## According conduct principle component analysis and prepared



According to Smith(2002), puts it "PCA is a way of identifying patterns in data, and expressingthe data in such a way as to highlight their similarities and differences. Since patterns in data can be hard to find in data of high dimension, where theluxury of graphical representation is not available, PCA is a powerful tool foranalyzing data." Principal ComponentAnalysis, or simply PCA, is a statistical procedure concerned with elucidatingthe covariance structure of a set of variables. In particular it allows us toidentify the principal directions in which the data varies. I am studying fivevariables in this study in which recruitment and selection, training anddevelopment, compensation and benefits, performance appraisal are myindependent variables.

Firm performance is my dependent variable. Principlecomponent analysis applied in spss for purpose of developing factors from different items on each construct. Different weights are given to all variables to conduct principle component analysis and prepared principle component.  $Pc = a1 (x1) + a2 (x2) \dots + an(xn)$ PC means principlecomponent

and a1 means regression weights for items that measured as well as X1means subjects corresponding score on observed variable.

In this study I amusing different contents like Kaiser-Mcycr-olkin(KMO) and varimax method ofrotation to get orthogonal components. Orthogonal factors are those factors that does not exist correlation. Test of KMO shows adequacy of the sample the Kaiser-Meyer –Olkin (KMO) test has been used. Bartlett's test of sphericity is used to judge whether factor analysis can be applied. If significant level of Bartlett's test of sphericity is less than 0.

05 than PCA will use otherwise not. To judge the reliability of datareliability test has been used . To check the loading % of every variable wefocus on factor loading and take only variable that have Eigen value > 1. Regression analysis has been used toshow the impact of human resource practices on organization performance. Thetwo basic types of regression are linear regression and multiple regressions. Linear regression uses one independent variable to explain and/or predict theoutcome of Y, while multiple regressions use two or more independent variablesto predict the outcome. Regression analysis is widely used for predictionand forecasting, where its use has substantial overlap with the field of machine learning.

Regression analysis is also used to understand which among the independent variables are related to the dependent variable, and to explore the forms of these relationships. In restricted circumstances, regression analysis can be used to infer causal relationships between the independent and dependent variables. However this can lead to illusions or false relationships, so caution is advisable.

Such that Y= C+b1x1+b2x2+b3x3+b4x4In this regression line Y stand for organization performance, x1 for recruitment and selection, x2 for training and development, x3 for performance appraisal and x4 for compensation and benefits. 4. Empirical Findings: Reliability of the instrument ismeasured with the help of Chronbach's Alpha values that were calculated throughsoftware for each variable. Questionnaire as data collection instrument was used which was comprised of 25 statements aiming to gauge impactof human resource practices on organization performance

for whichall 20 statements are developed on 5-point Likert scale (from Strongly Disagreeto Strongly Agree).

Results of the data that are foundby applying statistical analysis tools are also been given with an appropriateamount of interpretation aiming to explain the meanings of those resultantfigures. Those figures were presented in a tabular format and graphically aswell for which SPSS 16 has helped me to draw these things effectively.