Factors Affecting Effectiveness of the Existing Performance Appraisal System for Academic Staff of General Sir John Kotelawala Defence University

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Abstract- Performance appraisal systems (PAS) are required to be effective in order to improve and sustain the employee performance of an organization. Academic staff is considered as the most important stakeholders of a university. Their general objective is to generate knowledge and skills and disseminate them. They hold a very important place in modern society as they directly influence the personal development of the present and successive generations. Evaluation and improvement of PAS for academic staff is a must because success of a university depends on its academia. The main objective of this study is to identify the factors affecting the effectiveness of the existing performance appraisal system for academic staff of General Sir John Kotelawala Defence University (KDU). The main factors used in the study were factors related to users, factors related to the system and factors related to perceived fairness. The study was conducted using quantitative methodology and was conducted at the KDU. The research approach was deductive. The population was entire academic staff in 2016 at KDU which was 166. The sample size was 118. Stratified random sampling was used to choose the sample. Data was collected using a structured questionnaire. The reliability was checked using Chronbach's alpha. Data were analyzed using statistical methods of correlation and regressions with SPSS. Factors related to users ; such as rators' training was significantly affected the effectiveness on the PAS. However rator's motivation did not. Factors related to perceived fairness; distributive justice, procedural justice and performance feed back were significantly affecting the effectiveness of PAS. Further, all factors related to system such as employee participation, instrument validity, goal setting and rating technique were significantly affecting the effectiveness of PAS. Among all the factors, procedural justice is most significant positively related factor for the effectiveness of PAS. Hence, the finding recommends focusing mainly on procedural justice for the improvement of the effectiveness of the existing performance appraisal system for academic staff of KDU.

Index Terms- Performance appraisal systems, Academic staff, effectiveness

I. INTRODUCTION

General Sir John Kotelawala Defence University (KDU) was established in 1981. It is a state university directly governed by the Ministry of Defence. It is engaged in offering both undergraduate and postgraduate degrees to cadet officers and civil students on a payment basis. The KDU is also involved in Research and Development activities as well. The work force consists of civilian and military staff.

There are four categories of civilian staff, namely, Academic, Academic support, Administrative and Non Academic staff. Academic staff is directly involved in teaching and research activities. The total number of civilian staff is 905. Among them 166 is academic staff.

Being the only defence university in Sri Lanka, it has a unique nature in administration and other work norms compared to other state universities. It adopts circulars and regulations of the University Grants Commission in relations to recruitment and compensation of civilian staff.

The university aims to be the best defence university in South East Asia. Therefore, it concerns on quality of the degree programmes. There is a high demand for academic positions at KDU. However, only the qualified staff is recruited on permanent basis. Further, it attracts qualified academia from state universities in order to develop the KDU in par with other state universities.

The performance evaluation of academic staff at KDU is carried out by means of a format called "Annual Increment Form" which is completed by the raters only. This evaluation is carried out for the sole purpose of granting the annual increment. However, it does not actually taking in to consideration of an individual staff member's performance progress during the period being evaluated. This format is distributed to the raters by the University administration in a confidential cover.

The components of the annual increment form are listed below;

Section I –General information (name, division, date of birth, age, personal file number, designation, grade, date of appointment, salary scale, date of increment, increment rate, etc) Section II- E Bar and language proficiency requirement, details of last increment.

Section III- Leave particulars during the incremental year

Section IV – Report of the Head of the Department based on following criteria

a) Punctuality and attendance ,b) Work, c) Conduct, d) Application to work and industriousness, e) Output and quality of work, f) Reliability without supervision, g) Relationship with colleagues, h) Dealing with staff and public, i)Willingness to accept responsibility, j) Commendations/punishments in the incremental year

Section V– Recommendation and approval of the increment

The above criteria mentioned in section IV, is common to all academic, academic support, administrative, clerical and minor grade employees. There is no demarcation between the criteria of academia and that of other staff. In addition, specific criteria such as number of lectures conducted, number of practical classes conducted, extra activities and research components are not included. Hence, the rating has become more vague and problematic. Further there is no measurement scale for the criteria. Hence rating errors like halo effect, contrast errors, recency bias, leniency bias, severity bias, self-serving bias is evident in many occasions. As a result both poor performers and high performers are rewarded in a similar manner. There is no effective link between the reward and the appraisal. Therefore, the existing PAS has unclear performance criteria and the format is identified as an ineffective rating instrument.

According to Opatha (2004) appraisal should focus on administration and development of the employee concerned. However, such achievements are not made in this appraisal system.

The   process of performance appraisal lacks a proper structure and consistency with respect to organizational goals. Therefore, the higher management of KDU is in search of an effective PAS for the academic members of KDU. Therefore the aim of this study is to investigate the factors affecting the effectiveness of the current PAS. Thereby, it is expected to achieve academic excellence not only in the performance of the academia but also the KDU as a whole.

II.   METHODOLOGY AND EXPERIMENTAL DESIGN

The author considers the whole population of civil Academic Members of KDU in the year 2015. The total number of academic members is 166, ranging from Lecturer (Probationary), to Senior Lecturer Grade I from the population of the study. Assistant and Senior Assistant Librarians too are taken as academics as defined by the University Grants Commission.

The sample in this research was civilian academic staff members of General Sir John Kotelawala Defence University with the number of 118 academia Sample size was determined using Krejcie and Morgan (1970) method. Stratified random sampling method was used and a computer based random number generator was used to select the academic members at each level.

The study involved both qualitative and quantitative methods to collect data by means of a structured pre tested questionnaire. Before the actual study was conducted, a pilot study was carried out to test the validity and reliability of instrument used. For the actual study, the quantitative data was collected by distributing the questionnaire to the academic staff of KDU.

The items on the questionnaire are responded to using a 5-point Likert scale ranging from absolute disagreement, through disagree, neutral, agree, and ending in absolute agreement. Numerical ratings for the responses can be obtained by using values ranging from one point for "absolute disagreement "to five points for "absolute agreement". The response scale is clearly ordinal. However the responses were assigned the values 1, 2, 3, 4, 5 and averages were computed during the analysis.

The questionnaire consists of 58 questions. It measures the level of effectiveness of the PAS by the means of independent variables, user's characteristics, perceived fairness and system characteristics.

III.   METHODS OF DATA ANALYSIS

Data was analyzed using SPSS (Statistical Packages for the Social Scientist) statistical package which was set at the 0.05 significance level. The level of effectiveness of the existing PAS will be determined using the results of questionnaires in terms of user's   characteristics,   perceived   fairness   and   system characteristics.

All independent variables were given marks between one to five (1-5) for the analysis purpose. Allocation of marks for the respondent's answers is as follows.

Table 01
Allocation of Marks

Answer	Marks
Absolute Disagreement	01
Disagreement	02
Neutral	03
Agree	04
Absolute Agreement	05

All data was analyzed by using mean value of the factors. Those mean values are interpreted as follows.

Table 02
Interpretation of Mean Values

Mean Value	Level of Effectiveness
Mean value between 4-5	Highly effective
Mean value between 3- 3.999 Mean value between 2 -2.999	Effective Ineffective
Mean value below 2	Highly Ineffective

The level of effectiveness for each factor of the questionnaire was analyzed using mean and standard deviation. The relationship of effectiveness of PAS and the variables; user's characteristics, perceived fairness and systems characteristics were analyzed using Pearson's correlation and coefficient. The statistically significant factors that affect effectiveness of PAS were determined by Analysis of variance test.

Statistical tests were carried out with the assumption that the population (N=166) was normally distributed. The response rate was 52.5%. The reliability test of Cronbach's Alpha was used to determine the consistency. The alpha coefficient for the 58 items of the questionnaire was 0 .986, suggesting that the items have very high internal consistency.

An assumption was made that all the survey participants answered the questions truthfully. Secondly, it is assumed that participant voluntarily expressed their views for the questionnaire. Thirdly, it is assumed that the responses collected

during the relevant study period have provided a valid measure of the effectiveness of the existing PAS.

IV.   RESULTS

The Level of Effectiveness of the Existing PAS in Terms of User's Characteristics, Perceived Fairness and System's Characteristics.

Table 03 Descriptive Statistics of Perceived Level of effectiveness of PAS in Terms of User's Characteristics, Perceived Fairness and System's Characteristics. (N =62)

Variable	Mean	Std. Deviation	Level of Effectiveness
User's Characteristics	2.6163	.39940	Ineffective
Perceived Fairness	2.0735	1.01076	Ineffective
System Characteristics	1.8696	.73387	Highly Ineffective
Factors			
Employee Participation	2.2194	.93648	Ineffective
Instrument Validity	2.1237	.95525	Ineffective
Goal Setting	2.1129	.99670	Ineffective
Rating Technique	1.8450	.82407	Highly Ineffective
Distributive Justice	1.9960	1.03275	Highly Ineffective
Procedural Justice	2.1355	1.06926	Ineffective
Performance Feedback	2.0258	1.10882	Ineffective
Rater's Motivation	3.8198	.48282	Effective
Rater's Training	1.4128	.77514	Highly Ineffective
Rating Accuracy	1.7267	.84834	Highly Ineffective
Intended Purpose	1.6150	.91089	Highly Ineffective

Correlation Analysis between Independent and Dependent Variables.

Table 04 Correlation Analysis between Overall Effectiveness of PAS and Independent Variables (User's Characteristics, Perceived Fairness and Systems Characteristics)

Variable	Effectiveness of PAS	
	Pearson Correlation	Sig. (2tailed)
Effectiveness of PAS	1	
User's Characteristics	.596**	.000
Perceived Fairness	.875**	.000
System Characteristics	.876**	.000

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

Table 05 Correlation between Effectiveness of PAS and Different Independent Variables that Impact Effectiveness of PAS.

Variable	Pearson Correlation	Sig. (2-tailed)
Effectiveness of PAS	1	
Employee Participation	.761**	.000
Instrument Validity	.798**	.000
Goal Setting	.747**	.000
Rating Techniques	.838**	.000
Distributive Justice	.802**	.000
Procedural Justice	.849**	.000
Performance Feedback	.830**	.000
Rater's Motivation	-.298	.052
Rater's Training	.799**	.000
Intended purpose	.949**	.000
Rating Accuracy	.941**	.000
**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).		

Multiple Regression Analysis between Independent Variables Related to Effectiveness of PAS.

Table 06 Regression Analysis between Independent Variables and Effectiveness of PAS (Model Summary)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928ª	.862	.824	.34861

a. Predictors: (Constant), rater's training, rater's motivation, employee participation, instrument validity, procedural justice, distributive justice, goal setting, rating technique, performance feedback.

Table 07 Regression Analysis between Independent Variables and Effectiveness of PAS (Coefficients).

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.392	.514		.762	.452
Employee participation	.166	.135	.160	1.226	.229
Instrument validity	.150	.128	.144	1.175	.248
Goal setting	-.126	.142	-.128	-.887	.381
Rating technique	.240	.143	.238	1.685	.101
Distributive justice	.022	.120	.025	.183	.856
Procedural justice	.319	.117	.359	2.729	.010
Performance feedback	.054	.155	.062	.350	.728
Raters motivation	-.126	.126	-.073	-.998	.326
Ratter's training	.165	.124	.154	1.330	.193

a. Dependent Variable: Effectiveness PAS

V. DISCUSSION

The total mean for user's characteristics was 2.6163, which indicates that the respondents perceived that the existing PAS is ineffective in terms of user's characteristics. Rater's motivation and rater's training factors showed mean of 3.8198 and 1.4128 respectively. Only the factor rater's motivation has scored a mean value closer to 4 which denote that the existing PAS is effective in terms of this factor.

Descriptive statistics has revealed that the total mean for perceived fairness was 2.0735 with a standard deviation of 1.010. This indicates that the respondents have perceived the existing PAS is ineffective where procedural justice (M=2.1355) and

performance feedback (M=2.0258) were rated as ineffective and distributive justice (M=1.9960) as highly ineffective.

The total mean score for the dependent variable systems characteristics was 1.8696 which reveals that the existing PAS is perceived as highly ineffective. The factors employee participation, instrument validity and goal setting have scored mean value closer to 2. However the factor rating technique, having a mean of 1.8450 is perceived as highly ineffective. The factor rating accuracy and intended purpose had mean values of 1.7267 and 1.6150, which indicates that the existing PAS is highly ineffective in terms of the said factors.There is a significant positive linear relationship of effectiveness of PAS and user's characteristics, perceived fairness and systems characteristics. Perceived fairness and systems characteristics have a very high positive linear relationship with the independent variable.

Among all factors, rater's motivation has a correlation coefficient of-.298. It explains a negative and weak correlation with the dependent variable. Employee participation, instrument validity, goal setting rater's training, rating techniques, distributive justice, procedural justice performance feedback, raters training have a high positive correlation. Intended purpose and rating accuracy have a very high positive correlation as the correlation coefficient is very much closer to +1.

Model summary shows that the value of R-square for the model is 0.862. This means that 86.2 percent of the variation in the effectiveness of PAS (dependent variable) can be explained from the eleven independent variables. The adjusted R-square for the model is 0.824, which indicates only a slight overestimate with the model. The standard error of the estimate is only 0.34861

Regression coefficients represent the mean change in the response variable for one unit of change in the predictor variable while holding other predictors in the model constant. A low p-value (< 0.05) of variables indicates that the changes in the independent variables were related to changes in response variable, effectiveness of PAS. Conversely, a larger (insignificant) p value suggests that changes in the predictor are not associated with changes in the response. Therefore, the analysis demonstrated that the most significant positively related factor was the procedural justice. It has scored a p value of 0.010 and Beta value of 0.359. It denotes that change of procedural justice by one item may affect the effectiveness by 35.9%.

The fairness of PAS needs to be increased in terms of distributive justice, procedural justice and performance feedback. The fairness of granting rewards to academia should be increased by making the appraisal unbiased, increased communication between supervisor and subordinate, output related rewards and design the PAS leading to better performance and better work quality.

The PAS should highly focus on procedural justice. Objective measures should be designed to appraisal. The standards should be clearly defined to evaluate the performance. Clear instructions should be given to a both raters and ratees. The standards should be simple and clear. The ratings should be available for review as well. They should be able to discuss problems in relation to their performance evaluation with the supervisor. A follow up system should be incorporated to PAS to

monitor whether the raters follow the said standards properly in case of a particular individual as well as in the equal manner for others.

The component of giving feedback should be focused on the new PAS. Feedback of an individual may lead to denial, venting of emotions, and behavioral and mental disengagement. Designing of PAS should address above issues. It should be strictly confidential, constructive and should lead the academia towards achieving expected goals. In this regard the PAS can identify future training needs of the ratees. Student feedback and peer review should also be included in the appraisal form.

The instrument for appraisal, the performance appraisal format in most cases, should include measures that evaluate most important job behaviors and the output. In the case of academia it is teaching and research. However, due to the unique nature of administration and day today activities, it is recommended to incorporate extra activities carried out by academic staff. Eg. contribution for establishment of the KDU hospital. For the last five years it was observed that academic staff who have contributed towards the rapid development of KDU are not being evaluated fairly. This shortcoming can be rectified by incorporating valid measures including appropriate terminology.

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REFERENCES

[1] Abbas, M.Z.(2014). Effectiveness of Performance Appraisal on Performance of Employees.*IOSR Journal of Business and Management(IOSR-JBM),Volume 16, issue 6. Ver. II*(Jun 2014), pp.173-178

[2] Armstrong, M. and Taylor, S., 2014. *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.

[3] Elverfeldt, A.V., 2005. Performance Appraisal-how to improve its effectiveness. *University of Twenty, Enschede.*

[4] Hamid, S.A.A. (2011). Factors affecting performance appraisal ffectiveness (BScThesis).Retrieved from http://ir.unimas.my/295/1/Siti_Aisyah_Abd_Hamid.pdf

[5] Igbojekwe, P.A., Ugo-Okoro, C.P. and Agbonye, C.O., 2015.

[6] Performance Evaluation of Academic Staff in Universities and Colleges In Nigeria: The Missing Criteria. *International Journal of Education and Research*, *3*(3), pp.627-640.

[7] Krejcie, R.V. and Morgan, D.W., 1970. Determining sample size for research activities. *Educational and psychological measurement*, *30*(3), pp.607-610.

[8] Maharvi, M.W., Iqbal, M.Z. and Ullah, M.I., 2014. Effectiveness of Performance Appraisal System: A Proposed Model with Empirical Evidence from the Government of Punjab, Pakistan. In *International Conference On Trends In Economics, Humanities And Management (ICTEHM'14) Aug* (pp. 13-14).

[9] Ochoti, G.N., Maronga, E., Muathe, S., Nyabwanga, R.N. and Ronoh, P.K., 2012. Factors influencing employee performance appraisal system: a case of the ministry of state for provincial administration & internal security, Kenya. *International Journal of Business and Social Science*, *3*(20).

[10] Opatha, H.H.D.N.P., 2004. Job performance evaluation of Sri Lankan university lecturers: an agenda for action and a suggested scheme.

[11] Punia, B.K. and Siwatch, R., 2009. Performance appraisal practices in indian universities: A study of awareness level and perceived significance. *Asia Pacific Business Review*, *5*(3), pp.71-88.

[12] Roolaht, T. and Türk, K., 2007. Appraisal and compensation of the academic staff in Estonian public and private universities: A comparative analysis. *TRAMES*, (2), pp.206-222.

[13] Weerasooriya, W.M.R.B., 2013. Performance Evaluation using the Balanced Scorecard: The case of Sri Lankan Universities. *Performance Evaluation*, *3*(4).

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