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HUMAN RESOURCE MANAGEMENT PRACTICES: DEVELOPING AND TESTING AN INSTRUMENT IN THE CONTEXT OF ACADEMIC STAFF IN UNIVERSITIES IN UGANDA

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Abstract
The purpose of this study was to develop and test instrument for HRM practices in the context of academic staff in universities in Uganda. HRM practices were operationalised as recruitment, selection, job design, training, performance appraisal, promotion, employee participation, rewards, job security and safety, and grievances handling mechanisms. In particular, the study sought to establish the validity and reliability of each of the 10 HRM practices and the correlation between them. The sample of 301 academic staff was chosen from four public and three private universities. The development and testing of the instrument was carried out basing on review of literature. The factors were tested using factor analysis and Cronbach alpha (á). The relationship between the HRM practices subscales was examined using Pearson product-moment correlations. It was found out that the items measuring HRM practices sub scales were valid and reliable measures. The correlation results suggested that the HRM subscales were independent with job design as the most independent subscale. It was concluded that the instrument provides appropriate measures for the different HRM practices.

Keywords: Academic Staff, Factor Analysis, HRM Practices, Measurement, Reliability, Scale Development, Testing, University

Introduction

Human Resource Management (HRM) practices refer to a system that attracts, develops, motivates, and retains employees to ensure the effective implementation and the survival of the organisation and its members (Tan & Nasurdin, 2011). Indermun (2014) suggests that HRM practices are a set of internally consistent policies and practices designed and implemented to ensure that an organisation's human capital contribute towards the achievement of its objectives. There are several HRM practices, namely recruitment, selection, job design, performance appraisal, training, promotion, participation, rewards, job security and safety, and grievances handling. Recruitment is *the searching for and obtaining potential job candidates in sufficient numbers and quality so that the organisation can select the most appropriate people to fill its job needs (Georgia, George & Labros, 2013).* Selection *is the process of assessing the suitability of candidates by predicting the extent to which they will be able to carry out a role successfully (Armstrong, 2010).* Job design according to *Maxwell (2008) also referred to as job redesign refers to any set of activities that involve the alteration of specific jobs or interdependent systems of jobs with the intent of improving the quality of employee job experience and their on-the-job productivity.*

Performance appraisal *refers to the systematic evaluation of the employee with regard to his or her performance on the job and his potential for development (Toppo & Prusty, 2012).* Training *is a systematic approach to learning and development to improve individual, team and organisational effectiveness (Aguinis & Kraiger, 2009). Promotion refers to an increase in job responsibility, scope,*

authority, or level within or outside the organisation (Singh, Ragins & Tharenou, 2009). Employee participation refers to employees having the opportunity to influence of decision-making throughout the organisation (Busck, Knudsen & Lind, 2010). Rewards are the benefits that arise from performing a task, rendering a service or discharging a responsibility (Agwu, 2013). Job security refers to the perceived stability and continuance of one's job while job safety deals with the prevention of accidents and minimising the resulting loss and damage to persons and property (Armstrong, 2010). With grievance handling mechanisms, *van Huijstee, Ricco and Ceresna-Chaturvedi (2012) indicate that they are procedures that offer formalised means through which individuals or groups negatively affected by certain organisational activities and operations can seek remedy.*

Importance of Human Resource Management Practices

Human resource management practices (HRM) practices are of strategic significance to organisations (Demo, Neiva, Nunes& Rozzett, 2012) . HRM practices enhance employee capabilities, motivation, and stability (Gellatly, Hunter, Currie & Irving, 2009). HRM practices (e.g. recruitment and selection) that ensure selective staffing, job design, comprehensive training, promotion opportunities and employee participation) enhance employee capabilities. These HRM practices help to increase feelings of internal control (autonomy) and competence, which, in turn, increase an employee's identification, involvement, and emotional connection with the work and the organisation hence commitment to the organisation (Gellatly et al. 2009; Thusyanthy, 2014). Nieves and Quintana (2016) state that HRM practices such as recruitment procedures that give access to a large number of qualified candidates, combined with an adequate candidate selection process, can influence the level of knowledge held by new employees, which is necessary for better job performance.

With respect to job design, Thusyanthy (2014) argues that job design directly affects employee's training and development. For instance, the job design aspect of job rotation increases the employee's knowledge, skills and competency. Foss, Minbaeva, Pedersen and Reinholt (2009) state that job design is an antecedent of knowledge-sharing behaviours that is sending and receiving knowledge. On the other hand, training increases individual performance and encourages employees to adjust their knowledge and skills to organisational needs. Besides, training encourages professional development helping organisations build idiosyncratic knowledge that is more valuable for the organisations than for their competitors. In addition, internal promotion policies allow firms to not only take advantage of investment in training but also incentivise employeesso they develop firm-specific skills and knowledge (Nieves &Quintana, 2016). *Busck, Knudsen and Lind* (2010) indicate that employee participation leads to increased productivity, greater responsibility and avoidance of conflicts in connection with changes, and contributes to a higher degree of well-being at work through motivation and empowerment.

HRM practices (e.g. performance appraisal and rewards) motivate employees' performance and commitment (Gellatly et al., 2009). Ayers (2013) specify that performance appraisals are the seminal tool for linking individual performance to organisational goals and outcomes. This linkage, referred to as goal alignment, is important for increasing organisational performance. Enhancing organisational performance starts with aligning individual performance with organisational goals and subsequently holding those individuals accountable for achieving organisational outcomes. Trivellas (2009) argues that appraisal provides feedback guidance in the context of an effective and more complete system of performance management that fosters employee motivation contributing to increased commitment. With respect to rewards, *Stumpf, Tymon Jr, Favorito and Smith (2013) indicate that these are either intrinsic or extrinsic. Intrinsic rewards are based on employees getting a positively valued experience from doing their work such as experience of work as meaningful, the ability to exercise some degree of choice, the experience of progress and the development of a greater sense of competence.*

Extrinsic rewards to refer to valuable goals that are external to the job itself that provide satisfaction to individuals such as pay, job security, supervisor and peers support among others (Ganzach & Fried, 2012). Bartol and Srivastava (2002) reports that intrinsic rewards have a positive effect on feelings of self-determination that is beneficial for intrinsic motivation. The intrinsic motivation is a propellant of individual creativity in an organisation. Dysvik and Kuvaas (2013) indicate that intrinsically motivated employees are more involved in their jobs and demonstrate greater effort and goal attainment than those less intrinsically motivated. However, extrinsically motivated behaviours depend upon the perception of a contingency between the behaviour and attaining a desired consequence such as implicit approval or tangible rewards or avoiding a negative consequence such as punishment. Payrelates to increased performance quantity, but not quality of

work.

HRM practices (e.g. employment security and effective grievance and dispute resolution processes) provide supportive and secure working conditions leading to employee stability (Gellatly et al., 2009). *Noble (2008) explains that within the classic Maslow's hierarchy of needs, the notions of security and safety occupy the second tier of the model, suggesting that they are even more sophisticated needs than the fundamental physiological concerns. He argues that job security fears can lead to several negative consequences, including decreased satisfaction and a greater propensity to leave one's job. Peene (2009) suggests that security and safety build psychological contract between employee and the organisation, which is an agreement about employees' beliefs regarding the terms of employment or, in other words, the perceived mutual obligations between employer and employee. In this respect, there is an exchange between job security that is the obligation of the employer, and loyalty that is the obligation of the employee. By perceiving insecurity about the job on the part of the employees, they will perceive the psychological contract as violated by the organisation hence losing faith in the dependability of the organisation.*

According to Schreurs et al. (2012) uncertainty will develop eliciting feelings of powerlessness, alienation, and lack of control over their situation. Employees will most likely interpret the environment as stressful, have higher negative emotional responses, and exhibit more strain. In such stressful situations, employees will develop a detached attitude to the job leading to lower levels of performance. Pertaining to grievances handling mechanisms, *Zuwena (2014) contends that when a conflict is not dealt with effectively, it may lead to a breakdown in team interaction, causing errors and poor performance. Chronic unresolved conflicts increase the rate of employee turnover in organisations and affect people and relationships other than those initially affected such as external stakeholders (customers) and investors. Gomathi (2014) suggests that effective grievance handling is an essential part of cultivating good employee relations and running a fair, successful and productive workplace. Owing to the importance of HRM practices,* the purpose of this study was to develop and test an aggregate instrument of measurement scales for the 10 HRM practices.

Literature Review

Scholars (e.g. Azmi, 2009; Bhanugopan, Aladwan & Fish, 2013; Coelho, Cunha, Gomes & Correia, 2015; Demo et al., 2012; Zhai, Liu& Fellows, 2013) have made attempts to develop and test HRM practice measurement scales. For instance, Azmi (2009) developed and tested a measure of HR using top companies in India.HR was conceptualised using two dimensions, namely Internal Fit with eight items and External Fit with14 items. Internal Fit measured how integrated the various sub functions of HR were. It focussed on issues like presence of HR vision existence of a coherent HR strategy, information sharing among HR managers, inter-linkages between HR sub-functions and allocation of budget for HR sub functions among others. External Fit measured whether the HR function was integrated with other functional areas of the organization. It covered inter-linkages between HR and other functions, information sharing between managers of HR and other functional areas, devolvement of HR responsibility to line managers and involvement of other departments in HR policies and activities. Statistical tests indicated reliability and validity of the factors with evidence of convergent and discriminant validity for the scales.

Bhanugopan et al. (2013) carried out structural equation model for measuring human resource management practices in the Jordanian organisations. The study used frontline employees' of various industries associated with insurance, finance, services, and accounting in Amman. Their structural equation model for four domains, namely staffing function (recruitment and selection), learning or skills enhancement (training and development), performance appraisal, and incentives (rewards and benefits) supported the construct validity for 15 items for a consolidated HRM practices scale. The items in the measure were five items for recruitment and selection, five for training and development, one item for performance appraisal, and four for rewards and benefits. Coelho et al.(2015) developed and tested a questionnaire for the HRM system using employees from a variety of sectors in Portugal in three studies. The HRM system domains measured were performance appraisal, career development, communication, performance pay, recruitment, and selection. Psychometric properties of the measures revealed good internal consistency reliability, item reliability and construct reliability, as well as convergent and discriminant validity.

Demo et al. (2012) carried out exploratory and confirmatory factor analysis for human resources management policies and practices scale (HRMPPS) with employees from various organizations in Brazil as the units of analysis. A six-factor model with 40 items that included six items on recruitment and selection, 12 questions on involvement, six items on training, development and education, six items on work conditions, five items on competency performance appraisal, and five items on rewards,

showed that they were valid and reliable. Zhai et al. (2013) developed a measurement scale for human resource practices using middle level staff in Chinese construction organisations. Confirmatory and exploratory factor analyses led to the development of a 15-item measurement scale of HR practices comprising four categories of HRM practice measures, namely job description and participation with six items, training with four items, staffing with two items and rewards with three items. The studies above reveal that there has been effort to develop and test measurement scales for HRM practices. However, the studies were skewed towards the Western World such as Portugal (Coelho et al., 2015), Southern American Countries such as Brazil (e.g. Demo et al., 2012) and Asia such as India (e.g. Azmi, 2009), Jordan (Bhanugopan et al., 2013) and China (Zhai et al., 2013).In addition, all these measures carried out in sectors other than universities.

On the other hand, there are a number studies (e.g. Chen & Huang, 2009; Dwivedula & Bredillet, 2009; Negash, Zewude & Megersa, 2014; Oldham, Kulik, Stepina, & Ambrose, 1986; Wan, Ong & Kok, 2002; Zulkiflee, Faizal, Shakizah & Durrishah, 2010) who carried out different studies on the HRM practices whose instruments were reviewed. Chen and Huang (2009) examined the role of knowledge management capacity in the relationship between strategic human resource practices and innovation performance using top executives of Taiwanese firms. The instrument used in the study comprised four HRM practices, namely; training, compensation, performance appraisal, staffing (recruitment and selection) and participation. Their factor analysis and reliability test indicated that their instrument was valid and reliable. In their study, Dwivedula and Bredillet (2009) sought to understand the constructs of work motivation in project-based organisations using respondents from various industries and different nationalities as units of analysis. In their study, work motivation that covered HRM practices was conceptualised in terms of employee development, work climate, perceived equity, work objectivity and job security. The reliability test of their instrument indicated that the instrument was reliable. Negash et al. (2014) investigated payment, promotion, recognition, working conditions and benefit towards academic staffs work motivation in Jimma University. Reliability test of their instrument indicated that except for the domain of payment, the rest were reliable measures.

Oldham et al. (1986) studied relations between situational factors and the comparative referents using employees from a variety of organisations in the USA. In their instrument, two HRM practices, namely; compensation (rewards) and job security were considered. Their reliability tests revealed that the instrument was reliable. Zulkiflee et al. (2010) investigated the styles used in handling employee grievances with heads of departments of the largest telecommunication company in Malaysia as units of analysis. Their factor analysis and reliability tests revealed that their instrument was valid and reliable. However, whereas the literature above shows that valid and reliable instruments had been developed through various studies, their efforts were discrete. Besides, their purpose was not to develop and test measurement scales and only one study (Negash et al., 2014) was carried out in Ethiopia in the African context. Hence, this study developed and tested measurements scales for HRM practices in the African context particularly Uganda and in universities.

Methodology

Instrument Development. The researchers were interested developing and testing measurement scales for HRM practices in the context of academic staff in universities. The research plan involved constructing a survey of HRM practices with 10 constructs. These HRM practices include recruitment, selection, job design, training, appraisal, promotion, participation, rewards, job security and safety, and grievances handling. The researchers specifically designed the instrument for academic staff in universities. The first step in developing and testing measurement scales for the HRM practices involved reviewing studies on instrument development on HRM practices and related fields. The studies included a measure on HR internal fit and external fit, HRM practices, strength of the HRM system and HRM policies and practices scale. While developing this instrument, the purpose remained clear that the items included would measure HRM practices employed by universities. Already existing surveys in various fields such as Schmidt et al. (2009) provided information on the methodology and approach (see Table 1) that the researchers used as they generated items designed to measure each of the 10 HRM practices. The present study develops an instrument that promises a starting point for work designed to examine HRM practices in universities. Before collecting data, preliminary validation of the instrument was carried out using face validity on the items in the instruments of various scholars that were used to develop this instrument as presented in Table 1. *Face validity was carried out to identify those items that were applicable to university contexts that were thus adopted for inclusion in this instrument.* The items were scaled using the five-point Likert scale from a minimum of 1 for the worst case scenario (strongly disagree) to a maximum of 5, which was the best case scenario (Strongly agree).

Table 1: Variables in the Instrument, their Sources and Reliabilities

Construct	Number of items adapted	Source of instrument, number of items and their reliability (á)
Recruitment	4	Demo et al., 2012 (6 items; á = 0.84)
Selection	2	Chen & Huang, 2009 (3 items; á=0.82)
	2	Wan, Ong & Kok, 2002 (7 items; á = 0.8324).
Job design	5	Dwivedula & Bredillet, 2009 (18 items; á = 0.85)
Appraisal	3	Chen & Huang, 2009 (3 Items; á = 0.90)
	3	Demo et al., 2012 (5 items; á = 0.86)
Training	4	Wan et al., 2002 (7 items; á = 0.83).
	3	Demo et al., 2012 (6 items; á = 0.88)
Promotion	5	Negash, Zewude & Megersa, 2014 (6 items; á = 0.77)
	2	Chen & Huang, 2009 (3 items; á=0.76)
Participation	5	Demo et al., 2012 (12 items; á = 0.93)
Rewards	3	Oldham, Kulik, Stepina & Ambrose, 1986 (10 Items; á = 0.70)
	3	Demo et al., 2012 (5 items; á = 0.81)
Job security and safety	3	Oldham et al., 1986 (10 items; á = 0.87)
	2	Demo et al., 2012 (6 items; á = 0.84)
Grievances handling mechanism	5	Zulkiflee, Faisal, Shakizah & Durrishah, 2010 (11 items; á = 0.83-0.93)

Research Participants. *The sample comprised 301 respondents from seven universities that were four public and three private universities. The public universities were* Busitema, Gulu, Kyambogo and Mbarara University of Science and Technology (MUST). The private universities Islamic University in Uganda (IUU), Kampala International University (KIU) and Ndejje. The respondents were as described in Table 1.

Table 2: **Respondents Background Characteristics**

Item	Categories	Frequency	Percent
Ownership of the University the respondent worked in	Public	128	42.5
	Private	173	57.5
	Total	301	100.0
Age group of the respondent in years	Up to 30 years	61	20.3
	30 but below 40	152	50.5
	40 and above	88	29.2
	Total	301	100.0
Sex of the respondent	Male	182	61.5
	Female	114	38.5
	Total	296	100.0
Highest level of education attained by the respondent	Bachelor's degree	33	11.0
	Post graduate diploma	14	4.7
	Master's degree	183	61.0
	PhD degree	70	23.3
	Total	300	100.0
Marital status of the respondent	Single never married	49	16.3
	Married	237	78.7
	Widowed	9	3.0
	Divorced	6	2.0
	Total	301	100.0
Tenure in years of employment attained by the respondent in the current University	Up to one	26	8.6
	One but below five	93	30.9
	Five but below 10	136	45.2
	10 and above	46	15.3
	Total	301	100.0
Position of the respondent in the hierarchy of current University	Administrative position (e.g. Principal of a college, Dean of a faculty, Head of institute, Head of dept)	62	20.8
	Strictly academic	236	79.2
	Total	298	100.0

Data Analysis. The researchers used quantitative research methods to establish the extent of the validity and reliability of the instrument. T*he validities of multi-item constructs of HRM practices, namely* recruitment, selection, job design, appraisal, participation, training, promotion, rewards, job security and safety and grievances handling mechanisms *were tested using Factor Analysis. The Cronbach Alpha method was used to test reliabilities of the constructs.*

Results

In the presentation of the results, the first step involved running a factor analysis on the items within each subscale to ascertain covariation among the items and whether the patterns fitted well into the HRM practices constructs. Kaiser-Guttman rule (which states that factors with Eigen values greater than one should be accepted to identify a number of factors and their constitution based on the data analysis was used (Schmidt et al., 2009). In addition, reliability tests were done for the items in each subscale. During factor analysis, those items that split loaded by loading highly on more than one component (Table 7) were eliminated because they were considered to be complex items (Yong & Pearce, 2013). After eliminating split loading items, reliability test was repeated on the remaining items and Cronbach alphas for all the items in constructs measuring HRM practices were above the benchmark of á = 0.7 (*Tavakol & Dennick, 2005*). The results are as presented in the subsequent confirmatory factor analysis and reliability tables.

Recruitment.

Table 3 shows that factor analysis reduced the five items of the first HRM practice (recruitment) into one factor. The factors had an Eigen value of 2.414, meaning that the factor accounted for 2.414/5 x 100 = 48.27% of the total variance among the five items.

Table 3: Factor and Cronbach Alpha for Items of Recruitment

Recruitment Items	Factor Loadings	Á
I was provided adequate relevant information about this University at the time of recruitment	0.794	0.722
I was given adequate relevant information about this job at the time of recruitment in this University	0.779	
I obtained the job in this University after information was officially disclosed to me on the criteria to follow for me to get the job	0.693	
I joined this University after information about the availability of job was widely disseminated	0.661	
My recruitment to this University was strictly based on merit	0.509	
Eigen value	2.414	
% variance	48.27	

Selection.

Table 4 shows that factor analysis reduced the four items of the second HRM practice (selection) into one factor. The factors had an Eigen value of 2.272, meaning that the factor accounted for 2.272/4 x 100 = 56.794% of the total variance among the four items.

Table 4: Factor and Cronbach Alpha for Items of Selection

Selection Items	Factor Loadings	á
To get the job in this University I went through a rigorous selection process	0.817	0.740
I went through a competitive selection process to obtain the job in this University	0.815	
When I was being selected to work in this University, my skills relevant to the job were evaluated	0.696	
When I was being selected to work in this University, my attitudes relevant to the job were evaluated	0.675	
Eigen value	2.272	
% variance	56.794	

Job Design.

Table 5 shows that factor analysis reduced the five items of the third HRM practice (job design) into one factor. The factors had an Eigen value of 2.647, meaning that the factor accounted for 2.647/4 x 100 = 52.941% of the total variance among the five items.

Table 5: Factor and Cronbach Alpha for Items of Job Design

Job Design Items	Factor Loadings	á
My job in this University is designed in such a way that my strengths is fully evoked	0.883	0.753
My job in this University provides me a flexible time schedule	0.817	
My job in this University is designed in a way that optimises my skills	0.808	
The requirements of my job in this University accurately reflect my understanding of the job	0.539	
I have the opportunity to rotate appointments in this University	0.505	
Eigenvalue	2.647	
% variance	52.941	

Performance Appraisal.

Table 6 shows that factor analysis reduced the six items of the fourth HRM practice (performance appraisal) into one factor. The factors had an Eigen value of 3.955, meaning that the factor accounted for 3.955/6 x 100 = 65.909% of the total variance among the six items.

***Table 6: Factor and Cronbach Alpha for Items of* Performance Appraisal**

Performance Appraisal Items	Factor Loadings	á
The appraisal system of this University has a strong influence on my performance	0.879	0.894
The appraisal system of this University advances my career	0.856	
The performance appraisal system of this University is fair	0.836	
In this University my performance is measured on the basis of objective results	0.835	
In this University after every appraisal I receive feedback about my performance	0.753	
In this University I am appraised at regular intervals	0.697	
Eigen value	3.955	
% variance	65.909	

Training.

Table 7 shows that factor analysis reduced the seven items of the fifth HRM practice (training) into two factors. The factors had Eigen values of 3.725 and1.019, meaning that the factors accounted for 3.725/7 x 100 = 65.909% and 1.019/7 x 100 = 14.556of the total variance among the six items. Cronbach's alpha for this set of items was 0.894 for the initial test of the items. After dropping the second and seventh items that split loaded, the items became more valid but less reliable (hence the reduction of á from 0.853 to 0.801). But the final alpha (á = 0.801) being above 0.7 (Tavakol & Dennick, 2011) indicates that the remaining items were internally consistent and thus reliably measured training

***Table 7: Factors and Cronbach Alpha for Items of* Training**

Training Items	Factor Loadings		
	1	2	á
The training programmes available for me in this University are relevant to the changing needs of my job	0.785		0.853*
In this University I receive regular training in the different aspects of my job (dropped)	0.744	-0.503	0.801**
My training needs in this University are identified through a formal performance appraisal mechanism	0.733		
My University provides me extensive training to enhance my job performance	0.732		
In this University I have been encouraged to participate in seminars and workshops	0.702		
The mentoring I have received in this University has been vital to my job performance	0.716		
In this University I have been assigned challenging jobs to evoke my skills (dropped)	0.690	0.504	
Eigen value	3.725, 14.556		
% variance	53.209, 1.019		

*Initial Cronbach Alpha

**Cronbach Alpha after dropping items two and seven that loaded highly on two components/ factors.

Promotion.

Table 8 shows that factor analysis reduced the five items of the sixth HRM practice (promotion) into one factor. The factors had an Eigen value of 3.333, meaning that the factor accounted for 3.333/5 x 100 = 66.651% of the total variance among the five items.

Table 8: Factor and Cronbach Alpha for Items of Promotion

Promotion Items	Factor Loadings	á
Promotion in this University is based on merit	0.851	0.874
I have a clear understanding of the promotion requirements of my job in this University	0.834	
Management of this University has communicated the promotion policy to me very clearly	0.832	
The promotional opportunities available to me in this University are satisfying	0.800	
There is an opportunity for me to get promoted in this University soon	0.762	
Eigenvalue	3.333	
% variance	66.651	

Employee Participation.

Table 8 shows that factor analysis reduced the seven items of the seventh HRM practice (employee participation) into one factor. The factors had an Eigenvalue of 4.515, meaning that the factor accounted for 4.515/7 x 100 = 64.494% of the total variance among the seven items.

Table 8: Factor and Cronbach Alpha for Items of Employee Participation

Employee Participation Items	Factor Loadings	á
I feel am equitably involved in the activities of this University	0.871	0.907
I am encouraged to participate in problem solving matters in this University	0.851	
Open and honest self-expression is promoted in this University	0.841	
I am given opportunity to suggest improvements in the way things are done in this University	0.831	
I am involved in decision making in this University	0.804	
I participate in different administrative activities in this University freely	0.733	
I am treated with respect in the handling of the activities of this University	0.670	
Eigen value	4.515	
% variance	64.494	

Rewards.

Table 9 shows that factor analysis reduced the six items of the eight HRM practice (rewards) into one factor. The factors had an Eigen value of 4.089, meaning that the factor accounted for 4.089/6 x 100 = 68.145% of the total variance among the six items.

Table 9: Factor and Cronbach Alpha for Items of Rewards

Rewards Items	Factor Loadings	á
The rewards/ remuneration I receive from this University are comparable to the market	0.887	0.901
I am satisfied with the rewards/ remuneration I receive from this University	0.881	
Rewards/ remuneration are fairly distributed in this University	0.878	
I am paid adequately for the work I do in this University	0.869	
My job performance is an important factor in determining the rewards/ remuneration I receive in this University	0.756	
My rewards/ remuneration in this University are/ is paid timely	0.643	
Eigen value	4.089	
% variance	68.145	

Job Security and Safety.

Table 10 shows that factor analysis reduced the five items of the ninth HRM practice (job security and safety) into one factor. The factors had an Eigen value of 2.822, meaning that the factor accounted for 2.822/6 x 100 = 56.440% of the total variance among the five items.

***Table 10: Factor and Cronbach Alpha for Items of*Job Security and Safety**

Job Security and Safety Items	Factor Loadings	á
I find this University a good place for me to work in	0.831	0.801
My personal safety in the University is guaranteed as I carry out my work	0.787	
I am assured of my job in this University as long as I continue performing	0.746	
In this University staff are rarely made redundant	0.742	
The place from where I work in this University has proper hygiene conditions.	0.638	
Eigenvalue	2.822	
% variance	56.440	

Grievance Handling Mechanisms.

Table 11 shows that factor analysis reduced the five items of the tenth HRM practice (grievance handling mechanisms) into one factor. The factors had an Eigen value of 3.269, meaning that the factor accounted for 3.269/5 x 100 = 65.390% of the total variance among the five items.

***Table 11: Factor and Cronbach Alpha for Items of* Grievance Handling Mechanisms**

Grievance Handling Mechanisms Items	Factor Loadings	á
In this University, problems concerning my job are first investigated to find a solution acceptable me	0.882	0.864
The middle course is always found to resolve impasses between me and my superiors in this University	0.851	
My job concerns in this University are brought out in the open so that they can be resolved in the best possible way	0.814	
My superiors in this University work with me to find solutions to the problems related to my job	0.769	
My superiors in this University try to avoid unpleasant exchanges with me	0.715	
Eigen value	3.269	
% variance	65.390	

Correlations among the HRM practices

A final set of analysis examined the relationship between the HRM practices subscales using Pearson product-moment correlations (Table 12). To examine the relationship between the HRM practice subscales, average indices for the 10 HRM practices that were recruitment (Rec), selection (Sel), job design (Jdes), performance appraisal (PA), training (Train), employee participation (EP), promotion (Promo), rewards (Rew), job security and safety (JSS) and grievances handling mechanisms (GHM) were computed. With respect to sub scale of recruitment, it weakly correlated with all the subscales except job design. Selection weakly correlated with five subscales namely training, performance evaluation, training, employee participation, rewards, job security and safety, and grievances handling mechanisms. Job design had no significant correlation with any of the subscales. Performance appraisal had a modest correlation with all the subscales except job design. Training had a modest correlation with all the subscales except job design while selection had no correlation with job design. Promotion, employee participation, rewards, job security and safety, and grievances handling mechanisms had modest correlation with all the subscales except job design with which there was no correlation. The correlation results suggest that the HRM subscales were independent with job design as the most independent subscale.

Table 12: Inter-correlations of HRM Practices Measures

	Rec	Sel	Jds	PA	Train	Prom	EP	Rew	JSS	GHM
Rec	1	0.460**	-0.040	0.393**	0.423**	0.443**	0.338**	0.389**	0.389**	0.366**
Sel		1	-0.003	0.130*	0.227**	0.092	0.127 *	0.148*	0.278**	0.193**
Jdes			1	-0.038	0.036	0.047	0.103	-0.069	0.037	0.035
PA				1	0.654**	0.630**	0.591 **	0.586**	0.528**	0.574**
Train					1	0.496**	0.583**	0.504**	0.484**	0.535**
Prom						1	.663**	0.562**	0.569**	0.576**
EP							1	0.588**	0.557**	0.606**
Rew								1	0.667**	0.618**
JSS									1	0.686**
GHM										1

* Correlation is significant at the 0.05 level (2-tailed).

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

Discussion

The specific purpose in mind for designing this instrument was to develop and test measurement scales for HRM practices in the context of academic staff in universities. The results reveal that this instrument for the 10 HRM practices is a valid and reliable measure. The internal consistency for all the HRM practices was satisfactory since Cronbach alphas (á) met the criterion of 0.70 (***Tavakol & Dennick, 2011).***The results also showed that all the items for the HRM practices were valid because the factor loadings were above the cut off value of 0.50 and loaded highly one factor. The items for the first HRM practice (recruitment) were reliable. These results consistent with those of Demo **et al. (20**12) whose reliability test for the same items found them reliable. Similarly, the items for the second HRM practice (selection) were reliable as was the case with Chen and Huang (2009) and Wan et al.(2002)whose reliability tests found the items reliability. The items for the third HRM practice (job design) were reliable. This was consistent with Dwivedula and Bredillet (2009) because their reliability test indicated that the items were reliable. The results for the fourth HRM practice (performance appraisal) also indicated reliability of the items.

Consistent with the results of Chen& Huang (2009) and Demo et al. (2012), reliability test for the fifth HRM practice (training) confirmed reliability of the items. However, two items on training were dropped because they split loaded on two factors. The items for the six HRM practice (participation) were reliable. These results consistent with those of Demo **et al. (20**12) whose reliability test for the same items showed that they were reliable. With respect to the items for the seventh HRM practice (promotion), they were also reliable as previously found out by Negash et al. (2014). With regard to the items for the eighth HRM practice (rewards), they were reliable as already indicated by Oldham et al. (1986).The results for the ninth HRM practice (job security and safety) also indicated reliability of the items. This was similar to the results of Oldham et al. (1986) and Demo et al. (2012) whose reliability test for suggested reliability of the items. Further still, consistent with Zulkiflee et al. (2012) reliability test for the tenth HRM practice (grievances handling mechanisms) supported reliability of the items. Overall, from the above results, it can be discerned that this designed HRM practices instrument provides appropriate measures for HRM practices in the context of universities.

Conclusion

The instrument developed by this study provides appropriate measures for the different HRM practices. The 10 HRM practice subscales were empirically supported. Therefore, this paper brings various subscales measuring HRM practices together. This paper provides a reliable and valid instrument to measure HRM practices not only for purposes of empirical research but also for the purposes of organisations aiming at effective management and high quality performance.

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