

## THE INFLUENCE OF WORK ENVIRONMENT AND SUPERVISION STYLE ON HEALTH WORKERS COMMITMENT TO THE UNIVERSITY OF CAPE COAST

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### ABSTRACT

**T**his study investigated the influence of work environment and supervision style on health workers commitment to the University of Cape Coast. A total of 237 randomly selected health workers of the university hospital completed the questionnaire, comprising 33 close-ended items related to work environment, supervision style, staff satisfaction with their work, staff commitment to the department/unit and staff commitment to the university. The instrument used for the study was a six-point Likert scale questionnaire. The Cronbach's alpha was used to test for the reliability of the instrument. The reliability coefficient was .798. Data for the study were analysed using Pearson Product Moment correlation and multiple regression analyses.

It was found out that work environment and supervision style relate positively to health workers commitment to the university; however, the two main variables do not directly predict health workers commitment to the university. They do so only if health workers are satisfied with their work and also are committed to their various departments/units in the hospital. It is therefore recommended that management of the university should ensure that the work environment of the hospital is safe, equipped with modern technology and conducive enough to boost staff satisfaction and commitment to the various departments in the hospital. Management should also use appropriate supervision strategies in the hospital, as this increases health workers commitment to the departments. If staff supervision goes *pari passu* with attractive work environment, the health workers will have satisfaction with their work, and they will be more committed to their departments and to the university as a whole.

**Key words:** Staff commitment; Staff satisfaction; supervision style; Work environment.

## Introduction

The mass exodus of health workers from the Ghana Health Service has been phenomenal. One can find Ghanaian Health workers all over the globe rendering efficient services. The host countries are usually in Europe in general and the United Kingdom in particular. This exodus has had grave consequences on the health delivery system in Ghana.

This canker appears to be widespread in West Africa. Indeed in the early 2000s, the Canadian Health Service Research Foundation (as cited in Burns & Grove, 2005) pointed out that health workers in most developing countries were leaving the profession to seek greener pastures elsewhere due to lack of job satisfaction and lack of commitment, both arising out of heavy workload, limited participation in decision making, and lack of opportunities for professional development. Paulson, Gisbert and Quiton (as cited in Choi, Flynn & Aiken, 2012) have made a similar observation. They add that health workers are unprotected from work place stress, leading to poor health, burn-out and frustration.

In the past seven years or so, the University of Cape Coast (UCC) health service has embarked on some major transformations in its technical, human and organisational environment, apparently in recognition of the fact that a comfortable work environment enhances both physical and psychological satisfaction of the staff. Some of the transformations include improved human resource practices, improvement in the availability of ICT facilities, and provision of additional space to reduce congestion. Supervision of staff which took the form of policing is now being managed through seminars and workshops. Since the transformations took off, there has not been any visible evaluation of the situation.

The purpose of this paper is therefore to find out if the changes in the past seven years have made any impact on the job satisfaction and organisational commitment of the staff of the university's health service. The paper thus explores the link between the style of staff supervision and nature of work environment on one hand, and the health workers' commitment to their work on the other.

The hypotheses tested in the evaluation exercise are as follows.

- H<sup>1</sup><sub>0</sub>: There is no statistically significant positive relationship between the health workers perception of the work environment and their satisfaction with their work in the University.
- H<sup>2</sup><sub>0</sub>: There is no statistically significant positive relationship between the health workers perception of the work environment and their commitment to the University.
- H<sup>3</sup><sub>0</sub>: There is no statistically significant positive relationship between the health workers perception of supervision style on the one hand, and their satisfaction with their work in the University.
- H<sup>4</sup><sub>0</sub>: There is no statistically significant positive relationship between the health workers perception of supervision style on their commitment to the University.
- H<sup>5</sup><sub>0</sub>: Supervision style and the staff's perception of the work environment do not directly influence health workers commitment to the University.

## Review of Related Literature

The current study considers job satisfaction as how contented health workers are with their job. It thus measures the health workers sense of achievement and success on the job. According to Kaliski (2007), it is generally perceived that job satisfaction is directly linked to productivity as well as to personal well-being. It also refers to the attitude and feelings people have about their work. With regard to work environment, the study grouped the work environmental factors that influence health workers job satisfaction and commitment into three. These are: the technical environment, the human environment and the organisational environment.

The technical environment involves elements surrounding the physical aspect of the work environment which are considered to be an important factor impacting on many organisations seeking to satisfy their employees. Becker (1982) posits that those characteristics associated with the technical environment will lead to dissatisfaction and non-commitment amongst health workers if perceived to be inadequate. This can negatively influence their work performance. The technical environment also focuses on elements pertaining to tools, equipment and technology in the work place. That is why organisations are urged to ensure that these factors and resources are sufficiently available to ignite health workers to do their job.

The human environment is the several elements concerning the human aspects of the hospital that influence health workers job satisfaction and commitment. Several conditions pertaining to the human environment that affect job satisfaction in the health service include the social relations at the work place, superordinate – subordinate relations, supervision styles, and social support (McCraey, 2005). According to McCraey, these conditions are dependent on management's ability to control the work situation and create a work environment that enriches health workers experience, give them greater autonomy, additional responsibilities and the opportunity to develop themselves. The human environment of the health service system improves when health workers perceive themselves as members of the family, co-workers as co-actors and beneficiaries, and individuals priding themselves in their role in decision making. This explains why hospitals as organisations are urged to create work environments that acknowledge the contribution of both individuals and the collectivity.

The last of the three sub-work environments is referred to as the organisational environment. It involves several elements pertaining to structures, systems and procedures within the organisation. These elements have to do with the hierarchy of positions and their specific roles and functions. The organisational environment has to do with how efficiently and or effectively members play their roles according to the rules of the organisation. If all or most members know their roles, and if they play their roles according to the roles, then we say the organisational environment is said to be healthy (Barling & Frone, 2002; Barnes, 2007). To foster this, the policies, hierarchy of functions and sanctions to apply must be made known by all members of the organisation. Simply put, a healthy work environment has to do with elements such as the work itself, job specification, enforced standards, performance feedback and reward. Such an environment makes health workers have an understanding of the hospitals operation and are able to relate to the hospital to satisfy their needs.

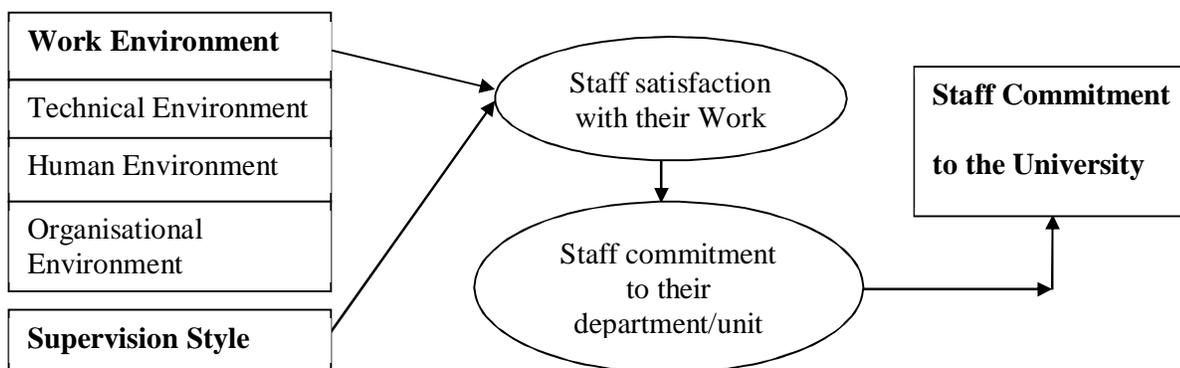
It is obvious that work environments are a key component impacting on employee motivation, performance, job satisfaction, and organisational commitment. Origo and Pagani (2008) add to this to the effect that these elements have a fundamental influence on an employee's level of job satisfaction and organisational commitment. Therefore, management should take on an employee-oriented focus, placing more value on people to create an environment people would like to work in.

Empirically, with regard to work environment, staff supervision, staff job satisfaction and organisational commitment, Zawiah and Taha (2006) in their study found out that there is significant correlation between job satisfaction and environmental factors. Annakis, Lobo and Pillay (2011) also found in their study that staff supervision, flexibility and work environment are important contributors to job satisfaction. These findings identified and explained the existence of complex relationships between the dimensions of staff supervision and job satisfaction. Thus, while most academic researchers considered staff supervision as a negative contributor to staff job satisfaction, Annakis et al. found that staff supervision can have either positive effects or negative effects on staff job satisfaction and commitment to the organisation.

An implication for managers that surface from this study is that staff will exit the organisation sooner rather than later depending on the nature of the organisational environment. Hence the conclusion that monetary compensation is not the quick fix solution. Managers should listen to the individual narratives and collective voice of their workers so as to gain a better understanding of how effective their organisations have been.

### Conceptual Framework

The conceptual framework for this study took into consideration all possible factors from the literature and from observations to derive the dependent, independent and mediating variables for analysis. The dependent variable is staff commitment to the university while work environment which comprises technical, human and organisational environments and staff supervision constitute the independent variables. Staff satisfaction with their work and their commitment to the various department/unit in the health service serve as intervening variables. The conceptual framework is illustrated in the Figure below (Figure. 1).



**Figure 1: Conceptual framework for examining the influence of work environment and staff supervision on staff commitment to the university**

Work environment in general comprises the technical, human and organisational environments. The study agrees that these environments and staff supervision do influence health workers commitment to the university positively. However, the study argues that this influence is not direct but rather indirect through staff satisfaction with their work and staff commitment to their department/unit. Therefore, it is hypothesised that the work environment and staff supervision in the university influence staff commitment to the university significantly. Staff satisfaction with their work and staff commitment to their department/unit are treated as intervening variables that enhance the potency of the influence of the independent variables on the dependent variable.

The general argument is that, if the work environments such as technical, human and organisational environments of the university and staff supervision are viewed positively or are in good shape, health workers of the university will be committed to the university significantly as expected. However, this influence is not as direct as it seems. It can be seen as a complex influence because the fact that the university's work environments and staff supervision are perceived positively or are in good shape does not mean health workers will be committed to the university significantly as expected. Health workers must first be satisfied with their work as a result of the work environment and staff supervision.

In other words, the work environments and staff supervision must boost health workers satisfaction with their work. This satisfaction will strengthen health workers commitment to their department/unit. Increase in health workers satisfaction with their work and their commitment with their department in the

hospital as a result of the various work environments and staff supervision will significantly improve health workers commitment to the university in the long run. Hence the hypothesis that supervision style and the work environment of the university hospital do not directly lead to health workers commitment to the university but rather do so indirectly through staff satisfaction with their work and staff commitment to their department in the university.

### **Methodology**

The study employed the descriptive survey design. This design helps researchers to collect data concerning the issues as they currently are.

### **Sample and Sampling Procedure**

The population for the study was all the 541 health workers working in the UCC health service sector (UCC, 2013). Based on the recommendation of Krejcie and Morgan (1970), a sample size of 237 health workers were selected for the study using simple random sampling procedure. A sampling frame was first constructed using staff records of the university. Specifically, the lottery method of simple random sampling was used to select all the respondents. Each would-be respondent was assigned a numbers on a piece of paper. The papers were then put into an opaque polythene bag.

The slips of paper were shuffled well and one slip was picked one at a time from the polythene bag without looking into it. Each assigned number picked was recorded. Each selected and recorded slip was thrown back into the polythene bag before the next one was picked. This was necessary to maintain a degree of probability of selecting the respondents. This ensured that every respondent had an equal chance of being picked. Slips drawn and assigned numbers that had already been selected were ignored. This means they were thrown back into the polythene bag and the picking process continued. The process continued until the required number (237) of respondents had been selected. Through this process the intended 237 health workers were randomly selected. The selected health workers were capable of providing data that assisted the researchers in examining the issues.

### **Instrument**

The design of this study lies in the domain of the descriptive survey. The questionnaire was considered to be the most appropriate instrument to gather data for this kind of study. The researchers were aware of the disadvantages of using this type of instrument especially as regards the return rate (Ary, Jacobs, Razavieh & Sorensen, 2006). The choice of the questionnaire, however, stemmed from the ease with which the respondents could complete them.

The questionnaire was made up of six sections: A, B, C, D, E and F. Section A dealt with personal information of respondents. The items included sex, age, staff category and length of service. Section B, C, D, E and F dealt with respondent views on the various forms of work environment, staff supervision, respondents' satisfaction with their work, respondent's commitment to their department/unit and respondent's commitment to the university. All the statements in sections B, C, D, E and F were measured on a six-point scale anchored from disagree totally (1) to agree totally (6). All the 33 items of the questionnaire were close-ended.

## Data Collection Procedure

Prior to the administration of the questionnaire, the director of the University Health Service was written to for permission to carry out the study in the organisation. The researchers self-administered the questionnaires. Respondents were given one day to answer the questionnaire. Most of the completed questionnaires were retrieved on that same day. There was a 100 percent return rate of the questionnaires.

## Data Analysis

The software used to analyse the data was the Predictive Analytic Software (PASW) for Windows Version 18.0. Specifically, Pearson Product Moment correlation and multiple regression analyses were the main statistical tools used to analyse the data obtained from the field.

## Results and Discussion

The first objective of the study was to find out the relationships among staff perception of the work environment, staff satisfaction with their work, staff commitment to the department/unit as well as their commitment to the University as a whole. To achieve this objective, many items were used to elicit data on each of the main variables considered. Work environment comprises the technical, human and organisational environments. The items were pooled together to form each of the main items. For example: technical environment, human environment and organisational environment had four items each which were pooled together to constitute the variable work environment. Supervision style and staff satisfaction with their work in the various units were made up of five items each while staff commitment to their units and the university as a whole were made up of three and four items respectively. The results of the correlation procedure are presented in Table 1.

**Table 1: Relationships among Work Environment, Supervision Style, Staff Satisfaction, Staff Commitment to the Department/Unit and Staff Commitment to the University**

Variables	Staff Satisfaction with work at the Department/Unit		Staff Commitment to the University	
	r	Sig.	r	Sig.
Work Environment	.576	.001**	.611**	.000
Supervision Style	.107	.079	.243*	.041

Source: Field Data, 2014.

\*\*p<0.01; \*p<0.05

Sample size (N) = 237.

The results in Table 1 were used to test the first, second, third and fourth hypotheses of the study as indicated earlier. As contained in Table 1, the work environment as perceived by the health workers was statistically significant and positively correlated with their satisfaction with the work at the department/ unit ( $r = .576$ ,  $p = .001$ ) and commitment to the University ( $r = .611$ ,  $p = .000$ ). Using Ary et al. (2006) suggestion for interpreting correlation co-efficients, the relationships between the variables were strong. This means that if the work environment of the health workers improved and perceived positively as expected, their satisfaction with their work in the department/unit and commitment to the University as a whole will be in a positive direction. The study therefore rejects the first and second hypotheses of the study.

The findings corroborate with that of Zawiah and Taha (2006) who in their study found out that there is significant correlation between job satisfaction and environmental factors. They aver that environmental factors relate to job satisfaction and that the strength of correlation is influenced by the surroundings. Similarly, Origo and Pagani (2008) also assert that work environmental factors have a fundamental influence on an employee's level of job satisfaction and organisational commitment.

However, there was no statistically significant positive relationship between supervision style and staff satisfaction with their work in the department/unit, even though supervision style related positively with staff commitment to the University ( $r = .243$ ,  $p = .041$ ). The study therefore fails to reject the third hypothesis while the fourth hypothesis is rejected. The finding is inconsistent with that of Annakis et al. (2011) who found a weak but positive relationship between staff supervision and job satisfaction.

The last hypothesis tested, was that staff perception of the work environment as well as staff perception of the style of supervision would not directly predict health workers commitment to the University. Multiple regression procedures were adopted to analyse the data to test this hypothesis. First, health workers commitment to the University as a whole was used as the dependent variable. Results of the analysis are shown in Table 2.

**Table 2: Multiple Regression Analysis on Health Workers Commitment to the University**

Variables	Model I	Model II	Model III
	Beta	Beta	Beta
Technical Environment	.034 (.074)	.249 (.074)*	.380 (.073)**
Human Environment	.565 (.062)**	.390 (.060)*	.405 (.057) **
Organisational Environment	.751 (.066)**	.719 (.057)**	.820 (.055) **
Supervision Style	.271 (.068)*	.107 (.051)	.343 (.081) *
Staff Satisfaction with their Work in the Department/Unit		.260 (.051)**	.227 (.049) **
Staff Commitment to their Work in the Department/Unit			.499 (.044) **
Constant	3.415	2.576	1.830
R	.634	.678	.891
R Square	.425	.570	.815
Adjusted R Square	.410	.535	.789

(Standard errors are in parentheses) \*\* $p < 0.01$ ; \* $p < 0.05$  Sample size (N) = 237. Source: Field Data, 2014.

The multiple regression analysis involved testing of three models. In the first model the three dimensions of work environment and supervision style were entered as independent variables. As contained in Table 2, the variables that predicted health workers commitment to the University in order of importance are organisational environment ( $\beta = .751$ ,  $p < 0.01$ ), human environment ( $\beta = .565$ ,  $p < 0.01$ ), and staff supervision ( $\beta = .271$ ,  $p < 0.05$ ). Technical environment was a non-significant contributor to the variance in the dependent variable. The total contribution of the independent variables to the variance in the dependent variable is 0.425 with an adjusted  $R^2$  of 0.410. This means that these variables predicted or explained about 42% of the variance in the health workers commitment to the University.

In the second model staff satisfaction with the work was entered into the equation to serve as a mediating variable. The theory here is that the independent variables do not predict health workers commitment to the University directly, and that they do so indirectly through staff satisfaction with the job and their commitment to their respective departments in the health service system. When the variable staff satisfaction with their work entered the equation the beta coefficients of human environment, organisational environment and staff supervision shrank while that of technical environment which was non-significant became significant and expanded. The percentage shrinkages of the variables are human environment (31.0%), organisational environment (4.3%) and staff supervision (60.5%). As expected there was a slight

increase with regard to the total contribution ( $R^2$ ) of all the independent variables, including staff satisfaction with their work, to the variance in the dependent variable. It increased from 0.425 to 0.570 with an adjusted  $R^2$  of 0.535, which means that job satisfaction tends to boost the total predictive power of each of all the independent variables.

In the third model the variable commitment to the department/unit was entered into the equation, and the result was that the beta coefficient of staff supervision regained its statistical significance. With the exception of staff satisfaction with their work, the beta coefficients of all the variables increased. Staff commitment to their department/unit was statistically significant when it entered the second model, which did change the beta coefficients of the other significant variables in the third model. This means that the explanatory power of the technical, human and organisational environments and staff supervision are shared with the mediating variables. The beta coefficient for staff satisfaction with their work shrank while that of the other variables increased.

Naturally, the total contribution ( $R^2$ ) of the variables when staff commitment to the department/unit was added increased from 0.570 to 0.815, while the adjusted  $R^2$  increased to 0.789. The data further show that when staff commitment to the department/unit entered the equation the  $R^2$  increased to 43.0%. This suggests that the health workers commitment to the various departments in the health service sector is a major condition for their commitment to the University. Charity thus begins at home as commitment to the department/unit gradually builds up to translate into commitment to the University.

What all the resultant shrinkages, increases and statistical non-significance mean is that the independent variables do not directly influence health workers commitment to the University. They do so only when the health workers are satisfied with their work in their respective departments/units and when they are committed to their various departments. We therefore fail to reject the fifth hypothesis. That is, health workers perception of the work environment as well as their perception of the supervision style does not directly influence their commitment to the University. First the work environment must enhance the workers satisfaction with their work, and this will in turn tend to ignite their commitment to their various departments/units. This increased commitment to their various departments/units in the health service will result in their overall commitment to the University.

The work environment of the health service sector is therefore not enough to explain health workers commitment to the University unless health workers satisfaction with their work and their commitment to their various departments/units are also high. These findings are consistent with that of Annakis et al. (2011) who found in their study that staff supervision, flexibility and work environment are important contributors to job satisfaction. They further found that work environmental factors and staff supervision do influence organisational commitment. However, they indicated that staff supervision can have positive or negative effects on staff job satisfaction and commitment to the organisation, depending on how flexible the supervision style is perceived.

## **Conclusions**

It can be concluded from the findings pertaining to this study that health workers in the University of Cape Coast health service system are generally not satisfied with the form of supervision done by management even though they perceived the work environment in positive terms. However, the health workers appeared not happy about the technical environment obviously because equipment and technology in the health service system are not in good shape as expected. This tends to explain the inability of the technical environment to contribute significantly to health workers eventual commitment to the university.

The results show that work environment does not influence or predict health workers commitment to the University directly. It does so only if it boosts the workers satisfaction with their work in their departments/units. If health workers are satisfied in their various departments/units, they are likely to be committed to the department/unit, and eventually they will be predisposed to be committed to the University. It is therefore necessary for the University to nurture the kind of environment that will make health workers satisfied in their work, as this will make them committed to their various departments/units and to the University in the long run. Furthermore the increased use of technology will reduce the amount of drudgery associated with non-use of technology in everyday work.

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