

Job Satisfaction and Productivity as Correlates of Quality Health Workforce Training for Achieving Sustainable Development Health Goals in Kaduna State

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Abstract

This paper examined job satisfaction and productivity as correlates of quality health workforce training for achieving sustainable development health goals in the college of health Makarfi, Kaduna State. Three (3) research objectives, questions and hypotheses guided the study. Correlation was employed and the population of the study was all academic and non-academic in colleges of health Makarfi, Kaduna state totalling three hundred and ninety-three (393), out of which a sample of two hundred and seven (207) was selected through purposive and proportionate sampling techniques. The instruments titled "Determinants of Job Satisfaction and Productivity Questionnaire (DEJOBSAP)" and Quality Health Workforce Training for achieving Sustainable Health Development Goal (QHETSHDG) were used for data collection. Cronbach alpha method was used to test the instruments' reliability. Thus, reliability co-efficient of .842 and .891 were obtained respectively. Descriptive statistics of mean and standard deviation were used to answer the research questions. While the null hypotheses were tested using Pearson Product Moment Correlation (PPMC). The study found that there was a positive significant relationship between job satisfaction and staff productivity as correlates of quality health workforce training. Also, there was a positive significant relationship between male and female responses on job satisfaction and productivity as correlates of quality health workforce training for achieving sustainable health development goals in colleges of health Makarfi, Kaduna State. Based on the findings, it was recommended among others that, the government and administrators of colleges of health should be committed to staff welfare such as remuneration package, work conditions, promotion, allowances, job security among others to motivate staff to invest more time in teaching/research work for quality health workforce training in Kaduna state.

Keywords: Job Satisfaction, Staff Productivity, Quality Health Workforce Training, Sustainable Health Development Goals.

Introduction

Health outcomes are linked to the supply of a competent and appropriately skilled health workforce. Although Nigeria has a large stock of health workforce, it has a shortage of quality health workforce that meets the needs of the population. The density of health workers is 1.95 per 1,000 populations (World Health Organisation [WHO], 2006). Kaduna State is facing a similar challenge of the inadequate health workforce. For instance, in 2016 the density of Health Workers in Kaduna State is 0.16 per 1,000 population. These figures are far below the WHO recommended threshold level of

2.28 health workers per 1,000 population (WHO, 2010a). The correlation between the availability of health workers and coverage of health interventions suggests that the public's health suffers when health workers are scarce. Thus, this calls for urgent health workforce training.

To address the problem of the inadequate health workforce in Kaduna state, Shehu Idris College of Health Sciences and Technology, Makarfi was founded in 1954 and is now a full-fledged Monotechnic established by Law No 8 of 2005, which was amended by Law No. 8 of 2010 as an institution for the training of middle-level Health Workforce (SICHST, 2019). The health workforce is all persons involved in activities primarily devoted to enhancing health—is an essential block of any functioning health system in any country, in the absence of which clinical and public health services cannot be delivered to the population (Adeloye, David, Olaogun, Auta, & Iseolorunkanmi, 2017). In this regard, Administrators of colleges of health expect lecturers to produce the critically needed health workforce for quality and sustainable health development.

However, in recent times, the role of lecturers in meeting the needs and expectations of the health institutions in terms of productivity has increasingly become more challenging and tedious, the fact that effective job performance that translates to high productivity requires satisfaction and commitment. It is worthy to note that they cannot perform excellently well without job satisfaction (Tijani, 2015). Hence, there would be a high level of productivity and student performance if the lecturers achieve high job satisfaction.

Job satisfaction of lecturers has direct links to their mobility and attrition which can be detrimental to students' academic performance. Scholars such as Veldman, Tartwijk, Brekelmans and Wubbels (2013) have established that job satisfaction has a potential effect on the mental and physical health of the workers, which could lead to absenteeism. Even when dissatisfied staff do not leave their jobs, students' performance suffers and the level of productivity is below.

Added to this, the productivity of lecturers contributes immeasurably to quality health workforce production. Ojedeke cited in Tijani (2015) affirmed this submission by saying that measures of productivity in higher institutions of learning include both visible and invisible factors which include among others inputs used in the teaching-learning process and the quality of outputs of the system in terms of their examination grades. Consequently, the indicators for measuring lecturers' productivity are level of student discipline, school effectiveness and quality workforce.

A sufficient and qualified health workforce is vital to achieving the Sustainable Development Goals (SDGs). WHO in 2010 recommended key interventions to attract and retain lecturers/instructors of health institutions in Nigeria (WHO, 2010). These interventions included quality medical education, compulsory regulation, financial incentives, and personal and professional support. Thus, this paper assessed the correlation between job satisfaction, productivity and quality health workforce for achieving sustainable goals development. At this point, it is imperative to define the variables in this study for better comprehension of the academic discourse.

Conceptual Clarification of Terms

The health workforce can be defined as "all people engaged in actions whose primary intent is to enhance health" (WHO, 2006). These human resources include clinical staff, such as Physicians, Nurses, Medical Social workers, Rehabilitation Therapists, Pharmacists and Dentists, as well as management and support staff, i.e. those who do not deliver services directly but are essential to the performance of health systems, such as managers, ambulance drivers and accountants. However, a shortage of health workforce can be perceived from the inadequate numbers and skills mix of people

being trained or mal-distribution of their deployment, as well as losses caused by death, retirement, career change or out-migration.

Job satisfaction refers to the attitudes, feelings and moods people have about their jobs (Armstrong cited in Essien & Gimba, 2017). Islam and Siengthai (2009) describe it as the “positive or negative” emotional state resulting from the appraisal of one’s job or job experiences. To Price cited in Raja and Anand (2013) job satisfaction is the affective orientation that an employee has towards his/her work. Also, Sempene, Rieger and Roodt in Chipunza and Malo (2017) assert that job satisfaction may be recognized as an individual’s perception and evaluation of the overall work environment. This implies that job satisfaction includes a positive or favourable approach and feelings about the work and the inverse, mentioning negative or unfavourable attitudes towards the work which indicate job displeasure. It is also an effective response to one’s job as a whole or a particular facet of it.

According to Musibau (2010) job productivity is concerned with the overall efficiency and effectiveness of getting things done. Also, Nakpodia (2011) refers to lecturers’ productivity as a measure of how much the goals of the institution of learning are being achieved through their commitment to and performance on the job. From the above definitions, job productivity in this context implies that aspect of lecturers’ evaluation standards which focuses on what the lecturers do towards the attainment of educational goals and expected academic performance of students. It might be high or low depending on his/her input. This can be determined through the academic performance of students and so on.

According to the United Nations Development Programme [UNDP] (2018), the Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The 17 SDGs are [integrated](#)—that is, they recognize that action in one area will affect outcomes in others and that development must balance social, health, education, economic and environmental sustainability.

Review of Related Empirical Studies

Several studies have been conducted on job satisfaction, productivity, quality health workforce and sustainable development. For instance, Cicolini, Comparcini and Simonetti (2013); Martins, Tukur, Danburam and Salwau (2016); Deriba, Sinke, Ereso and Badacho (2017); Agarwal, Kirk, Sripad, Bellows, Abuya and Warren (2019); Zhu, Tang, Thu, Supheap and Liu (2019) revealed that quality medical education, personal and professional support was related to increased health workforce production and utilization of health services. Furthermore, compensation, recognition by management and opportunity for development were associated with job satisfaction and quality health workforce production.

Goal 3 of Sustainable Development Goals is “**to ensure healthy lives and promote well-being for all at all ages**” requires that health institutions the world over join hands to produce a unified holistic health workforce to address contemporary health challenges and problems in developing countries such as Nigeria (Oleribe, Crossey & Taylor-Robinson, 2015). Furthermore, SDG Goal 3 is closely linked to over a dozen targets in other goals related to urban health, equal access to treatments, and non-communicable diseases, among others. The SDGs represent a unique opportunity to promote public health through an integrated approach to public policies across different sectors (the Health in all approach defined by the WHO) (Galatsidas, 2015)

On the aspect of job satisfaction, Adedoyin (2011); Muhammad, Rashida, Riffat and Fayyaz (2011); Owolabi and Adebayo (2012); Unanma, Abugu, Dike, and Umeobika (2013); Daso (2013); Bolarinwa

(2014); Kifunya cited in Igberadja (2016); Jacob and Lefgren cited in Josiah and Oluwatoyin (2017) revealed that there was a positive relationship between the teacher's job satisfaction variables such as staff development, training, remuneration package, academic qualification, work condition, promotion among others and overall quality health workforce production for achieving sustainable health development. However, the studies of Asif, Fakhra, Tahir and Shabbir (2016) revealed that quality health workforce production has no significant correlation with lecturers' job satisfaction. This implies that administrative, managerial and leadership styles play a vital role in determining the job satisfaction of employees in an organization. Also, there are internal satisfactory factors that are related to the work itself (such as the feeling of independence, the feeling of achievement, self-esteem, feeling of control among others) whereas external satisfactory factors are not directly related to the work itself (such as good relationships with colleagues, high salary, good welfare and utilities).

On the aspect of lecturer job productivity, research findings of Ndugu (2014); Tijani (2015); Thompson (2015); Yusuf and Fashiku (2016); Oni, Nwajiuba and Nwosu (2017) revealed that there was a significant relationship between teacher productivity and quality health workforce production for achieving sustainable health development goals. These findings demonstrate that staff productivity enhances quality health outcomes in terms of competent and efficient manpower.

Similarly, studies have been conducted on whether a relationship exists between male and female perception as regards job satisfaction, productivity and quality health workforce production for achieving sustainable development goals. For instance research revelations of Mahmood and Nudrat (2011); Okoro, Ekanem, and Udoh (2012); Akiri (2014); Onuoha, Samuel and Ojo (2014); Zalenzunik, Christenson and Roethlisberger in Shaheen (2014) demonstrated that relationship exists between male and female employees on job satisfaction and productivity as determinants of quality health workforce development. However, research findings of Nadjla and Hasan (2009); Raisani in Shaheen (2014) affirmed that gender is negatively related to lecturers' satisfaction and indicated that female teachers were more satisfied with colleagues, responsibility and work than their male counterparts. Thus, findings seem to be inconclusive about the nature of the relationship between gender and job satisfaction, productivity and quality health workforce development. This study attempts to fill this gap in research with particular reference to colleges of health Makarfi, Kaduna State.

Theoretical Framework

This study utilized the Job Characteristics Theory postulated by Hackman and Oldham (1975-76) which state that the outcomes of job redesign were influenced by several moderators. Notable among these moderators are differences in the degree to which various individuals or employees desire personal or psychological development (Perry et al., 2006). Job characteristics are aspects of the individual employee's job and tasks that shape how the individual perceives his/her particular role in the organization. The clarity of tasks leads to greater job satisfaction and productivity (Moynihan & Pandey, 2007). Thus, the theory is related to this study for the fact that, that jobs that are rich in motivating characteristics (i.e., task significance, satisfaction) trigger psychological states (e.g., experienced meaningfulness of work) increase the likelihood of high productivity which eventually leads to quality health workforce production for achieving SDGs in the college of health, Kaduna state.

Statement of the Problem

Job satisfaction and productivity have been noted to be imperative ingredients for lecturers' commitment to quality health workforce training. However, in situations, where either gender is dissatisfied with their jobs, it could harm the training process. It is in the light of the above, that this present study investigates lecturers' job satisfaction and productivity as correlates of quality health workforce training in colleges of health in Makarfi Kaduna State.

Objectives of the Study

The specific objectives were to:

1. find out the relationship between job satisfaction and quality health workforce training for achieving Sustainable Development Health Goals in the college of health Makarfi, Kaduna State.
2. assess the relationship between staff productivity and quality health workforce training for achieving Sustainable Development Health Goals in the study area.
3. find out whether a relationship exists between male and female responses on job satisfaction and productivity as correlates of quality health workforce training for achieving Sustainable Development Health Goals in the study area.

Research Questions

The study provides answers to the following research questions:

1. What is the relationship between job satisfaction and quality health workforce training for achieving Sustainable Development Health Goals in the college of health Makarfi, Kaduna State?
2. What is the relationship between staff productivity and quality health workforce training for achieving Sustainable Development Health Goals in the study area?
3. Is there any relationship between male and female responses on job satisfaction and productivity as correlates of quality health workforce training for achieving Sustainable Development Health Goals in the study area?

Null Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

HO₁ There is no significant relationship between job satisfaction and quality health workforce training for achieving Sustainable Development Health Goals in the college of health Makarfi, Kaduna State.

HO₂ There is no significant relationship between staff productivity and quality health workforce training for achieving Sustainable Development Health Goals in the study area.

HO₃ There is no significant relationship between male and female responses on job satisfaction and productivity as correlates of quality health workforce training for achieving Sustainable Development Health Goals in the study area.

Methodology

Research Design

This study was correlational in nature. Thus, correlation research design aims to discover relationship between two or more variables (Nworgu in Osakede, 2017).

Study Population, Sample and Sampling Technique(s)

The population of the study was all academic and non-academic staff in the College of Health Makarfi, Kaduna state totalling three ninety-three (393) (College Registrar, 2019), out of which a sample of one hundred and ninety-six (196) participants was selected through purposive and proportionate sampling techniques based on the recommendations of Research Advisory (2010) that for a population between 1000-1200, a minimum sample size of one hundred and ninety-six (196) should be selected.

Instrumentation

The instruments titled "Determinants of Job Satisfaction and Productivity Questionnaire (DEJOBSAP)" and Quality Health Workforce Training for achieving Sustainable Health Development Goal (QHETSHDG) were used for data collection. The first instrument contains three (3) sections with thirty-four (24) items. The first section contains the bio-data of the respondents, the second part focused on dimensions of job satisfaction, and the third section contains items on determinants of staff productivity. The second instrument has two (2) sections, the bio-data and the other part on quality health workforce training for achieving sustainable health development goals. The instruments were developed based on a modified four (4) Likert Scale that is, Strongly Agree (SA); Agree (A); Disagree (D) and Strongly Disagree (SD).

Validity of the Instrument

To establish the content and face validity of the instrument, the adopted instruments were given to senior lecturers at Ahmadu Bello University, Zaria. The corrections made were effected before the final production of the instruments.

Reliability of the Instrument

The researcher conducted a pilot study at Ameer Shehu Idris College of Advanced Studies, Zaria which is not part of the main study. The researcher employed two trained research assistants who distributed thirty (30) copies of the instruments to academic and non-academic staff. Cronbach alpha method was used to test the reliability of the instruments. A reliability coefficient of .84 was obtained for DEJOBSAP and .89 for QHETSHDG respectively.

Procedure for Data Analysis

The study employed both descriptive and inferential statistics. The descriptive statistics of mean and standard deviation were used to answer the research questions. While the null hypotheses were tested using Pearson Product Moment Correlation (PPMC) to find out whether a significant relationship exists between the variables that are, job satisfaction, productivity and quality health workforce training for achieving sustainable health development goals.

Results and Discussions

Out of two hundred and twenty (220) questionnaires distributed, two hundred and seven (207) were successfully retrieved and this formed the basis of the analysis.

Presentation of Descriptive Data

The research questions developed were answered in the section.

Table 1 Means and Standard Deviations of Job Satisfaction and Quality Health Workforce Training

Variable	Mean	SD	N	Mean Diff
Job Satisfaction	41.22	10.77	207	1.21
Quality Health Workforce Training	40.01	10.10		

Source: Field Survey, 2021

Table 1 presents the summary of the Means and Standard Deviations on lecturers' job satisfaction as correlates of quality health workforce training for achieving sustainable health development goals. The mean scores of job satisfaction (M=41.22, SD=10.77) were higher than that for quality health workforce training (M=40.01, SD=10.10). Thus, the mean difference is 1.21.

Table 2 Means and Standard Deviations of Staff productivity and Quality Health Workforce Training

Variable	Mean	SD	N	Mean Diff.
Staff' Productivity	39.81	11.88	207	0.7
Quality Health Workforce Training	39.11	11.86		

Source: Field Survey, 2021

Table 2 shows the summary of the Means and Standard Deviations of staff productivity as correlates of quality health workforce training for achieving sustainable health development goals in colleges of health. The mean scores of lecturers' productivity (M=39.81, SD=11.88) were higher than that of quality health workforce training (M=39.11, SD=11.86). Thus, the mean difference between the two variables is 0.7.

Table 3: Means and Standard Deviations of male and female lecturers

Variable	Mean	SD	N	Mean Diff.
Male	40.22	10.66	207	0.44
Female	39.78	10.43		

Source: Field Survey, 2021

Table 3 indicates the summary of the Means and Standard Deviations of male and female responses on job satisfaction and productivity as correlates of quality health workforce training. The mean scores of male respondents (M=40.22, SD=10.66) were less than that of female respondents (M=39.78, SD=10.43). However, the mean difference is 0.44.

Null Hypotheses Testing

The hypotheses were tested as follows:

Table 4: Correlation Analysis of job satisfaction and Quality Health Workforce Training

Variable	Mean	SD	N	R	P-value
Job Satisfaction	41.22	10.77	300	.231**	0.002
Quality Health Workforce Training	40.01	10.10			

** Correlation is significant at 0.05 level

Table 4 presents the summary of the PPMC analysis of job satisfaction as a correlate of quality health workforce training. The mean scores of job satisfaction (M=41.22, SD=10.77) were higher than that for quality health workforce training (M=40.01, SD=10.10). Thus, the difference in the mean score produces a significant relationship between job satisfaction and quality health workforce training (r=.231, p=0.002). This is because; the p-value of 0.002 is less than 0.05. Therefore, the null hypothesis

that states there is no significant relationship between job satisfaction and quality health workforce training for achieving sustainable health development goals is rejected. This implies that, when lecturers are satisfied with the job, they put in their best to ensure quality training takes place which eventually leads to the production of a competent and efficient health workforce.

Table 5: Correlation Analysis of lecturers' productivity and Quality Health Workforce Training

Variable	Mean	SD	N	R	P-value
Staff' Productivity	39.81	11.88	300	1.001**	0.001
Quality Health Workforce Training	39.11	11.86			

** Correlation is significant at 0.05 level

Table 5 presents the summary of PPMC analysis of lecturers' productivity as a correlate of quality health workforce training. The mean scores of staff productivity (M=39.81, SD= 11.88) were higher than that of quality health workforce training (M=39.11, SD=11.86). As a result, the difference in the mean score produces a significant relationship between staff Productivity and quality health workforce training ($r=1.001$, $p=0.001$). This is because; the p-value of 0.001 is less than 0.05. Therefore, the null hypothesis that states there is no significant relationship between staff productivity and quality health workforce training for achieving sustainable health development goals is rejected.

Table 6: Correlation Analysis of male and female lecturers' perception of job satisfaction and productivity as correlates of Quality Health Workforce Training

Variable	Mean	SD	N	R	P-value
Male	40.22	10.66	300	.813**	0.001
Female	39.78	10.43			

** Correlation is significant at 0.05 level

Table 6 presents the summary of the PPMC analysis of male and female respondents on job satisfaction and productivity as correlates of quality health workforce training. The mean scores of male respondents (M=40.22, SD=10.66) were higher than that of female respondents (M=39.78, SD=10.43). Thus, the difference in the mean score produces a significant relationship between male and female responses ($r = .813$, $p=0.001$). This is because; the p-value of 0.001 is less than 0.05. Therefore, the null hypothesis that states there is no significant relationship between male and female responses on job satisfaction and productivity as correlates of quality health workforce training for achieving sustainable health development goals is rejected. Thus, job satisfaction and productivity are determinant factors for quality health workforce training.

Discussions

The finding revealed that there was a significant positive relationship between job satisfaction and quality health workforce training for achieving Sustainable Development Health Goals in the college of health Makarfi, Kaduna State. This concurs with the research revelations of Adedoyin (2011); Muhammad, Rashida, Riffat and Fayyaz (2011); Owolabi and Adebayo (2012); Unanma, Abugu, Dike, and Umeobika (2013); Daso (2013); Bolarinwa (2014); Kifunya cited in Igberadja (2016); Jacob and Lefgren cited in Josiah and Oluwatoyin (2017) revealed that there was a positive relationship between the teacher's job satisfaction variables such as staff development, training, remuneration package, academic qualification, work condition, promotion among others and overall quality health

workforce production for achieving sustainable health development. However, the studies of Asif, Fakhra, Tahir and Shabbir (2016) revealed that quality health workforce production has no significant correlation with lecturers' job satisfaction.

The study revealed that there was a positive significant relationship between staff productivity and quality health workforce training for achieving Sustainable Development Health Goals. This is in line with the findings of Ndugu (2014); Tijani (2015); Thompson (2015); Yusuf and Fashiku (2016); Oni, Nwajiuba and Nwosu (2017); who revealed positive a significant relationship between teacher productivity and quality health workforce production for achieving sustainable health development goals. These findings demonstrate that staff productivity enhances quality health outcomes in terms of competent and efficient manpower.

Finally, the study found a positive significant relationship between male and female responses on job satisfaction and productivity as correlates of quality health workforce training for achieving Sustainable Development Health Goals in the college of health, Makarfi. This reaffirmed the findings of Mahmood and Nudrat (2011); Okoro, Ekanem, and Udoh (2012); Akiri (2014); Onuoha, Samuel and Ojo (2014); Zalenzunik, Christenson and Roethlisberger in Shaheen (2014) demonstrated that relationship exists between male and female employees on job satisfaction and productivity as determinants of quality health workforce development. However, research findings of Nadjla and Hasan (2009); Raisani in Shaheen (2014) affirmed that gender is negatively related to lecturers' satisfaction and indicated that female teachers were more satisfied with colleagues, responsibility and work than their male counterparts.

Conclusion

Based on the findings, it can be concluded that quality health workforce training which is a nationwide concern at the moment in the quest to achieve sustainable health development goals, can be bolstered if priority is given to job satisfaction and productivity is enhanced.

Recommendations

To bolster lecturers' job satisfaction and productivity for quality health workforce training, the following was recommended:

1. The government and administrators of colleges of health should be committed to the staff welfare such as remuneration package, work conditions, promotion, allowances, and job security among others to motivate staff to invest more of their time in teaching/research work for quality health workforce training in Kaduna State.
2. Administrators of colleges of health should develop more assessment tools to track staff activities and reward handsomely those that put in their best to enhance health workforce training. This will bolster staff productivity and job commitment in colleges of health, Kaduna state.
3. Government and administrators of colleges of health should prioritize male and female staff development and training as these will help to enhance their ability and job commitments for quality health workforce training in Kaduna state.

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