

The Effects of Performance Management Practices on Academic Staff' Job Satisfaction in some Selected Ethiopian Universities

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Abstract

Universities are playing a vital role in developing human capital, economic growth and development of countries. They need to implement the PM system to align individual goals with department, college and university strategic goals to improve the overall performance of the university. The study aimed to investigate the practices of performance management dimensions and their effects on academic staff' job satisfaction in some selected Ethiopian public and private universities. The study used a mixed research approach and descriptive and explanatory research designs were used. Data was collected via questionnaire, semi-structured interviews and documents. The questionnaire respondents were 307 academic staff from public and private universities. Qualitative data was collected from semi-structured interview and open-ended questionnaires. The interviewees were purposefully selected from research coordination and publication directors, community service directors and department heads. Quantitative data were analyzed with SPSS version 25 using descriptive statistics (frequency and percentage) and inferential statistics (independent samples t-test, ANOVA, Pearson correlation, and hierarchical multiple regression). Documents and qualitative data were examined through theme analysis. The finding of the study showed that there was a positive and significant relationship between the practices of the PM dimensions together and their effects on job satisfaction of the academic staff in the selected universities. The Pearson correlation analysis finding showed that performance management dimensions had the positive correlation with academic staff job satisfaction. The finding indicated the effect of each PM dimensions on the job satisfaction of academic staff. The finding also indicated the comparison t-test and R2 value for public and private universities. The study concluded that job satisfaction of academic staff was achieved by their performance directly from the practices of the performance management dimensions. The findings indicated the contribution of each performance management dimension and their effect on job satisfaction. Managing these factors could be beneficial for university management (presidents, college directors, and department heads) and academic staff.

Key Terms: Job Satisfaction, Performance management, Performance management dimensions, Public University, and Private University

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1. Introduction

Higher education plays a fundamental role in the progress of a country and it also contributes to the global economy (Jalaliyoon & Taherdoost, 2012; Morris, 2011). Higher education is seen as a mechanism for converting inputs (notably student time, academic time, consumables and equipment and building services) into outputs based on the practices of PM dimension, which can be narrowly classified as related to teaching, research and outreach or community service (Decramer, Christiaens & Vanderstraeten, 2008; Boland & Fowler, 2000). There are debates about whether the PM system is essential for the improvement of universities or not, and literature has revealed both sides of the arguments. Camilleri and Camilleri (2018) observed that different institutional stresses have been placed on universities that have contributed to the implementation of performance management systems. The PM system may contribute to teaching, knowledge transfer, expanding participation, improving the learning experience of students, ties with the economic sector, etc. in higher education institutions, but the focus may depend on the strategy of the institution (Sarrico & Dyson, 2000).

Literature confirmed the applicability of Performance Management in public and private sectors, similarly to public and private universities. Sameeksha (2017) describes how organizations, both public and private, have been paying attention to improving the performance and productivity of employees, teams, and organizations as never before though they vary in structure, operations, policies, practices, and productivity. Carmine and Rivenbark (2012) stated that PM has been growing as an effective organizational approach in public and private organizations around the world.

Performance Management (PM) enables universities to improve their overall performance and it also enables universities to achieve goals and outcomes. PM helps the university understand job performance through measures, and individuals are rewarded and recognized through accurate and constructive feedback (Karwan, 2015). Therefore, higher education plays a fundamental role in the future of nations and their position in the world economy. Karwan (2015) added that universities need to implement the PM system to improve the performance of individuals and align individual goals and objectives with departmental strategic goals and the university's strategic goals to improve the overall performance of the university.

Some performance management practices, such as training and development, career development, and performance-related pay and rewards, appeared to satisfy employees, according to a (Mallaiah, 2008) study. Even though the rest of the performance management practices such as performance agreements, performance planning, managing performance throughout the year, and reviewing performance did not seem to satisfy the employees or were not significant for employees' job satisfaction (Mallaiah, 2008). However, Robby (2010) noted that practices relating to performance management and organization results show association with employees' job satisfaction. Robby (2010) further indicated that PM practices are interdependent with employees' job satisfaction. This means that when employees perform well to achieve their goals, they derive satisfaction from this and this drives them to perform even better.

Thus, the study examined the practices of performance management dimensions (performance pre-requisite, planning, evaluation, and appraisal) and their effects on job satisfaction of academic staff in some selected Ethiopian public and private universities.

1.2. Statement of the Problem

In the last two decades, the Ethiopian government has embarked on massive expansion of national education system to transform the country economic, social and democratic developments. Though tremendous achievement has been made in terms of quantity expansion, the quality of education has been deteriorating and students' achievements have been declining (Mulatu, 2016; Fekede & Fiorucci, 2012; National Agency for Examination, 2011; Lemlem, 2010 & Tessema, 2006). The Ethiopian Education and Training Policy (2018) reported that during the past one and a half decades, there have been significant expansions in Ethiopian higher education institutes (HEIs). Besides, there are engagements on the harmonization of undergraduate curricula, and the introduction of modular teaching, continuous assessment, and peer learning. However, these activities have a little positive impact on the quality of universities core processes, for example, teaching and learning, research outputs, and community service.

So far, none of the Ethiopian universities were found the first two thousand top universities of the world and ranked the first fifteen universities of Africa (uni-Rank, 2019). Only Addis Ababa university got 13th rank from Africa universities and few universities such as Jimma University, Gonder Health Science college were found in the two hundreds of Africa Universities (uni-Rank, 2019). There may have many reasons and one of the reasons may not be properly using and analyzing the PM dimensions and their effects on job satisfaction of academic staff in Ethiopian universities.

Many types of research have been done in Ethiopia, such as concerning performance appraisal (PA), performance evaluation (PE) and employees' motivation, the impacts of PA and challenges of PA, and employees' perception of PA. For example, Abebe(2017) studied the role of the performance management system on employees' job motivation in the case of the Commercial Bank of Ethiopia. Alela (2016) assessed the PM practices of World Vision Ethiopia. Wondwossen (2017) investigated the effects of performance management practice on employee performance in Assai public school in Addis Ababa. Mulu (2008) examined the status of PM implementation in federal public-sector institutions with particular emphasis on measurement frameworks and PM structures, as well as behavioral aspects. Yonas (2018) assessed the PM practices in the Ministry of Public Service and Human Resource Development.

Though there have been a few studies on PA and PE practices and the effectiveness of performance management (Mulatu, 2016; Abebe, 2017; Alela, 2016; Wondwossen, 2017; Mulu, 2008; and Yonas, 2018), these studies were either case studies or focused on one or a single sector. We can refer to Ethiopia as 'under-researched' country in the field of PMS practices, and hardly found comparative studies in Ethiopian public private universities. Hence, this might make these studies difficult to generalize to the Ethiopian public and private sectors, particularly to the public and private university context.

It may be possible to question the practices of the PM dimensions and their effects on job satisfaction in selected Ethiopian public and private universities. As a result, the study looked at the practices of PM dimensions and their effects on job satisfaction at the selected Ethiopian public and private universities. Based on the information in the prior section, the research attempted to address the following basic research questions. Based on the information in the prior section, the research attempted to address the following basic research questions. 1) To what extent do the practices of PM dimensions affect the job satisfaction of academic staff at the selected Ethiopian universities? And 2) Are there any similarities in the practices of PM

dimensions and their effects on the job satisfaction of academic staffs between the selected Ethiopian universities?

2. Literature Review

2.1. Theoretical Framework of Performance Management

2.1.1. Definitions of Performance, Performance Management and Performance Management System

To have a clear understanding of what PM and PM dimensions (performance planning, performance implementation, performance evaluation and feedback and rewarding) mean, the concept of what performance and PM mean should be clear. Many writers define the term "performance" in their own ways (Armstrong, 2009; Vroom, 1964; and Ameen & Ahmad, 2014). Armstrong (2009) defined performance as the record of outcomes achieved. Bernardin et al. (1995) defined performance as the outcomes of work, including both behaviors and outcomes. Performance is the achievement of the goal through the input process into the output (Aldholay, Abdullah, Ramayah, Isaac, & Mutahar, 2018; Korir, Rotich & Bengat, 2015).

There are many definitions of PM. Accordingly; PM can be defined as a systematic process for improving organizational performance by developing the performance of individuals, teams, and organizations (Armstrong, 2009; Aguinis, 2009). On a different note, Roberts (2001) stated that PM involves the setting of corporate, individual, team, and organizational objectives. On the other note, Sayantani (2015) stated that PM is a means of getting better results from the organization, teams and individuals by understanding and managing performance within an agreed framework of strategic goals.

The performance management system (PMS) is a much broader and complicated issue. PMS incorporates activities such as common goal setting, planning, continuous progress evaluation and review (Armstrong, 2009). According to Miller (2016) and Gladies & Kennedy (2014), PMS is regarded as a tool to confirm optimum individual performance according to (Miller, 2016; Gladies & Kennedy, 2014). Aguinis (2013), on the other hand, described the major functions of PMS such as deal with a continuous review of individual, team performance and organizational performance, reliable feedback on activities, and aligning the job role with organizational strategic objectives. The PMS has certain variables such as aligning the workforce, building competencies, motivating better business results, continuous development and improving performance. Generally, based on the above concepts and writers' views, it could be possible to conclude that PM is a continuous process and practice that improves individuals, team and organizational performance. It should be shared and aligned with the strategic goal.

2.1.2. Performance Appraisal and Performance Management

There are debates about the purposes and difference between performance appraisal and performance management. Fletcher (2001) stated that performance appraisal has evolved to become part of a wider approach to integrating human resource management strategies, namely performance management. Segal (2000) clarified the utilization of PA and he stated that performance appraisals focused on motivating individual employees. Segal (2000) added that PA has a bureaucratic system that is run by the HR department rather than by the concerned departments or teams. PA was usually backwards-looking, focusing on what had gone wrong rather than focusing on the future or looking forward to future development needs. Whereas

performance management focuses on both backward and future-looking. PM looks for a continuous review with one or more formal reviews. PM emphasis is on a more comprehensive and more natural process of management (Connell and Nolan, 2004; Armstrong, 2009 & Brudan, 2010).

2.2. Theories of Performance Management

Buchner (2007) listed theories that have related to performance management in recent years. They were Equity Theory, Expectancy Theory, Cognitive Evaluation Theory, Goal-Setting Theory, Control Theory, System Theory, Motivation Theory of X and Theory of Y and Social Cognitive Theory. Based on these contexts, the researchers selected three theories to be used as the foundation of the theoretical framework for this study.

Goal-Setting Theory explains why goals are central issues in even the most basic performance management systems and how they achieve organizational achievement and employee job satisfaction (Locke & Latham, 1990). There are five basic principles that allow goal setting to perform better. These include: clarity, challenge, commitment, feedback, and task complexity (Locke & Latham, 1990, 2002; Latham & Locke, 2007). As they worked to understand the core properties of effective goals, goal difficulty and goal specificity stood out as having the strongest effect on employees' job satisfaction. In particular, difficult and specific goals create motivation and job satisfaction for employees. These lead to have to higher performance when compared to vague and unclear goals (Locke and Latham, 2002).

Control Theory, because feedback is also a central issue in the essence of performance management and in the growing interest in organizational performance (Carver & Scheier, 2002). Armstrong (2009) explained that control theory focuses attention on feedback as a means of shaping behaviour. As people receive feedback on their behavior, they appreciate the discrepancy between what they are doing and what they are expected to do and take corrective action to overcome it. Feedback is recognized as a crucial part of performance management processes (Aguinis, 2009& Armstrong, 2009). Control theory helps in performance management by evaluating the output and its consistency with pre-defined sets of parameters (Barrows & Neely, 2012).

Expectancy theory (Vroom,1964) explains why individual behavior is aligned with organizational expectations and is applicable to all types of organizations.As Vroom cites Armstrong (2009) the expectance theory states that performance is a function of ability and motivation, as depicted in the formula: $\text{Performance} = f(\text{Ability} \times \text{Motivation})$. Expectancy Theory claims that people will be motivated to exert effort on the job when they believe that doing so will help them achieve the things they want (Vroom, 1964). Individual performance should always be aligned with organizational expectations for future achievement of identified goals (Salaman et al. 2005).

The above theories of PM, such as goal setting, expectancy, and control theories, support the concept of the performance management system. These theories are very much related to the practices of PM dimensions and job satisfaction of employees. Generally, these performance management theories (Goal Setting, Expectancy and Control Theories) are applicable in public and private universities to create job satisfaction. All of them may be relevant at the university management level, departmental or individual staff level.

2.3. Dimensions of Performance Management

The performance management process is built on the assumption that defining performance planning, performance implementation, performance measurement, evaluation and rewardable work agenda contributes to organisational success (Aguinis *et al.*, 2011). This research aims to examine the PM dimensions practices in Ethiopian universities as an integrated system, which comprises of five main PM ongoing processes: pre-requisite for performance management, performance planning, performance implementation, performance evaluation, and performance appraisal.

The performance pre-requisite is the primary stage of the performance management system (Aguinis 2005). There are two important requirements that are needed before a performance management system is implemented. These are: knowledge of the organization's mission and strategic goals, and knowledge of the job in question (Armstrong, 2009). Performance planning (PP) is the second most important step in the PM dimensions. Planning provides a framework by which an organization identifies its vision, where it wants to go, and how to achieve that vision (Gilley and Gilley 2003). The performance management process starts with performance planning and is the basis for an effective process. PP refers to the setting of performance expectations and goals for individuals and groups to channel their efforts towards organizational objectives (Noella et al., 2000). Performance implementation (PIM) is one of the critical parts of PM dimensions or components. Organizations could achieve their mission if there were clear PIM directions and strategies. Managing for performance is a process of developing programs, budgets, and procedures to implement organizational strategies and policies (Wheelen & Hunger, 2011). This is the process of directing, influencing, and motivating employees to perform essential tasks. Performance evaluation and review (PER) is one of the dimensions of PM that has been most often practiced in any organization. PER is the process in which activities and performance are monitored so that actual performance can be evaluated against what is desired (Armstrong, 2006). The performance is evaluated based on the standard that has been set and finds out the actual result and the gap (Cascio, 2000; De Waal, 2001; Armstrong, 2006). Performance Appraisal (PA) is a major component of PM dimensions. PA is a systematic appraisal and ranking of people by their supervisors at an annual review meeting, typically by clients or colleagues (Armstrong, 2009 & Flaniken, 2009).

2.4. Performance Management Practices and their Effects on Job Satisfaction

Performance management is interdependent with employee satisfaction. The participatory approach to performance management allows employees to respond in terms of their flexibility, cooperation, commitment, and eventually satisfaction (Torrington, 2008). PM is concerned with satisfying the needs and expectations of organizations' stakeholders-owners, management, employees, customers, suppliers, and the general public (Armstrong, 2006). Dessler (2003) suggested that performance management practices may include goal setting, worker selection and placement, performance appraisal, compensation, training and development, and career management. These can generally be termed as the ways and means through which a manager defines the employees' goals, employees' capabilities, and the employees' job satisfaction.

Some performance management practices, such as training and development, career development, and performance-related pay and rewards, appeared to satisfy employees, according to a (Mallaiah, 2008) study. Even though the rest of the performance management practices such as performance agreements, performance planning, managing performance

throughout the year, and reviewing performance did not seem to satisfy the employees or were not significant for employees' job satisfaction (Mallaiah, 2008). However, Robby (2010) noted that practices relating to performance management and organization results show association with employees' job satisfaction. Robby (2010) further indicated that PM practices are interdependent with employees' job satisfaction.

Mallaiah (2008) noted that PM practices should be based on the linkages of the key components such as performance planning, performance execution, performance appraisal, recognition and reward, and performance improvement on a continuous basis to ensure organizational effectiveness. Mallaiah (2008) concluded that the conducive and congenial physical, social, and psychological conditions for PM practices have the potential to enhance the job satisfaction of library professionals. Robson et al. (2005) state that the employee performance management process enhances employee satisfaction and vice versa. The study suggested that implementing performance management dimensions is likely to be effective in satisfying its staff. This indicates when employees perform well to achieve their goals, they derive satisfaction from this and this drives them to perform even better.

2.5. Conceptual Framework of the study

The conceptual framework as it has been seen below (Figure 2.1) is developed from the literature to identify the important elements that indicate the practices of PM dimensions and their influence on university performance achievements directly. It is used as a guide throughout this study and to develop the research design.

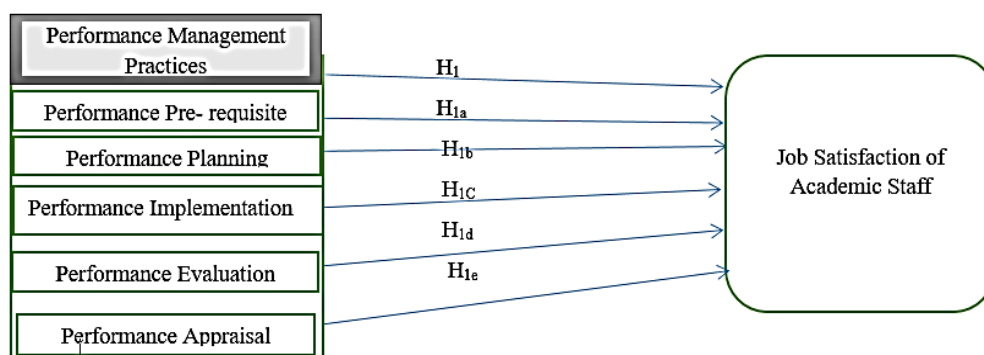


Figure one: Conceptual Framework

Source: Adopted from (Jain, 2017; Singh, 2013; Armstrong, 2006; Pulokas, 2009)

3. Research Methodology

3.1. Research Approach and Design

The researchers used mixed research approach and the descriptive survey and explanatory research design. In this study, the independent variables were found in the PM dimensions (PPR, PP, PIM, PER and PA). The dependent variable was the job satisfaction (payment, training and development, promotion, recognition, supervision and job security).

The coefficient question or model specification that the researcher formulated for the study was presented as follows.

$$JS = \beta_0 + \beta_1 (PPR) + \beta_2 (PP) + \beta_3 (PIM) + \beta_4 (PER) + \beta_5 (PAR) + e \dots \text{Model (1)}$$

Where β_0 , β_1 , β_2 , β_3 , β_4 and β_5 are the regression co-efficient

JS: Job Satisfaction

PPR: Performance Prerequisite,

PP: Performance Planning,

PIM: Performance Implementation,

PER: Performance Evaluation and Review,

PA: Performance Appraisal and e: error term.

The questionnaires were employed so as to obtain quantitative data from the academic staff. The questionnaire for PM dimensions was formulated around the general performance management processes or stages proposed by (Jain, 2017; Singh, 2013, Armstrong, 2006; Pulokas, 2009). The second part of the questionnaire was about job satisfaction (JS) issues. The Minnesota Satisfaction Questionnaire was adapted for the study and JS indicators were payment, training and development, promotion, recognition, supervision, and job security. The researcher measured job satisfaction items by adapting the Minnesota Satisfaction Questionnaire (MSQ) with a 22 item scale developed by Weirs et al. (1967).

3.2. Sampling Technique

For the purposes of this study, interval scales were used: a seven-point scale was used for the practices of PM dimensions and job satisfaction. Joshi, et.al (2015) argued that considering the reliability of the responses from participants, the 7 point scale may perform better compared to the 5 point scale, owing to the choice of items on the scale.

The target population consists of all the academic staff such as professors (lecturers, assistant professors, associate professors, and professors) from three public and two private universities who have gotten accreditation from HERQA in 2018. Probability sampling was employed to collect data from the academic staff using stratified and simple random sampling procedures to obtain the respondents for questionnaires. Systematic random sampling has been used while selecting three public and two private universities. Stratifying sampling was used to select colleges and departments. Participants were chosen from among academic staff, researchers, and department heads using simple random sampling techniques and the lottery method.

The researcher also employed a non-probability sampling technique using purposive sampling techniques to collect data through semi-structured interview questions. In this case, the researcher selected the respondents purposely from universities' academic management such as department heads and (research and coordination office and community service) since the data obtained from interview was believed to secure more reliable and valid data.

The researchers used Yamane's (1967) formula to determine the sample size because the behaviors of the participants (academic staff) have a homogenous nature. The sample size was determined by Yamane, 1967 simplified formula and presented as follows.

$$N = n / 1 + N e^2$$

Where: - n = sample size

N = total population

e = sampling error

· Sample size from the public university is calculated as follows.

$$n = \frac{N}{1 + N e^2}$$

Where: n = sample size

N = 2419

e = sampling error = 0.05

$$n = \frac{2419}{1 + 2419(0.05)^2}$$

$$n = \frac{2419}{1 + 2419(0.0025)}$$

$$n = \frac{2419}{1 + 6.047}$$

$$n = 343$$

Hence, the sampled respondents from the public universities academic staffs were 343. Sample size from the private university is also calculated as follows:

$$n = \frac{N}{1 + N e^2}$$

Where: n = sample size

N = 130

e = sampling error = 0.05

$$n = \frac{130}{1 + 130(0.05)^2}$$

$$n = \frac{130}{1 + 130(0.0025)}$$

$$n = \frac{130}{1 + 0.325}$$

$$n = 98$$

Hence, the sampled respondents from private universities were 98. Accordingly, the approximate sizes of questionnaire respondents from public universities were 343 and from private universities were 98 respondents. The total numbers of the sample of individual academic staffs were 441 (98+343).

3.3. Data Analysis Techniques

The researchers used inferential statistics (independent t-Test, Pearson correlation, and Hierarchical Multiple Regression Analysis) to analyze the quantitative data. Pallant (2013) stated that before the analysis of the data, different assumptions of the statistical techniques should be employed to examine multiple regression analysis. Therefore, assumptions such as sample size, multicollinearity, linearity and normality were checked.

4. Results and Discussions

This part of the study presented respondents' data and then was followed by data discussion and analysis. This section had three major parts. The first part presented the response rate, reliability and validity test. The second part presented data and examined based on the research objective, 'the effects of PM dimensions on JS' and lastly, there would be a comparison of the effects of PM dimensions on JS of academic staff between public and private universities.

4.1. Response Rate

441 questionnaires were distributed and of those, 343 questionnaires were distributed to public universities and 274 questionnaires were returned, which was 81.26% return rate. Moreover, 98 questionnaires were distributed to private universities' respondents and 81 questionnaires were returned, which was 83 % return rate. Totally, 355 questionnaires were returned, which was 81.97% return rate. From the returned 355 questionnaires, 48 questionnaires were discarded since there were questionnaires that were incomplete, outliers, and uniformly rated responses. Finally, 307 questionnaires were used for the study. Babbies (1986) said that 50% of the questionnaire return rate is adequate, 60% is good and 70 % is considered very well. This indicated that 81.26 % of the questionnaires were used by public universities and 83% of the questionnaires for private universities were applied for this study.

4.2. Validity and Reliability Test

4.2.1 Test for Validity and Reliability

The literature suggests various validation types. Out of these types of validity, the researcher used the content and construct validity to address the validity of the study. The content validity test was checked from consulting professors and scholars who had good knowledge of the subject and experience in PM dimensions and universities' performances from Ethiopian Civil Service University (ECSU) and they were consulted to get comments and feedback about the questionnaire and then the comments and feedback were incorporated. A pilot test was conducted to ensure the quality of the questionnaire. Based on the results of the pilot test, the researcher checked whether the questionnaires were reasonably understandable.

Table 4.1 Result of Confirmatory Factor Analysis

Measures	Factor Loading	Squaring of factor loading	Average Variance Extracted (AVEs)	Composite Reliability (CR)
PM Practices				
PPR	0.258		0.646	0.941
PP	0.694	0.482		
PIM	0.774	0.599		
PER	0.850	0.722		
PA	0.885	0.783		
Job Satisfaction Measures				
Pay	0.733	0.537	0.886	0.899
Training	0.815	0.664		
Promotion	0.885	0.783		
Recognition	0.822	0.675		
Supervision	0.073			
Job security	0.056			

Source: Researcher survey using SPSS, 2021

Construct validity is established during the analysis of the data (Thanasegaran, 2009). Construct validity can be assessed through convergent and discriminant validity. For this purpose, confirmatory factor analysis was used to assess the degree to which items were measuring the same concepts or variables. Thus, conformity factor analysis (CFA) was used to assess the

overall measurement. The cut-off point for the factor loading is 0.4 (Hair *et. al.*, 2006). The factor loading for performance pre-requisite, supervision, and job security has less than 0.4-factor loading. The factor loadings which were above the threshold of 0.4 were considered significant (see Annexed three). The convergent, divergent validity and composite reliability results are presented in Table 4.1.

4.2.2. Reliability Test

The table 4.2 depicted that the values of Cronbach's Alpha for each part of the questionnaire and the entire questionnaire. As it can be seen from the Table 4.2, for each items' value of Cronbach's Alpha was in the range between 0.784 - 0.981. This range was considered as high; the result ensured the reliability of each field part of the questionnaire. Reliability was checked and the results were presented in the following table 4.1.

Table 4.2. Reliability Test Result

No	Name of Processing Item	No of Items	Coefficient for each item	Coefficient for the group items
1	PM Practices	40		0.889
1.1.	Performance Pre-requisite (PPR)	5	.889	
1.2.	Performance Planning(PP)	7	.901	
1.3.	Performance implementation (PIM)	10	.904	
1.4.	Performance Evaluation and Review (PER)	8	.919	
1.5.	Performance Appraisal and Recognition (PAR)	10	.846	
2	University Performance Achievement (UPA)	14		0.924
3.	Job Satisfaction	21		
3.1.	Payment (Pay)	3	.899	
3.2.	Training and Dev't	3	.970	
3.3.	Promotion (Prom)	4	.981	
3.4.	Recognition (RCG)	4	.968	
3.5.	Supervision (SPV)	3	.943	
3.6.	Security (SCR)	4	.784	

Source: (Survey data, 2020)

4.2. Checking Assumptions for Multiple Regression Analysis

Before multiple regression analysis of PM dimensions and their effects on JS conducted, there should be some assumptions that needed to be checked.

Table 4.3. Multicollinearity for PM Practices and its Effect on JS

Model		Collinearity Statistics	
		Tolerance	VIF
	(Constant)		
	PPR	.879	1.138
	PP	.524	1.908
	PIM	.467	2.143
	PER	.355	2.817
	PAR	.336	2.972

Source: Survey SPSS data, 2020

These assumptions are multicollinearity, linearity, and normality. To detect multicollinearity, the researcher used the variance inflation factors (VIF) and tolerance impact. Based on this assumption, besides using the degree of correlation as a criterion to identify multicollinearity, it was checked using tolerance and VIF results. The following Table 4.3 also showed the result of tolerance and VIF for the PM practices and their effects on academic job satisfaction.

The result of the study indicated that all independent variables had tolerance value above 0.10 points which were from 0.336 to 0.879 points and VIF values are below 10. Therefore, one of the assumptions of not using the highly correlated independent variable in a multiple regression model was not violated PM practice and JS (Table 4.4).

The second assumptions were normality and linearity that were checked for multiple regression analysis. According to Hair, et al. (2010), normality refers to the shape of data distribution for an individual metric variable and its correspondence to the normal distribution. To test the variables for normality, graphical as well as statistical methods were applied (Tabachnick and Fidell, 2007& Green & Salkind, 2011). Thus, the histogram showed that the data were normally distributed and this study did not violate the normality assumption (see annex 3).

Linearity checking was other assumptions that was checked for multiple regression analysis. The linearity will give the researcher an indication of whether the variables are related in a linear (straight-line) or curvilinear fashion (Pallant, 2013& Green & Salkind, 2011). Based on this literature, the linearity for this study showed the positive relation of the PM practices and academic staffs' JS. It started from the left bottom and rose to the right top (see Annex 4).

Generally, the researcher tested multicollinearity, normality and linearity. Once, assumptions verified, the researcher could conduct multiple linear regression to interpret the inferential results. The interpreted outputs for multiple linear regressions are the beta weights, r^2 values (regression and coefficients), and F-value reported in the ANOVA (Green & Salkind, 2011). Based on this concept or literature support, the researcher used the R beta values, r^2 values (regression and coefficients to interpret outputs for multiple regression results.

4.3. Effects of PM Practices on Job Satisfaction

This section examined the correlation and regression analysis of PM dimensions and their effects on JS and would be followed by the comparison of the effect on public and private universities.

4.3.1. Correlation Analysis of PM Practices and JS

The researcher has set one hypothesis that revealed the relation between the practices of PM dimensions and their effect on academic job satisfaction. This major hypothesis is presented as follows.

H1. PM dimensions have significant and positive effects on academic staffs' job satisfaction in the selected universities

- H_{1a}. PPR has significant and positive effects on academic staffs' job satisfaction in the selected universities.
- H_{1b}. PP has significant and positive effects on academic staffs' job satisfaction in the selected universities.

H _{1c} . PIM has significant and positive effects on academic staffs' job satisfaction in the selected universities.
H _{1d} . PER has significant and positive effects on academic staffs' job satisfaction in the selected universities.
H _{1e} . PA has significant and positive effects on academic staffs' job satisfaction in the selected universities.

Table 4.4 below describes a detailed correlation analysis with various variables such as performance pre-requisite, performance planning, performance implementation, performance evaluation and review and performance appraisal and JS of the academic staffs.

Table 4.4: Pearson Correlation Analysis for PM Practices and JS

Correlations								Sig. (1-tailed)
		JS	PPR	PP	PIM	PER	PAR	
Pearson Correlation	JS	1.000						.000
	PPR	.182	1.000					.000
	PP	.510	.346	1.000				.000
	PIM	.587	.198	.604	1.000			.000
	PER	.633	.216	.579	.634	1.000		.000
	PA	.707	.208	.571	.668	.780	1.000	.000
	PM	.701						
Dependent variable: JS								
Predicative variables: PPR,PP,PIM,PER and PA ,PM								

Source: (Data from SPSS, 2020)

From the above correlation matrix Table 4.4, it is evident that PM dimensions had a significant positive correlation with academic job satisfaction. The correlation values ranged between the practices of PM dimensions jointly and JS was from 0.182 to 0.701. There were associations of independent variables (PM dimensions) among themselves which was ranged from 0.216 to 0.780

4.3.2. Regression Analysis for the Effects of PM Practices on JS

There were different ways of presenting the results of multiple regressions. As a minimum, the researcher should indicate what type of analysis was performed (standard or hierarchical), standardized (beta) values if the study was theoretical, or unstandardized (B) coefficients (with their standard errors) if the study was applied. If the researcher performed a hierarchical multiple regression, he/she should also provide the R square change values for each step (Field, 2009 & Pallant, 2013). Hierarchical multiple regression was used to assess the ability of two variables such as academic staffs' job satisfaction as the dependent variable and the practices of PM dimensions (PPR, PP, PIM, PER and PA) as independent variables. The following table indicated hierarchical multiple regression analysis of PM practices and JS of the academic staffs.

Table 4.5. Model Summary for PM practices and JS

Model	R	R Square	Change Statistics	
			R Square Change	Sig. F Change
1	.182 ^a	.033	.033	.001
2	.510 ^b	.260	.227	.000
3	.619 ^c	.383	.123	.000
4	.683 ^d	.467	.084	.000
5	.732 ^e	.536	.070	.000

Source: (Survey data, 2020)

In the model summary table, five models were entered step by step. PPR was entered as an independent variable in model one, while JS was entered as a dependent variable. Model two included PPR, PP and JS. Model three included all the variables that were entered in both block one, two (PPR, PP) and added PIM. Thus, model three consisted of (PPR, PP, PIM, and JS); model four included all the variables that were entered in model three plus PER and lastly, model five included all the variables that were entered in all blocks (PPR, PP, PIM, PER, PA, and JS). After the variables in model 1 (PPR) had been entered, the overall model explains 3.3% of the value. Model 2 as a whole explained 26% of the contribution for academic staff' job satisfaction, whereas PP alone had a 0.227 (22.7%) contribution to JS, keeping other factors constant. Model three explained 38.3 percent (0.383100) of the JS in total. PIM alone had a 0.123 (12.3%) contribution to the respondents' JS. Then model 4 explained as the whole 46.7% and PER alone has 0.084 (8.4%) and the last model variables (PPR, PP, PIM, PER, and PA) are explained as the whole 53.6% and PA alone has 0.070 (7%), keeping other factors constant.

These findings were consistent with previous research conducted. Aysha (2015) made research on performance management practices and their impact on banks' performance in Pakistan. Aysha's (2015) research findings confirmed that there was a positive relationship between performance management systems and employees' job satisfaction. Wairimu (2015) made research on the relationship between the independent variables (Performance management systems) and the dependent variable (Employee performance). He pointed out that the R square value has a strong relationship between the performance management system and job satisfaction. Robby (2010) noted that the practices relating to performance management show a positive association with employees' job satisfaction. Robson et al. (2005) state that the employee performance management process enhances employee satisfaction and vice versa.

The coefficient regression analysis result had a statistically positive or significant effect on the practices of PM dimensions jointly and their effects on the JS of the respondents. Table 4.6 indicated that the multiple regression analysis results for PIM, PER, and PA had a positive significant effect on academic job satisfaction, and PPR and PP did not have a significant effect on job satisfaction for academic staff.

Table 4. 6 Coefficients Regression Analysis for PM practices and JS.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.278	.256		4.997	.000
	PPR	.000	.046	.000	-.003	.998
	PP	.070	.046	.083	1.523	.129
	PIM	.135	.053	.146	2.543	.011
	PER	.091	.044	.138	2.092	.037
	PA	.333	.050	.455	6.721	.000
a. Dependent Variable: JS						
b. Independent variables: PPR,PP, PIM, PER and PA						

Source: Survey Data, 2020

Generally, the data analysis and discussions of this study showed that there was a positive and significant relationship between the practices of PM dimensions together and their effects on job satisfaction of the academic staff at the selected universities. The respondents indicated their overall job satisfaction in relation to the performance of education, research work and community service of their department. These findings were triangulated from open-ended and semi-structured interviews. Both PU and Pri.U interviewees said that they were satisfied with their job and they confirmed their overall job satisfaction in relation to the performance of education, research work and community service of their department. This finding was supported by different studies. (Kagarri et al, 2010) stated that there was a positive relationship between practices of PM dimensions and academic staff' job satisfaction. They also argued that PM practices facilitated employees' job satisfaction and enhanced organizational performance by focusing on the team and employees' attitudes.

Table 4.7. Summary of the Results for PM Dimensions and their Effect on JS

Hypotheses	Standardized coefficient	T-values	P<0.05	Results
PPR → JS	.000	.003	.998	Rejected
PP → JS	.083	1.523	.129	Rejected
PIM → JS	.146	2.543	.011	Supported
PER → JS	.138	2.092	.037	Supported
PA → JS	.455	6.721	.000	Supported
PM → JS	.701	17.15	.000	Supported

Source: (Survey Result from SPSS, 2020)

4.5. Comparing PM Practices and their Effects on JS in PU and Pri.U.

This section of the study showed the comparison of practices on PM dimensions and their effects on JS of academic staffs in public and private universities. The succeeding tables showed on the Independent Sampling t-Test, Pearson correlation, and multiple regression analysis (independent sampling t-test and model summary) results that were found in PU and Pri.U. This part of the study examined the hypotheses 'There are significant similarities of the practices PM dimensions and their effects on JS between PU and Pri.U.'

4.5.1. Independent Samples Test

An Independent-samples t-test was conducted to see the significance of the relationship between the independent (PM practices) and dependent job satisfaction. The Independent-samples t-test has been used for analyzing the comparison of factors of PM dimensions between private and public universities, to find out whether the difference between two samples was significant or not.

Table 4.8 Independent Samples Test

Independent Samples Test										
PM Dimensions		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the difference	
									Lower	Upper
PPR	EVA	.136	.712	-.150	305	.881	-.0138	.0922	-.1954	.1676
	EVNA			-.139	122.95	.890	-.0138	.1000	-.2112	.1842
PP	EVA	.433	.511	.262	305	.794	.0314	.1199	-.2046	.2674
	EVNA			.273	153.36	.785	.0314	.1149	-.1956	.2585
PIM	EVA	.236	.627	2.100	305	.037	.2274	.1082	.0144	.4404
	EVNA			2.271	165.17	.024	.2274	.1001	.0297	.4251
PER	EVA	4.691	.031	-1.02	305	.308	-.1558	.1525	-.4558	.1443
	EVNA			-1.12	166.88	.269	-.1558	.1404	-.4329	.1214
PA	EVA	.132	.717	.305	305	.760	.0421	.1378	-.2293	.3134
	EVNA			.308	143.45	.759	.0421	.1367	-.2282	.3123
Note: EVA means Equal variances assumed EVNA means Equal variances not assumed										

Source: Computing SPSS result, 2021

The significance values for Levene's test were larger than .05 except PER (Table 4.8). The researcher concluded that the variance in mean for the practices of PM dimensions were not significantly different between public and private universities. If the value in the significant (2-tailed) column is equal to or less than .05, there was a significant difference in the mean scores on the dependent variable for each of the two groups. If the P-value is above .05, there was no significant difference between the two groups (Pallant, 2013). These findings were triangulated from open-ended and semi-structured interviews. Both PU and Pri.U interviewees said that they were satisfied with their job and they confirmed that the profession was the best of all other professions.

4.5.2. Regression Analysis for PM Practices and JS

Table 4.9: Model Summary for PM Practice and JS Relation

Model Summary						
Types of University	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
PU	1	.735 ^a	.540	.530	.54233	.000
PriU	1	.737 ^c	.543	.513	.52227	.000
a. Predictors: (Constant), PA, PPR, PP, PIM, PER						
b. Dependent Variable: JS						
c. Predictors: (Constant), PA, PPR, PIM, PP, PER						

Source: (Survey Data from SSPS result, 2020)

Table 4.9 revealed regression analysis for practices of PM dimensions and their effects on job satisfaction in public and private universities. The value of R^2 was 0.540, which indicated that PM practices could account for 54% of the variation in academic staffs' job satisfaction in public universities. The remaining 46 % was not explained which means that the rest 46% of the variation of JS was related to other variables which were not depicted in the model. The value of R^2 for Pri.U was 0.543, which indicated that PM practices could account for 54.3 % of the variation in academic staff's job satisfaction and which was nearly the same result to the PU. The remaining 45.7 percent was not explained which means that the rest 45.7 percent of the variation of JS was related to other variables which were not depicted in the model two. This variance has highly significant as indicated by $P < 0.000$ for private universities.

Generally, PM dimensions jointly had a positive and significant contribution to academic staff's job satisfaction for both PU and PriU. The hypothesis that there were significant similarities of the practices of PM dimensions and their effects on JS between PU and Pri.U. was accepted generally for both public and private universities.

5. Conclusions

This study used the practices of PM dimensions (PPR, PP, PIM, PER, PA) as independent variables, and job satisfaction of academic staff was used as the dependent variable. The researcher used Pearson correlation and hierarchical multiple regression analysis to indicate the association and effect of PM practices on UPA. The finding showed that the practices for the PM dimensions (PPR, PP, PIM, PER and PA) were positively associated with job satisfaction. The hierarchical multiple regression analysis (step by step) results indicated the effect of each predicate variable (PM dimensions) on JS of academic staff. This study also showed the comparison of PM practices and their effects on PU and Pr.U. There was a positive association between PM practices and JS in both public and private universities.

Based on the analyses and major findings, this study has established the following conclusions. This study proved that there was a positive, significant relationship between PM dimensions (and each of its dimensions) and JS and the strength of the correlation were somehow strong, and all the alternative hypotheses, therefore, were supported. Overall, the findings suggested that the academic staff of both public and private universities had a moderate level of general job satisfaction. They had a different level of job satisfaction, and these might require different kinds of leadership styles and motivational mechanisms for optimum

organizational performance management practices to achieve the goals. At the same time, the universities' management needs to probe into the low general satisfaction among their academic staff.

Finally, the study also concluded that the existing practices of PM dimensions (planning, implementation, evaluation and reviewing, appraisal and evaluation of performance) enhanced the academic staff job satisfaction and then the achievement of universities' performances in education, research and community service.

Limitations and Further Research

The present study has several limitations that deserve review. First, the study was conducted on the assumption that the practices of PMS such as performance pre-requisite, performance planning, implementation, evaluation and review, performance appraisal are the independent variables that influence the dependent variable job satisfaction of academic staff. There would be other independent variables which could satisfy Ethiopian public and private universities' academic staff, such as economic, legal issues, governance issues, and leadership styles. Second, the results of this study must be qualified in terms of the samples that were used. Extensive sampling was beyond the resources of the researcher. To enhance external validity, future research efforts should obtain a representative sample from several universities, ideally using longitudinal research design to establish causal relationships among the variables.

Third, since only academic staff were used as samples in this study, this may raise the issue of generalisability of findings. Non-academic staff remains an open empirical question. Additional replication using a more careful comparison by types of employees and types of occupation would be useful.

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