Mediation effect of performance appraisal management on the work environment – job satisfaction relationship among support staff in a university in Uganda

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ABSTRACT

The suitability of work environment is an important antecedent of effective performance appraisal management process and job satisfaction among employees within an organization. This study examined the mediation effect of performance appraisal management on the relationship between work environment and job satisfaction among support staff at a public university in Uganda. The study employed cross-sectional survey design. A structured, closed ended questionnaire containing mainly 5-point Likert type items was administered to a census of 207 support staff of the university; 172 (83.1%) responses were complete and used in data analysis. Findings revealed that the support staff ratings of suitability of work environment, effectiveness of performance appraisal management, and job satisfaction at the university were at moderate levels. In addition there was a partial mediation effect of performance appraisal management on the work environment – job satisfaction link at the university. Policy implications include deliberate effort on the part of management to provide suitable working conditions and enhance effective performance appraisal management so as to increase job satisfaction among the support staff.

Keywords: Work environment, performance appraisal, job satisfaction, university, Uganda.

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INTRODUCTION

A suitable work environment that entertains focus and transparency in performance appraisal management is important to enhance the job satisfaction of the employees and hence productivity and success of an organization. Work environment refers to the situations, settings, conditions, and circumstances under which people work (Oludeyi, 2015). A suitable work environment is therefore a precursor for effective performance appraisal management. Performance appraisal management is defined as the continuous process of planning, organizing, controlling, and implementing the efforts of the employees in harnessing the work environment to achieve the strategic organizational goals through periodical appraising of employees (Aguinis, 2009; Nuwagaba, 2015). Effective management of the appraisal system is necessary for job satisfaction of employees. Employee job satisfaction on the other hand means how happy the employees are in fulfilling their desires and needs at their work place (Malik et al., 2010).

According to Anyadike (2013), performance appraisal systems characterized by non-disclosure of appraisal results to the employees result in reservation of energy among and hence underutilization of human resource. Our experience as university staff in Uganda is that though performance appraisal is part of the performance management system of public service, the appraisees are often not given effective, if any, feedback on their evaluations. In addition, the expected structural changes in the work environment that would foster job satisfaction are not effectuated. This tended to be the status quo in most Ugandan institutions including public universities at the time of the study.

The public university whose support staff participated...
in this study was relatively young and tended to grapple with the performance appraisal management process. Employee performance appraisal was introduced at the university to evaluate the performance of the staff and in terms of their areas of strength and weakness. The appraisal process was expected to reveal issues in which employees may require more training, promotion, salary and work environment enhancement among others in order to achieve the goals of the institution (Amaratunga and Baldry, 2002). The appraisal was further intended to identify employees who perform below expected standards so as to be put back on track, and to better the work environment for greater job performance and satisfaction.

However, the work environment and performance appraisal management process of the university at the time of this investigation seemed to be generating low levels of job satisfaction among the support staff. For instance, given the characteristic rural location of the university, the work environment posed to be less suitable than would enhance effective job performance and satisfaction among the support staff. There were reports of lack of office space, office furniture, and insufficient accommodation on campuses among others. The performance appraisal management at the university also showed gaps in performance management tools such as employee coaching, conducting evaluations of the system, and giving feedback to employees.

The fact that a meagre 8.3% of the support staff was promoted in 2016 indicates an ineffectiveness of the performance appraisal management, which could not facilitate satisfactory performance and job satisfaction. Such a scenario could account for the high levels of unacceptable behaviors like failing to meet the stated standards, abscondment, failing to accomplish tasks on time, lack of self-drive, and working below the potentials among the support staff. Whereas previous studies (Boles, 2004; Rubin, 2011) have established bilateral links between the study variables, there has existed a gap in the literature on any mediated relationship among the variables. Therefore, this study sought to assess the mediation effect of performance appraisal management on the relationship between work environment and job satisfaction among support staff at the university.

The mediated relationship was expected to bring out more graphically the effect of decisions and activities of performance appraisal management on the influencing the suitability of work environment and how this would reciprocally affect the job satisfaction of the support staff.

The study was guided by the Affective Events Theory (Weiss and Cropanzano, 1996). According to the theory, the connections between employees' inner influences - intellects, feelings, emotional states, and their reactions as influenced by the effectiveness of management techniques (e.g., during performance appraisal) are all affected by the suitability of the work environment which also affects their performance, commitment, and job satisfaction. As proposed by Sypriewska (2013), an employee builds confidence and participates actively in the success of the organization when provided a suitable work environment and when appraised constructively.

LITERATURE REVIEW

Work environment with its associated effects on performance appraisal management and employee job satisfaction dates back to prehistoric times. In China, civil servants and military officers were appraised for mental, moral, and physical fitness as far back as 200 BCE to ascertain that there was a fit between their biodata and work environment so as to generate satisfaction and high productivity (Wiese and Buckley, 1998 cited in Rubin, 2011). During the middle ages, European guilds used appraisals for certifying craftsmen as masters, and early European universities used exams to evaluate and match the quality and performance of students of divinity and the liberal arts to their missions (Wiese and Buckley, 1998). Rubin (2011) reports that performance appraisals in the US were conducted by governments and the military for purposes of staff promotion and downsizing. This brief historical setting brings to the fore the fact that performance appraisal is conducted to ensure that there is a fit between work environment and job satisfaction among employees.

A suitable environment is one that attracts employees to their workplace and encourages them to perform effectively. The intent of providing a suitable work environment is to enable employees perform effectively; make best use of their knowledge, skills, and competences and the available resources in order to improve and provide quality services. A poor work environment has over time proved to be associated with reduced job satisfaction, absenteeism, somatic complaints, burnout and depression phenomena (Osibanjo et al., 2015). According to Mary (2013), people strive to work, stay, and make a difference in those corporations that offer good and positive work environment where employees feel that they are valued. This means that organizations should provide conducive and supportive work environments to their employees.

The suitability of a work environment is multidimensional. In this study we adopted the Civil Service of Jamaica (2006) dimensions of work environment including communication, supervisor-supervisee relations, social relations, work load, work-life balance, safety and health, professional development, and strategy and orientation. A study by Lambert et al. (2001) similarly reveals that environmental factors such as the level of salary, promotion, appraisal system, climate management, relation with coworkers and furniture or fittings in the office are important causes of job satisfaction among employees. Managers within an organization need to devise mechanisms to provide these
conditions to a threshold level within the organization.

A study by Khan et al. (2011) reveals that selecting and using proper furniture and equipment, the important physical factors in the office, is an important factor in enhancing employee productivity and satisfaction. Selecting appropriate office furniture is an important consideration in which office managers need to pay more attention to make sure that the physical environment is properly maintained. Osibanjo et al. (2015) similarly acknowledge that while the ergonomic environment is important in increasing employee productivity, office furniture and equipment which employees require should be provided to allow for comfort and accomplishment at work throughout the day.

Generally, the physical design of offices and the environmental conditions at work places are important factors for employees’ job satisfaction and performance. One survey conducted by Brill in particular has suggested that improvements in the physical design of office buildings may result in a 5-10 percent increase in productivity and eventually increase performance as well as job satisfaction. Al-Anzi et al. (2009) posit favourable office design as a factor that encourages employees to work. Results of a survey by Kithuka (2015) reveal that nine employees out of ten believed that a workspace and quality of the furniture affects the attitude of employees and increases their productivity. Similarly, Osibanjo et al. (2015) concluded that the type and the comfortability of the furniture and fittings within the office environment have a significant impact on the satisfaction level of employees as it affects their performance. Accordingly, therefore, it is important to recognize the significance of these factors to increase the employees’ satisfaction level in the workforce. How employees perceive their work environment can affect employee’s commitment, motivation, and performance and also helps organization to form a competitive edge over its rivals.

Other studies that examined the effect of physical work environment on employee job satisfaction, performance, and health (Scott et al., 2003) posit that suitability of work environment predicts employee’s job involvement and job satisfaction. Strong (1998) asserts that social, organizational, and physical contexts serve as the motivator for tasks and activities, and considerably influence worker performance. Researches on quality of work life balance (Atibuni et al., 2017) have also established the importance of safe and healthy working conditions as a determinant of engagement.

Taiwo (2010), citing Brenner (2004), posits that the ability to share knowledge in organizations depends on how the work environment is designed to facilitate organizations to use work environment as if it were an asset. This helps organizations to improve effectiveness and allow employees to benefit from collective knowledge. Taiwo further argues that work environment designed to suit employees’ satisfaction and free flow of exchange of ideas is a better medium of motivating employees towards higher productivity. Brown and Leigh (1996) assert that a motivational and empowered work climate (furniture inclusive) influences employees’ attitudes toward work positively and can improve work performance and satisfaction.

A work place survey conducted by Khan et al. (2011) delineated that effective work environment management entails making work environment (including attractive furniture) creative, comfortable, satisfactory and motivating to employees so as to give employees a sense of pride and purpose in what they do. The process of arriving at these qualities involves performance appraisal. The management of the appraisal process sets the difference in productivity and satisfaction outcomes among the employees.

A good performance appraisal management system works towards the improvement of the organizational performance by managing the performances of teams and individuals for ensuring the achievement of the overall organizational ambitions and goals. According to Fisher and Ashkanasy (2000), performance feedback has an important influence on employee affection. This implies that job performance reviews should be done on a regular basis among employees in an organization such that employees get a prompt feedback on their performance. A prompt and effectively delivered performance feedback provided by managers will lead to employee job satisfaction (Wright and Snell, 1991). Sheard and Golby (2010) aver that satisfied employees will work to fulfill the organizational goals. Berger (2008) puts it that these practices will further lead to greater commitment to and enjoyment of the job by the employees.

From the studies reviewed, it can be argued that employee satisfaction sentiments are best achieved through maintaining a suitable work environment by providing adequate and suitable physical infrastructures and ergonomic environments in form of autonomy, participation, and mutual trust – all determinable through effective performance appraisal management. The consequence of a low level of performance appraisal management is a low level of job satisfaction leading to low employee commitment, participation, recognition and poor supervisor-supervisee relations. Furthermore, unfair procedures used in performance appraisal management create job dissatisfaction. We acknowledge that there was a sufficient coverage on correlational research between work environment and job satisfaction, and between performance appraisal management and job satisfaction. In this study, therefore, we aimed at examining the mediation effect of performance appraisal management on the link between work environment and job satisfaction, on which there was barely any literature.

METHODOLOGY

The study employed quantitative methods, using
descriptive correlational research design. The descriptive nature of the study was intended to describe the levels of suitability of the university work environment, effectiveness of performance appraisal, and job satisfaction among the support staff. This was important because the study sought to explain the study variables with respect to the demographics of the respondents. The descriptive approach, as esteemed by Sarantakos (1998, 2012), was relatively cheap and easy to implement, and yielded results in a short period of time. The correlational design enabled easy determination of the degrees or strengths of the associations and structural equation modelling among the variables. Since the study variables were quantifiable, a correlational study was befitting to establish the relationships and interaction effects among them.

The study population consisted of support staff who had served the university for at least six months by the time of data collection. According to the human resource policy of the university, support staff members were employed on probation for at least six months before confirmation, and the first performance appraisal was after at least three months of service. The study used census method to engage all the 207 support staff of the university as participants. This method was preferred because the population was small and allowed wholesome examination of the participants as well as reducing bias during the exercise.

Quantitative data were generated from the respondents by administering a questionnaire. The questionnaire was cost effective and yielded results very fast. Closed-ended questions were used to limit the respondents to preset answers and avoid unwarranted responses. The questionnaire had four sections including the biodata section, the performance appraisal management scale, work environment scale, and job satisfaction scale. The biodata section to assess the demographics of the respondents consisted of questions relating to age range, gender, level of study, marital status, period of stay, and department.

The suitability of work environment was measured using a 22-item Work Environment Scale. The scale measured suitability in terms of communication, supervision, social relations, workload and work life balance, workplace safety and health, professional development, and strategy and orientation. The effectiveness of performance appraisal management was obtained using an 18-item Performance Management and Appraisal System Scale adapted from the original scale authored by the Civil Service of Jamaica (2006). The effectiveness of performance appraisal management was determined with reference to strategic planning, employee coaching, conducting appraisal, giving feedback, and conducting evaluation. Data for the level of job satisfaction among the support staff were measured using the 10-item Generic Job Satisfaction Scale authored by Macdonald and Macintyre (1997). Job satisfaction was measured in terms of commitment, recognition, participation, and supervisor-supervisee relations. All the scales had acceptable Cronbach’s alpha reliability above .70.

After approval and clearance of the research proposal by the Faculty Research Ethics Committee, an introduction letter was obtained from the Faculty Dean. This served to introduce the researchers to various authorities including deans of other faculties to grant permission to meet their support staff. On meeting the support staff, self-introductions were made followed by an explanation of the purpose of the study. Consent was sought, the questionnaire administered, and participants filled the instrument within 30 minutes and the questionnaires were collected the same day.

The filled-in questionnaires were screened for completeness. Questionnaires from 172 participants were, on screening, found to be completely filled, giving a response rate of 83.1%. The incomplete ones were disregarded while data in the complete questionnaires were coded and entered in Statistical Package for Social Scientists (SPSS) software. The entered data were cleaned and managed as follows:

The items on the scales were each scored on 5-point Likert scale, 1 (strongly disagree) to 5 (strongly agree). The scores of the items in each scale were added to constitute the individual’s rating on the scale. The suitability of work environment ranged from low (22 to 51) through moderate (52 to 81) to high (82 to 110) levels. The performance appraisal management scores were categorized as low (19 to 44), moderate (45 to 70) and high (71 to 95) levels of effectiveness. The job satisfaction scores were categorized as low (10 to 23), moderate (24 to 36), and high (37 to 50) levels of job satisfaction.

Data analysis involved calculation of frequencies, percentages, means, and standard deviations to determine the overall suitability of the work environment, effectiveness of performance appraisal management, and level of job satisfaction. Pearson product moment correlation coefficient was run to determine the degree of correlation between the study variables. Further, determination of the mediation effect of performance appraisal management on the relationship between work environment and job satisfaction among support staff in the university involved structural equation modelling using multiple regression with the Process plugin Model 4 in SPSS by Hayes (2013). The variables satisfied the condition of normal distribution as shown in Table 1.

There was a strict adherence to ethical considerations. The researchers guarded against manipulation of participants, fabrication and falsification of data, and consequently the misrepresentation of results and conclusions. Permission was sought from the relevant authorities and gatekeepers and consent obtained from all participants before administration of the research
instrument. The researchers ensured confidentiality and anonymity throughout the process.

RESULTS AND DISCUSSION

Suitability of work environment for support staff at the university

Responses from the support staff at the university revealed that the work environment was moderately suitable ($M = 71.22$, $SD = 12.87$). In terms of the work environment subscales, this result implies that there was generally a fair relationship between the subordinates and the managers, workload and work life balance, and work safety and health at the public university. This is similar to results obtained by Oswald (2012) and Jayaweera (2015) who found out that generally low- and middle-income countries provide inadequate working environments for their workers.

Similarly, results obtained by Fine and Kobrick (1978), Mohapatra and Srivastava (2003), and Naharuddin and Sadegi (2013) indicate that job aid and physical workplace environment significantly affect employees’ performance and hence job satisfaction. The respondents’ perception of moderate level of suitability of the work environment may be a result of the fact that the university generally had few physical facilities and equipment such as computers for the support staff. This reiterates the importance for an employee to be availed the right work space, conditions, and gears so as to foster competence, efficiency, and productivity. Offices should be furnished with quality furniture and tools so that workers get motivated to perform in a safe and healthy workplace.

Level of effectiveness of performance appraisal management at the university

Findings of the study revealed that the effectiveness of Performance Appraisal Management was generally moderate ($M = 53.35$, $SD = 9.88$). This could imply that on average there was limited coaching and training of the employees about the process of performance appraisal, little or ineffective feedback given after the appraisal and also less involvement of the employees during the evaluation exercise. This result tallies with results obtained by Bintu (2014), Gebeyaw (2017) and Rubin (2011) that enumerate a number of benefits of effective performance appraisal to the individual employee, leaders, and the organization and its entire clientele.

The reasons for the moderate level of effectiveness may include the fact that some of the respondents acknowledged being encouraged to some extent to participate in the discussions during the process of appraisal. However, there was a general outcry that workers were not usually provided with effective feedback. This means that the university policy on and practice in performance appraisal management needs to be strengthened with clear guidelines on the duties and responsibilities of different stakeholders in handling the performance appraisal process.

The level of job satisfaction among support staff at the university

Results indicate that job satisfaction among support staff at the university was at moderate levels ($M = 36.44$, $SD = 6.16$). This probably means that there is less recognition of support staff for their performance, less commitment to their work, less participation, and only fair supervisor-supervisee relationship. This implies that the support staff are not fully satisfied with their jobs due to the ineffectiveness of the results of performance appraisal management and also with the suitability of the work environment of the university.

This finding is similar to results obtained by Kithuku (2012) who found out that bank employees in Kenya were moderately satisfied with their job depending on work environment and performance appraisal. A suitable work environment in the bank coupled with an effective performance appraisal management would generate high job satisfaction levels whereas an unsuitable environment in combination with an ineffective performance appraisal would lower the job satisfaction levels. Indeed, results of the study by Bond et al. (2004) indicate that the strongest correlate of job satisfaction was social support which is an aspect of work environment. Raising the job satisfaction levels among the support staff would require availing a suitable work environment characterised by equal educational opportunities for personal growth and training at the university.

Table 1. Normality test results for the variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kolmogorov-Smirnov&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Performance appraisal management</td>
<td>.066</td>
<td>172</td>
</tr>
<tr>
<td>Work environment</td>
<td>.063</td>
<td>172</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>.111</td>
<td>172</td>
</tr>
</tbody>
</table>

<sup>a</sup> Lilliefors Significance Correction.
Mediation effect of performance appraisal management on the relationship between work environment and job satisfaction among support staff at the university

In determining the mediation effect of performance appraisal management on the relationship between work environment and job satisfaction among the support staff at the university, first Pearson Product Moment correlation coefficient was determined between the variables. Results indicate that there was a moderate statistically significant positive correlation between work environment and performance appraisal management \((r = .386, p < .001)\), between performance appraisal management and job satisfaction \((r = .386, p < .001)\), and between work environment and job satisfaction \((r = .457, p < .001)\). In other words when a suitable work environment is maintained and performance appraisal is managed with high effectiveness, the job satisfaction will be high among the employees. A study by Bond et al. (2004) had earlier on unearthed that when work environment is suitable, the job satisfaction is high. A similar previous study by Rubin et al. (2011) revealed that effective management of performance appraisal is associated with high job satisfaction. Oswald (2012) and Jayaweera (2015) also indicated that when performance appraisal is managed with high effectiveness, the work suitability will be high. Now the interaction effect of the three variables had not yet been considered in a previous study. This was the focus of the current study.

The multiple regression to determine the mediation effect of performance appraisal management on the link between work environment and job satisfaction revealed that the direct path \(c\) of regressing job satisfaction on work environment was significant, \(b = .25, t = 7.46, p < .001\), with a significant overall model, \(F (1, 170) = 47.43, p < .001, R^2 = .36\). Path \(a\) that showed that work environment significantly predicted performance appraisal management, \(b = .35, t = 6.70, p < .001\), with a significant overall model for the path, \(F (1, 170) = 44.95, p < .001, R^2 = .21\). Path \(b\) of regressing job satisfaction on performance appraisal management was also significant, \(b = .09, t (170) = 2.16, p < .03\). In the indirect path \(c'\), the regression of job satisfaction on work environment while controlling for performance appraisal management was still significant, \(b = .28, t (170) = 9.40, p < .001\) with a significant overall model, \(F (170) = 88.29, p < .001, R^2 = .34\). The Sobel test (normal theory test) results showed that \(c-c'\) was significantly different from zero, \(z = 2.04, p < .001\), \(k^2 = .03\). This suggests partial mediation effect of performance appraisal management on the relationship between work environment and job satisfaction. In other words, a higher level of suitability of the work environment would enhance a higher level of performance appraisal management effectiveness, and consequently the support staff would exhibit a higher level of job satisfaction, and vice versa. Figure 1 shows a diagrammatic representation of the mediation.

![Figure 1](image-url)

**CONCLUSIONS**

The work environment at the university was moderately suitable for the support staff. In this case, the manager-subordinate relationship, workload and work life balance, work safety and health of the support staff were catered for but not fully. Therefore, the support staff needed to be equipped with the right tools and conditions so as to...
boost their competence as employees.

Performance appraisal management at the university was moderately effective. This implies that the coaching and training provided to the support staff in the process of performance appraisal is limited, inadequate feedback was given after the appraisal and there was also less involvement of the support staff during the evaluation exercise. Therefore, the university needed to tighten its policy on performance appraisal management and give clear guidelines on the process.

The job satisfaction among support staff at the university was moderately satisfactory. In other words, the support staff were not fully satisfied with their jobs. Hence there would be need to improves employee morale through opportunities for further studies, personal growth and training, and provision of fair working conditions and workload.

Performance appraisal management partially mediated the relationship between work environment and job satisfaction among support staff at the university. This means that a high level of suitability of the work environment would promote effective performance appraisal management, and consequently a higher level of job satisfaction among the support staff. The study findings supported Weiss and Cropanzano’s (1996) Affective Events Theory. Therefore, there was need to promote the suitability of the work environment at the university so as to enhance performance appraisal management effectiveness and hence job satisfaction among the support staff. This could be achieved among others ways by encouraging employees to participate in the discussions during the process of performance appraisal and also feedback should be encouraged by the managers.

RECOMMENDATIONS

The university needs to equip offices with equipment, encourage and improve good relationships among staff in different departments of the University. Generally there should be a planned move to develop strategies that strengthen the suitability of work environment and increase the employee morale and employee satisfaction to enhance productivity and performance.

Given that the performance appraisal management mediates the relationship between work environment and job satisfaction, there is need to ensure regular and effective communication to the appraisees as soon as the performance appraisal process is conducted to identify their strengths, weaknesses, and opportunities available for continuous improvement. The performance appraisal process needs to be periodically reviewed so as to assist the unsatisfied employees to restore their confidence in their work and in the institution in general. Also, management should devise strategies to gain full participation of all employees in the performance appraisal process by intensifying education and coaching of the new recruits on the whole process of performance appraisal and its management.

The performance appraisal process should be tailored to identifying dissatisfied workers who should then be provided with counselling services to investigate if factors causing dissatisfaction can be adjusted to their personal need. If not, the university needs to accept greater responsibilities for the impact of their work practices on employee health and job satisfaction. Workplace policies must be aimed at eradicating work practices that cause most dissatisfaction among the personnel. The university management should deliberately develop a meaningful work environment for increased job satisfaction among the support staff, which might have a bearing on staff retention, motivation, productivity, and turnover.

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