related to this, Katz (1964), as cited in Lai (2009), stated that to encourage the achievement of organizational goals, organizations should provide rewards to those employees who perform the
desired behavior in the form of financial incentives and fringe benefits. Williams (n. d) supported this idea in that the most popular incentive programs are those that recognize outstanding employees with monetary rewards; some programs increase both a teacher's salary and their professional status.

In addition, Hoy and Miskel (1996) argue that teachers are motivated by the opportunity to earn more money particularly for educators whose income falls to meet the basic needs. In the same way, the research findings of Ololube (2008), Spector (1997) and Baron (1995) indicated that both motivation and hygiene factors may determine employees’ job satisfaction and dissatisfaction based on different conditions.

These show that there are controversies among scholars on the issues what satisfies employees. Therefore, it needs an investigation to decide whether the aforementioned factors can contribute toward teachers’ job satisfaction. Thus, this study examined factors that contribute to teachers’ job satisfaction in Aksum University from the perspectives of Herzberg’s two factor theory but both motivation and hygiene factors are placed on the same continuum.

![Hygiene factors and Motivation factors](image)

**Fig. 1 The Conceptual Framework of the study**
1.2 Statement of the problem

Job satisfaction is one of the topics that have drawn interests among scholars in the field. Many studies have been conducted to examine factors that determine employees’ job satisfaction over six decades and thousands of articles have been published (Zembylas & Papanastasiou, 2006). However, most of the studies have been done in the context of developed countries such as United States of America, United Kingdom, Canada and New Zealand but a few studies have been undertaken in the developing countries (ibid).

The issue of employee job satisfaction has received the interest of scholars since it plays an important role in enhancing the productivity of organizations and improving the performance of employees. Gautam, Mandal & Dalal (2006) also elucidated that employees’ job satisfaction has received considerable attention by the researchers and managers in the field. The outcomes of satisfied workforce includes; employee retention, loyalty and harmony that are significantly contribute to the growth and development of the organizations. Thus, enhancing employees’ job satisfaction has become one of the most demanding activities to manage human resource in any organization. There is no doubt that efficiency suffers with dissatisfied employees. This showsthat employees with high job satisfaction exhibit high energy, pleasurable engagement and enthusiasm while employees with dissatisfaction show distress, unpleasant engagement and nervousness (Heller, Judge, & Watson, 2002). Locke (1976) also indicated that the most common outcomes of job satisfaction are person’s physical health, mental health and social life.

Therefore, it is evident that satisfied workers will bemuch more productive and be retained within the organization for a longer period as compared to displeased workers who will be less useful and will have a greater tendency to quit the job (Crossman, 2003). More importantly, satisfied workers were not only lead to better performances, but they provide a higher service to the customers which could result in creating customersatisfaction. Huselid (1995) believed that if workers are not satisfied, turnover will increase and employees will become frustrated and unproductive.

Currently, there appears to be a widespread dissatisfaction in different organizations including higher education institutions. This phenomenon has triggered concerns of various parties and researchers have constantly conducted researches to gain a better understanding of the issues related to this problem. Mobley (1982) described employee turnover as a potentially costly
phenomenon facing many organizations including educational institutions. Since the business nature of academic institutions involve the cultivation of the future generation, the turnover of employees has more serious implications as compared to other organizations. Because the consequences that emerge as a result of high turnover among employees would not only have negative implications on the business part of the academic institutions but also have serious effects on the generations being educated in these institutions. Thus, not only will the teaching occupation suffer from disrepute but the attainment of objectives of education will also be adversely affected (Evans & Olumide-Aluko, 2010).

Employee commitment and effectiveness solely depend on motivation, morale and job satisfaction. This shows that teachers’ motivation and job satisfaction are important phenomena for all organizations including educational institution in any country. Some of the behavioral manifestations of employees due to lack of job satisfaction were exposed to stress and burn-out, frequent absenteeism, regular leave-taking from school, underperformance of tasks given, conflict with supervisors, disobedient behavior towards their colleagues and learners, lack of cooperation and initiative to render services for task accomplishment. Similarly, surveys studies indicated that teachers were unhappy about their remuneration packages, responsibilities, promotion, increased workloads, lack of tangible incentives, minimal opportunities for career advancements, and lack of recognition for work done, unreasonable work policies and insecure work conditions among others (Maniram, 2007).

High turnover amongst teachers could be attributed to job dissatisfaction (Wisniewski & Gargiulo 1997). They concluded that lack of recognition, few opportunities for promotion, excessive paperwork, loss of autonomy, low remuneration, and stressful interpersonal interactions are contributed to teachers’ decisions to leave schools. The results of different studies show that teachers were satisfied with their jobs and working conditions is more likely to have significant consequences for the retention of teachers, their approach to teaching, the creation of collegial relations within a school, and student outcomes (Crossman & Harris, 2006).

As indicated above, there is a disagreement among scholars on the factors that contribute to employees’ job satisfaction. It is evident that designed compensation system by itself is not a guarantee to satisfy employees and improve their performance unless it is designed and implemented in a ways that address all issues related to job satisfaction and performance.
Therefore, employees’ levels of job satisfaction and organizational commitment have become subject to the research (Taşdan&Tiryaki, 2008). Employees who are satisfied and committed are more likely to attend work, stay with an organization, arrive at work on time, perform well and engage in behaviors helpful to the organization. This implies that there is strong relationship between teachers’ job satisfaction and commitment. Similarly, the findings of Shann (1998) confirmed that there is positive relationship between job satisfaction and organizational commitment of teachers.

The findings of research indicated that teacher dissatisfaction causes little commitment and productivity, reduced ability to meet student needs, certain degrees of psychological disorders and high levels of stress related disability (Karavas, 2010). Thus, the researcher inspired by the view that little attention was given to the issue of teachers’ job satisfaction. Although there is high teacher turnover in Aksum University, study has not been conducted on teachers’ job satisfaction. This situation initiated me to conduct this research to examine teachers’ job satisfaction in Aksum University from the perspectives of Herzberg’ two factor theory so as to suggest the way in which their satisfaction can be enhanced.

1.3 Research Questions

- What is the effect of hygiene factors on teachers’ job satisfaction in Aksum University?
- What is the contribution of motivation factors on teachers’ job satisfaction in Aksum University?
- Do the overall motivation factors more contribute to teachers’ job satisfaction than the overall hygiene factors in Aksum University?
- Do teachers differ in their job satisfaction with hygiene and motivation factors based on sex, qualification and experience?
- Which categories of job satisfaction are significantly contributed to differentiate teachers at the separate levels of sex, qualification and experience?

1.4 Significance of the Study

The findings of this research provide practical suggestion to educational leaders about the most important factors that affect teachers’ job satisfaction so as to enhance and sustain their job satisfaction. It also provides valuable information for educational planners and managers to have an insight about the role of job satisfaction on teachers’ performance and productivity. The
findings of the study shall also be of significance to school administrators in recognizing the effective way of motivating employees internally.

In addition, it helps to aware top level management about the existence of individual difference among employees and in turn, they might develop different mechanisms based on the specific context of particular institution. It also helps them to give special attention to major factors to make teachers satisfied by their job. This might necessitate designing an incentive strategy to enhance teachers’ job satisfaction. Because all proposed strategies cannot be successful unless it matched with the need of teachers and value.

Finally, since the issue of job satisfaction has received little attention in Aksum University, the study might initiate other researchers to conduct further studies in this area.

1.5 Delimitation of the Study
Although it is important to examine teachers’ job satisfaction in different Universities, this study delimited to Aksum University to make it more manageable. In relation to variables, this study focused on Herzberg’s two factor theory motivation factors; achievement, recognition, responsibility, advancement, growth and work itself while hygiene factors which are classified as working conditions, salary, interpersonal relations, job security, company policy, service conditions, supervision, administration (Herzberg, et al., 1959).

1.6 Limitations of the Study
- This study aimed to assess the levels of teachers’ job satisfaction at a particular point of time. But, it is unknown that whether they are satisfied with their job currently unless systematic longitudinal study was conducted.
- The study was geographically restricted to the specific areas of Aksum University. Due to this reason, the results of this study cannot be generalized to other universities which were not included in the present study.
- Since the data gathering technique was self-administered questionnaire, the accuracy of the data was limited to the subjective perception and attitude of respondents.

2. Review of Related Literature
2.1 The Concept of Job Satisfaction
A great many definitions of the concept of job satisfaction have been formulated over time by different authorities in the field. Thus, some of these definitions are illustrated as follows. Locke (1976) stated job satisfaction as the pleasurable or positive emotional state resulting from the appraisal of one’s job and job experiences. The happier the individual, the higher is level of job satisfaction. It is assumed that positive attitude towards work and greater organizational commitment increases job satisfaction which in return enhances performance of the individual. Similarly, Vroom (1964) Viewed job satisfaction as the positive orientation of an individual towards all aspects of the work situation. As the performance of the employees’ increases, it will affect organizations’ performance and its profitability. In addition, Armstrong (2006) explained job satisfaction as the attitudes and feelings that people have about their work. This implies that positive and favorable attitudes towards the job indicate job satisfaction but negative and unfavorable attitudes leads to job dissatisfaction. When an employee has a high level of job satisfaction, they will have a positive attitude towards his or her job.

Therefore, it is possible to conclude that job satisfaction is the positive and pleasurable feelings that employees have towards their job. Herzberg’s two factor theory employed for the purpose of this study to see the predictive powers of hygiene and motivation factors.

2.2 Herzberg’s Two Factor Theory of Job Satisfaction

Although most of the debates about theories of job-satisfaction start with Maslow’s theory of ‘Hierarchy of Needs’ (1943) however, the story begins with the idea of ‘scientific movement’ or ‘Taylorism’ by Frederick Taylor which treats the human being as ‘Economic-man’ where ‘Money’ is the biggest motivator for job-satisfaction. This view was criticized by Elton Mayo and his associates (1933) during ‘Hawthorne Studies’ about the nature of human being.

Currently one of well-known and controversial theory of job satisfaction is Herzberg's two factor theory, developed from his work to determine the attitude of workers towards their jobs (Gouws, 1995). This theory which we now turn often is referred to as the two-factor theory, a designation that has its rationale in the dual nature of its approach to the sources of job satisfaction. Thus, Herzberget al. (1959) formulated the two-factor theory of job satisfaction following an investigation into the sources of job satisfaction and dissatisfaction of 200 accountants and engineers drawn from over nine companies in the United States.
The main implications of this research, according to Herzberg, are that: The wants of employees divide into two groups. The first group revolves around the need to develop in one’s occupation as a source of personal growth. The second group operates as an essential base to the first and is associated with fair treatment in compensation, supervision, working conditions and administrative practices. The fulfillment of the needs of the second group does not lead individual to high levels of job satisfaction and extra performance on the job. All we can expect from satisfying the second group of needs is the prevention of dissatisfaction and poor job performance. These groups form the two factors in Herzberg’s model: one consists of the satisfiers or motivators, because they are seen to be effective in leading individual to superior performance and effort. The other consists of the dissatisfiers, which essentially describe the environment and serve primarily to prevent job dissatisfaction, while having little effect on positive job attitudes and job satisfaction. This implies that lack of motivators in a job tends to sensitize people to any lack of hygiene factors, with the result that more and more hygiene must be provided to obtain the same level of performance. Herzberg emphasizes strongly the need for companies to build motivators into their jobs.

2.2.1 Motivation Factors
Motivation factors are equated with psychological needs that are placed along a continuum from a state of satisfaction which are related to the actual performance of the work or job contents. Herzberg postulated that motivators bring job satisfaction and improve performance when they maintained adequately but their absence does not result job dissatisfaction (Herzberg, 1966). Job satisfaction is viewed as an outgrowth of motivators or intrinsic factors which include recognition, achievement, possibility of growth, advancement, responsibility, and the work itself. These factors are considered to be closely related both conceptually and empirically. The basic needs specified are those related to personal growth and self-actualization, and these are said to be satisfied by the intrinsic aspects of the work itself.

The motivators are internal job factors that urge the employees to strive for better achievements, and lead to job satisfaction and higher motivation. They are the factors that influence the perceptions or feelings of employees about themselves and their work, and motivate them to work harder or better. Bennell and Akyeampong(2007) state that intrinsic motivators such as responsibility, the challenging nature of a job, and achievement are motivators those come from within a person.
Herzberg’s Two-factor Theory has been linked to that of Maslow’s Hierarchy of Needs Theory. The Theory suggests that Maslow’s higher-order needs are similar to Herzberg’s satisfier factors, and Maslow’s lower-order needs are similar to Herzberg’s hygiene factors. According to Herzberg et al. (1959), motivation factors are internal factors that are associated with higher-order needs, which include the opportunity to achieve in the job, recognition of accomplishment, challenging work and growth options, responsibility in the job, and the work itself.

Applying these concepts to teachers, Herzberg et al. (1959) claimed that the intrinsic factors can lead teachers to feel satisfied, but their absence does not necessarily lead to dissatisfaction. A teacher who is not recognized and not given responsibility for his or her high-quality performance in the workplace will not necessarily quit teaching, as long as he or she is well-paid and has good relationships with colleagues. In the teaching profession, the intrinsic factors play a significant role in motivating individuals to join the profession (Jyoti& Sharma, 2009). If we want people to be encouraged, satisfied, and motivated about their jobs, Herzberg et al. (1959) claimed, the emphasis should be on factors associated with the nature of the work opportunities for promotion, personal growth, recognition, responsibility and achievement. Thus, satisfaction with the intrinsic aspects of the job is long-lived and, therefore, enables teachers to sustain their motivation over a long period of time.

### 2.2.2 Hygiene Factors

Hygiene factors are extrinsic factors equated with physiological needs which are placed along a continuum from a state of dissatisfaction which are related to job context. Herzberg argued that hygiene factors tend to increase job dissatisfaction when they are absent while these factors appropriately provided, can serve to remove dissatisfaction and improve performance up to a point, but they cannot be relied upon to generate really positive job feelings or the high levels of performance that are potentially possible (Balkin et al., 2003). To accomplish these outcomes, management must shift gears and move into motivation (Herzberg et al., 1959).

The extrinsic job characteristics reflect outcomes generated by performing the job, and are concerned with the context or environment in which the job has to be performed. Herzberg et al. (1959) claimed that hygiene factors are necessary, but not sufficient conditions for the satisfaction of employees. With regard to teachers, a teacher who feels that his or her salary is not ample, will be dissatisfied, but improving the salary to an acceptable level will not
necessarily lead to job satisfaction. In the same way, Herzberg et al., (1959) believed that hygiene factors do not cause satisfaction, but can help to prevent dissatisfaction. Therefore, managers who try to eliminate factors that can create job dissatisfaction may bring about a more pleasant working environment, but not necessarily job satisfaction. As a result, Herzberg characterized conditions surrounding the job as quality of supervision, pay, company policies, physical working conditions, relations with others, and job security, as hygiene factors.

The results of Herzberg’s studies indicated that satisfaction will largely be caused by the true motivators and dissatisfaction by the hygiene factors. This implies that factors that lead to job satisfaction are different from the factors that contribute to dissatisfaction (Herzberg et al., 1959). Thus, factors that involve job content (motivation factors) tend to lead to job satisfaction. Motivators are those that come from intrinsic feelings. These includes: responsibility, possibility of growth, achievement, recognition, work itself and advancement and promotion. These factors motivate by changing the nature of the work.

To sum up, hygiene factors lead to increase job dissatisfaction when they are absent while their presence reduce job dissatisfaction but does not necessarily result job satisfaction, positive job attitude and superior performance and effort (Herzberg et al., 1959). On the other hand, the presence of motivators leads to generate job satisfaction, positive attitude towards the work situation and improve productivity but its absence reduce the level of job satisfaction (Herzberg, 1966). Herzberger et al. (1957) argued that the opposite of job satisfaction is not job dissatisfaction, but no satisfaction. Similarly, the opposite of job dissatisfaction is not job satisfaction. Thus, the two feelings can’t be treated as opposite to each other. This implies that job dissatisfaction is not necessarily the opposite of job satisfaction while positive and negative effects at work are independent of one another.

2. Research Methodology

2.1 Research Design

Research design is the “blue print” that describes the conditions and procedures for collecting and analyzing data (McMillan & Schumacher, 2010). Yin further noted that it links the research questions to the research conclusions through the steps undertaken during data collection and data analysis (ibid). Since this study involved large number of samples to assess teachers’ job
satisfaction, descriptive survey design was found suitable. Therefore, the researcher followed this
design as a guide to examine teachers’ job satisfaction.

2.2 Population, Sample size and Sampling Techniques
There are seven colleges in Aksum University. These include; college of social Sciences,
Engineering and Technology, Natural and computational sciences, Business Economics, Health
Sciences, Agriculture and Education and Behavioral sciences. In these colleges, there are a total
of 833 teachers with different qualification, experience and sex. For manageability reason, the
researcher selected 360 teachers using simple random sampling technique, mainly lottery
method. Simple random sampling technique give equal chance for participants to be selected
randomly as a sample from the given population (Evans, 2007). Thus, 360 teachers were used as
the sample for the final study.

2.3 Data Gathering Instrument
Questionnaire is the instrument found relevant to collect data for this study. Questionnaire is used
commonly to gather data for descriptive survey (James et al, 1997). In addition to this,
questionnaires encourage the respondents to be honest because they are answered anonymously,
and they are more economical than interviews (Cohen et al., 2007). The questionnaires
had four parts. The first part contains items concerning the background of the research
participants. The second part consists of questions concerning respondents’ general level of
satisfaction with their job. Finally, the third and fourth parts contain items related to Herzberg’s
hygiene and motivation factors to measure respondents’ job satisfaction respectively.

The researcher prepared the questionnaire to measure the respondents’ level of job satisfaction
based on the framework the study. For each dimension there had five points of Likert type items.
The scales of each item required participants to express their opinion ranging from ‘not satisfied
at all’ represented by a score of ‘1’ to highly satisfied designated by a score of ‘5’.

2.4 Pilot Study
In this study, pilot test was conducted on 30 teachers who found outside the main sample of the
study. The distribution of samples for pilot test followed the same procedures as did in the main
sample of the study. Cronbach Alpha was used to test the internal reliabilities of items related to
general levels of satisfaction, motivation and hygiene factors independently. The reliability
coefficients of the instruments with Cronbach Alpha (α) = (0.82, 0.87 and 0.84) for respondents’
general levels of satisfaction, motivational and hygiene factors respectively. The results indicated that the reliability of instruments were high due to high level of coefficients.

2.5 Data Gathering Procedures

The researcher distributed the questionnaire to the selected sample teachers with the help of college deans, department heads and program leaders. The respondents have given three days to complete the questionnaire. Because, they were very busy with summer courses and examinations. Finally, the researcher collected the questionnaire in person.

2.6 Data Analyses Techniques

Multiple regression and MANOVA were mainly employed to analyze the data using SPSS version 23. According to Tabachnick and Fidel (2007) multiple regression analysis used when there are dependent and independent variables with interval or scale level which is normally distributed in the population. Similarly, in this study, the data were normally distributed across independent and dependent variables at scale level.

Before analyzed the data, different tests were used to check whether the data met the assumptions of multiple regression and MANOVA or not. The assumption of the analysis techniques were tested on multiple regressions and MANOVA in relation to the presence of sufficient sample size, missing values, univariate and multivariate outliers, multicollinearity, normality and linearity across dependent and independent variables. Although the purpose of multiple regression and MANOVA different, they have more similarities than differences in testing the normality of the data before analysis. Specifically, standard regression was used to see the effect of hygiene and motivation factors on teachers’ job satisfaction (RQ#1 & #2) respectively. Step wise regression was also used to determine the predictive powers of motivation and hygiene factors for teachers’ job satisfaction (RQ#3).

Due to the presence of dependent and independent variables, there were three main effects: sex, qualification and experience, and four interaction effects: Sex X qualification, sex X experience, qualification X experience and sex X qualification X experience. In order to test for interaction and main effects, multivariate MANOVA was conducted to determine whether there are differences between teachers in their satisfactions with the overall hygiene and motivation factors due to sex, qualification and experience factors (RQ#4).
Finally, descriptive mean was employed to identify categories of job satisfaction which are significantly contributed to differentiate teachers at the separate levels of sex, qualification and experience (RQ#5).

3. Results and Discussions

3.1 The Effect of Hygiene Factors on Teachers’ Job satisfaction

The first basic question sought to see the result of Herzberg’s hygiene factors on teachers’ job satisfaction. To look at their contribution, standard regression was employed through entered all the predictors which assessed in terms of the unique amount of variance it account for. Leech, Barrett and Morgan (2005) also believed that standard regression employed when the researcher enter all the independent variables in to the regression equation at once to determine its predictive powers. In this case, teachers’ job satisfaction is considered as dependent variables while the seven constructs of hygiene factors are treated as predictor variables.

Due to this reasons, it was imperative to use Standard regression to determine whether these factors predict teachers’ job satisfaction or not. Therefore, the results of standard regression were shown in the table below.

Table 1: Standard regression on the effect of hygiene factors on teachers’ job satisfaction

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variables</th>
<th>R Square</th>
<th>Un standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>Constant</td>
<td>.065</td>
<td>4.54</td>
<td>.279</td>
<td>16.24</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Salary</td>
<td></td>
<td>-.202</td>
<td>.046</td>
<td>-.238</td>
<td>-4.42</td>
</tr>
<tr>
<td></td>
<td>I/p relationship</td>
<td></td>
<td>.027</td>
<td>.031</td>
<td>.062</td>
<td>.886</td>
</tr>
<tr>
<td></td>
<td>Supervision</td>
<td></td>
<td>-.021</td>
<td>.026</td>
<td>-.042</td>
<td>-.810</td>
</tr>
<tr>
<td></td>
<td>Service condition</td>
<td></td>
<td>.038</td>
<td>.025</td>
<td>.107</td>
<td>1.506</td>
</tr>
<tr>
<td></td>
<td>Job security</td>
<td></td>
<td>-.012</td>
<td>.020</td>
<td>-.032</td>
<td>-.608</td>
</tr>
<tr>
<td></td>
<td>Org. policy</td>
<td></td>
<td>-.086</td>
<td>.064</td>
<td>-.071</td>
<td>-1.35</td>
</tr>
<tr>
<td></td>
<td>Work conditions</td>
<td></td>
<td>.040</td>
<td>.026</td>
<td>.078</td>
<td>1.504</td>
</tr>
</tbody>
</table>
The standard regression revealed that a total of 6.5% of teachers’ job satisfaction was explained by the seven predictor variables while the rest of 93.5% of teachers’ job satisfaction was predicted by the other variables. The model using a standard regression method revealed that there was a significant model; F (7, 352) = 3.476, p<0.05. The values of coefficient of determinations were found as (-.238 at p< 0.05 while .062, -.042, .107, -.032, -.071 & .078, p>0.05) for salary, interpersonal relationship, supervision, service condition, job security, organizational policy and working conditions respectively. Although 6.5% of teachers’ job satisfaction was predicted by the combinations of hygiene factors, except salary, all other variables were not significant predictor of teachers’ job satisfaction independently. Therefore, the findings of this study was partially supported Herzberg’s two factor theory, because salary was found significant predictor of job satisfaction as opposed to the assumption of Herzberg while others were not significant predictors which is similar to Herzberg’ two factor theory.

3.2 The Effect of Motivation Factors on Teachers’ Job satisfaction

The second basic question sought to assess the effect of Herzberg’s motivation factors on teachers’ job satisfaction. For this purpose, standard regression was employed through entered all the independent variables in to the regression equations at simultaneously. The justification that the researcher used standard regression was already mentioned under section 3.1. In this case, teachers’ job satisfaction is considered as dependent variables while the six constructs of motivation factors are treated as predictor variables. As a result of this, Standard regression was employed to determine whether these factors predict to teachers’ job satisfaction or not. Therefore, the results of standard regression had depicted in the table below.

Table 2: Standard regression on the effect of motivation factors on teachers’ job satisfaction

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variables</th>
<th>R Square</th>
<th>Un standardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>T-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>Constant</td>
<td>.071</td>
<td>4.761</td>
<td>.304</td>
<td>15.68</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Achievement</td>
<td></td>
<td>.045</td>
<td>.061</td>
<td>.051</td>
<td>.740</td>
</tr>
<tr>
<td></td>
<td>Recognition</td>
<td></td>
<td>-.241</td>
<td>.075</td>
<td>-.282</td>
<td>-.321</td>
</tr>
<tr>
<td></td>
<td>Responsibility</td>
<td></td>
<td>-.052</td>
<td>.043</td>
<td>-.072</td>
<td>-1.19</td>
</tr>
<tr>
<td></td>
<td>Possibility of growth</td>
<td></td>
<td>-.094</td>
<td>.046</td>
<td>-.119</td>
<td>-2.05</td>
</tr>
<tr>
<td></td>
<td>Advancement</td>
<td></td>
<td>.056</td>
<td>.068</td>
<td>.070</td>
<td>.811</td>
</tr>
</tbody>
</table>

© GSJ
Work itself  .037  .047  .041  .793  .428

The standard regression revealed that a total of 7.1% of teachers’ job satisfaction was explained by the combination of six predictor variables while the rest of 92.9% of teachers’ job satisfaction was predicted by the other variables which were not included in this study. The model using a standard regression method revealed that there was a significant model at F (6, 353) = 4.476, p<0.05. The values of coefficient of determinations are found as (-.282 and -.119 at p< 0.05) while .051, -.072, .070, & .041, p> 0.05) for recognition, possibility of growth, achievement, responsibility, advancement and the nature of work respectively.

Therefore, the results of this study was partially supported the findings of Herzberg’s two factor theory due to the fact that recognition and possibility of growth among motivational factors were found significant predictors of teachers’ job satisfaction while achievement, responsibility, advancement and work itself were not contributed to teachers’ job satisfaction as opposed to the assumption of Herzberg’s two factor theory of job satisfaction.

3.3 The Levels of Predicting Power of Motivation and Hygiene factors on Teachers’ Job satisfaction

Table 3: Step wise regression of the predicting powers of motivation and hygiene factors on teachers’ job satisfaction

<table>
<thead>
<tr>
<th>Model</th>
<th>Dependent variable</th>
<th>Independent variables</th>
<th>R Square</th>
<th>Un standardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>2</td>
<td>Job satisfaction</td>
<td>Recognition</td>
<td>.062</td>
<td>4.85</td>
<td>.221</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Possibility of growth</td>
<td></td>
<td>-.17</td>
<td>.044</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Constant</td>
<td></td>
<td>.09</td>
<td>.041</td>
</tr>
</tbody>
</table>

Step wise regression is another type of multiple regression which helps to determine the predictive power of independent variables through enter large set of variables into the regression equation based solely on statistical criteria. Similarly, Leech, Barrett and Morgan (2005) stated that step wise regression used when there are a relatively large set of variables that may be good predictors of the dependent variable which will be afforded priority of entry, with no
reference to theoretical considerations. In this case, the researcher employed stepwise regression to determine the predicting powers of motivation and hygiene factors on teachers’ job satisfaction. Therefore, all motivation and hygiene factors entered into the regression equation without precondition to identify variables that significantly predict the dependent variable.

The stepwise regression revealed that a total of 6.2% of teachers’ job satisfaction was explained by recognition and possibility of growth while the rest of 93.8% of teachers’ job satisfaction was predicted by other factors. The model using a stepwise regression method revealed that there was a significant model at F (2, 357) = 17.513, p<0.05. The values of coefficient of determinations were found as (-.205 and -.125 at p< 0.05) for recognition and possibility of growth respectively. This result indicated that recognition and possibility of growth were more powerful predictors of teachers’ job satisfaction than other motivation and hygiene factors. Therefore, it is possible to conclude that motivation factors were more contributed to teachers’ job satisfaction than hygiene factors.

### 3.4 Results of Multivariate Tests of Effects

In analyzing MANOVA, it is essential to identify the dependent and independent variables. For the purpose of this study, overall hygiene and motivation factors were treated as two dependent variables to compute multivariate MANOVA. While, sex, qualification and experience with two or more levels were treated as independent factors. Therefore, it was vital to determine if there were significant differences between teachers in their job satisfaction with hygiene and motivational factors due to sex, qualification and experience differences. Thus, it needs to employ multivariate analysis of variance to make sure if there were significance difference between teachers in their satisfaction with hygiene and motivation factors due to sex, qualification and experience differences. Due to this reason, MANOVA was employed so that the results are shown in the table below.

Table 4: The Results of Multivariate Testsof MANOVA

<table>
<thead>
<tr>
<th>Sources</th>
<th>Wilks Lambda</th>
<th>F</th>
<th>Hyp.DF</th>
<th>Error DF</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (S)</td>
<td>0.999</td>
<td>0.18</td>
<td>2</td>
<td>348</td>
<td>.898</td>
<td>.001</td>
</tr>
<tr>
<td>Qualification (Q)</td>
<td>0.967</td>
<td>2.930</td>
<td>4</td>
<td>696</td>
<td>.020</td>
<td>.017</td>
</tr>
<tr>
<td>Experience (E)</td>
<td>0.961</td>
<td>3.468</td>
<td>4</td>
<td>696</td>
<td>.000</td>
<td>.020</td>
</tr>
</tbody>
</table>
As shown in the table above, the result of MANOVA of Wilks’ Lambda indicated that significant differences were not observed between male and female teachers in their satisfaction with the overall hygiene and motivation factors. That is, $\lambda = .999$, $F (348, 348) = 0.18$, $P = .898$, multivariate $r^2 = .001$. With regard to qualification and experience, teachers had significant difference in their satisfaction with the overall hygiene and motivational factors at different levels of independent variables (factors). Hence, the results of Wilks’ Lambda, $\lambda = .967$, $F (348, 696) = 2.930$, $P = .020$, multivariate $r^2 = .017$, and $\lambda = .961$, $F (348, 696) = 3.468$, $P = .00$, multivariate $r^2 = .020$ for the qualification and experience of teachers respectively. In contrary to this, the results of the interaction effect of independent factors were not significant to differentiate teachers in their satisfaction with the dependent variables.

Moreover, Univariate tests between subject effects were employed to know the categories which contributed to the observed significant difference on educational qualification and experience. The results of univariate tests were indicated in the table below for the effects of qualification and experience.

### 3.5 Sex, qualification and experience as the factor to differentiate teachers’ job satisfaction

Table 5: Univariate Tests between subjects effects on Qualification and Experience

<table>
<thead>
<tr>
<th>Main Effect</th>
<th>Dependent Variables</th>
<th>Type III Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>Hygiene Factors</td>
<td>.213</td>
<td>2</td>
<td>.106</td>
<td>5.68</td>
<td>.004</td>
<td>.031</td>
</tr>
<tr>
<td></td>
<td>Motivation Factors</td>
<td>.022</td>
<td>2</td>
<td>.011</td>
<td>.455</td>
<td>.635</td>
<td>.003</td>
</tr>
<tr>
<td>Experience</td>
<td>Hygiene Factors</td>
<td>.224</td>
<td>2</td>
<td>.112</td>
<td>5.99</td>
<td>.003</td>
<td>.033</td>
</tr>
<tr>
<td></td>
<td>Motivation Factors</td>
<td>.028</td>
<td>2</td>
<td>.014</td>
<td>.566</td>
<td>.568</td>
<td>.003</td>
</tr>
<tr>
<td>Q X E</td>
<td>Hygiene Factors</td>
<td>.004</td>
<td>1</td>
<td>.004</td>
<td>1.93</td>
<td>.661</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Motivation Factors</td>
<td>.029</td>
<td>1</td>
<td>.029</td>
<td>1.19</td>
<td>.275</td>
<td>.003</td>
</tr>
</tbody>
</table>

As indicated in the table, teachers were significantly differed in their satisfaction with respect to hygiene factors on qualification and experience but not motivation factors. But, significance
differences were not observed among teachers with the interaction effect of qualification and experience on both hygiene and motivation factors.

4. Conclusion and Recommendations

4.1 Conclusion

The purpose of this study was to examine teachers’ job satisfaction in Aksum University from the perspectives of Herzberg’s two factor theory. Based on the findings of this study, teachers were partially satisfied with both what Herzberg considered as hygiene factors (dissatisfier) and motivation factors (satisfiers). Therefore, it is possible to conclude that the results of this study were partially supported the assumption of Herzberg’s two factor theory.

4.2 Recommendation

Based on the findings of this study, the following recommendations have suggested:

- Much attention should go to both motivation and hygiene factors that would lead to an increased sense of accomplishment, autonomy, more challenging work situations and provide more opportunities for advancement.
- Formulate clear policies and procedures to ensure teachers have promotion opportunities.
- Design and implement appropriate incentive strategies based on the specific context of the organizations including educational institution.

References


Acknowledgement

I would like to express my deep hearted appreciations to Mr. Shimelis Mesfin (PhD candidate), for his technical support in the research process as a whole. His keen insights and knowledge inspired and guided me throughout my study.

Funding

The author did not get any fund to conduct this study.

Author details

My name is Kelemnesh Seifu Badeg and working as a Lecturer at the University of Gondar in the college of business and economics. I am graduated with BA degree from Jimma University in the department of logistic and supply chain management in 2009. I am also graduated with MBA in the college of business and economics from Hawassa University in 2013. I have been serving as a lecturer in higher education institutions (both in Aksum University and University of Gondar) since 2009. I am engaging in research works, community services and projects to accomplish the mission of my institution.

Citation information
Kelemnesh, S.B. (2020). Examine Teachers’ Job Satisfaction from the perspectives of Herzberg’s Two Factor Theory in Aksum University.