Analysis of Personal Predictors of Job Satisfaction in the Kaduna State Public Sector

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Abstract: *The study attempts analyzing the determinants of expressed satisfaction with the job among employees of the Kaduna state public sector. A total of 1779 employees were taken as study sample from a staff strength of 1779. A structured questionnaire was used to source data. Logistic regression was used to determine the relationship in the data set with the introduction of dummy variables. Results were presented using tables and percentages. It recommends fairness the provision of workplace opportunities for both male and female employees.*
Key Word: *Satisfaction, Access, Characteristics and Workplace*

I. Introduction

Job Satisfaction is an important indicator of how employees feel about their jobs and a predictor of work behaviours such as organizational citizenship, absenteeism and turnover (Wegge, 2007)). Further, job satisfaction can partially mediate the relationship of personality variables and deviant work behaviors. One common research finding by Rode (2004) is that, job satisfaction is correlated with life satisfaction. This correlation is reciprocal, meaning people who are satisfied with life tend to be satisfied with their job and people who are satisfied with their job tend to be satisfied with life. However, some research has found that job satisfaction is not significantly related to life satisfaction when other variables such as non-work satisfaction and core self-evaluations are taken into account. An important finding for organizations to note is that job satisfaction has a rather tenuous correlation to productivity on the job as a recent meta-analysis found an average uncorrected correlation between job satisfaction and productivity (Judge, 2001). Further, another study found that the relationship between satisfaction and performance can be moderated by job complexity, such that for high-complexity jobs the correlation between satisfaction and performance is higher than for jobs of low to moderate complexity. In short, the relationship of satisfaction to productivity is not necessarily straightforward and can be influenced by a number of other work-related constructs, and the notion that a happy worker is a productive worker should not be the foundation of organizational decision-making, with regard to job performance, employee personality may be more important than job satisfaction (Mount, Ilies and Johnson, 2006). The link between job satisfaction and performance is thought to be a spurious relationship; instead, both satisfaction and performance are the result of personality.

Researchers have conceptualized job satisfaction in many different ways. While some of the conceptualizations were based on some specific facets of the job, others have used conceptualizations based on total satisfaction (Ward and Sloane, 2000) while others have used conceptualizations based on the intrinsic-extrinsic distinctions (Thomson, 2008). Kristensen (2004) discovered that, Satisfaction with type of work was found to be the most important job characteristic while satisfaction with Job Security was found to be insignificant. These results hold across age, gender and education. Similarly, Corneliben (2006) found out that, job characteristics correlated positively with job satisfaction and labour mobility at different levels.

The work-environment characteristic is another category of variables that others have found to have an impact on job satisfaction. Judge, Thoresen, Bono and Patton (2001), found job-related feedback and the social environment to be important determinants of job satisfaction for public professionals. Findings on the impact of gender on job satisfaction are at present not consistent. While some of the findings suggest that there are no differences in the level of job satisfaction among men and women, others do suggest that the expectations of working women in terms of job satisfaction are different from those of men argued Sokoya (2007).

II. Statement of the problem

Expression of job satisfaction among employees assists to measure their feelings regarding conditions of service provided by their employers. This can only be ascertained when these feelings are measured and quantified. Employees of the Kaduna state public sector had feelings but were not expressed in a measurable form to be quantified. Their feelings were likely to vary by both their background (sex, age, literacy level and ethnic group) and workplace characteristics (depart, occupation, grade level, work environment and job status).

Based on the forgone, this study is concerned with the impact of these characteristics on the expression of satisfaction with the job and what level is it expressed. The level of impact on the expression of satisfaction by employees of the Kaduna state public sector is not known and therefore cannot be quantified for organizational planning. Previous studies were concerned only with personal characteristics as determinants of job satisfaction. On this note, the study looks at both personal and organizational characteristics.

Based on the above, the study aims at predictors of satisfaction the Kaduna state public sector through the following objectives:

I.   To determine the background and workplace characteristics of the Kaduna state public sector employees
II.   Identify the level of expressed satisfaction with the job among employees of the sector.
III. Analyzed the predictors of expressed level of satisfaction among employees.

Study Area

Kaduna State is one of the 36 states in the Federal Republic of Nigeria. The administrative divisions called Local Government Areas, that constitute the state rose from seven when Katsina State was carved out in 1987 to 13 in 1989, to 18 in 1991 and then 23 in 1996 (Kaduna State statistical year book, 1996). It is situated between latitude 9^0 2´ N, 11^0 35´N and between longitude 7^0 15'E and 9^0 6´E. It is bordered by the Federal Capital Territory and Nasarawa State in the South, South East by Plateau and Bauchi State, North East by Kano State, in the North by Katsina State, North West by Zamfara State and South West by Niger State, (Kaduna State Statistical Year Book, 2001).   See Figure 1.
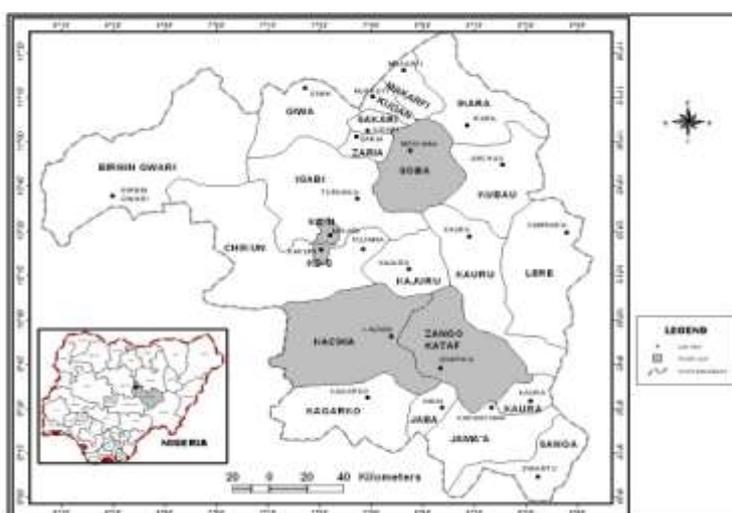

Figure 1. Showing Kaduna state and sample Areas

III.   Methodology

Sampling of Respondents

A proportional sample of 1,779 employees was drawn from a comprehensive staff list obtained from the Ministry of Economic Planning, stratified by names of establishments, sex, grade levels and departments. This number constituted 10 percent of the state public sector work force of 17,779 persons as at 2008, and of this number males constituted 69.2 percent (7,957) while females constituted only 31.8 percent (3,536).

Sampling of Establishments in the Kaduna state Public Sector

Ten establishments (seven ministries, two parastatals, and one commission) were selected from 49 establishments identified for the study. The selection of the establishments was done bearing in mind the need for such establishment to be found in the local government. Twenty three Local Government Areas (L.G.A) made up Kaduna state of which five with the presence of the 10 establishments were sampled. These include; Soba, Kaduna North and South, Zango kataf and Kachia.. (See table 5 below for the result of sample selection exercise). The selection of the five local government areas reflects the socio-cultural setting and fair spatial spread in the north and south of the state.

Data collection

A structured questionnaire was used to source data on the background and workplace characteristics, and a list of available motivations in the sector was drawn, from which respondents were to choose from by summarizing thus: regular,, not regular and never motivated.   Twelve field assistants, consisting of six males and six females assisted the researcher   to administer the questionnaire to employees through a purposive

sampling technique in the designated establishments. Questionnaire administration took cognizance of population proportions of sampled establishments.

Measurement of job satisfaction

This was achieved with the used of the cumulative responses of employees on access to motivation, which were scored and scaled thus; high=3, moderate=2 and low=1. The resulting scale ranges from 1 to 3; with 1 as the least score by a respondent, assuming 1 is the score in each of the 14 items ($1 \times 14 = 14$) while 46 is the highest score on the assumption that a respondent scored 3 in each of the 3 items ($3 \times 3 = 46$), at this stage, the data was subjected to series of transformations.

Thereafter, the respondents were re-categorized into two groups; high and low satisfaction (those who scored < 9 points on the average had low satisfaction) while those that scored ≥ 9 points and above had high satisfaction. This allowed for a comparison of the two groups and estimate of the determinants of high satisfaction employees of the Kaduna State through a logistic regression.

Data Analysis

The main aim of the statistical analysis of the data is to identify key variables that could be used to explain differences among employees by levels of motivation in the Kaduna state public service sector. In view of the nature of our data the outcome (high and low) measures of job satisfaction were crossed tabulated with the independent variables (Socio-economic and demographic: age, marital status, educational status and religion, gender and organizational characteristics: department, grade level, occupation, job status and workplace location) within the data set.

In statistics, logistic regression sometimes called the logistic model or logit model is used for prediction of the probability of occurrence of an event by fitting data to a logit function logistic curve. Like many forms of regression analysis, it makes use of several predictor variables that may be either numerical or categorical. Any explanation of logistic regression begins with an explanation of the logistic function (Asika, 2006):

$$f(z) = \frac{e^z}{e^z + 1} = \frac{1}{1 + e^{-z}}$$ 1

The input is z and the output is $f(z)$. The logistic function is useful because it can take an input of any value from negative infinity to positive infinity, whereas the output is confined to values between 0 and 1. The variable z represents the exposure to some set of independent variables (background and workplace characteristics: age, sex, marital status, educational status, department deployed, workplace location, workplace occupation, among others), while $f(z)$ represents the probability of a particular outcome, given that set of explanatory variables (level of job satisfaction). The variable z is a measure of the total contribution of all the independent variables used in the model and is known as the logit while e represents the error term, which is the difference between the absolute value and estimated value.

The variable z is usually defined as

$$z = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \cdots + \beta_k x_k,$$ 2

where β_0 is called the "intercept" and β_1, β_2, β_3, and so on, are called the "regression coefficients" of x_1, x_2, x_3 respectively. The intercept is the value of z when the value of all independent variables is zero. Each of the regression coefficients describes the size of the contribution of that explanatory/ risk factor (Asika, 2006). Logistic regression model is employed in this study to describe the probability that an employees of the Kaduna State public sector will either be categorised as having high satisfaction (Y=1) or not (Y=0). The result of the specific application of logistic regression model to the data set using SPSS Version 17 and Minitab Version 13 for Windows, are presented in chapter four.

IV.   Results
Kaduna State Public Sector Employees by Background Characteristics

Table 1 presents results on employees' background characteristics. The sex composition of the Kaduna State public sector employees was sought to show representation between males and females; according to results, male employees were highest, 67.2% by representation against, 33 percent for the females.

The age composition of employees revealed that age group 21 to 40 years constituted the dominant workforce, 64 percent (males 35% versus females 29%), age range 40 years and above was next, 24 .8 % (male, 15.8% while female 9.0%) . Those within age range 16 to 20 years had the least representation, 11%.

Employees by marital status revealed those married as highest by representation in the workforce, 73% with males as majority (52%) compare to 21 percent for the females. Next to it in this segment were those on single status, 23.6% (males, 13.8% against 9.0 %).While employees with other statues were least represented in the workforce, 3.5%.

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Representation by religion in the sector revealed that, christians had the highest, 77% in the workforce; males, 51% while females had only 27.1% compare to those that profesed Islam, having 21.9 percent (males, 16.3% versus females, 5.6%) while other religions had the least representation, 1%.

Employees of the Kaduna state public sector comprises different ethinic groups of which the none Hausa were majority 69% (males, 50% and females, only 19%) compare to the Hausa ethnic group; 31% (males, 21.6% as against females, 9.0%).

Employees by literacy levels, revealed thus; those that had tertiary education constituted, 70% in the workforce (male, 52% while females, only 19.2 %). Next to it were those with post primary school education, 14% (males, 7.6% as against females, 6.4%). There were also those with school certificate, they constituted 8% only (males, 5.2% while females had only 3%). The least representation was reported among those that were without formal education, 7% (males, 3.4% and females, 3.1%).

Table 1. Background Characteristics of the Kaduna state Public Sector Employees

Background Characteristics	Male	%	Female	%
Sex:	1102	67.2	546	42.5
Age Range:				
16-20 yrs	102	6.1	87	5.0
21-40yrs	577	35.0	470	28.5
40 and above	262	15.8	150	9.0
Total	**941**	**56.9**	**707**	**42.5**
Marital Status:				
Married	851	51.6	348	21
Single	277	13.8	162	9.8
Others	24	1.5	36	2.0
Total	**1102**	**66.9**	**546**	**32.8**
Educational Status:				
No Formal Education	23	1.4	33	2.1
Primary Sch. Education	83	5.2	43	2.7
Secondary sch. Education	111	7.0	102	6.4
Tertiary Education	825	52.2	310	19.6
Others	32	2.0	17	1.1
Total	**1074**	**67.8**	**505**	**31.9**
Religion:				
Christianity	29	16.3	92	5.6
Islam	825	50.1	446	27.1
Others	13	0.8	3	0.2
Total	**1107**	**67.2**	**542**	**32.8**
Ethnic Group:				
Hausa	354	21.6	148	8.9
Others	829	50	317	19
Total	**1183**	**71.6**	**465**	**27.9**

Kaduna State Public Sector Employees by Workplace Characteristics

Table 2 presents results on employees' workplace characteristics. Results on workplace environment; rural or urban showed thatt hose working in rural areas were highest by representation in the workforce, 60; males made up 39% while femles were only 21 percent compare to those resident in urban areas with only 40 percent (males, 24% and females, 16%).

Employees by department deployed to at the work place revealed that education department carried the bulk of employees in the sector (50%); males, 35.8% as against females, 13.9 %. Next, was the department of administration, 19.0%t; males, 11.4 % while females made up a fair 7.6%. While in the department of health services, both males and females had 3.0% representation in the workforce. Other departments had; 4.0%, 8.7%, 4% and 7% for department of agriculture, finance, works and others respectively.

Results showed representation in the workforce differ by job status; those with permanent status were highest, 83.3% in the workforce (males, 58% and females, 25.3%) compare to others. Employees on contract appointment were next by representation, 8% (males, 5 % as against 3.3% for females). In addition, Casual workers made up only 5% of the work force; with 3.4 and 1.2% males and females respectively, while part time workers had the least by representation, 4.1% (males 2.1% and females 2.0 %).

Employees by major occupations at the work place revealed that, workers in services occupations out numbered others in the workforce, 45% (males, 30% and females,15%) compare to those in the sales services, 0.3%. This demonstrated clearly that those in services occupations such as teaching, nursing among others comprised the bulk of workers. Next to it were those in the administrative and managerial cadre constituted 22% while other occupations constituted; 17%, 7%, 0.3%, 2% and 6.0% for professional, clerical, sales, production and others in that order.

Table 2 . .Kaduna State Public Sector Employee by Workplace Characteristics

Location	Male	%	Male	%	Total
Rural	645	39	346	20.9	991
Urban	400	24.3	257	15.6	657
Total	**1045**	**63.3**	**593**	**36.5**	**1648**
Department Deployed:					
Administration	189	11.4	124	7.6	313
Agriculture	64	3.8	12	0.2	76
Education	590	35.8	228	13.9	818
Finance	106	6.4	37	2.3	143
Health	43	2.6	61	3.7	104
Works	50	3.0	20	1.3	70
Others	61	3.7	63	3.8	124
Total	**1103**	**66.7**	**545**	**32.8**	**1648**
Job Status					
Casual	56	3.4	19	1.2	75
Part Time	37	2.2	32	1.9	69
Permanent and Pensionable	953	57.8	417	25.3	1370
Contract	55	3.3	77	4.7	132
Others Specify	1	0.1	1	0.1	2
Total	**1101**	**66.8**	**546**	**33.2**	**1647**
Occupation					
Professional/ Technical	215	13.0	72	4.3	287
Administrative/Managerial	242	14.6	120	7.5	362
Clerical	77	4.6	43	2.6	120
Sales worker	4	0.2	1	0.1	5
Production worker	19	1.2	13	0.8	32
Services	501	30	246	14.9	747
Occupation not stated	52	3.1	43	2.6	95
Total	**1110**	**66.7**	**538**	**32.8**	**1648**

Expressed Satisfaction with the Job by Employees of the Kaduna State Public Sector

Workers were asked to express satisfaction with the job (low, moderate, high) through a number of statements reflecting work place conditions of service (Table 3). Employees, who expressed moderate satisfaction constituted 52.9%, next were those that expressed high satisfaction stood at 29.2% while those that expressed low satisfaction had the least representation, 18.1%.

Table 3. Employees of the Kaduna State Public sector by Expressed Job Satisfaction

Variables Code	Expressed Job Satisfaction					
	Low	**%**	**Moderate**	**%**	**High**	**%**
Flow of information	159	0.7	974	4.5	515	2.4
Inter-personal relations	98	0.5	997	4.6	553	2.5
Job feelings	385	1.7	888	4.1	375	1.7
Career opportunities	186	0.8	907	4.2	555	2.6
Involvement in organizational goals	91	0.4	694	3.2	863	4.0
Tasks performed	259	1.2	972	4.5	417	1.9
Personal	311	1.4	955	4.4	382	1.7
Conflict resolution	366	1.7	859	3.9	423	1.9
Participation in decision making	188	0.8	782	3.5	678	3.1
Use of skills	311	1.4	194	0.9	243	1.1
Organizational atmosphere	926	4.3	592	2.7	128	0.6
Salary to experience	121	0.5	739	3.4	128	0.6
Quantity of work	184	0.8	1120	5.2	344	1.5
Job boredom	483	2.2	836	3.8	329	1.5
Total	**4068**	**18.1**	**11,509***	**52.9**	**5933**	**29.2**

The Odd Ratio to Report High Satisfaction with the Job by Background Characteristics Among Employees of the Kaduna State Public Sector

Table 4 presents results on the odd to report high satisfaction by background characteristics. Results revealed that sex, marital status and educational status were found positive in influencing the expression of high satisfaction with the job; .000, .045 and .035 in that order with corresponding odd ratios to report high; 7%, 3% and 4% as arranged in the table.

Table 4. the Odd to Report High Satisfaction with the Job by Background Characteristics

Background characteristics	B	S.E.	Odd	df	Sig.	Exp(B)
SEX_log	4.464	.508	7.287	1	.000**	86.824
MARITALSTATUS_log	.314	.157	3.975	1	.046*	1.369
AGE_log	-.192	.258	.552	1	.458	.826
RELIGION_log	-.225	.185	1.473	1	.225	.799
EDUCATIONALSTATUS_log	.111	.165	4.449	1	.035*	1.117
ETHNICGROUP_log	-.316	.168	3.512	1	.061	.729

Significant at p ≤0.05 and 0.01***

The Odd Ratio to   Report High Satisfaction with the Job by Workplace Characteristics Among Employees of the Kaduna State Public Sector

Table 5 presents results on the odd to report high satisfaction with the job. Workplace characteristics such as department deployed to, employment status, location of workplace (urban or rural) and grade level were found significant ; .001, .022, .000 .013 respectively with a corresponding odd to report high satisfaction thus; 6%. 2%, 5% and 6% respectively

Table 5. the Odd to Report High Satisfaction with the Job by Workplace Characteristics

Workplace characteristics	B	S.E.	Odd	df	Sig.	Exp(B)
DEPARTMENT_A	-20.489	4330.901	3.750	1	.001**	.000
OCCUPATION_log	-.289	.178	2.622	1	.105**	.749
EMPLOYMENTSTATUS_log	.359	.157	5.213	1	.022*	1.431
LOCATION_log	.667	.135	24.426	1	.000**	1.948
WORKINGHOURSTIME_log	-.147	.124	1.404	1	.236	.863
GRADELEVEL_log	.314	.127	6.139	1	.013**	1.369

Significant at p ≤0.05 and 0.01***

V.   Discussion

From table1, results suggest that female employees were least represented compare to males in the workforce. This fines relevance in the provisions of the Federal Ministry Women Affairs (2006) that women are least represented in all segments of the economy compare to men in the country. This suggests further that women interests and aspirations are least represented in the sector. In addition, more than half the workforce had tertiary education with a mere 19% for women, this points to the fact that women were most likely to compete favourably with men in accessing workplace opportunities including motivations. This is in line with a study report by Aminu (2012) that education has persistently remain the bane for women to compete favourably with men in the labour market in Nigeria.

It was observed in table 2 that the bulk of the workforce resides in rural areas with slightly above one third as urban based. In addition,   education department had the largest workforce in the sector with most of them as teachers. Further, results suggest that majority of the employees were on tenure appointment with a few in other statues, which is an indication that there was less of casual, part time and contract employees.

Compelling revelations in table 3 suggests that more than half the workforce expressed moderate satisfaction with the job, which is an indication that the condition of service is fair but not good enough. This cautioned Pillay (2009),   low expression of satisfaction with the job is a sign of poor condition of service in the workplace, which is consequent to low out put, and high staff turn over

It was observed in table 4 that the odd to report high satisfaction with the job was significantly related with sex, marital status, educational status and ethnic group, this implies female employees were less likely like their males counterpart to expressed high satisfaction with the job. This could be interpreted to also mean that female employees access less workplace opportunities compare to males and hence their expressed level of satisfaction with the job. In   addition, the educational attainment of each employee of the sector is a key determinant to the expression of satisfaction with the job, this implies, employees with low educational attainments were less likely to be satisfied with the job compare to those well educated, because access to workplace opportunities differ by educational attainment. This   finding finds relevance in the work of Kristensen (2004), that job satisfaction vary with human capital endowment.

In table 5, is the obvious fact that workplace characteristic such as department, occupation, location, employment status and grade level had positive relationship with the expression of high satisfaction. This suggests that expression of satisfaction with the job in the sector is related with occupations assigned to workers and that employees of certain occupations like teaching and others were less likely to express high satisfaction with the job compare to health workers. Similarly employees in rural areas had less chance to express high satisfaction compare to their urban colleagues. This is because of differences in access to workplace opportunities, given that urban resident employees were closer to the headquarters of sector compare to those of rural resident. This coincides with a finding by Sokoya (2006) that the workplace environment is significant in the expression of satisfaction with the job.

VI.   Conclusion

Results revealed that on 33 % of the workforce in the Kaduna state public sector was females, 59% was resent in rural areas, 50%   was deployed to education department, 53% expressed moderate satisfaction, background characteristics such as sex, education and ethnic group maintained positive relationships with the expression of job satisfaction. Further, workplace characteristics such as location of workplace, department, occupation and grade level had positive relationships with the expression of high satisfaction.

Recommendation.

It is certain from the compelling revelations in the results that certain policy measures should to be taken to enhance the expression of high satisfaction by employees of the sector as follow:

* More females be employed in the sector to enhance their expression of high satisfaction.
* Female education should be given priority to enhance fair access to workplace opportunities to permit for high expression of satisfaction with the job.
* Equal opportunities should be given to both males and females to cause equal expression of satisfaction with the job

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