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Research Pape

## IMPACT OF HRM PRACTICES ON EMPOLYEE PERFORMANCE IN PUBLIC SERVICE ORGANIATIONS IN ETHIOPIA

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#### **ABSTRACT**

The purpose of this study is to analyse the relationship between HRM practices and employee performance in public service organization namely Amhara Regional Civil Services Commission, Ethiopia. It will be interesting to know whether the variables behave the same way they do in a private sector organization. In its attempt, this paper considers the role of employee Social Exchange Theory (SET) and Ability, Motivation, Opportunity (AMO) theory framework. For this purpose data were collected through structured questionnaire from a sample size of 257 managerial and non-managerial employees working in different offices under ANRS Civil Service Commission. The PLS-SEM 3 was used to analyze the data to determine the impact of HRM practices on employee performance. The result shows that employee engagement in the form of training & development and opportunity for career development have significant positive impact on employee performances. The perceived organizational support in the form of performance appraisal, compensation and benefits and leadership practices have also shown significant positive impact on employee performance. However there is no evidence for HRM practices to have direct influence on the performance; it is mediated through employee engagement and perceived organizational support (POS).

#### INTRODUCTION.

The best HR practices include providing security, hiring right people, self-managed and effective teams, fair and performance based -compensation, training in relevant skills, creating a flat and egalitarian organization and making information easily accessible to those who need it when these best practices are combined they form bundles which create synergies. They become the sources competitive advantage to the organization. Human resources management in the Ethiopian civil service is based on a number of administrative rules and regulations that have served governments in the last four decades. As such, the management of the Ethiopian civil service is characterized by tactical management, entangled with procedures the serve public authorities for short-term decisions. This paper is an attempt to relate the existing civil service management system in Ethiopia to strategic management, which, as confirmed by several studies, is non-existent in the Ethiopian civil service.

The paper examines the implications of this absence of strategic management for human resources management in the Ethiopian civil service. In this connection, problems associated with human resources need assessment job analysis and design, staff selection and associated with human resources need assessment job analysis and style, staff selection and recruitment, career and succession plans, employee transfer, promotion and training are considered in addition, the performance evaluation, remuneration, appeal and grievances systems currently in place, at federal and regional levels, are looked at, and some prominent organizational and management are discussed. It is hoped that this paper would help provoke a discour se on the strategic problems of and potential solutions to these in the Ethiopian civil service. The purpose of this study is to analyse the relationship between HRM practices and employee performance in public service organization namely Amhara Regional Civil Services Commission, Ethiopia. It will be interesting to know whether the variables behave the same way they do in a private sector organization. In its attempt, this paper considers the role of employee Social Exchange Theory (SET) and Ability, Motivation, Opportunity (AMO) theory framework.





#### **REVIEW OF LITERATURE**

A number of studies are found in HRM practices and their impact on organizational performance. Huselid (1995) established that high involvement HRM practices have positive relationship with productivity, corporate performance and financial performance. Effective selection and recruitment practices were found to have positive relationship on top- class performance according to Harel and Tzafrir(1996) and Delaney & Huselid (1996). Authors like Arthur(1994), Huselid(19960 found effective recruitment practices have positive influence on training and development. The HR systems could significantly improve the performance of organizations when they are aligned with right type of production strategy ( Youndt et al). Birdi et al (2008) ,in their study on the impact of HRM practice on productivity concludes that employee empowerment and extensive training positively contributes for the organization. Khan(2010) evaluated the effects of human resources management on organizational performance in oil and Gas industry in Pakistan. Similarly a significant positive relationship was found between compensation and promotion practices and perceived employee performance in a study conducted among University teachers in Pakistan (Shahzad et al., 2008). Even in small businesses the HRM practices play a critical role in deciding organizational performance. Collins et al (2005) investigated the small businesses and found that HRM impact employee performance significantly.

However Guest (2002) argued that impact of HRM on performance depends on workers response to HRM activities. Hence the perceptions of HRM practices by the employee cannot be ignored. If the perception is positive the impact will be positive and vice versa. Wright et al (2003) contended that employees will make discretionary effort in commitment to the organization if proper HRM is in store. Marwat et al., (2009) examined the impact of HRM on perceived employee performance in the telecom sector in Pakistan and found existence of high degree of correlation between the variables. Baloch et al (2010) analyzed the impact of compensation, promotion, performance evaluation on perceived performance. The results of correlation indicated a significant and positive relationship among them. Another dimension of HRM is training and development. Doyle (1997) found that training and motivation has positive impact on performance of employees. Anything that offers learning experience is training and it is focusing on fixing a specific issue (Paul and Anantharaman (2003)). Training leads to increase motivation, which in turn, contributes for productivity of the organisation.

There is guite a number studies on perceived organizational support (POS) in recent times. Rhoades & Eisenberger (2002) conducted meta-analysis covering 70 POS studies carried out through 1999. They reported finding of a highly statistically significant relation between POS and performance. More recent meta-analytic Kurtessis et al,2015) found consistent positive relationship between POs and organizational performance. Shoss et al., (2013) proposed abusive supervision will result in negative valuation by employees and consequently they withhold positive contributions to it. Neaves and Eisenberger(2012) found perceived organizational support was positively related to failure-related trust among subordinates and supervisors. In order to understand the direction of association between POS and extra role performance Chen et al (2009) assessed POS and extra role performance 2 times separated by a 3 year interval among 199 employees and they found positive association between POS and extra performance. Similar inferences were reached by studies made by Hayton et al(2006), Lynch et al(1999)Eisenberger Et al(1986). Social Exchange Theory (SET) explains the relationship between POS and productivity. Many authors have conducted their studies in the SET framework. For example, Cropanzano & Mitchell (2002), Tepper et al (2004), Harvey et al (2007) analyzed job performance, employee attitudeand psychological wellbeing respectively. As the employees feel valued their tendency to stay at the organization ,to move forward, to initiate and implement strategies will increase.

In recent research the concept of employee engagement has become a widely researched one. The level of commitment and involvement an employee has towards an organization contributes to the success of the organisation. Employee engagement initiative has a direct impact on the organizations' productivity. The impact of engagement (or disengagement) can manifest itself through productivity and organizational performance, outcomes for customers of the organization, employee retention rates, organizational culture, and advocacy of the organization and its external image (Schaufeli and Bakker 2008). The engaged employees adds lot of meaning to their affiliation with their organization (Bowen &Ostroff, 2004). With regard to pay and remuneration authors like Bucking ham and Coffman (2005) stated that mere bringing pay to market levels is not sufficient to, order maintain employee engagement. Saks (2006)argues that employees will engage themselves in different degrees and in response to the resources they receive from their organisation. According to Mone and London(2010) organization must work to develop and nurture engagement because it is the barometer that determines the association of employee with organization. A positive association of employee engagement with individual and organizational performance had been found in the studies by Nazir and Islam(2017), Hansen et al(2014) .. Employee engagement has been conceptualized differently by different authors. For example, Schaufeli et al ..(2002)considers EE as a positive ,full of energy and job related state of mind with vigor and





dedication. Another aspect of the impact on HRM is its impact on employee performance (EP). Significant literature support is available for the positive association HRM and employee productivity. For example, Mathis et al (2009) and Gibson (2012) have studied link between HRM and employee performance and found significantly positive association between them. We come across a number of studies on the effect of perceived organizational support on several employee behaviors. In their study ,Hassan et al (2014) found POS significantly moderated the relationship between deep acting and job performance. Hur et al (2015), Duke et al (2009) established that employees' work efforts enhances their job performance. POS is that the extent to which employees perceive that the organization values their contribution and care about their well beings. (Guan et al. (2014) Declarative knowledge, procedural knowledge and motivation are the three factors in employee performance which makes them perform better than others.

There is a direct relationship between poor perception about organizational practices and disengagement when they don't have POS. Prior research (e.g., Shantz et al., 2014; Hur et al., 2013; Chen et al., 2012) inferred negative not likely to exert poor out comes as other organizational resources. Chin (1998), Hair et al., ((2013) have shown method by which one can get results in structural equation modelling. Wong, Ken Kwong-Kay. (2013) has described how to use PLS-SEM in structural equation modeling.3.ObjectivesofthestudyThe general objective of this study is to understand the impact of HRM practices in public administrative organization namely ANRS Civil service bureau. The specific objectives are as follows. The study aims

- 1. to study the impact of HRM practices on employee performances in ANRS
- 2. to study the relationship between HRM practices on Employee engagement (EE)
- to study Impact of HRM practices on POS
- 4. to understand the effect of POS on employee performance
- 5. to understand the effect of EE on employee performance
- 4. Hypotheses development

Human Resource Management Practices

HRM practices interact in predicting firm performance, such that HRM systems consisting of practices that enhance workforces' ability, motivation, and opportunity that lead to higher organizational performance. From the review of literature researcher identified three major HR practices: Recruitment and Selection, Performance Appraisal, and Career Development (Cianni and Wnuck, 1997; Paul and Anantharaman 2003). This also includes job description, performance appraisal, and compensation. John Delery and Nina Gupta(2016) test alternative conceptualizations of the relationship between systems of human resource management (HRM) practices and organizational effectiveness. The authors describe a framework suggesting a complex relationship between HRM practices and organizational effectiveness, test this approach empirically in a large sample of US motor carriers, and compare the results to those derived using other approaches prevalent in the strategic HRM literature. The results support the general hypothesis that HRM practices enhance organizational effectiveness, provide some evidence that HRM practices can enhance each other's effectiveness, and underscore the value of theory driven methodological approaches.

H1: HRM practices positively influence employee performance

H2: HRM practices positively influences employee engagement

Perceived organizational support (POS)

As already mentioned perceived organizational support (POS) is the degree to which employees believe that their organization values their contributions and cares about their well-being and fulfills socioemotional needs. [Eisenberger et al (1986)] POS is generally thought to be the organization's contribution to a positive reciprocity dynamic with employees, as employees tend to perform better to reciprocate received rewards and favorable treatment. Research has demonstrated that employees are differentially committed to multiple foci such as top management, supervisors, and coworkers (Becker, 1992; Mathieu &Zajac(1990); Reichers, 1986). This multidimensional approach to organizational commitment suggests that commitment with the organization as a focus should be more highly related to positive discretionary actions on the part of the organization than positive discretionary acts attributable to other foci such as the supervisor (Reichers, 1985). (Shore, L.M. & Shore, T.H. (1995)) says that in order to meet socioemotional needs and to assess the benefits of increased work effort, employees form a general perception concerning the extent to which the organization values their contributions and cares about their well-being. Such POS would increase employees' felt obligation to help the organization reach its objectives, increase their identification with the organization, and contribute to their expectation that improved performance would be rewarded. Behavioral outcomes of POS would include





increased in-role and extra-role performance, increased organizational commitment, and decreased withdrawal behaviors such as absenteeism and turnover.

H3: HRM practices positively influences POS

Behavioral outcomes of POS include increases in in-role and extra-role performance and decreases in withdrawal behaviors such as absenteeism and turnover. Organizational support theory (OST) proposes that employees form a generalized perception concerning the extent to which the organization values their contributions and cares about their well-being (perceived organizational support, or POS). This impacts the employee performance.

H4: POS positively influences employee performance

#### 2.1 Employee engagement

Employee Engagement and Organizational Performance Employee engagement is a critical ingredient of individual and organizational success. It predicts employee outcomes, organizational success, and financial performance. The impact of engagement (or disengagement) can manifest itself through productivity and organizational performance, outcomes for customers of the organization, employee retention rates, organizational culture, and advocacy of the organization and its external image (Schaufeli and Bakker 2008). Further, Employee engagement is a powerful concept that organizations can utilize to improve many of their business functions, including safety performance. The degree of employee engagement is directly related to addressing the six fundamental elements above and the level of involvement that employees are given in managing their work processes, practices, and activities. Some of the ways that employees can become involved in addressing the safety of the work in which they are going to be engaged may include participating in production goal assessment, having input into planning the work, assessing the risk, evaluating the procedures, suggesting possible practice methods, addressing logistics, selecting risk mitigation techniques, having the "right" information, etc. Of course, this will require that the workforce be capable, skillful, knowledgeable, and motivated. The organization will have to have selected the "right" workers as well as supervisors, have staffs that are knowledgeable of the operational functions, and have a deep understanding of human nature. They will also have to have an enlightened leadership, a culture and climate that foster and support engagement, and integrated and aligned organizational and operational systems. There has to be robust and open communication, fair treatment, and feedback as well as opportunity for growth and development. The degree to which these aspects are implemented and function seamlessly will determine the level of engagement and the outcomes that drive the organization's success.

AMO theory stresses that employee' abilities, motivations, and opportunities contribute to organizational performance; this is an integrating perspective illustrating why and how leaders and strategic HRM practices promote firm performance. Human resource practices are source of capabilities that allows firms to learn and capitalize upcoming opportunities that determines how firms compete. The organization performance depends to the extent employee display discretionary behaviors of the employees. The discretionary behaviors of employees are result of the extent of engagement levels of the employees. The employee benefitted by the organizational practices and resources may commits to react positively in kind and repay in some form to the organization. The reciprocity levels of employee perceptions over practices are by engaging in behaviors directed at the organization. Within Social Exchange Theory, engaged employees feel an intrinsic obligation to be socioemotionally attached to the source of engagement namely, their work and their employing organization. The engaged employees adds lot of meaning to their affiliation with their organization.

H5: Employee engagement positively influences employee performance

#### DATA AND METHODOLOGY. 3.

ANRS Civil Service and Human Development Commission, has been chosen because it is the major public service provider in Amahara region. It has its offices in all cities and villages in this region. It directly deals with people. The nature of the present study needs both primary and secondary data.. The primary data is collected from employees and experts working in public organizations under the ANRS Civil Service and Human Development Commission. While secondary data is collected from documents developed by public and governmental organizations, articles, reports, and directives developed on human resource planning, job analysis, job description, job specification and performance. There are 45 regional offices of ANRS Civil Service Commission in the region. Out of total number of bureau, 30 % were selected. The population of the survey constituted the management and non-management staff of Civil services department of Amhara Region. Ethiopia. Using Yamane formula, the sample size was determined. This sample size fulfills the requirement for running the partial least square model. 280 structured questionnaires were distributed and 257 usable





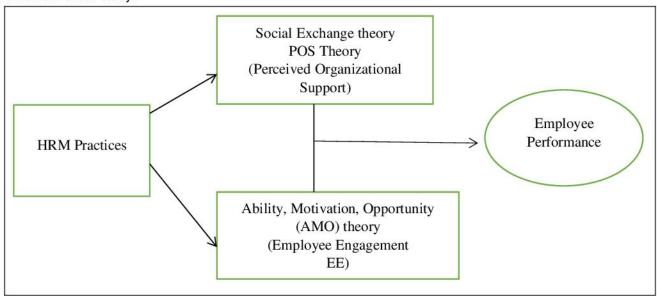
questionnaires were received. The response rate was 91.4%. This forms the base sample of the study. Data were collected during one month period in May 2019.

#### RESEARCH METHODOLOGY

Existing measurement scales have been used and all the selected scales are English-based. The survey questionnaire comprises four sections i.e. employee engagement, HRM practices, POS and employee performance and also demographic information of respondents. A total of sixteen items scale representing four aspects namely employee engagement, perceived organizational support (POS), HRM practices, and employee performance has been adapted. This study aims at exploring the impact of HR practices in public sector organizations with special reference to ANRS Civil Services and Human development Commission. Using a Survey data from 258 valid responses collected from the employees of these organizations PLS-SEM algorithm was employed to test the proposed model. Further SPSS was used to examine the mediating effects of intermediate variables considered in this study.

#### 4.1 The Model development

Organizations need to have competent human resource to achieve the organizational objectives. They have to undertake more serious and realistic preparations on human resource planning, job analysis, recruitment and selection. From the policy making point of view it will be useful to know how much the organizations are adhering to rules and principles of recruitment and selection procedures. The following diagram shows the theoretical framework of the study.

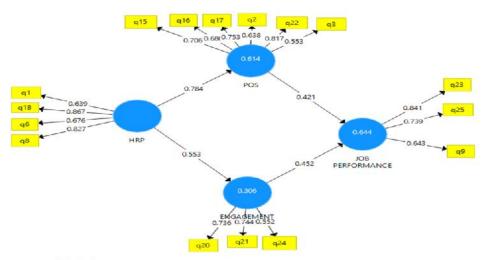


The PLS-SEM3 algorithm was used to estimate the proposed model using two step method. First, we estimate the measurement model to examine reliability and validity of the instrument and then structural model is estimated to test the hypotheses. Because of the complexity of the model (paths and indicators), PLS-SEM is suitable for this research. Further, PLS-SEM is suitable for this study as it is less restrictive on sample size and data distribution. (Eastin et al(2007); Johnson & Indvik(2003)). It has been indicated the PLS estimation requires samples 10 times the largest number of structural paths directed at a particular construct in the model.( Thompson et al(1995) and the same in this study met necessary conditions for using PLS estimation. In addition to that, direct effect and indirect effects of the model were estimated.





## 4.2 Path Analysis



#### 4.3 The Measurement Model

Prior to estimating the path coefficients and effect size in the structural model, the indicator reliability, internal consistency, discriminant validity and convergent validity of the measurement model were examined to ensure that they are satisfactory (Wong, 2013). Indicator reliability was checked to outer loadings for all items of latent variables. It was found that all variables have loadings between 0.6 and 0.85 satisfying minimum threshold suggested by Hair et al., (2013) The estimated values are furnished in Tab.1.The convergent validity was then assessed by examining the values of average variance extracted AVE (Fornell & Lacker, 1981). Bagozi and Yi (1968) suggested that the AVE threshold level of 0.5 is an indicator of convergent validity. All the variables under consideration exceeded this level as indicated in table.1. Next the composite variability was examined. The goal of a reflective model is to ensure the reliability and validity of the construct measures and to provide support for the suitability of their inclusion in the path model (Asgari (2016). Furthermore, composite reliability (David, 2016) is a preferred alternative to Cronbach's alpha as a test of convergent validity in a reflective model. Composite reliability varies from 0 to 1, with 1 being perfect estimated reliability (David, 2016) In an exploratory model, composite reliabilities should be equal to or greater than 0.6 Chen(1998). When modeling for confirmatory purposes, composite reliabilities should be equal or greater than 0.7, while 0.8 is considered good for confirmatory research (David, 2016). Composite reliability for the reflective constructs is provided in Table 3. The composite reliability values for all the b.1.constructs were found to be greater than 0.7 indicating good level of internal consistency (Andreassen et al (2014). A threshold level of 0.6 or higher was indicated by Lim(2002) to demonstrate a satisfactory reliability by not exceeding the 0.95 level. The results are presented in Tab.1a

#### 4.4 The Measurement Model

Table.1: Outer loadings

|     | Employee   | HRP.  | Employee    | Perceived Organizational                |
|-----|------------|-------|-------------|---|
|     | Engagement |       | Performance | Support                                 |
| Q1  |            | 0.659 |             | • |
| Q15 |            |       |             | 0.706                                   |
| Q16 |            |       |             | 0.680                                   |
| Q17 |            |       |             | 0.753                                   |
| Q18 |            |       | 0.867       |   |
| Q2  |            |       |             | 0.658                                   |
| Q20 | 0.736      |       |             |   |
| Q21 | 0.744      |       |             |   |
| Q22 |            |       |             | 0.817                                   |
| Q23 |            |       | 0.841       |   |
| Q24 | 0.6552     |       |             |   |
| Q25 |            |       | 0.739       |   |
| Q3  |            |       |             | 0.653                                   |
| Q6  |            | 0.676 |             |   |
| Q8  |            | 0.651 |             |   |



Table 1a: Reliability Measures

|  | Cronbach's<br>Alpha | rho_A | Composite Reliability | Average Variance<br>Extracted (AVE) |
|--|---------------------|-------|-----------------------|-------------------------------------|
| Employee<br>Engagement                 | 0.612               | 0.617 | 0.721                 | 0.511                               |
| HRP                                    | 0.751               | 0.754 | 0.842                 | 0.575                               |
| Employee<br>Performance                | 0.691               | 0.698 | 0.788                 | 0.556                               |
| Perceived<br>Organizational<br>Support | 0.783               | 0.785 | 0.848                 | 0.502                               |

The discriminant validity was assessed to examine the extent to which each construct is empirically distinct from other constructs in the Structural model. The discriminant validity is met for the research as the square roots of AVE for all the variables are larger than the corresponding LVC as indicated in the diagonal matrix in bold. This satisfies Fornell-Larcker Criterion. This is shown in table.2

Fornall-Larcker Criterion Discriminant Validity

|  | Employee<br>Engagement | HRP   | Employee<br>Performance | Perceived<br>Organizational<br>Support |
|--|------------------------|-------|-------------------------|--|
| Employee<br>Engagement                 | 0.714                  |       |                         | 70                                     |
| HRP                                    | 0.553                  | 0.759 |                         |  |
| Employee<br>Performance                | 0.692                  | 0.597 | 0.746                   |  |
| Perceived<br>organizational<br>Support | 0.687                  | 0.754 | 0.732                   | 0.696                                  |

All the results presented above for the measurement model prove that the model has a good indicator reliability, internal consistency, convergent validity and discriminant validity. Thus, it can be inferred that the constructs of the model are statistically distinct and we can proceed to estimate and test the structural model

#### 4.5 The Structural Model

After examining the measurement model, we have to evaluate PLS-SEM results for the structural model. Standard assessment criteria include the statistical significance and relevance of the path coefficients, the coefficient of determination and blindfolding cross validated redundancy measure Q2 . The values were calculated. They are shown in the subsequent tables.

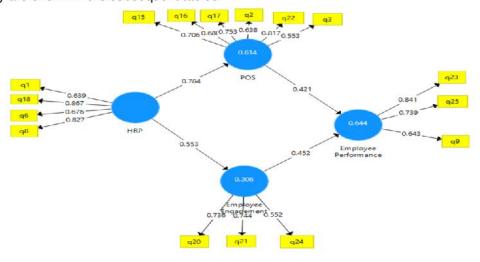


Fig.2





#### 4.6 Structural Path analysis

The Figure 2 presented above shows the path analysis. The relationship between constructs has been determined by examining their path coefficients and related t-statics via bootstrapping procedure. The path coefficient shows that all the four structural model relationships are significant, confirming the hypothesis proposed in the research on construct relationship confirming the hypothesis proposed in the construct relationship. The results of the PLS structural model support to infer that the HRP has the strongest effect on POS(β=0.784 ,P<0.001) confirming hypothesis 3. The HRP has reasonably good effect on employee engagement (ß=0.553, P<0.001). This result confirms hypothesis 2. Perceived Organizational Support found to have positive influence on employee performance (β=0.421, P<0.001) confirming hypothesis 1. The employee engagement positively influence employee performance. The path coefficient associated with EE to EP was found to be β=0.452 and P<0.001, thereby confirming hypothesis 4. These results confirm that all the constructs are supported.. The findings of PLS-SEM showed that all the HRM practices namely career advancement, job security and performance feedback were positively and significantly related to employee engagement which is consistent with SET. It indicates that the presence of proper HRM practicessystems in the work-place gives strong signals to their employees that they are valued, appreciated and recognized within the organizations. Similarly the positive and significant relationship found between HRM practices and POS and that of HRM and Employee performance is consistent with AMO theory. Regarding the total indirect effect, HRM practices positively influences employee performance with POS and EE as the mediating variables. As per the estimated relationship in which the \( \beta = 0.580, \text{ P} < 0.001, \text{ confirms the hypothesis that HRM practices positively and} \) significantly influence employee performance.

Table 3: Path Analysis

|          | Original<br>Sample | Sample Mean | Std Deviation | t staistic | Р     | Inference |
|----------|--------------------|-------------|---------------|------------|-------|-----------|
| HRP->EE  | 0.553              | 0.553       | 0.046         | 12.012     | 0.000 | Accept    |
| HRP->POS | 0.784              | 0.787       | 0.020         | 39.345     | 0.000 | Accept    |
| POS->EP  | 0.421              | 0.420       | 0.051         | 8.339      | 0.000 | Accept    |
| EE->EP   | 0.452              | 0.455       | 0.057         | 7.914      | 0.000 | Accept    |

#### 4.7 MEASURING THE VALUE OF R2

In PLS path models, the squared correlation values of 0.67,0.33 and 0.19 are considered as substantial, moderate and weak respectively (Chin 1998). The R2 value of latent endogenous construct employee performance and that of POS is greater than 0.6 and the values are considered to be. The PLS diagram shown above indicated that the two constructs EE and POS jointly explained 64.4 % of the variance of the endogenous construct EP.

Table 4: Bootstrapping results for R2 and R2 adjusted.

|                      | R2    | Adj.R2 | Effect      |
|----------------------|-------|--------|-------------|
| Employee Engagement  | 0.306 | 0.303  | Moderate    |
| Employee Performance | 0.644 | 0.641  | Substantial |
| POS                  | 0.614 | 0.612  | Substantial |

#### EFFECT SIZE (f 2)

The effect size is the measure of impact of each predictor construct on the dependent construct. In the PLS path model, when an independent construct is omitted from the model, it measures the changes in squared correlation values and determine whether the omitted independent construct has substantive effect on the value of dependent construct. The effect of predictor independent construct is large at the structural level if f 2 is 0.35 and it is medium if f 2 is 0.15 and small if f 2 is 0.02 (Cohen 1988) and the results and inference are tabulated in Table 5.

Table 5: FFFFCT SIZE (f 2)

| Dependent construct | Independent<br>construct | Effect size | Inference              |
|---------------------|--------------------------|-------------|------------------------|
| EEE                 | HRP                      | 0.441       | Medium to large effect |
| POS                 | HRP                      | 1.590       | Large effect           |
| EP                  | EEE                      | 0.303       | Medium to large effect |
| EP                  | POS                      | 0.263       | Medium effect          |





#### 4.8 PREDICTIVE RELEVANCE (Q 2)

In addition to the size of R2, the predictive sample reuse technique (Q2) can effectively be used as a criterion for predictive relevance. Based on blindfolding procedure, Q2 evaluates the predictive validity of a large complex model using PLS. While estimating parameters for a model under blindfolding procedure, this technique omits data for a given block of indicators and then predicts the omitted part based on the calculated parameters. Thus, Q 2 shows how well the data collected empirically can be reconstructed with the help of model and the PLS parameters. Q 2 can be obtained using two different types of prediction techniques, that is, cross validated communality and cross validated redundancy. The first one is obtained by predicting data points using latent variable score, whereas the latter one is obtained by predicting the questionable blocks using the latent variables used for prediction. Chin (2010) suggests using the latter to estimate the predictive relevance of a large complex model. Q 2 is generally estimated using an omission distance of 5-10.Lee Chuan [2018] stated that in a researcher model where the Q2 value(s) is found greater than 0, it is considered that the model has a predictive relevance. The cross-validated redundancy value (Q2) as suggested by Chin [ibid.,] is greater

than 0 and suggests that the model has predictive relevance. The rule of thumb indicates that a cross validated redundancy Q 2 > 0.5 is regarded as a predictive model (Chin 2010). The estimated Construct cross validate redundancy results are furnished below:

Table 6: Predictive relevance of the model by cross validated redundancy approach.

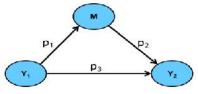
|                             |         | 110 111000 01 01 0100 | o randatou rodamaanoj ap      | prodom                      |
|-----------------------------|---------|-----------------------|-------------------------------|-----------------------------|
| Latent endogenous construct | SSO     | SSE                   | $Q^2 = (1 - \frac{SSE}{SSO})$ | Inference                   |
| Employee                    | 127.980 | 110.394               | 0.137                         | Medium predictive relevance |
| Engagement                  |         |                       |                               |                             |
| Employee                    | 125.051 | 74.471                | 0.404                         | Large predictive relevance  |
| Performance                 |         |                       |                               | 50 A                        |
| POS                         | 204.25  | 141.605               | 0.307                         | Large predictive relevance  |

#### 4.9 Model's predictive relevance

The quality of partial least squares path model is evaluated by calculating Q2 statistics. It is the capability of the model to predict by repeating the observed values by the model itself through blind folding procedures (Tenenhaus et al 2005). In structural equation models, Q2 greater than zero means the model has predictive relevance and less than zero means the model lacks predictive relevance. As a relative measure of predictive relevance, values of 0.02, 0.15, and 0.35 indicate that an exogenous construct. The latent constructs employee performance and POS were found to have large predictive relevance. In general it can be said that the model has good predictive relevance.

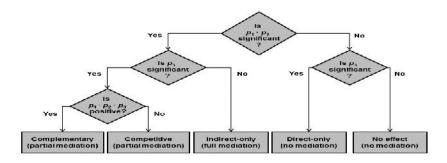
#### 4.10 Mediation in PLS-SEM

Mediation occurs when a third mediator variable intervenes between two other related constructs. More precisely, a change in the exogenous construct causes a change in the mediator variable, which, in turn, results in a change in the endogenous construct in the PLS path model. Thereby, a mediator variable governs the nature (i.e., the underlying mechanism or process) of the relationship between two constructs. Analyzing the strength of the mediator variable's relationships with the other constructs allows substantiating the mechanisms that underlie the cause-effect relationship between an exogenous construct and an endogenous construct. In the simplest form, the analysis considers only one mediator variable, but the path model can include a multitude of mediator variables simultaneously (i.e., multiple mediator analysis). Constructs POS and EE mediate in parallel the relationship between constructs HRM and EP. In SmartPLS, the results of the PLS-SEM algorithm and the bootstrap procedure include the direct, the total indirect effect, the specific indirect effects, and the total effect. These outcomes, which are available in the SmartPLS results reports, permit conducting a mediator analysis (e.g., as suggested by Hair et al. 2017). Note that the SmartPLS results allow analyzing both single and multiple mediation models (i.e., parallel and serial mediation). The decision tree of SmartPLS on mediation. To analyze a mediator model, Zhao et al. (2010) suggest a model, as shown in the following figure, which Hair et al. (2017) also propose to use for PLS-SEM:









The  $\rho 3$  is the value of path coefficient between HRM and EP.It was found that it is insignificant. At the same time value of  $\rho 1$ (HRM to POS) and  $\rho 2$ (POS to EP) and  $\rho 1 \times \rho 3$  are found to be signicant. When considering multiple mediators, the researcher shall analyze the model that has all relevant mediators at an equivalent time (as, for instance, shown within the above figure). For such a mediator model, one can use the before described analysis procedure as suggested by Hair et al. (2017) and Zhao et al. (2010). It also allows in a multi mediator model to analyze the total indirect effect ( $\rho 1 \cdot \rho 2 + \rho 4 \cdot \rho 5$ ) for the total mediation via both mediators M1 and M2. Alternatively, the researcher can use the procedure to analyze the specific indirect effects per mediator variable (i.e.,  $\rho 1 \cdot \rho 2$  for the M1 mediator and  $\rho 4 \cdot \rho 5$  for the M2 mediator). Indirect effect ( $\rho 1 \cdot \rho 2 + \rho 4 \cdot \rho 5$ ) was estimated to be 0.58 which is higher than 0.These confirm that the relationship between HRM and employee performance (EP) is mediated through POS and EE.

Table 7: Indirect effect

|         | Original<br>Sample | Sample Mean | Std Deviation | t staistic | Р     | Inference |
|---------|--------------------|-------------|---------------|------------|-------|-----------|
| HRP->EP | 0.580              | 0.582       | 0.031         | 18.609     | 0.000 | Accept    |

#### 4.11 Model fit

The standardized root mean square residual (SRMR) is the difference between the observed correlation and the predicted correlation. It allows assessing the average magnitude of the discrepancies between the observed and expected correlations as an absolute measure of (model) fit criterion. A value less than 0.10 and of 0.08 are considered an honest fit [Hair et al ]. The saturated model is the model that assesses correlation between all constructs. And the estimated model is a model that is based on a complete effect scheme and takes the model structure under consideration . The results indicate that the model is a good fit as SRMR is less than 0.08. A value less than 0.15 or of 0.08 in a more conservative version; (Hu and Bentler, 1999) are considered a good fit. Henseler et al. (2014) introduce the SRMR as a goodness of fit measure for PLS-SEM which will be wont to avoid model misspecification. In this study SRMR value was found to be 0.147 which reflects a moderately good fit.

Table 8: The Standardized Root Mean Square Residual

|            | Saturated Model | Estimated Model |  |
|------------|-----------------|-----------------|--|
| SRMR       | 0.141           | 0.147           |  |
| D_ULS      | 2.690           | 2.921           |  |
| D_G        | 1.796           | 1.268           |  |
| Chi square | 1475.53         | 1502.002        |  |
| NFI .      | 0.442           | 0.432           |  |

The value of the d\_ULS and d\_G in itself do not pertain any value. Only the bootstrap results of the precise model fit measures allow an interpretation of results. More specifically, since the d\_ULS and d\_G (and SRMR) confidence intervals are not obtained by running the "normal" bootstrapping procedure, but the adapted Bollen-Stine bootstrapping procedure, their results interpretation somewhat differs from the "normal" bootstrap outcomes. The bootstrap routine provide the confidence intervals of these discrepancy values. A model fits well if the difference between the matrix implied by your model and therefore the empirical matrix is so small that it are often purely attributed to sampling error. Hence, the difference between the matrix implied by your model and therefore the empirical matrix should be non-significant (p > 0.05). Otherwise, if the discrepancy is critical (p < 0.05), model fit has not been established. In this study  $\rho$  which establishes the model fitOne of the primary fit





measures proposed within the SEM literature is that the normed fit index by Bentler and Bonett (1980). It computes the Chi<sup>2</sup> value of the proposed model and compares it against a meaningful benchmark. Since the Chi<sup>2</sup> value of the proposed model in itself doesn't provide sufficient information to guage model fit, the NFI uses the Chi<sup>2</sup> value from the null model, as a yardstick. Literature, however, does not explain how the PLS-SEM Chi<sup>2</sup> value differs from the CB-SEM one. The NFI is then defined as 1 minus the Chi2 value of the proposed model divided by the Chi<sup>2</sup> values of the null model. Consequently, the NFI results in values between 0 and 1. The closer the NFI to 1, the better the fit. In this study NFI value is 0.442 which implies moderately good fit.

#### **DISCUSSION AND CONCLUSION**

The objective of this study is to identify the predictors of employee performance and to investigate whether POS and EE can act as a moderator variable on the relationship between HRM practices and employee performance of in ANRS Civil Services Commission, Ethiopia.. The findings of PLS-SEM showed that all the HRM practices namely career advancement, job security and performance feedback were positively and significantly related to employee engagement which is consistent with SET. It indicates that the presence of proper HRM practices systems in the work-place gives strong signals to their employees that they are valued, appreciated and recognized within the organizations. Furthermore, this study found the positive relationship between performance HRM practices and employee engagement. Another objective of this study is to investigate the moderating role of POS such that employees with poor perceptions of HRM practices will show higher level of engagement if they have higher POS than the employees with lower POS. Results revealed that POS moderates the relationships between all the HRM practices and employee performance.. In fact, POS can compensate the relatively poor perceptions of HRM practices. Employees who hold poor perceptions regarding their HRM practices are no longer to show a lower level of engagement in the workplace if they have higher level of organizational support.

Alternatively, employees with poor perception about organizational practices are likely to exert disengagement when they don't have POS. With this view, prior research (e.g., Shantzet al., 2014; Hur et al., 2013; Chen et al., 2012) argued that negative work behaviors not likely to exert poor work outcomes as other organizational resources such as POS can buffer the relationship. This finding can be interpreted under the social exchange perspective. It suggests that when individuals work under lack of job related resources, they tend to have other organizational resources to cope with the situation that may positively impact on employees' behavioral outcomes. In other words, in the highly demanding work context in where employees need to be as engaged as possible towards their work, they expect higher organizational support to maintain their membership within the organization. The presence of higher level of organizational support can compensate relatively low level of job related resources that results in employees' positive attitudes as employees exert higher energy in investing extra effort in the workplace.

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