

Organizational Reward and Job Tension among Nigerian Agriculture Researchers: Implications on Personnel Work-Attitudes

Oluwatoyin Aduke Oso, Ph.D.^{1*}; Richard Akinwunmi Oyeyinka, Ph.D.²
Okanlade Adesokan Lawal-Adebawale, Ph.D.¹; and Dare Akerele, Ph.D.³

¹Department of Agricultural Extension and Rural Development, ²Department of Agricultural Administration, ³Department of Agricultural Economics and Farm Management, Federal University of Agriculture, Abeokuta, PMB 2240, Nigeria.

E-mail: mrsoaoso@gmail.com

ABSTRACT

This study examined the combined influences of organizational reward and job tension on work-attitudes (organizational commitment and job satisfaction) among agriculture researchers. Data were collected through a questionnaire survey of a random sample of 271 researchers working in 10 purposively selected research institutes in Nigeria. Data were analyzed using the hierarchical regression model. Results revealed that age was significantly related to organizational commitment but unrelated to job satisfaction. Moreover, increased organizational reward was found to foster improved organizational commitment and higher job satisfaction. However, job tension was unrelated to job satisfaction but is a significant determinant of personnel commitment to the organization. Result highlights the importance of increased reward system and reduced job tension for improved personnel work-attitudes in organizations.

(Keywords: agriculture researchers, job satisfaction, job tension, organizational commitment, organizational reward)

INTRODUCTION

Reward is the compensation received by an employee for his or her service to the organization (Jiang et al., 2009). There are also positive outcomes that are earned to compensate an employee's performance and productivity. A well-established reward and recognition system is necessary to produce desired levels of motivation in employees.

Rewards can be viewed as monetary or non-monetary payments that employees receive from their employers. Monetary reward consists of all

forms of reward given to employees in monetary terms such as pay, commissions, bonuses etc. (Aloysuis, 2013). Non-monetary rewards however include respect, career opportunities and training. Rewards play an important role to attract, motivate, retain, and maintain commitment among workers in any organization with the purpose of ensuring high standard of performances and workforce stability (Abdullah, 2011). Moreover, Dessler (2008) opined that there are three main objectives of a reward system: attracting new employees, encouraging the employees for good performance and maintaining their commitment to the organization.

Further, the social exchange theory suggests that exchanges will occur in an organization if the processes put in place create valued rewards as well as offering more benefits than costs (Gursoy et al., 2002). The theory opined that employees, who evaluate and perceived beneficial rewards in the exchange, have positive perceptions than those who perceived it as harmful. Organizational or individual attitudes depend on the perceptions of exchange made by employees. Abdullahi et al. (2011) reported the impact of reward on commitment of employees to the extent of boosting the self-esteem of the workforce which invariably increases their productivity.

The concept of job tension however, means the same as work or job stress and it is the interactive process in which workplace conditions and events induce consequences (physical, psychological, mental, or social) on employees (Cropanzano et al., 2005). Based on this notion, stress is considered to be an interactive process in which conditions and events of the environment (stressors) induce consequences which may be positive or negative on individuals.

Stress situations occur when workplace demands exceed the worker's capabilities to cope with them (Santora and Esposito, 2010). Work-related stress is the response the personnel have when presented with work demands and pressures that are not matched with their knowledge and abilities. It can also result when workers' knowledge and abilities are not sufficiently utilized or when there is little opportunity to exercise any choice or control; or when there is little or no support from others (Cox et al., 2002).

Organizational commitment is viewed as the total capacity to act in ways that meet organizational goals and interest (Hahn, 2005). Other researchers suggested that commitment is shown through congruence between personal and organizational goals and values or through an exchange of behavior for valued rewards (Yousef, 2002).

Systems of high commitment human resource practices increase organizational effectiveness by creating conditions where an employee becomes highly involved in the organization and work hard to accomplish the expected goals. Individuals with higher levels of organizational commitment have a sense of belonging and identification with the organization. This increases their desires to pursue organizational goals and activities as well as to remain a part of the organization (Meyer and Allen, 1997).

Moreover, George and Jones (2008) described job satisfaction as "the collection of feelings and beliefs that personnel have about their current jobs. Others have defined job satisfaction as "a positive feeling about a job resulting from an evaluation of its characteristics" (Robbins and Judge, 2009). Job satisfaction describes how content an individual is with his or her job (Noah and Steve, 2012). Job satisfaction has emotional, cognitive, and behavioral components (Bernstein and Nash, 2008).

The emotional component refers to job-related feelings such as boredom, anxiety, acknowledgement and excitement. The cognitive component of job satisfaction pertains to beliefs regarding one's job whether it is respectable, mentally demanding or challenging and rewarding. Finally, the behavioral component includes people's actions in relation to their work such as tardiness, working late, faking illness in order to avoid work etc. (Bernstein and Nash, 2008).

MATERIALS AND METHOD

Study Population

The population of this study consisted of all researchers in research institutes for the study. Of the 18 agricultural research institutes that make up the National Agricultural Research System (NARS) in Nigeria, nine of them are located in the south-west agro-ecological zone thereby accounting for 50% of the total NARIs in the country. The headquarters of International Institute of Tropical Agriculture (IITA) is also in this zone giving a total of 10 research institutes for this study. They are:

1. Institute of Agricultural Research and Training (IAR &T)
2. International Institute of Tropical Agriculture (IITA)
3. Cocoa Research Institute of Nigeria (CRIN).
4. National Institute of Horticultural Research (NIHORT).
5. Nigerian Cereal Research Institute (NCRI).
6. Forestry Research Institute of Nigeria (FRIN).
7. Nigerian Institute for Oceanography and Marine Research (NIOMR).
8. National stored Product Research Institute (NSPRI).
9. National Institute for Oil-palm Research (NIFOR).
10. Rubber Research Institute of Nigeria (RRIN).

The total sum of researchers in the ten selected research institutes equals 768. Fifty percent of researchers in each of these research institutes were randomly selected. Thus, 50% of the total sum gave a total of 384 researchers who were selected for this study. Valid responses were obtained from 271 respondents (i.e. 70.57% responses). Hence, 271 researchers formed the sample size of this study.

Measurement of Variables

Socio-Demographic Characteristics:

- (a) Age: This was measured in years
- (b) Sex: It was assessed as male = 1 and female = 2
- (c) Tenure: The number of years spent in the organization was measured in years.
- (d) Rank: This was measured as: Research officer II = 1, Research officer I = 2, Senior Research officer = 3 and Principal Research officer = 4.
- (e) Educational level: This was measured as B.Sc. = 1, M.Sc = 2, Ph.D = 3.

Organizational Reward: A 3-item scale adapted by Eisenberger *et al.* (1997) was used. The 5 points on the rating scale were weighted according to the belief of variability of opportunities for recognition, pay and promotion of highly inadequate = 1 to highly adequate = 5.

Job Tension: The 4 item-scale developed by House and Rizzo (1972) was used to measure job tension. The measure was assessed on a 3-point Likert rating scale of not tensed = 1, to tensed = 3. A sample item is "I work under a great deal of tension."

Affective Commitment: The 6-item scale developed by (Meyer and Allen, 1997) was used to measure organizational commitment. The measure was assessed on a 5-point Likert type scale. The five points on the scale were weighted according to the degree of commitment to the organization of strongly disagree = 1 to strongly agree = 5.

Job Satisfaction: The 6-item scale developed by Brayfield and Rothe (1951) was used to measure job satisfaction. The measure was assessed on a 4-point Likert scale. The 4 points on the scale were weighted according to the levels of satisfaction of dissatisfied = 1 to highly satisfied = 4.

Data Analysis

The hierarchical regression model was employed in analysing data for the mediational analyses that

were done in this study (Tabachnick and Fidell, 1989). To test for the mediating role of job satisfaction, the four-step procedure outlined by Preacher and Leonardelli (2001) was employed as follows:

- (i). The predictor should be significantly related to the mediator.
- (ii). There should be a significant relationship between the predictor and criterion in the absence of the mediator.
- (iii). The mediator should also have a significant relationship with the criterion.
- (iv). The magnitude of the relationship between predictor and criterion should become non-significant or reduced upon the inclusion of the mediator to the model to provide evidence of full or partial mediation.

RESULTS AND DISCUSSION

The socio-demographic characteristics of researchers, age, sex, rank, tenure and educational background are presented in Table 1. The age of the respondents falls within 25-55 years ($\bar{X} = 36.29$ years, $Sd = 6.53$ years). From the table, half of the researchers were in the age range of 31-40 years (50.90%). This implies that researchers in the study area are still young. This result is in line with the findings of Ibeun (2002) who reported that (59.0) of researchers in South-West Nigeria fall within the age range of 31 - 40 years. This also implies that some of the respondents are still within the active and economically-productive age bracket and they should be active in research work. It also implies that they have many more years to spend with the organization if they are willing to remain with the organization. This will have positive implication for agricultural development in the country.

Further, the table shows that (58.70%) of respondents were male and female (41.30%). This result indicates that there are more male researchers than their female counterparts in the study area. The findings of Oso (2013) revealed that 60.8% of researchers in research institutes in Oyo state were male and female (39.20%) and this corroborates the findings of the present study.

Table 1: Socio-Demographic Characteristics of Respondents (n = 271).

Variables	Frequency	Percentage	Mean	Sd
Age (years)				
21 – 30	60	22.10		
31 – 40	138	50.90	36.29	6.53
41 – 50	67	24.70		
51 – 60	6	2.20		
Total	271	100.00		
Sex				
Male	159	58.70		
Female	112	41.30		
Total	271	100.00		
Tenure (years)				
1 -5 yrs	153	56.50		
6-10 yrs	83	30.60		
11 – 15 yrs	24	10.30	5.97	4.03
16 – 20 yrs	4	1.50		
More than 20 yrs	3	1.10		
Total	271	100.00		
Rank				
Research Officer II	31	11.40		
Research Officer I	100	36.90		
Senior Research Officer	77	28.40		
Principal Research Officer	63	23.30		
Total	271	100.00		
Educational level				
B.Sc.	80	29.50		
M.Sc.	171	63.10		
Ph.D.	20	7.40		
Total	271	100.00		

Source: Field Survey, 2015

However, Bammeke and Ajayi (2010) reported there were more (84.8%) male researchers than their female counterparts in research institutes. The research finding therefore indicated that more women researchers have been employed in research institutes compared to what was obtainable in previous years when fewer female researchers were on ground.

More than half of the respondents had spent between (1-5) years in the organization (56.50%), and (30.60%) had spent between (6-10yrs) (Table 1). As indicated by the mean (5.97), researchers had been on the job for about 6 years and the implication of this is that most of the respondents are still young in the organization and they have the opportunity to serve for more years in order to increase the productivity of the organization. On the contrary, 10% of the researchers had spent between (11-15yrs) and (2.60%) of the respondents had spent above 15 years in the organization indicating that there were fewer long-tenured researchers in the study area. It should be noted however that longer research experience

is obtained through accumulated research knowledge and skill which is needed for optimum productivity indicating that the longer the tenure, the better the performance and work-attitudes.

From the result, (11.40%) of researchers were research officers I and (30.60%) research officers II. Further, (28.40%) were senior research officers and (23.30%) were principal research officers (Table 1). This shows that focal research institutes were dominated by fairly high-ranked officers, who obtained their ranks through their qualifications as shall be discussed below and not the number of years spent in the organization as earlier discussed.

The educational qualifications of the respondents were Bachelor's degree (29.50%), Masters' degree (63.10%), and Ph.D. (7.40%) (Table1). The findings indicated that most of the respondents had Masters' degree, which is the minimum pre-requisite for appointments in research institutes as at present. Also, this result confirms the speculation that there are fewer

Ph.D. holders in agricultural research institutes. This may happen because as soon as there is improvement in education standard, a lot of employees look for greener pastures where they can obtain better working conditions. However, qualification or educational attainments play a leading role in the development of organizational commitment. As the individual's qualification gets better, their sense of belonging is improved and they tend to be more committed to the organization. Thus, when institutions employ or retains qualified work-force, the performance and productivity of the organization is enhanced.

In Table 2, the result of the hierarchical regression is presented. From Step 1, the socio-demographic characteristics (age, sex, tenure, rank and educational level) were entered and age was significantly related to organizational commitment ($b_1 = 0.09$, $p < 0.05$). As shown in Table 2, the only socio-demographic variable that was found to impact on organizational commitment was age. Thus, the older the researcher is, the more committed he or she will be to the organization. The result suggests that older personnel can be less enthusiastic than younger ones who look for greener pastures and

move to new locations for better offers resulting into low commitment. Moreover, the older ones might have more financial obligations and commitments to their families than the younger ones and this makes them to be more committed for continued stay with the organization. This finding corroborates that of (Mohammed and Eleswad, 2013) who found only age to be significantly related to organizational commitment. An implication of this finding is that organizations should strive to retain older employees since they are more committed and will stay longer with the organization than their younger counterparts.

There was however an insignificant relationship between the biographics (age, sex, tenure, rank and educational level) and job satisfaction in this study. This result agrees with the findings of Banmeke and Ajayi (2005), who found insignificant relationships between respondents' (age, sex, tenure and educational level) and job satisfaction. The implication of this result is that none of the personal characteristics for this study were determinants of their satisfaction with job and so, they do not predict job satisfaction.

Table 2: Hierarchical Regression of Job Satisfaction and Organizational Commitment on Predictors (n = 271).

Variables	Job Satisfaction		Org. Commitment	
	b	SES	b ₁	SES ₁
Step I: Biographics				
(Constant)	20.69**	1.48	18.82**	2.05
1. Age	0.01	0.05	0.09*	0.06
2. Sex	-0.40	0.39	-0.48	0.53
3. Tenure	0.16	0.09	0.19	0.11
4. Rank	-0.28	0.33	-0.49	0.44
5. Education	0.19	0.38	-0.00	0.51
ΔR^2	(0.04)		(0.06)	
Step II:				
6. Organizational reward	0.58**	0.08	0.98**	0.09
7. Job tension	-0.05	0.06	-0.23**	0.07
ΔR^2	(0.22**)		(0.37**)	
R	0.68		0.76	
R ²	0.46		0.58	
Adj R ²	0.44		0.56	
F	16.98**		23.55**	
SES	2.37		2.83	
DF	13, 257		14,256	

* $P < 0.05$, ** $P < 0.01$

In Step 2, organizational reward was entered into the model and it explained (22%) variance in researchers' satisfaction with job. Organizational reward was significantly related to satisfaction with job ($b = 0.58$, $p < 0.01$) implying that the higher the reward obtained by researchers from the employing organization, the higher they are satisfied with job. Previous research revealed that organizations that encourage socially-sensitive treatment of their employees in the form of recognition and rewards contribute to the degree of job satisfaction experienced by their employees (Veeran and Katz, 2002). Danish and Usman (2010) also found financial rewards and recognition to have a significant impact on job satisfaction. He reported that the greater the financial reward, the less worry employees have concerning their financial state, thereby enhancing their impression of self-worth to the organization. Galanou et al. (2011) also reported that reward system positively impact on job satisfaction.

The current study shows that increased organizational reward received by researchers will boost their satisfaction with their job.

Moreover, organizational reward was significantly related to organizational commitment ($b_1 = 0.98$, $p < 0.01$) implying that the higher the reward obtained from the organization, the higher the commitment of researchers. According to Babakus et al. (2003), the perceptions that employees have with regards to their reward climate influences their attitudes (organizational commitment) toward the employers. Rewards that bring benefits and provide evaluation and recognition are expected to motivate personnel for increased productivity (Bartol and Srivastava, 2002). It is indicated from this study that increased organizational reward obtained by researchers will foster satisfaction with job and this will be reciprocated by their commitment and loyalty to the organization.

Further on Step 2, job tension was found to be unrelated to job satisfaction ($b = -0.05$, $p > 0.05$) implying that the stress experienced by researchers on the job is independent of their satisfaction with job. However, job tension had significant inverse relationship with organizational commitment ($b_1 = -0.23$, $p < 0.01$). ILO (1986) found job stress to have a negative implication on workers' health and commitment. The study finding agrees with the above and the implication is that an increased job stress resulted into a

reduction in the researchers' commitment to the research institutes and vice-versa.

It should be noted however, that job tension could be as a result of researchers having little or no opportunity to exercise choice or control over situations affecting them. It could also result from little or no support from other members of the organization. When this happens, reduced commitment is inevitable. Thus, increased organizational reward and reduced job tension will foster satisfaction with job and greater loyalty (commitment) to the organization.

CONCLUSION

From the result of this study, the socio-demographic characteristics (age, sex, tenure, rank and educational level) do not predict researchers' satisfaction with job. Only age was found to predict researchers commitment to the employing organization. Further, organizational reward is a significant predictor of job satisfaction and organizational commitment of researchers in focal research institutes. When researchers are satisfied with jobs, they are more committed to the organization and are less-willing to withdraw or quit the organization.

Also, reduced job stress is essential for ensuring increased commitment of the researchers to the organization. Job tension is unrelated to job satisfaction in this study and so, it is not a predictor of researchers' satisfaction with job. However, reduced job tension or stress will boost personnel commitment to their employers. Therefore, these findings demonstrated that increased organizational reward and reduced job tension are required to boost the affective commitment and job satisfaction of researchers. In view of the findings of this study, the following recommendations are made:

1. Managers should re-consider the reward package of their workplace so that satisfaction of their employers can be boosted for improved productivity.
2. Employers should retain older employees because they are more committed and will tend to stay longer with their employers than their younger counterparts.

- Employers should ensure that facilities that tend to reduce job stress are put in place in their organizations to improve workers' productivity.

REFERENCES

- Abdullahi, R.B., M. Musa, H. Zahari, and K. Khalid. 2011. "The Study of Employees' Satisfaction and its Effect Towards Loyalty in Hotel Industry in Klang Valley, Malaysia". *International Journal of Business and Social Science*. 2:147–155.
- Aloysius, S.M. 2013. "Testing Mediating Effect of Job Satisfaction on the Relationship between Rewards and Employees' Loyalty". *Social Science Research Network*. 6:52–71.
- Babakus, E., U. Yavas, S.M. Karatepe, and T. Avci. 2003. "The Effect of Management Commitment to Service Quality on Employees' Affective and Performance Outcomes". *Journal of Academy of Marketing Science*. 31(3): 272–286.
- Banmeke, T.O.A. and M.T. Ajayi. 2005. "Job Satisfaction of Extension Workers in Edo State Agricultural Development Programme (EDADP), Nigeria". *International Journal of Agricultural and Rural Development*. 6: 202–207.
- Banmeke, T.O. A. and M.T. Ajayi. 2010. "The Use of Information and Communication Technologies (ICT) by Agricultural Researchers in Edo State, Nigeria". *Journal of Development Communication*. 1(21):86.
- Bartol, K.M. and A. Srivastava. 2002. "Encouraging Knowledge Sharing: The Role of Organizational Reward Systems". *Journal of Leadership and Organization Studies*. 9: 64–76.
- Bernstein, D.A., and P.W. Nash. 2008. *Essentials of Psychology (4th ed.)*. Cengage: Boston, MA.
- Brayfield, A. and H. Rothe. 1951. "An Index of Job Satisfaction". *Journal of Applied Psychology*. 35: 307–311.
- Cox, T., A.J. Griffiths, C. Barlow, R. Randall, T. Thompson, and G.E. Rial. 2002. *Organizational Interventions for Work Stress: A Risk Management Approach*. HSE Books: Sudbury, UK.
- Cropanzano, R., B.M. Goldman, and B. Lehman. 2005. "Work Stress". In: Barling, J., Kelloway E. K. and Frone M. R. (Eds): *Hand Book of Work Stress*. 63-88. Sage Publisher: London, UK.
- Danish, R.Q., and A. Usman. 2010. "Impact of Reward and Recognition on Job Satisfaction and Motivation: An Empirical Study from Pakistan". *International Journal of Business Management*. 5 (2):159–167.
- Dessler, G. 2008. "Human Resource Management". Pearson Education Inc.: New York, NY.
- Eisenberger, R., J. Cummings, S. Armeli, and P. Lynch, P. 1997. "Perceived Organizational Support, Discretionary Treatment and Job Satisfaction". *Journal of Applied Psychology*. 82: 812–820.
- Galanou, E., G. Georgakopoulos, I. Sotiropoulos, and V. Dinutris. 2011. "The Effects of Reward System on Job Satisfaction in an Organizational Chart of Four Hierarchical Levels: A Qualitative Study". *International Journal of Human Science*. 8(1):484–519.
- George, J.M. and G.R. Jones. 2008. *Understanding and Managing Organizational Behavior. Fifth Edition*. Pearson Prentice Hall: Upper Saddle River. NJ.
- Gursoy, D., C. Jurowski, and M. Uysal. 2002. "Resident Attitudes: A Structural Modeling Approach". *Annals of Tourism Research*. 29(1): 79 –105.
- Hahn, M. 2005. "Organizational Commitment". *American Journal of Applied Science*. 2(6): 1078–1081.
- House, R. and I. Rizzo. 1972. "Towards the Measurement of Organizational Practices: Scale Development and Validation". *Journal of Applied Psychology*, 56:388–396.
- Ibeun, M.O. 2002. "Demographic Analysis of Human Resources in Nigeria". *Journal of Fisheries and Aquatic Sciences*. 17(1):63–65.
- International Labor Organization. 1986. "Psychological Factors at Work: Recognition and Control". Occupational Safety and Health Series, 56:98–120.
- Jiang, Z., Q. Xiao, H. Qi, and L. Xiao. 2009. "Total Reward Strategy: A Human Resource Management Strategy Going with the Trend of the Times". *International Journal of Business and Management*. 4(11):177 –183.
- Meyer, J.P. and N.J. Allen. 1997. *Commitment in the Workplace: Theory, Research and Application*. Sage Publishers: Thousand Oaks, CA.
- Mohammed, F. and M. Eleswed. 2013. "Job Satisfaction and Organizational Commitment: A Correlational Study in Bahrain". *International*

Journal of Business Humanities and Technology. 3(5):43–53.

24. Noah, Y., and M. Steve. 2012. "Work Environment and Job Attitudes among Employees in a Nigerian Work Organization". *Journal of Sustainable Society.* 1(2):36–43.
25. Oso, O.A. 2013. "Effects of Organizational Information on Researchers' Work Attitudes in Selected Agricultural Institutes in Oyo state, Nigeria". *The Pacific Journal of Science and Technology.* 14(2):277–282.
26. Preacher, K.J. and G.J. Leonardelli. 2001. "Calculation for Sobel Test: An Interactive Calculation Tool for Mediation Tests (Computer Software)". Retrieved June 27, 2015 from <http://www.unc.edu/~preacher/sobel.htm>.
27. Robbins, S.P. and T.A. Judge. 2009. *Organizational Behavior. Thirteenth Edition.* Pearson Prentice Hall: Upper Saddle River, NJ.
28. Santora, J.C. and M. Esposito. 2010. "Dual Family Earners: Do Role Overload and Stress Treat them as Equals?". *Academy of Management Perspectives.* 24(4):92–93.
29. Tabachnick, B.G. and L.S. Fidelli. 1989. *Using Multi-Variate Statistics. Second Edition.* Pearson: London, UK.
30. Veeran, P. and L.A. Katz. 2002. "An Exploratory Study of the Relationship between Interpersonal Justice Perceptions and Job Satisfaction in an Organization Undergoing Change". *South African Journal of Labour Relations.* 6:43–55.
31. Yousef, D.A. 2002. "Job satisfaction as a Mediator of the Relationship between Role Stressor and Organizational-Communication and Employee Turn-over". *Academy of Management Proceedings. A Study from an Arabic Perspective.* *Journal of Managerial Psychology.* 17 (4): 250–266.

ABOUT THE AUTHORS

Dr. (Mrs.) Oluwatoyin Oso, is a graduate of the Department of Agricultural Extension and Rural Development, Federal University of Agriculture, Abeokuta, Nigeria. Her research interest focused on agricultural communication, administration, and management.

Dr. Richard Akinwunmi Oyeyinka, is a faculty member of the Department of Agricultural Administration, Federal University of Agriculture, Abeokuta, Nigeria.

Dr. Okanlade Adesokan Lawal-Adebowale, is a faculty member of the Department of Agricultural Extension and Rural Development, Federal University of Agriculture, Abeokuta, Nigeria.

Dr. Dare Akerele, is a faculty member of the Department of Agricultural Economics and Farm Management, Federal University of Agriculture, Abeokuta, Nigeria.

SUGGESTED CITATION

Oso, O.A., R.A. Oyeyinka, O.A. Lawal-Adebowale, and D. Akerele. 2017. "Organizational Reward and Job Tension among Nigerian Agriculture Researchers: Implications on Personnel Work-Attitudes". *Pacific Journal of Science and Technology.* 18(2):221-228.

