



Trends in Agricultural Economics

ISSN 1994-7933

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Research Article

An Assessment of Extrinsic Factors Influencing Job Satisfaction Among Agricultural Extension Agents in North Central Zone, Nigeria

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Abstract

Background and Objective: The study assessed extrinsic factors influencing job satisfaction among male and female agricultural extension agents (AEAs) in North-Central Nigeria. The main objective is to determine if significant differences exist in job satisfaction among male and female AEAs in the area. **Materials and Methods:** The states covered include: Kwara, Kogi, Niger, Nasarawa, Benue and Plateau. A simple random sampling technique was used for sample selection while a questionnaire was adopted for data collection. A total of 490 AEAs (340 males and 150 females) were used for the study. The data were analysed using a three-way mixed Analysis of Variance (ANOVA). **Results:** Generally, when the responses of male and female AEAs on all the extrinsic factors were compared across the six states, the result indicated that the female AEAs were significantly ($p < 0.05$) more satisfied in their job than their male counterparts. Again, looking at each extrinsic factor across the states, both the male and female AEAs rated their relationship with their superiors higher than other extrinsic factors while they were least satisfied with the salary they earned. At the state level, there were significant variations ($p < 0.05$) in job satisfaction among the male and female AEAs in some states. However, the male and female AEAs in Niger State did not significantly differ in any of the factors. **Conclusion:** Based on the findings, it was concluded that job satisfaction among male and female AEAs in North-Central Nigeria, depends on gender, location and the type of extrinsic factor considered.

Key words: Extrinsic factors, job satisfaction, male extension agents, female extension agents, gender

Citation: Nwali, P.N., J. Ajah and E.E. Idu, 2022. An assessment of extrinsic factors influencing job satisfaction among agricultural extension agents in North Central Zone, Nigeria. *Trends Agric. Econ.*, 15: 1-10.

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Competing Interest: The authors have declared that no competing interest exists.

Data Availability: All relevant data are within the paper and its supporting information files.

INTRODUCTION

Satisfaction is a word that connotes different meanings to many people. According to Saif and Saleh¹, it is a feeling of happiness when someone fulfils his/her needs and desires. It is a condition felt by an individual who experienced performance or an outcome that fulfilled his/her human expectations². In recent times, attention has been drawn very close to job satisfaction by employees. In an organisational structure, job satisfaction has become more associated with approaches to improving job design and work organization. In every sector of the economy including agricultural extension, job satisfaction of the employees is positively related to quality services and satisfaction of the beneficiaries of the services. It involves a complex number of variables, conditions, feelings and behavioural tendencies³. The effectiveness of an organisational structure has been closely linked to the level of job satisfaction among the workers and it is considered as a critical success factor for organizations' progress⁴. Job satisfaction is crucial not just for the employee but for employers as well⁵. A satisfied employee is an asset to the organization the individual works with. To some extent, job satisfaction is a reflection of good treatment⁶. That is, job satisfaction is perceived to be directly linked to productivity as well as to personal well-being.

Extrinsic factors of job satisfaction are those factors that show how people feel about the aspects of the work condition or the environments that are external to the task⁷. They are factors that contribute to the performance of activities to achieve outputs. It refers to performing an activity with a feeling of being pressured just to make sure that one would achieve the result one desires⁸. Hennessey and Amabile⁹ stated that extrinsic motivation is concerned with doing something to make sure that some external goals are achieved or that some externally-imposed constraints are met. Extrinsic factors include but are not limited to compensation, work conditions, supervision and relationship with co-workers as well as job security. However, Bektaş⁷ argued that these factors are not satisfiers but could be a source of dissatisfaction if absent. Bakotić¹⁰ stated that good working relationship among the workers in an organization contributes to job satisfaction. That is, good working relationships at the workplace influence the effectiveness and behavioural outputs of employees. Reducing salary, wages and other benefits according to Baughman *et al.*¹¹ hinder the satisfaction of workers significantly. This is a fact because it has been shown that job satisfaction has a positive relationship

with a good and well-maintained work environment^{12,13}. Artz¹⁴ added that fringe benefits are an important extrinsic factor that affects an employee's satisfaction in performing his/her job.

In Nigeria, empirical evidence showed that some researchers have conducted studies on the job satisfaction of agricultural extension agents. For instance, Okwoche *et al.*¹⁵ worked on the determinants of job satisfaction among extension agents in Benue State's Agricultural and Rural Development Authority (BNARDA). Ogunremi and Olatunji¹⁶ assessed extension agents' job satisfaction towards innovation dissemination to fish farmers in Lagos State. Ibrahim *et al.*¹⁷ worked on role perception and job satisfaction among extension workers in Nasarawa State's Agricultural Development Programme (NADP). Also, Onu *et al.*¹⁸ carried out a study on the factors affecting job satisfaction of front-line extension workers in Enugu State's Agricultural Development Programme ENADEP. From the foregoing, there is no doubt that a lot of studies have been carried out on job satisfaction most of them did not emphasize extrinsic factors affecting job satisfaction. Again, most of the studies in Nigeria were narrowed down to a particular state hence the need to determine the extrinsic factors influencing job satisfaction among male and female agricultural extension agents in North Central Nigeria.

The study is very important because the effectiveness of agricultural extension service delivery to the end-users is assumed to be determined by the level of satisfaction derived by AEAs in the course of performing their tasks. Thus, if the extrinsic factors influencing job satisfaction among male and female agricultural extension agents in North-Central Nigeria are known, it will help agricultural policy-makers as well as other relevant agencies to contribute in creating conditions and compensation that would enhance technologies transfer to farmers. In addition, the study is vital because it addressed the issue of gender which Lambrecht *et al.*¹⁹ argued are rarely considered in the literature on agricultural extension and technology adoption. Gender job satisfaction is essential in understanding the context in which agricultural development is being implemented in Nigeria as a developing country.

In this regard, the study addressed the following questions: (1) What are the extrinsic factors influencing the male and female AEAs' job satisfaction? (2) Which of the extrinsic factors provide the male and female AEAs the highest and least job satisfaction? (3) Is there any locational (states) difference among male and female AEAs' job satisfaction in the study area?

The main objective is to assess the extrinsic factors influencing job satisfaction among male and female agricultural extension agents in North Central Nigeria. The specific objectives are to (1) compare the extrinsic factors influencing job satisfaction among the male and female AEAs, (2) determine the extrinsic factor that provides the male and female AEAs with the highest and least job satisfaction and (3) determine whether there are locational (states) differences in job satisfaction among male and female AEAs in the study area.

MATERIALS AND METHODS

Study area: The study area is North Central Zone, Nigeria. It comprises Kwara, Kogi, Niger, Nassarawa, Benue and the Plateau States. All the states have Agricultural Development Programmes (ADPs). The zone is situated geographically spanning from the West, around the confluence of the River Niger and the River Benue with latitude 10°20'N and longitude 7°45'E. The North Central Zone is rich in economic activities, like cattle rearing, crop farming, commerce and oil production²⁰. The population for the research was male and female AEAs in the respective ADPs of the six states. The study was carried out from April-July, 2021 in North-Central Nigeria.

Research methodology: A simple random technique was adopted for sampling while questionnaires were used for data collection. A total of 529 questionnaires were administered across the states but only 490 (340 males and 150 females) were properly filled and used for the study. The skewness of the data in favour of the male AEAs is clear evidence of male dominance of agricultural extension service in the study area. This may be attributed to the practice of purdah or seclusion because Bawa²¹ stated that it determines the extent of women's visibility and mobility in public spaces. Some agricultural extension agents in each state were recruited and trained as enumerators. In the questionnaires, the AEAs were asked to rate their level of job satisfaction using: Very satisfied (5), Satisfied (4), Not sure (3), Dissatisfied (2), Very dissatisfied (1) and Not satisfied at all (0). The scores obtained from the respondents were subjected to analysis using a three-way mixed analysis of variance in the line with the method adopted by Ajah and Atewamba²². The three-way mixed Analysis of Variance (ANOVA) is mathematically expressed as:

$$Y_{ijkt} = \mu + L_i + E_j + G_t + LE_{ij} + LG_{it} + EG_{jt} + LEG_{ijt} + e_{ijkt} \quad (1)$$

Where:

- Y_{ijtk} = Individual extension agent's response to the extrinsic factors influencing job satisfaction
 - - i denotes the level of factor L
 - - j denotes the level of factor E
 - - t denotes the level of factor G
 - - k denotes the kth observation in cell or treatment (i,j,t)
- μ = Population mean
- L_i = Differences in job satisfaction due to location (Kwara, Kogi, Niger, Nasarawa, Benue, Plateau States). This measures the main effect of location (state)
- E_j = Extrinsic factors– this measures the main effect of the extrinsic factors on job satisfaction i.e., differences in job satisfaction due to type of extrinsic factor (18 extrinsic factors of job satisfaction were identified from literature)
- G_t = Gender - this measures the main effect of gender, i.e., differences in job satisfaction due to the gender of the respondent (male or female)
- LE_{ij} = Interaction between location and extrinsic factors
- LG_{it} = Interaction between location and gender
- EG_{jt} = Interaction between extrinsic factors and gender
- LEG_{ijt} = Interaction of location, extrinsic factors and gender
- e_{ijtk} = Error term

We hypothesize that job satisfaction among agricultural extension agents in North-Central Nigeria depends on three factors-the location (state) where the extension agents works, the type of extrinsic factors used in measuring job satisfaction and the gender of the extension agent. Extrinsic factors have eighteen (18) measures (levels) of job satisfaction. Gender and location (state) have two and six levels respectively. By implication, the model states that job satisfaction (Y_{ijtk}) depends on the state of the extension agent in North-Central Nigeria (L_i), type of extrinsic factor (E_j), the gender of the extension agent (G_t), both location and type extrinsic factor (LE_{ij}), both location and gender (LG_{it}), extrinsic factors and gender (EG_{jt}) and the joint effects of location, extrinsic factors and gender (LEG_{ijt}). The μ is the population mean which has no effect on the scores obtained and does not contribute to any variation in the observed differences²³. The error term is given by e_{ijtk} . SPSS 21.0 was used to run the analysis and mean separation was done using the LSD model²⁴. It was tested at 5 percent probability level.

RESULTS AND DISCUSSION

ANOVA results of extrinsic factors influencing job satisfaction of extension agents: The ANOVA results of the extrinsic factors influencing job satisfaction among the male

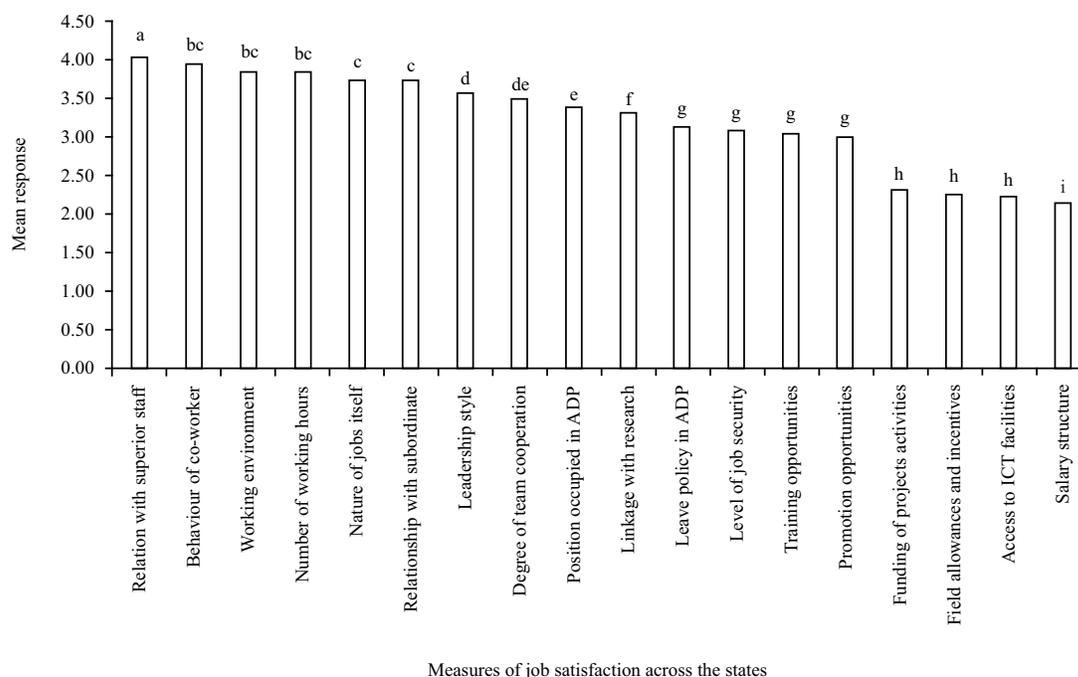


Fig. 1: Job satisfaction irrespective of gender and location (state)

Means with the same alphabet did not significantly differ

Table 1: ANOVA Results of extrinsic factors influencing job satisfaction of extension agents

Sources of variations	Df	SS	MS	F-cal	p-value
Extrinsic factors	17	2318.00	136.35	149.25	0.00
Extrinsic factors*location	85	835.307	9.83	10.76	0.00
Extrinsic factors*gender	17	26.26	1.55	1.69	0.04
Extrinsic factors*location*gender	85	127.35	1.49	1.64	0.00
Error (within subjects)	8126	7423.92	0.91		
Location	5	96.71	19.34	87.15	0.00
Gender	1	1.25	1.25	5.61	0.02
Location*Gender	5	1.45	0.29	1.31	0.26
Error (between subjects)	478	106.09	0.22		

*sign for the interaction of factors

and female AEAs are shown in Table 1. The results showed that all the three factors predicted to influence job satisfaction including their interaction effects are significant except the interaction effect of location and gender (location*gender) with a p-value of 0.26. However, based on the objectives of the study, only the result of gender, type of extrinsic factor and the interaction of gender, extrinsic factors and location (extrinsic factors*location*gender) were further subjected to mean separation and the results presented in Fig. 1-8.

Comparing agricultural extension agents' extrinsic job satisfaction across the state: Row one of Table 1 showed the result of the AEAs job satisfaction irrespective of gender and location (State). That is the main effect of extrinsic factors on job satisfaction. The question here is: Across the six states sampled and without reference to gender, do AEAs' job

satisfaction depend on the type of intrinsic factor? That is, without reference to any particular location or gender, do the AEAs derive equal job satisfaction from each of the extrinsic factors? It tests the hypothesis which states that the AEAs derive equal job satisfaction from each of the extrinsic factors. The result, $F(17, 8126) = 149.25, p = 0.00$, indicated that job satisfaction depends on the type of intrinsic factor in question hence the null hypothesis was rejected. Of all the extrinsic factors included in the study, "relationship with superior co-workers" gave the AEAs the highest job satisfaction as the mean response was significantly higher than other extrinsic factors (Fig. 1). This also gave the impression that the relationship with superior co-workers was more cordial among the male and female AEAs in the study area than other extrinsic factors. The most unsatisfying extrinsic factor identified by the AEAs was the salary structure. The low mean

response of AEAs on salary structure indicated that the male and female AEAs in the study area were not satisfied with the salary they received from ADP. This is in line with the finding of Neog and Barua²⁵ and Stringer *et al.*²⁶ which revealed that salary is the most important factor for influencing the level of job satisfaction of employees. Reducing salary, wages and other benefits hinder the satisfaction of the workers greatly¹¹.

Comparing gender job satisfaction among the agricultural extension agents:

The result comparing male and female AEAs job satisfaction irrespective of location and type of extrinsic factor is shown in Table 1. This is a measure of the main effect of gender hence the question is: Irrespective of location and the type of extrinsic factor, is there any difference in job satisfaction among the AEAs based on their gender? Here, we test the hypothesis which states that there is no significant difference in job satisfaction among the AEAs based on their gender. The result, $F(1, 478) = 5.61, p = 0.02$ shows that job satisfaction depends on gender. In other words, irrespective of location and type of intrinsic factor, the male and female AEAs significantly ($p < 0.05$) differed in their job satisfaction concerning the extrinsic factors hence, the rejection of the null hypothesis. Mean separation (Fig. 2) indicated that the female AEAs were significantly more satisfied in doing extension work than their male counterparts. This finding agrees with Bender *et al.*²⁷ which showed that

female workers experience more job satisfaction than their male colleagues. In other words, there was a gender difference in the job satisfaction among male and female extension agents employed by ADPs. This also corroborates the finding of Pook *et al.*²⁸ which showed that there was gender bias as regards job satisfaction. This could be a result of the interest the female AEAs have in extension service. It could as well, be that the female AEAs have more advantages over their male counterparts in the areas of their needs. Looking at the result, therefore, one can also deduce that female AEAs in the study area were more committed to doing their job. This is because they considered the situation the male found unfavourable to be favourable in doing their assigned job.

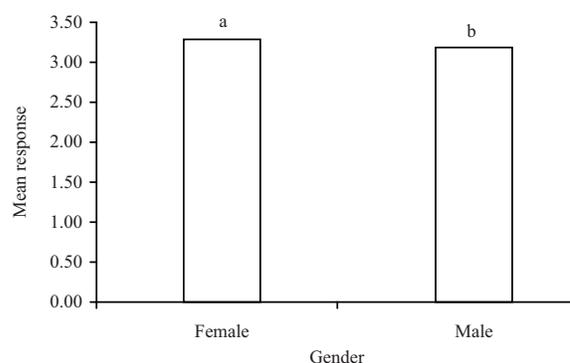


Fig. 2: Gender job satisfaction irrespective of location and indicator-type
Means with the same alphabet did not significantly differ

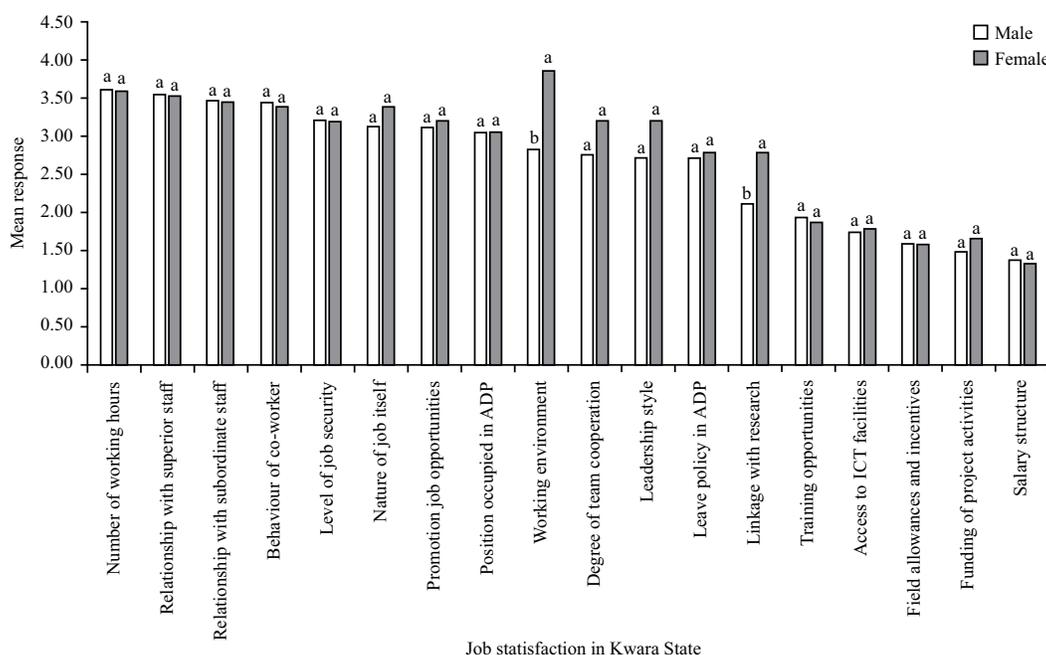


Fig. 3: Comparing gender job satisfaction in Kwara State
Means with the same alphabet (for the same indicator) did not significantly differ

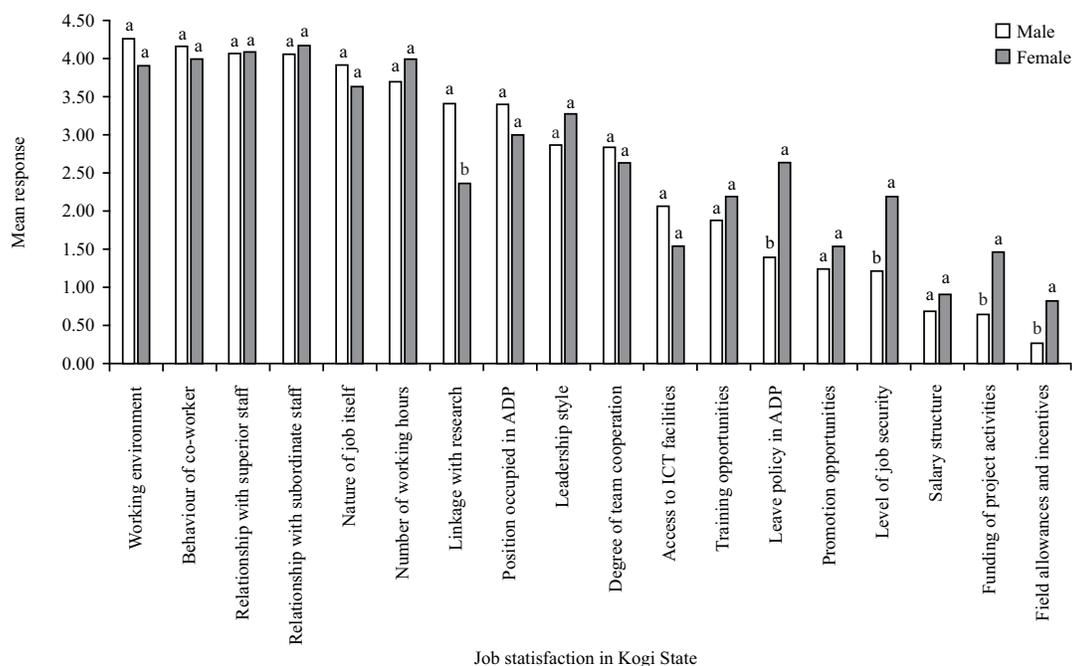


Fig. 4: Comparing gender job satisfaction in Kogi State

Means with the same alphabet (for the same indicator) did not significantly differ

Analysing the interaction effects of gender, location and type of extrinsic factors:

The results of the interaction effect of gender, location and type of extrinsic factor are presented in Table 1. Here, the question is: In each of the locations (States) and for each of the extrinsic factors, do male and female AEAs differ in their job satisfaction? Based on this, we test the hypothesis which states that there is no significant interaction effect of gender, location and type of extrinsic factors on job satisfaction of AEAs. The result, $F(85, 8126) = 1.64$, $p = 0.00$ indicated that there was a significant interaction effect leading to the rejection of the null hypothesis. In other words, in each of the states, there were significant variations in job satisfaction among the male and female AEAs on some of the extrinsic factors listed. Based on the result, mean separation was done and the results are presented state by state (Fig. 3-8).

Comparing gender job satisfaction in Kwara State: The result of AEAs job satisfaction in Kwara State is presented in Fig. 3. The result revealed that there was no significant difference ($p > 0.05$) in gender job satisfaction for all the extrinsic factors, apart from “working environment” and “linkage with research” where the female AEAs were more satisfied than their male colleagues. The implication is that job satisfaction between the male and female AEAs in

Kwara State did not differ significantly. This finding agreed with Aguilar and Vlosky²⁹ which showed that there was a higher level of job satisfaction among cooperative extension workers but significant differences among males and females did not exist.

Comparing gender job satisfaction in Kogi State:

The result of the mean separation in Kogi State is presented in Fig. 4. The result showed that the male and female AEAs significantly differed in their level of job satisfaction on five out of the eighteen extrinsic factors studied. While male AEAs significantly ($p > 0.05$) derived higher job satisfaction from “linkage with research”. The female AEAs on the other hand, significantly ($p > 0.05$) enjoyed the leave policy, job security, funding of project activities and field allowances and incentives of ADP more than their male colleagues. This implies that male AEAs in Kogi State were more research-oriented than their female counterparts. There was no significant difference between the two genders in the remaining thirteen factors although the mean responses indicated that there were marginal differences in the mean ratings. In terms of job security, this finding agreed with Vlosky and Aguilar³⁰, who reported that female workers placed higher importance on job stability/security as a factor influencing their job satisfaction.

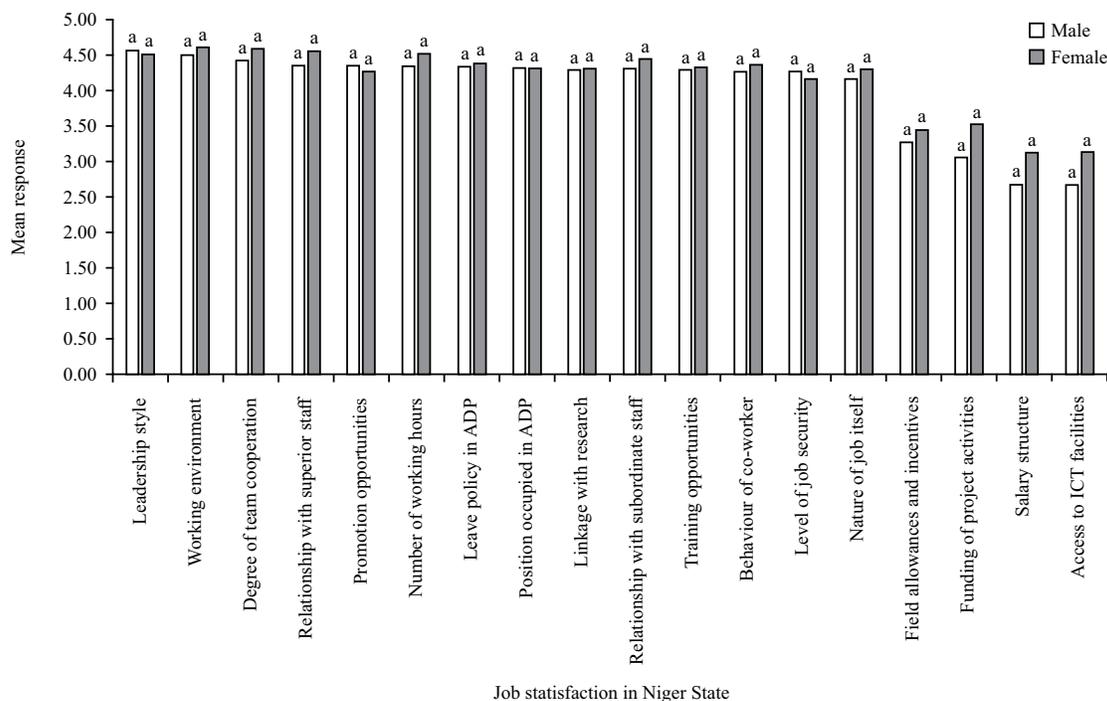


Fig. 5: Comparing gender job satisfaction in Niger State

Means with the same alphabet (for the same indicator) did not significantly differ

Comparing gender job satisfaction in Niger State: The result of the mean separation in Niger State is presented in Fig. 5. The result showed that male and female AEAs in the state did not differ significantly ($p > 0.05$) in their level of job satisfaction for all the extrinsic factors. The gender balance in job satisfaction observed in the state for the entire extrinsic factors may imply unity of interest and cordial relationship between the genders. This will make the discharge of responsibilities easier individually and during teamwork. This result agreed with Aguilar and Vlosky²⁹ whose finding showed that cooperative extension workers experienced a high level of job satisfaction but no significant differences existed among the male and female employees. The magnitude of the mean responses for almost all the extrinsic factors indicated that the AEAs rated their job satisfaction very high. This disagreed with Olatunji *et al.*³¹ who stated that extension agents were not satisfied with promotion opportunities, remuneration and work environments.

Comparing gender job satisfaction in Nasarawa State: The data in Fig. 6 shows the result of the mean separation in Nasarawa State. The result indicated that male and female AEAs in Nasarawa State derived similar levels of job satisfaction from all the extrinsic factors except for the challenges coming from the “nature of job itself”, from which the male AEAs derived a higher level of job satisfaction than

their female colleagues. This may be attributed to the fact that the extension job in the state may give them opportunities to do more things more than their female counterparts. This result agreed with Olatunji *et al.*³¹ who carried out a study on job performance and satisfaction of agricultural extension agents.

Comparing gender job satisfaction in Benue State: Like the other states, the result of the mean separation in Benue State is presented in Fig. 7. From the result, it can be seen that, except for “training opportunities” and “access to ICT facilities”, where female AEAs showed a higher level of job satisfaction, both genders in the state were indifferent in their level of job satisfaction for the remaining extrinsic factors. This shows that female AEAs in Benue State responded well to training opportunities given to them as staff members of ADP and had more access to information communication technologies than their male counterparts. Despite the overall responses from both genders, the study showed that females tended to be more satisfied than their male colleagues and this agreed with Sousa-Poza and Sousa-Poza³².

Comparing gender job satisfaction in Plateau State: The rating of job satisfaction by the AEAs in Plateau State is shown in Fig. 8. The result shows that female AEAs were significantly ($p < 0.05$) more satisfied than their male counterparts to

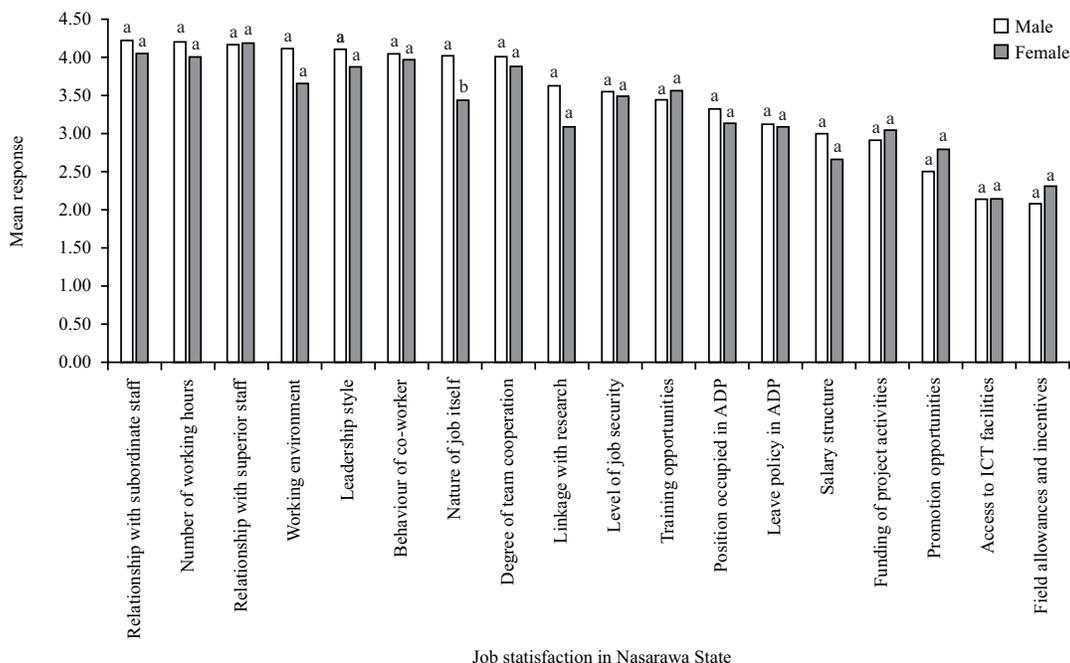


Fig. 6: Comparing gender job satisfaction in Nasarawa State
 Means with the same alphabet (for the same indicator) did not significantly differ

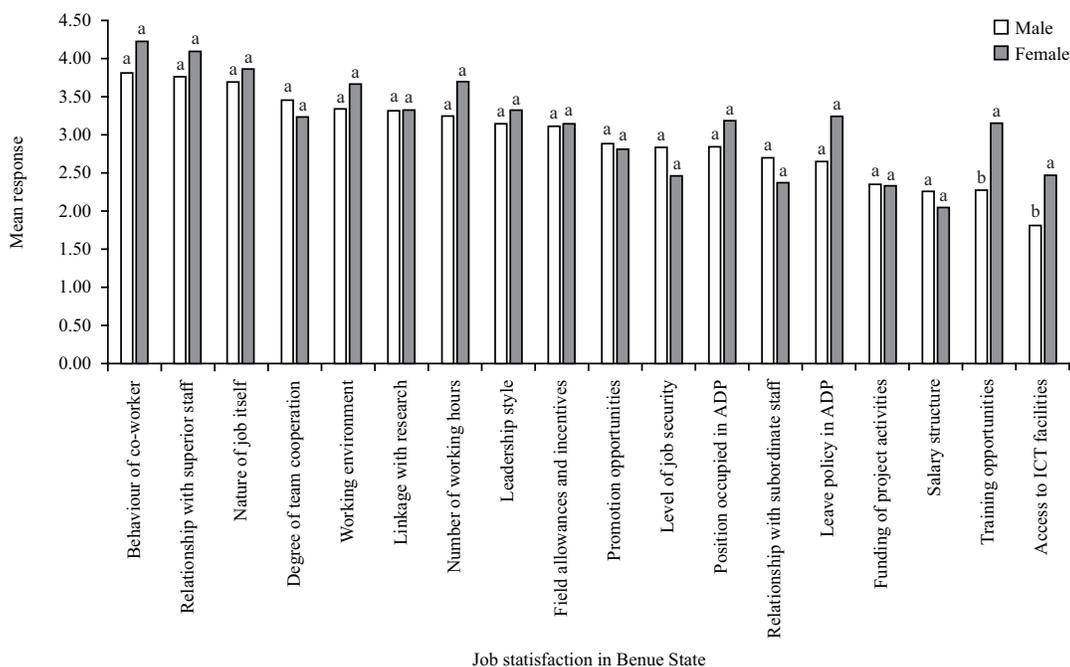


Fig. 7: Comparing gender job satisfaction in Benue State
 Means with the same alphabet (for the same indicator) did not significantly differ

working environment, promotion opportunities in ADP, the position occupied in ADP and the salary structure". It could be that the female AEAs in Plateau State ADP were more

committed to the extension service delivery and as a result, felt happy working as extension agents. It could also be that the female AEAs found joy in doing the extension service

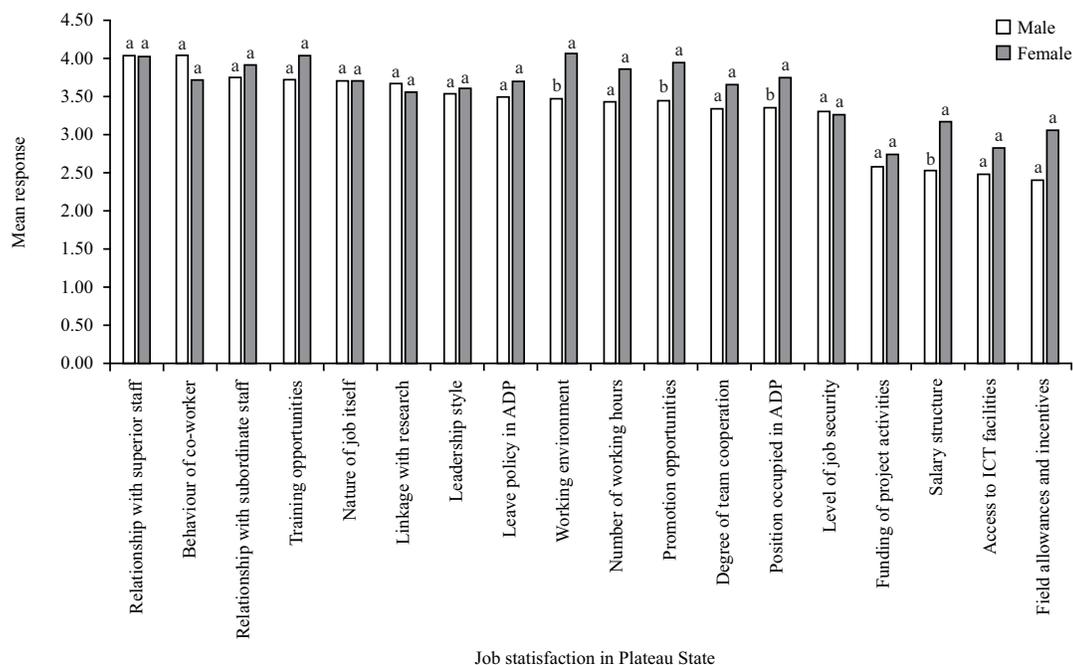


Fig. 8: Comparing gender job satisfaction in Plateau State

Means with the same alphabet (for the same indicator) did not significantly differ

delivery more than the male colleagues and were ready to work under any condition to achieve their goals. This finding is in agreement with Konrad *et al.*³³ who concluded that male workers consider earnings and responsibility to be more important than their female counterparts. Specifically, on salary structure, this also corroborates the finding by Sumner and Niederman³⁴ which showed that female workers tended to be more satisfied than the male with their company's financial rewards.

CONCLUSION

Agricultural Extension Agents (AEAs) in Nigeria are the gatekeepers in technology transfer hence the study assessed the level of job satisfaction among the male and female AEAs in North-Central Nigeria. Among the extrinsic factors studied, "relationship with superior co-workers" gave the AEAs the highest level of job satisfaction, while the least satisfying extrinsic factor was the 'salary structure'. Generally, without reference to any particular extrinsic factor, the female AEAs were more satisfied with their job than their male colleagues. This implies that, on average, the female extension agents enjoyed working under Agricultural Development Programme (ADP) more than their male counterparts. Hence, more women should be employed as

ADP staff since they can afford to bear the challenges facing the organization more than their male colleagues.

SIGNIFICANCE STATEMENT

The study discovered that extrinsic job satisfaction among agricultural extension staff (agents) in North-Central Nigeria depends on the gender of the staff, the state where the staff works and the nature of the extrinsic factor considered. Of all the extrinsic factors studied, the least satisfying to the staff was the salary structure and this calls for urgent attention because of the rate of inflation in Nigeria. If the federal government of Nigeria is sensitive to the welfare of agricultural extension staff, this study will trigger the review of their welfare package upwards. This will in turn translate to higher innovations and technological transfer to the end-users (farmers).

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