

Contextualizing Project Human Resources Management within Nigeria's Public University System: a case study of Federal University of Technology, Minna

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Abstract: *Universities are incubators of skills, knowledge and ideas that trigger economic growth and stability. But this is dependent on the attitude of university staff (especially academic staff) towards their duties, a factor believed to be influenced by prevailing environmental factors. A range of factors that influence behaviour/performance of lecturers in federal universities in Nigeria were examined using survey questionnaire as an instrument. The analyses of respondents' views reveal, contrary to a generally held notion, that the nature of technology available and lack of recognition considerably affect performance, perhaps, more than poor remuneration, while comfort and nature of relationships (vertical and lateral) are key factors that enhance staff performance at work. The study recommends activities aimed at strengthening management-staff relationship as well as periodic performance evaluation of staff. The outcome of this study would serve as a guide for enhancing the performance of public universities in Nigeria by creating a work environment that enhances performance.*

Key words: *project, human resources management, motivation, university, work performance, recognition, relationship, reward.*

I. Introduction

The development of any nation is hinged on her ability to harness and transform available human and material resources into value adding/enhancing products and services. Even though these two resources are essential for economic growth and stability, there are suggestions that, perhaps, human resources contribute more to the development of the society, whether at societal or individual level. This may have informed the suggestions by Faust (2010) that knowledge is replacing other resources as the main driver of economic growth. Again, there are views that acquisition of knowledge is a sustainable source of competitive advantage (Diugwu, 2011a, 2011b). And according to Zack (1999), knowledge is a valuable and strategic resource, and its application on problems becomes the most important capability, especially in today's society where economic growth and development are driven by the existence of requisite knowledge (Varghese, 2007).

Although man is endowed with innate knowledge, this has to be nurtured and harnessed for optimal benefit; this is only achievable through education (formal or informal). Education is the base upon which prosperity and social mobility are built on (Faust, 2010); a potent and vibrant instrument for development of nations (Aghenta, 2000; Fadipe, 2000; Olutola, 1983). According to Woodhall (1970), this impact could be attributed to the ability of the education process to increase the creative capacities of people. Having thus, established education as a route through which knowledge could be acquired and nurtured, it becomes necessary to establish the sources of education (and by implication, knowledge). Although formal education starts with the basic pre-primary and primary education, progressing through to the higher education/tertiary level, Varghese (2007) sees the higher education system as the main source of knowledge production, dissemination and absorption in any society. In the views of Sir Leszek Borysiewicz (2012), a key output of higher education institutions is human resources, with economic productivity as a by-product of teaching and research. Thus, the tertiary education system is able to promote growth and well-being by providing the high level skills and research output required in modern economies (OECD, 2011).

The above notwithstanding, there are suggestions that greater percentage of the contribution of the tertiary/higher education sector is made by Universities. For instance, Faust (2010) notes that higher education generates broader economic growth and individual prosperity; and universities, having contributed nearly £60 billion to the economy of United Kingdom between 2001 and 2008, for instance, have become key players in a global system that is increasingly driven by knowledge. This feat is woven around the fact that universities, as traditional carriers of advanced research and higher knowledge, play greater roles in enhancing knowledge production through the provision of the human resources and scientific results that could be turned into patents, products, and services (Power & Malmberg, 2008).

In could be inferred from the foregoing that the university system has the training of skilled management manpower that can contribute to the development of the society as its core mandate. As noted in Power and Malmberg (2008), universities, through the education of students, could have a very real effect on the

provision of labour. Additionally, the university system is expected to be a source from which new ideas emanate through cutting edge researches. In all these core functions, universities rely on their staff (academic and non-academic), who work within scope, cost, time, and quality constraints. Allusions to these constraints have been made in earlier works. In Nigeria for instance, although the education sector has multiple sources of fund, it is the Federal government that is the major funder of higher education, and quite expectedly, there is a competition with other sectors/sub-sectors for available limited resources (Harvey & Jowsey, 2004). Within the education sub-sector, the fund allocated to universities is considered higher than that allocated to other levels of education. This has been attributed to increase in the number of universities (Moja, 2000). There are, however, observations that the fund allocated to the sector has not reflected inflation rates and the growing enrolment figures (Ejiaga, 1997).

It could be argued that the establishment of some universities in Nigeria was influenced by social and political pressures rather than economic considerations of manpower needs of the country. This amounts to poor conceptualization and has caused myriads of problems within the system to the extent that stakeholder needs have neither been satisfied, nor their expectations met. These are practical implications of poor application of project management principles. It is in recognition of these constraints and expectations that the university system is regarded in this paper as a project oriented one; and its activities can only be efficiently executed through the application of acceptable project management principles. As a result, the discussions in this paper would be guided by project human resource management principles (Gale, 2004; Huemann, Turner, & Keegan, 2004; Project Management Institute, 2000). A critical assessment of the human resources aspect of the university system, especially in Nigeria, is important because in order to build intellectual capital, there is need to utilize "social capital", which is developed through the repeated interaction of people over time (Nahapiet & Ghoshal, 1998). This further highlights the need to establish organizational cultures, forms and reward systems capable of enhancing and sustaining these social relationships (Quinn, Anderson, & Finkelstein, 1996). This cannot be effectively done without first, establishing those factors that impact on the performance of staff, as performance is shaped by prevailing environmental factors (New & Payne, 1995).

II. Literature Review

Nigeria's university education sector

Universities have been described variously (Brickel, 1975; Brubacher, 1982; Privateer, 1999). However, as highlighted by Kerr (2001), all these views have a commonality – that is, that universities engage simultaneously in teaching, research, manpower development, as well as community oriented services. Thus, Universities are visualized as places for higher education and basic research; and although they serve these traditional functions, well-resourced universities play leading roles in successful economies around the world (ICF Consulting, 2003). Consequently, the establishment of universities could have been motivated by the need to train middle to high-level manpower that would spearhead nation building. And, as Borysiewicz (2012) puts it, Universities produce human resources whose activities lead to higher productivity. This is not different in Nigeria's case where universities are expected to produce the right type of manpower in sufficient quantity and quality needed to transform the nation from a developing country to a developed country (Fadipe, 2000).

There are about three hundred and sixty five (365) higher education institutions (HEIs) in Nigeria, made up of 104 Universities; 121 monotechnics and polytechnics; (85) Colleges of Education (CoE), and 65 Innovative Enterprises (Shu'ara, 2010). However, information from the National Universities Commission's website (the regulator in charge of Universities in Nigeria) shows that the number of Universities has increased to 128 (40 Federal; 38 State; 51 Private). **Table 1** below which profiles the routes to tertiary education in Nigeria clearly shows that prospective students prefer studying in universities to monotechnics, polytechnics and colleges of education. In view of this, the focus of this paper shall be on university sub-sector (at Federal level) in view of the population that they serve.

Table 1: Routes to tertiary education, 2007 - 2010

Year	University Matriculation Examination (UTME)	Monotechnics, Polytechnics & Colleges of Education (MPCE)	Total
2007	911,679	167,836	1,079,515
2008	1,192,050	310,022	1,502,072
2009	1,184,651	342,908	1,527,559
2010	1,330,531	45,140	1,375,671
Total	4,618,911	865,906	5,484,817
% (Total)	84%	16%	

Source: Shu'ara (2010)

Available data which dates back to the 1962/63 academic session show continual increases in the number of institutions, students' enrolment, as well as graduate output (National Universities Commission, 1994; Shu'ara, 2010). On the other hand, there has not been a commensurate increase in budgets; a situation that forced expenditures per full time equivalent (FTE) down to \$362 in 1998, from \$700 in 1991 (Jibril, 1999). The observation by Ajayi and Akindutire (2007) that the demand for admission is higher than what the system's physical capacity can accommodate in terms of personnel and infrastructure is supported by views that the lingering financial crises has hampered the provision of these resources (UNESCO, 2004). This has negatively impacted on the system. For instance, it may have caused the shortage of academic staff in our universities (Federal Ministry of Education, 2003; Shu'ara, 2010) due to the migration of academic staff to other institutions or countries in search of better remuneration and conditions of service (Bangura, 1994; Saint, Hartnett, & Strassner, 2003). The consequence of the above is that the remaining academic staff are over-worked and intellectually jaundiced (Ukeje & Ehiametalor, 1998). Furthermore, this shortage, according to Shu'ara (2010), is such that over 60% of academic staff, particularly in the critical areas of science and technology, are at Lecturer 1 or below cadre; this has enormous implications on the quality of teaching and learning.

In view of the above, any doubts about the ability of Nigerian universities to live up to this expectation would be well founded. This perhaps informed the description of the Nigerian higher education system by Moja (2000) as inefficient and ineffective. This is demonstrated by the decline in quality due to the unstable environment occasioned by frequent strikes by students or staff, as well as the quality of the academics recruited among other factors. This necessitates rethinking quality promotion in the nation's education sector. These factors, shortage of quality staff as well as frequent strikes, are undoubtedly linked to job satisfaction and motivation.

An Overview of Motivation and Job Satisfaction

Motivation is a psychological process that causes the arousal, direction, intensity and persistence of behaviour (E. A. Locke & Latham, 2004). Within the context of a work environment, the concept of motivation explains why workers behave in certain ways; the psychological forces that determine the direction of a person's behaviour, level of effort and tenacity (George & Jones, 2011). Therefore, motivation, as an in-built human trait, needs to be aroused and sustained with a view to aligning employees' behaviour with that of the organization (Mawoli & Babandako, 2011). Although motivation is a complex phenomenon, with many competing and perhaps inconclusive theories (see for instance, Harder (2008)), it helps in addressing issues relating to employee performance. The various views about motivation have been encapsulated into the content or process/cognitive perspectives/theories. The content theories emphasise what motivates individuals by identifying their needs, relative strengths, and the goals they pursue so as to satisfy these needs. Process theories on the other hand emphasize the process of motivation, looking specifically at the various variables which help initiate, direct and sustain behaviour. **Table 2** below summarizes these broad classifications of motivation.

Table 2: Classification of theories of motivation

	Classification	Summary of theory	Examples
Content Theory:	(a) Needs theory:	The ability of a job to meet the specific needs of individuals is a motivating factor	(i) Abraham Maslow's hierarchy of needs (ii) Clayton Alderfer's ERG theory (iii) McClelland's learned Needs Model
	(b) Job content theory	Only those aspects that are related to job content (achievement, recognition, responsibility, supervision, relationship, advancement) that satisfy and motivate people to work.	(i) Herzberg's Two Factor Model (ii) Hackman and Oldham
(2) Process/Cognitive theory		Deals with 'how' and 'why' people are motivated	(i) Vroom's Expectancy theory (ii) Adam's Equity theory (iii) Locke's Goal Setting theory (iv) Skinner's Reinforcement theory

While motivation cannot be directly measured, factors such as satisfaction/no-satisfaction and dissatisfaction/no-dissatisfaction factors that could be used in measuring it have been identified (F. Herzberg, 1974). Mullins (1996) notes that factors which lead to satisfaction include achievement, recognition, the work itself, responsibility, achievement, growth; while factors that lead to dissatisfaction are company policies, supervision, relationships with supervisor/peers, work conditions, salary, status, security among others. These factors could either minimize the level of dissatisfaction (Jaafar, Ramayah, & Zainal, 2006), or affect a person's desire to do a good job (Nelson & Quick, 2003).

The level of satisfaction or dissatisfaction derived from a job (or job satisfaction) is a widely researched topic in organisational behaviour (Lumley, Coetzee, Tladinyane, & Ferreira, 2011; Spector, 1997). This assertion is given credence by the numerous, albeit, varying descriptions and definitions of job satisfaction (George & Jones, 2011; Hoppock, 1935; Edwin A. Locke & Latham, 1990; Vroom, 1964). This notwithstanding, job satisfaction simply conveys an individual's perception or understanding that work is not a necessity imposed upon him or her; an indication of the degree to which that individual feels that he or she is positively or negatively affected by his/her job (Ifinedo, 2005). It is obvious from available literature that perception about a job and its different aspects play a huge role in the level of productivity. This basically, is what the study of job satisfaction is all about (Gibson, Ivancevich, & Donnelly, 2000; Luthans, 2002; Spector, 1997). Job satisfaction according to F. A. Herzberg, Mausner, and Snyderman (1962) is emotional response to one's tasks, as well as the physical and social conditions of the workplace. There are equally observations that job satisfaction is influenced by a range of intrinsic and extrinsic outcomes (rewards) offered by a job (Cheung & Scherling, 1999; Gibson et al., 2000); a feeling of happiness or unhappiness associated with a particular job or the job holder's expressed views about the job (Gibson et al., 2000). Although motivation is that invisible, internal and hypothetical construct that can neither be seen nor measured directly (Pinder, 1998), it could manifest in the level of satisfaction derived from doing a particular job; known to impact on organisational performance (Begley & Czajka, 1993; Morrison, 2008; Tharenou, 1993). In the education sector, it is has been blamed for teacher attrition (Russ, Chiang, Rylance, & Bongers, 2001), the situation where teachers leave the classroom to take up other professional responsibilities, inside or outside of education, or to spend more time with their families (Miller & Chait, 2008).

There are suggestions that although motivation and job satisfaction are related, they are distinct phenomena (Gibson et al., 2000; Peretomode, 1991). A further inference from these sources is that motivation is focused essentially on the behavior of the individual, while job satisfaction relates to the level of fulfillment derived from specific job responsibilities. In view of this distinction, efforts have been made to establish a link (if any) between an individual's level of motivation and the degree to which that individual is satisfied with his/her job. Among other research studies, Ahmed and Islam (2011) for instance, concluded from their study that a positive association exists between motivation and job satisfaction.

The level of satisfaction derived from a job could trigger off emotional reactions (caused either by personal or organizational factors) that could affect organizational commitment (Mowday, Steers, & Porter, 1979). These personal factors are those regarded by employees as being important to them (Sempene, Rieger, & Roodt, 2002). For instance, whereas a clearly defined job description is a motivator, an unclear job description and irrelevant administrative assignments can overburden staff, thus which causing dissatisfaction among them (Fuhrmann, 2006). This is closely aligned with the view expressed by Davidson (2007) regarding high work load and non teaching activities as specific job design problems. Therefore, in line with Lynn (2002), there is a need to provide professional learning and growth opportunities capable of motivating teachers and enhancing their performances. It is also instructive to note that in view of the link between the level of staff turnover and absenteeism in work established in Porter and Steers (1973), the moment an employee feels that his/her input are greater than outputs, that employee becomes de-motivated (Adams, 1963). This could increase the desire to satisfy basic human needs (lower-order motivators), increase susceptibility to corrupt tendencies, fraudulent activities, including robbery among some workers (Karwai, 2005). In the education factor, several sources have shown that a link exists between job satisfaction and attrition (Russ et al., 2001); a situation that could be triggered or worsened by lack of recognition, few opportunities for promotion, excessive paperwork, loss of autonomy, lack of supplies, low pay, and stressful interpersonal interactions (Wisniewski & Gargiulo, 1997). On the other hand, job satisfaction leads to better performance by students, possibly caused by enhanced teacher effectiveness (Ashton & Webb, 1986).

An employee who is not satisfied with his/her job, quite expectedly, impacts negatively on the entire system. And within the higher education sector of countries such as Nigeria, these include low lecturer output, high staff turnover, regular strike actions, poor students' performance and lecturer absenteeism (Adelabu, 2005). Within the Nigerian education sector, Ololube (2006, 2007) identifies limited professional advancement opportunities and low salary (causing them to keep other jobs to supplement their earnings) as major causes of job dissatisfaction among teachers.

III. Methodology

With a view to achieving the objective of this study, a descriptive survey approach utilising close ended questionnaires for data collection was adopted. The research population considered was only the academic staff (N=833) of the Federal University of Technology Minna.

The sample size was calculated using the following formula (**equation 1**) proposed by Cochran (1977):

$$n_0 = \frac{z^2 pq}{e^2} \tag{1}$$

where

- n_0 is the sample size
- z is the standard normal variable (1.96 at 95% confidence level)
- p is the proportion or degree of variability (50% or 0.5)
- q is the which is equal to (1-p)
- e is the level of precision (5% or 0.05)

The solution to the above formula shows that a sample size (n_0) of 384 is required.

However, the above formula is more appropriate when dealing with a large population. As such, for a small population size a finite population factor (fpc) shown in **equation 2** is applied (Cochran, 1977; Kish, 1965):

$$fpc = \sqrt{\frac{N - n_0}{N - 1}}, \tag{2}$$

where

- fpc is the finite population factor
- N is the population size
- n_0 is the sample size from **equation 1** above

According to Kish (1965), **equation 2** above should be applied when a sample size exceeds 10% of the population size N (in this case 833); upon which a revised population size should be calculated using **equation 3** below:

$$n_R = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}} \tag{3}$$

where

- n_R is the revised sample size based on the fpc
- N is the population size
- n_0 is the sample size from **equation 1** above

Solving **equation 3** above yields a revised sample size of 263. A further 30% (78.91) of this figure was added to compensate for non-responses (Israel, 1992), making the total number of questionnaires distributed to be 341.

IV. Results And Discussion

Out of the 341 questionnaires that were administered, 189 were returned, representing a 56% response rate; which is adjudged reasonable. A basic frequency analysis and analysis of variance (ANOVA) were carried out using SPSS software.

Distribution of Respondents

Table 4 below shows the distribution of respondents according to (a) rank, and (b) salary. The percentages shown are based on the number of valid responses.

Table 4: Distribution of respondents

(a) Responses grouped according to rank			(b) Responses grouped according to salary range		
Rank	Frequency	Valid Percent	Salary Range (₦)	Frequency	Valid Percent
Professor	7	4.9	18000-49999	10	5.5
Associate Professor	9	6.3	50000-99999	34	18.7
Senior Lecturer	23	16.0	100000-149999	59	32.4
Lecturer I	34	23.6	150000-199999	17	9.3
Lecturer II	46	31.9	200000 and above	62	34.1
Assistant Lecturer	18	12.5	Valid Responses	182	100.0
Graduate Assistant	7	4.9	Missing	7	
Valid Responses	144	100.0	Total	189	
Missing	45				
Total	189				

There are 45 and 7 missing cases recorded from the rank of respondents and salary range respectively. These missing cases were not followed up because for confidentiality purposes, there was no provision for identity of respondents. Secondly, the response rate achieved was adjudged reasonable enough for the purposes of the study.

Impact of Work Environment on Performance

A one-way between groups analysis of variance (ANOVA) was conducted to compare the effect of work environment (comfort, structure, relationship, recognition, empowerment, and autonomy) on staff performance.

Table 5: ANOVA Result of Influence of Work Environment on Staff Motivation

		Sum of Squares	df	Mean Square	F	Sig.
Comfort	Between Groups	114.509	6	19.085	7.348	.000
	Within Groups	350.646	135	2.597		
	Total	465.155	141			
Structure	Between Groups	43.557	6	7.260	3.181	.006
	Within Groups	296.691	130	2.282		
	Total	340.248	136			
Relationship	Between Groups	8.494	6	1.416	.774	.592
	Within Groups	241.520	132	1.830		
	Total	250.014	138			
Recognition	Between Groups	46.054	5	9.211	5.706	.000
	Within Groups	145.280	90	1.614		
	Total	191.333	95	3		
Empowerment	Between Groups	47.392	6	7.899	2.987	.009
	Within Groups	343.732	130	2.644		
	Total	391.124	136			
Autonomy	Between Groups	34.273	6	5.712	2.122	.055
	Within Groups	349.960	130	2.692		
	Total	384.234	136			

It could be seen that from **Table 5** above that at the $p < .05$ level, there are statistically significant different among the ranks regarding the variables as follows: comfort - $[F(6, 135) = 7.348, p = 0.000]$; structure- $[F(6, 130) = 3.181, p = 0.006]$; recognition - $[F(5, 90) = 5.706, p = 0.000]$; and empowerment- $[F(6, 130) = 2.987, p = 0.009]$. There is, however, no statistical difference in the perception of respondents with regards to the variables, relationship - $[F(6, 132) = .774, P = 0.592]$; autonomy - $[F(6, 130) = 2.122, P = 0.055]$.

Table 6: Post Hoc Comparison of Selected factors using Tukey HSD method

Factors	Rank	Mean	Std. Deviation	Factors	Rank	Mean	Std. Deviation
Comfort	Professor	3.14	1.464	Recognition	Professor	.	.
	Associate Professor	1.44	.882		Associate Professor	4.00	.000
	Senior Lecturer	2.39	1.751		Senior Lecturer	4.13	1.586
	Lecturer I	2.91	2.115		Lecturer I	5.07	1.530
	Lecturer II	2.26	1.584		Lecturer II	3.77	1.107
	Assistant Lecturer	1.83	.857		Assistant Lecturer	5.67	.488
	Graduate Assistant	6.00	.000		Graduate Assistant	4.43	.976
Structure	Professor	2.29	.488	Empowerment	Professor	1.86	1.464
	Associate Professor	3.78	.441		Associate Professor	2.33	.866
	Senior Lecturer	4.00	1.567		Senior Lecturer	3.00	1.784
	Lecturer I	4.13	1.661		Lecturer I	3.72	1.611
	Lecturer II	3.20	1.706		Lecturer II	3.48	1.947
	Assistant Lecturer	2.67	1.291		Assistant Lecturer	3.00	.845
	Graduate Assistant	3.43	.976		Graduate Assistant	4.71	.488

For those variables where statistical differences were observed, a post hoc comparison of the factors using the Tukey HSD was carried out to ascertain the sources of the observed differences. The test results (Table 6 above) show that the mean score views of graduate assistants (M = 6.00, SD = 0.000) were statistically significantly different from those of professors (M = 3.14, SD = 1.464), associate professors (M = 1.44, SD = 0.882), senior lecturers (M = 2.39, SD = 1.751), lecturer I (M = 2.91, SD = 2.115), lecturer II (M = 2.26, SD = 1.584), assistant lecturers (M = 1.83, SD = 0.857).

The result of the Tukey HSD multiple comparisons analysis (Table 7) shows the sources of the observed statistical differences. Whereas the observed statistical significant differences in comfort could be explained by all the ranks (significance values < 0.05), the correlation in terms of structure emanates from the perceptions of Assistant Lecturer and Lecturer I's which shows a mean difference of -1.458 and a significance value of 0.039. In terms of perceptions about empowerment, it is explained for by the independent variables, graduate assistants and professors, with a mean difference of 2.857 and a significance value of 0.022. On aggregate, these results suggest that the performance of staff of public universities in Nigeria is affected by their work environment. See also Appendix 1 for more on sources of identified statistical differences.

Table 7: Post Hoc Comparison of Selected factors using Tukey HSD method

Dependent Variable	(I) Rank	(J) Rank	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Comfort	Graduate Assistants	Professor	2.857*	.861	.020	.28	5.44
		Associate Professor	4.556*	.812	.000	2.12	6.99
		Senior Lecturer	3.609*	.696	.000	1.53	5.69
		Lecturer I	3.094*	.672	.000	1.08	5.11
		Lecturer II	3.739*	.654	.000	1.78	5.70
		Assistant Lecturer	4.167*	.718	.000	2.02	6.32
Structure	Assistant Lecturer	Professor	.381	.692	.998	-1.69	2.45
		Associate Professor	-1.111	.637	.588	-3.02	.80
		Senior Lecturer	-1.333	.501	.117	-2.83	.17
		Lecturer I	-1.458*	.473	.039	-2.87	-.04
		Lecturer II	-.538	.452	.896	-1.89	.81
		Graduate Assistants	-.762	.692	.927	-2.83	1.31
Empowerment	Graduate Assistants	Professor	2.857*	.869	.022	.25	5.46
		Associate Professor	2.381	.819	.064	-.07	4.84
		Senior Lecturer	1.714	.702	.190	-.39	3.82
		Lecturer I	.996	.678	.764	-1.04	3.03
		Lecturer II	1.237	.662	.504	-.74	3.22
		Assistant Lecturer	1.714	.744	.250	-.51	3.94

*. The mean difference is significant at the 0.05 level.

Post hoc tests are not performed for Recognition because at least one group has fewer than two cases

The respondents were given opportunities to express their feelings on a range of issues. An analysis of these comments gives further insight into what motivates/de-motivate staff. For instance, a response by one Professor shows a need for a comfortable work environment; and engendering closer relationships among all stakeholders is a subset of this. An Assistant Lecturer observed that it should be comfort first, because this enhances effective research and learning, thereby positively impacting knowledge transmission and acquisition. Also, a Lecturer II observed that “... *good working relations amongst staff helps to reduce working challenges*”.

It is worth noting that the extent to which an individual or group has been given authority or power to make critical decisions affect the level of performance. It is therefore not a coincident that there is no statistically significant difference across the ranks regarding empowerment. Kirkman, Rosen, Tesluk, and Gibson (2004) for instance, established a positive relationship between empowerment and performance; such that empowerment has been linked to the desire to continuously improve not only on existing practice(s), but also on the level of commitment.

V. Factors Affecting Performance

An ANOVA test of factors that hinder work performance was carried out. The results (Table 8 below) show that there is no statistically significant difference among respondents on how poor remuneration (P-value of .443 at the 0.05 level of significance) as well as meaningful work and supervision (p = .137 at the 0.05 significance level) affected performance at work. Similarly, the results show there are statistical differences in

the means of how nature of technology available for work, lack of recognition, unnecessary bureaucracy, meaningful work and supervision, as well as inadequate training at the 0.05 level significance level. This could be seen as an indication that these factors are major hindrances to work performance.

Table 8: Major Hindrances to Work Performance

		Sum of Squares	df	Mean Square	F	Sig.
Nature of technology available for work	Between Groups	37.830	6	6.305	2.414	.030
	Within Groups	331.752	127	2.612		
	Total	369.582	133			
Lack of recognition	Between Groups	55.447	6	9.241	4.269	.001
	Within Groups	274.911	127	2.165		
	Total	330.358	133			
Unnecessary bureaucracy	Between Groups	54.650	6	9.108	3.457	.003
	Within Groups	355.724	135	2.635		
	Total	410.373	141			
Poor remuneration	Between Groups	14.717	6	2.453	.993	.433
	Within Groups	308.761	125	2.470		
	Total	323.477	131			
Meaningful work and supervision	Between Groups	18.529	6	3.088	1.656	.137
	Within Groups	236.845	127	1.865		
	Total	255.373	133			
Inadequate training	Between Groups	189.544	6	31.591	11.542	.000
	Within Groups	347.590	127	2.737		
	Total	537.134	133			

The ANOVA test procedure was also used to test the general feelings of staff towards their motivation. The results (between groups) are presented in **Table 9**. From the table, it is clear that the P-values indicate no difference for sponsorship of social events which is .122 at 0.05 levels, signifying that this variable has minimal effect on staff motivation. The P-value for the remaining variables is negligible which indicates their strong connection to staff motivation.

However, in considering the causes of hindrance within the work place, using the overall ranking, the nature of technology and lack of recognition were surprisingly rated high, more than poor enumeration. A respondent felt that non-availability of required technology and inadequate training on available technology have greatly affected the staff output. There are both intrinsic and extrinsic factors responsible for this. Making reference to this, a graduate assistant observed that “poor and obsolete technologies, poor training on how to use new technology act as disincentive to work and discourage people.” There are also views that the irregular and erratic power (electricity) supply in Nigeria is also major hindrance to technological uptake. The nature of technology available manifests in physical aspects of machine equipment, process and work lay out and the actual method, system and procedure involved in carrying out a work schedule. It influences the level and extent of social interaction among workers. Information technology (IT) also influences the pattern of work; changing the function, structure of group work, as well as the nature of supervision. A Professor observed that “students in Nigerian higher education institutions learn about technologies rather than with technologies. Simply put they are only taught theories and little or no practical ...”

Lack of recognition is equally a hindrance. Some lecturers feel that even though teaching ought to be a noble profession, it is not duly recognized and accorded such respect by the society at large because of government’s attitude towards the profession. The need for proper recognition and appreciation of efforts has been variously recognised (Aslam, 2011).

Some believe that apart from staff salary, other needs which enhance unity should be given adequate consideration. This implies that nature of relationship that exists within a work environment is seen as having a significant impact on the ability of staff to perform effectively. Relationship could be developed along several lines. For instance, it could be linear in nature, whereby authority flows vertically down the structure. It could also be along functional lines (applicable to specialist or advisory positions); involve the delegation of authority and responsibility for a specific activity; or laterally between individuals of different department but usually of the same level (Mullins, 1996).

Table 9: General Feelings of Staff towards their Motivation

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Develop friendly atmosphere	3.452	6	.575	4.530	.000
Sponsor social events	7.207	6	1.201	1.717	.122
Minimum supervision	45.879	6	7.647	7.540	.000
Policies de-motivate staff	33.925	6	5.654	6.824	.000
Policies targeted at individuals	25.373	6	4.229	3.793	.002
Adequate equipment	7.099	6	1.183	5.198	.000
More visibility to management	18.651	6	3.109	4.577	.000
Better job description	5.324	6	.887	4.108	.001
Assessment of performance	20.442	6	3.407	8.939	.000
Subordinate assessment of performance	41.591	6	6.932	10.031	.000
Employee is no longer interested in work	76.500	6	12.750	9.653	.000
Suffering from too much work	41.079	6	6.847	4.077	.001
Work is source of satisfaction and pleasure	13.817	6	2.303	2.269	.041

VI. Conclusion and Recommendations

This paper has explored key critical factors that affect motivation of employees of public universities in Nigeria. There are indications, and or pointers that lack of understanding and limited management commitment is affecting the ability of the universities to improve employee worker satisfaction. It was established that factors such as level of comfort, administrative structure, type of relationship with others, recognition, empowerment, as well as autonomy impact on output of employees. However, it was revealed that these affect the different ranks differently.

It thus follows that in order to improve productivity of employees, Management of public universities should strive, for instance, to create and maintain friendly atmosphere among their staff. There is also a need to improve technology available for work. A form of recognition/appreciation, in the form of merit award (which must not be monetary) amongst academic staff within the university would help increase dedication. This can be achieved by a strategic implementation of a monitoring and evaluations system that can automatically detect lecturer's achievement which would be integrated into the university system.

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APPENDIX 2: Result of Kruskal-Wallis Test

		Test Statistics					
		Comfort	Structure	Relationship	Recognition	Empowerment	Autonomy ¹
Chi-Square		25.110	17.259	5.837	25.801	17.685	10.646
Df		6	6	6	5	6	6
Asymp. Sig.		.000	.008	.442	.000	.007	.100
Mean	High	131.00 (GA)	83.39(AP)	84.00(GA)	70.33(AL)	106.50(GA)	87.67(AL)
Rank:	Low	45.39 (AP)	35.64(P)	59.17(SL)	31.69(L2)	35.79(P)	39.00(GA)

		Nature of technology	Lack of recognition	Unnecessary bureaucracy	Poor remuneration	Meaningful work and supervision	Inadequate training
Chi-Square		11.063	21.666	19.260	9.133	12.384	43.744
Df		6	6	6	6	6	6
Asymp. Sig.		.086	.001	.004	.166	.054	.000
Mean	High	93.86 (GA)	93.86(GA)	101.07(P)	93.86(GA)	75.95(L2)	103.29(P)
Rank:	Low	41.20(P)	21.00(P)	41.36(GA)	57.04(L2)	34.67(AP)	40.44(SL)

		Friendly working atmosphere	sponsoring more social events	Opportunity to schedule own work and make decisions with minimum supervision	Some management policies demotivate staff	Management policies are targeted at specific individuals	Employee would work better with adequate equipment
Chi-Square		23.628	8.149	35.033	21.567	17.495	28.818
Df		6	6	6	6	6	6
Asymp. Sig.		.001	.227	.000	.001	.008	.000
Mean	High	84(P, AP, GA)	83.54(L1)	99.00(GA)	89.00(AP)	88.06(AP)	88.00(P)
Rank:	Low	44.56 (AL)	59.28(AL)	43.76(AP)	34.29(GA)	47.019(L1)	39.07(GA)

		Visibility of upper management is important	Better job description would improve performance	Employee appreciates assessment of their performance	Employee appreciates a subordinate's assessment of their performance
Chi-Square		16.666	21.770	35.348	36.675
Df		6	6	6	6
Asymp. Sig.		.011	.001	.000	.000
Mean	High	76.50(L2)	82.71(L1)	93.50(GA)	88.12(AL)
Rank:	Low	29.06(AP)	30.00(AP)	15.71(P)	11.14(P)

		Has lost interest in work and is looking for something better	Work overload	Work is a source of satisfaction and pleasure
Chi-Square		43.118	21.576	15.107
Df		6	6	6
Asymp. Sig.		.000	.001	.019
Mean	High	89.09(L2)	94.83(AP)	95.67(AP)
Rank:	Low	26.67(L2)	36.29(P)	51.29(P)

¹ Only GAs has less than 50 on autonomy, perhaps they are not confident working alone due to less of experience and academic qualification