

CORRELATES OF MOTIVATION OF GAME RANGERS AT THE MOLE NATIONAL PARK, GHANA

DR. W. ODURO, Institute of Renewable Natural Resources, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

DR. J.A. KWARTENG, School of Agriculture, Dept. Of Agricultural Economics and Extension University of Cape Coast, Cape Coast, Ghana.

ABSTRACT

A descriptive-correlational survey research design was used to establish Game Rangers' perceptions of their existing levels of motivation, job satisfaction, recognition, supervision, perceived competence and role clarity. The relationships among these variables as well as age and number of years experience as a game ranger were also examined. The results indicated perceived low levels of recognition, average levels of motivation, job satisfaction, perceived competence and supervision, and a high level of role clarity. Significant relationships were found between the following variables: job Satisfaction and Recognition ($r = .37$); Supervision and Recognition ($r = .40$); Motivation and Job Satisfaction ($r = .41$); Motivation and Recognition ($r = .47$); Motivation and Supervision ($r = .43$); and Experience and Age ($r = .58$). The best predictors of motivation from the variables of the study were supervision and job satisfaction. Several specific recommendations are made for improving the levels of motivation, supervision, job satisfaction and recognition among game rangers.

INTRODUCTION

The important role of human motivation cannot be overemphasized when viewed in the light of proven positive relationships between motivation and performance. Mitchell [7] noted that performance was influenced by a minimum of

four factors including motivation. The important influence of motivation on employee performance is mainly responsible for the massive interest in motivational studies.

Several motivation theories have attempted to explain human behaviour. Among them are: 1. Maslow's Hierarchy of Basic Needs which encompasses survival, security, affiliation, recognition and self-actualization [6]; 2. Herzberg's Motivation-Hygiene Theory which suggests that certain job factors called 'motivators' contribute to job satisfaction while others called 'hygiene factors' frequently account for job dissatisfaction (3); 3 (9) and (1) present the valence-Instrumentality-Expectancy (VIE) theory which holds that the motivational "Force" to engage in a behaviour is a multiplicative function of: (i) Individual expectancies about what outcomes are likely to result from a particular behaviour, and (ii) The valence or degree to which the individual desires the outcomes in question.

Game park rangers, like employees of other human organizations, need to be motivated in order to meet individual needs and achieve organizational goals. The inability of the Wildlife Division (WD) over the last 15 years to develop the capacity to meet its policy mandate, and a corporate culture that is neither performance nor change-oriented, have been noted as major issues in the Division (Wildlife Development Plan – 1998-2003, 1998, Vol. 1, May, 1998). In addition, an Institutional Reform Team (IRT) has identified the absence of any clear training policy or programme in the Department (8). Such situations are bound to affect the motivation and subsequent performance of Game Rangers. The situation can however be overcome through an effective human resources development programme.



W. Oduro



J. A. Kwarteng

Any such human resource development effort aimed at improving performance and the attainment of the objectives of the Wildlife Division should be performance oriented and motivation enhancing. The effort will have to begin with an examination of motivation and various inter-related variables that may account for the success of goal attainment. Such variables are found both in the internal operation of the organization and outside of the organization's structure. The literature suggests that some of the variables affecting motivation and subsequently performance are job satisfaction, recognition, supervision, perceived competence and role clarity.

This study was an attempt to examine game rangers' current perceptions of existing levels of, and inter-relationships among motivation, job satisfaction, recognition, supervision, perceived competence and role clarity. In addition, the possible influence of age and number of years experience as a game ranger was examined. The dependent variable was motivation while the other variables constituted the independent variables of the study.

HYPOTHESES AND RESEARCH QUESTION

The research hypothesis is as follows:

There is a positive relationship between motivation and the following variables: job satisfaction, recognition, perceived competence, role clarity, age and number of years experience as a game ranger.

The research question is as follows:

What are game rangers' perceived levels of motivation, job satisfaction, recognition, supervision, perceived competence and role clarity, and what is the relationship between motivation and the following variables: job satisfaction, recognition, supervision, perceived competence, role clarity, age and number of years experience as a game ranger?

METHODOLOGY

A descriptive-correlational survey research design was used for the study. The design enabled the assessment of the nature and strength of relationships amongst the variables of the study. A census was conducted of all game rangers at the Mole National Park using a three-part survey questionnaire.

The first part of the questionnaire was used to gather data on Game Rangers' levels of motivation, job satisfaction, supervision, recognition, role clarity and perceived competence. The second part of the questionnaire elicited background information on age and number of years of experience on the job. The third and final part of the questionnaire elicited recommendations from respondents for improving performance. A panel of experts was used to ascertain content validity of the questionnaire.

Descriptive statistics involving measures of central tendency, frequencies, and percentage distributions were computed to describe game rangers on the variables of the study. Correlational techniques were used to determine the nature and strength of relationships amongst the variables of the study. Finally, a stepwise multiple regression technique was used to determine the amount of variance in motivation accounted for by the independent variables of the study, and thus identify the best predictors of motivation from the independent variables of the study. An alpha level of .05 was established *a priori* for all tests.

RESULTS AND DISCUSSION OF RESULTS

The results of the study (see Table 1) revealed that game rangers perceived their levels of motivation, job satisfaction, supervision and perceived competence to be average (X between 2.51 and 3.50). The respondents indicated that they were clear about their jobs ($X = 4.41$), but were however of the opinion that the overall level of recognition they received as game rangers was low ($X = 2.21$). Standard deviation val-

ues of less than 1.0 indicated consistency in agreement among game rangers with the reported levels of motivation, job satisfaction, perceived competence, role clarity, supervision and recognition.

With respect to motivation, the following items were scored low ($X =$ or less than 2.5): *I have opportunities to attend training programmes outside the country; I receive adequate salary for my work; Apart from my salary I receive other monetary rewards; I receive non-monetary gifts; I have adequate transport; and I am paid transport and other allowances.* These observations would suggest that the motivation of game rangers can be improved by providing opportunities for training, improving salary levels and providing adequate transport allowances. The only item that was ranked high ($X = 3.51$ and above) by the game rangers in the motivation domain was, *I am provided with accommodation.* A detail of all items in the motivation domain, their mean levels and standard deviation values are presented in Appendix 1.

Pertaining to job satisfaction, the results indicated that even though game rangers had only average satisfaction with their jobs ($X = 3.39$; Table 1), they were not tired of the job and intended to continue in their profession. This is borne out by the low ratings ($X =$ or less than 2.5) scored on the following two items on the job satisfaction scale: *I will like to give up my job and I am tired of my job* (see Appendix 1). Although overall job satisfaction was rated as average, game rangers indicated that their job was interesting and that they had opportunities to use their skills and received supervision. This observation was borne out by the fact that the following items were ranked high ($X =$ or greater than 3.50): *My job is interesting; I receive supervision; I feel a strong sense of belonging and I have opportunity to use my skills* (Appendix 1).

On the whole, game rangers perceived their competence as being average ($X = 3.20$, Table 1). Competency levels were low ($X =$ or less than 2.50) for *plotting surveys, survey design, quarantine and market surveys.* Items scoring high ($X =$, or greater than 3.51) on the competency domain included *competency in record collec-*

tion, competency in planning, and competency in supervision of fieldwork (Appendix 1).

With respect to role clarity, game rangers were of the opinion that they were very clear about their roles (see Table 1). All but one of the items contributing to the measurement of role clarity was scored high ($X =$ or greater than 3.51. See Appendix 1). Game rangers indicated they understood the goals of the Department of Wildlife and how their roles fitted in with these goals. They were clear about their job responsibilities and knew exactly what to do to achieve their goals. Game rangers were, however, not very clear about how their performance was judged in the long run (Appendix 1).

Pertaining to supervision, game rangers indicated they received an average level of supervision (see Table 1). The results showed that game rangers had good relationships with their supervisors and received some supervision feedback (see appendix 1). However, game rangers indicated that they were not provided with current information through the supply of current bulletins, journals, newsletters etc. Thus although average, relationships with supervisors may be further improved if supervisors provided current information support through the provision of bulletins, journals, newsletters etc.

On the issue of recognition, the results indicated that game rangers perceived the level of recognition to be low ($X = 2.21$). There was little tangible recognition or monetary reward as a show of appreciation. What little recognition they received was verbal (see Appendix 1).

Although a great variation existed in the ages and number of years of experience of game rangers, the average age and number of years of experience were found to be 43 years and 17 years respectively. This was an indication of good staff maturity, an important factor when considering job performance and related factors such as motivation.

Table 1: Mean Levels of the variables of the study

Variable	n	X	Level*	S. D
Motivation	40	2.91	Average	.38
Job satisfaction	40	3.39	Average	.34
Perceived competence	40	3.20	Average	.71
Role clarity	40	4.41	High	.40
Supervision	40	3.40	Average	.52
Recognition	40	2.21	Low	.62
Experience	39	16.91		7.37
Age	39	42.62		7.45

*X = 0 – 2.5 = low; X = 2.51 – 3.50 = average; X = 3.51 and above = high

Pearson Product correlation co-efficient showing relationships among the variables of the study are presented in Table 2. The results indicated significant relationships between the following variables: Job Satisfaction and Recognition ($r = .37$); Supervision and Recognition ($r = .40$); Motivation and Job Satisfaction ($r = .41$); Motivation and Recognition ($r = .47$); Motivation and Supervision ($r = .43$) and Experience and Age ($r = .58$). These significant positive relationships would suggest that efforts at improving motivation must involve the improvement of job satisfaction, recognition and supervision. These findings were not surprising since similar observations had been made in studies of agricultural extension agents. For example, Chambers and Belshaw (1973) pointed out that unpleasant working conditions and erratic administrative supervision

Table 2: Pearson Correlation Co-efficients between variables of the study

	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈
X ₁	1.00							
X ₂	-.15	1.00						
X ₃	.37*	.14	1.00					
X ₄	.27	.12	.25	1.00				
X ₅	.16	-.04	.40*	.10	1.00			
X ₆	.41*	.15	.47*	.28	.43*	1.00		
X ₇	-.11	.01	-.07	-.14	-.12	.09	1.00	
X ₈	.02	-.20	.17	-.05	.14	.16	.58*	1.00

* P < .05 n = 40

X ₁ = Job satisfaction	X ₅ = Supervision
X ₂ = Perceived competence	X ₆ = Motivation
X ₃ = Recognition	X ₇ = Experience
X ₄ = Role Clarity	X ₈ = Age

contributed to the sense of frustration among agricultural extension agents. Also, (4) noted in a study of agricultural extension agents in the Vihiga district in Kenya that dissatisfaction among extension agents was widespread as a result of poor pay and poor prospects for promotion. Taking note of the above studies (5), suggested that increasing pay, rationalizing promotional opportunities, and restructuring the supervisory system would seem to be an obvious means of improving staff morale and performance.

While not significant at the .05 level, it is worthy of note that positive relationships were observed between motivation and the following variables; perceived competence, role clarity, experience and age. This observation seems to suggest that taking steps to ensure that game rangers are more competent in clearly identified roles will lead to an improvement in their motivation levels. The results suggest that this will be especially true for the more experienced and older ones. Any such steps at increasing competence and role clarity should include training.

Again, while not significant at the .05 level of significance, observed negative correlations suggest that more experienced game rangers tended to perceive recognition, role clarity, supervision and job satisfaction levels as low. Since these variables are positively related to motivation, it is imperative that steps be taken to improve their levels, especially among more experienced game rangers. This will logically lead to an improvement of motivation levels and subsequently performance of the game rangers. This will be consistent with Mitchell's assertion that performance is influenced by motivation.

The results of a stepwise regression analysis indicated that the best predictors of motivation from the independent variables of the study were supervision and job satisfaction (see Table 3). Supervision accounted for 25% of the variance in motivation while job satisfaction explained a further 11% of the variance in motivation. Thus together, supervision and job satisfaction explained 36% of the variance in motivation, an indication of the importance of the

two variables in any efforts aimed at improving motivation. The unexplained variance in motivation may be attributed to possible relevant variables not included in the study. The implications for decision making are that supervision and job satisfaction should be improved to enhance motivation and subsequently performance, since motivation has been established to have a significant positive relationship with performance

Table 3: Stepwise regression of independent variables on motivation

Independent Variable	Step of Entry	Beta	R ²	Change in R ²	SE	F	Sig. F
Supervision Job Satisfaction	1	.5197	.2514	11.10	.00
	2	.3753	.36	.11	.19	9.72	.00

* $P < .00$ Significant

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations can be drawn from the results of the study.

- Game rangers at the Mole National Park have average levels of motivation, job satisfaction, supervision and perceived competence.
- Recognition for their work is perceived to be low. According to the agents, whatever little recognition they receive is verbal and not expressed in tangible terms.
- Game rangers understand clearly what their job responsibilities are, but are rather unclear about how their performance was judged in the long run.
- Motivation levels of game rangers are positively and significantly related to job satisfaction, recognition, supervision, age and experience. Thus, the aspect of the research hypothesis that stated that there is a positive relationship between motivation and the following variables; job satisfaction, recognition, and supervision is true (and therefore not rejected).

- The more experienced agents also tended to be the older agents. This observation was both logical and tangible as experience tended to be accumulated over time.
- Positive relationships were observed between motivation and the following variables; perceived competence, role clarity, experience and age. These relationships were however not statistically significant.
- The best predictors of motivation were supervision and job satisfaction.

The following recommendations for improving motivation are made on the basis of findings from the study: opportunities should be provided for both local and outside training for game rangers; financial remuneration in terms of salaries and other monetary rewards should be increased; adequate accommodation, and transportation or T & T allowances should be ensured; in addition, adequate risk allowance and insurance coverage should be provided.

Secondly, since motivation was found to be significantly associated with job satisfaction, supervision and recognition, efforts should be made to improve the levels of these variables among game rangers. Findings from the study indicate that job satisfaction may be improved by: creating and maintaining an environment that will allow rangers to feel a strong sense of belonging; providing adequate support for the job; maintaining good level of supervision; and providing opportunities for rangers to use their skills and abilities in their jobs.

Supervision may be improved by making supervisors' expectations clear to rangers; maintaining good relationship between supervisors and rangers; providing scheduled evaluation feedback; providing appropriate reward when deserved and providing rangers with current information on their profession through the supply of current bulletins, journals, newsletters, etc.

Recognition may be improved by: providing rangers with tangible recognition (e.g. certificates of merit and appreciation) and monetary rewards for good performance; sponsoring rangers on trips for conferences, and providing

praise or citations for outstanding performance suggests that greater effort be made to improve and sustain high levels of these two.

Finally, the conclusion that the best predictors of motivation are supervision and job satisfaction

APPENDIX 1
Means and Standard Deviations for subscale items

	Mean	S. D.
Motivation		
I have the opportunity to take part in important decision-making	3.58	1.47
I am given the opportunity to improve my competencies through training programmes inside the country.	3.65	1.31
I am given the opportunity to improve my competencies through training programmes outside the country	1.88	1.36
I receive adequate salary for my work.	2.35	1.15
I receive some monetary reward, other than my salary, from time to time.	1.85	1.12
I receive non-monetary gifts from time to time.	2.63	1.53
I receive appropriate recognition from my organization from time to time	3.73	1.13
I receive appropriate recognition from the community (e.g. park visitors and district assemblies) for services rendered	2.85	1.50
I receive praise (e.g. "well-done" etc.) from my supervisors	3.85	0.98
I am placed in an area of my work where I have great interest.	3.23	1.41
I have the necessary tools I need to effectively carry out my work.	2.85	1.45
There is adequate transportation for my work.	2.50	1.26
I am provided with accommodation or given support to secure accommodation.	4.03	1.00
I am given health insurance coverage or reimbursed for expenditures on health	2.97	1.32
I am given adequate risk allowance	2.85	1.25
I am paid T & T and other allowances regularly.	1.68	1.02
	Mean	S. D.
Job Satisfaction		
I am often bored with my work	2.60	1.48
My job is interesting.	4.30	0.94
It seems my friends are more interested in their jobs than I am.	2.63	1.30
I like my job better than most rangers	3.48	1.04
I will like to give up this job for another with equal conditions of service	2.35	1.25
I feel enthusiastic about my work.	3.92	0.98
I receive encouragement in my work.	3.50	0.91
I receive supervision in my work.	4.20	0.79
I feel a strong sense of belonging in my work	4.30	0.73
I receive adequate support for my work.	3.40	0.90
I am tired of my job.	1.87	1.09
I have opportunity to use my skills and abilities in my job.	4.25	0.87
	Mean	S. D.
Supervision		
I receive scheduled supervisory visits from my supervisors	3.90	1.03
I receive unscheduled supervisory visits from my supervisors	2.95	1.24
My performance as a game ranger is evaluated on schedule by my supervisor	3.63	1.17
I receive scheduled evaluation feedback from my supervisors	3.15	1.46
I receive constructive criticism from my supervisors when necessary.	3.46	1.14
I am provided with current information on my profession through the supply of current bulletins, journals, newsletters etc.	1.87	1.30
I receive appropriate punishment from supervisors when deserved	3.62	1.27
I receive appropriate reward from supervisors when deserved	2.63	1.31
I have good relations with my supervisors	4.60	0.67
My supervisors make their expectations very clear	4.00	1.16
My supervisors promote participation	3.36	1.42

	Mean	S. D.
Recognition		
I receive verbal recognition (e.g. praise) for good performance from my supervisors when necessary	3.93	1.07
I receive tangible recognition (e.g. certificate of merit, certificates of appreciation) from my supervisors when necessary	1.65	1.25
I am financially sponsored on trips, training conferences, etc. as a show of appreciation for good performance	2.10	1.30
I am given monetary reward as a show of appreciation for good performance	1.23	0.80
I am sometimes mentioned for praise by the chief or public officers at functions such as durbars, fora, etc.	1.65	1.15
I receive praise (e.g. "thank you" "well-done" etc.) from park visitors in appreciation for services rendered.	2.73	1.34
Role Clarity		
I understand the goals of the Wildlife Division	4.68	0.47
I know how my roles fit in with the organization's goals	4.38	0.54
I know what my job responsibilities are	4.70	0.46
I know exactly what is expected of me in my day-to-day work as a ranger.	4.68	0.48
I know exactly what to do to achieve my goals as a ranger.	4.62	0.59
I know how my performance is judged in the organization	3.40	1.15
Perceived Competence		
My perceived competency level in surveying and demarcating boundaries of conservation areas is	2.60	1.41
My perceived competency level in plotting surveys and preparing relevant maps and plans is	2.30	1.24
My perceived competency level in survey, design, alignment and construction of roads is	2.40	1.32
My perceived competency level in selection of camp sites is	3.73	0.91
My perceived competency level in fauna and ecological survey is	3.11	1.32
My perceived competency in general supervision of junior staff is	3.93	0.94
My perceived competency in supervision of field work is.	3.93	0.83
My perceived competency in record collection and keeping on wild animals, weapons and hunting activities is	4.10	0.90
My perceived competency in organizing and undertaking control duties involving dangerous animals is	3.73	1.22
My perceived competency in planning and executing anti poaching and control operations is	4.13	0.88
My perceived competency in detection, investigating and prosecuting offences against wildlife legislation and Game by-laws before a District magistrate is	3.65	1.08
My perceived competency in inspection of quarantines is	2.33	1.16
My perceived competency in preparation of permits is	2.83	1.34
My perceived competency in extension work is	2.94	1.35
My perceived competency in market surveys is	2.06	1.26
My perceived competency in ensuring proper care and use and accounting for those in my range is	3.59	0.91
My perceived competency in assisting the officer in charge in routine administrative work is	3.52	1.28
My perceived competency in assisting in the undertaking of special scientific investigation and duties is	2.85	1.22
My perceived competency in collection and preservation of fauna and floral scientific specimens is	3.10	1.39
My perceived competency in the supervision, care and maintenance of museum specimens is	2.88	1.20

REFERNECES

1. Campbell, J. P., Dunnette, M. D., Lawler, E. E. III, & Eeick, K. E. Jr., *Managerial behaviour, performance and Effectiveness*. New York: McGraw-Hill (1970).
2. Chambers, R. & Belshaw, D. *Managing Rural Development: Lessons and Methods from East Africa*. Institute for Development Studies. Discussion Paper No. 15. Brighton, U.K. University of Sussex. (1973).
3. Herzberg, F., Mausner, B., & Snyderman. *The motivation to work. (2nd Ed.)* New York: John Wiley and Sons (1959).
4. Leonard, D. K. *Some hypotheses concerning the impact of Kenya Government agricultural extension on small farmers.* Institute for Development Studies. Staff Paper No. 71. Nairobi: University of Nairobi. (1970).
5. Lele, Uma. *The design of Rural Development: Lessons from Africa*. The John Hopkins University Press. Baltimore and London. (1975).
6. Malslow, A: *A theory of human motivation. Psychology Review*, Vol. 50 No. 4 (1943).
7. Mitchell, T. R.,: *Motivational strategies in personnel management*. Allyn and Balon Inc. Boston (1982).
8. Training Needs and Human Resource Development Report prepared by the Environment and Development Group, UK on behalf of Protected Areas Management and Conservation Project, Wildlife Department, Ministry of Lands and Forestry, Accra, Ghana (1998).
9. Vroom, V. H.: *Work and Motivation*. New York: John Wiley & Sons. (1964).
10. Overview and Summary. Wildlife Development Plan – 1998-2003, Vol. 1 May, 1998. Wildlife Department, Ministry of Lands and Forestry, Accra, Ghana. (1998).