

# Applying Hackman and Oldham (1975) Job Characteristic Model in the analysis of Job Satisfaction at Makerere University: An Empirical Paper

ERIA MUWANGUZI<sup>1, \*</sup>, BETTY EZATI<sup>1\*</sup>, CHRISTOPHER B. MUGIMU<sup>1\*</sup>

*College of Education and External Studies, Makerere University (Corresponding author: emuwanguzia@gmail.com)*

---

## **Abstract**

*This study delved into an examination of Hackman and Oldham (1975) Job Characteristic Model in the analysis of job satisfaction at Makerere University. This study was prompted by the fact that the interventions used at Makerere University were not addressing the root causes of job dissatisfaction. The study was approached from the positivist paradigm, using a descriptive cross-sectional survey design where a quantitative data were collected from 304 academic staff using an adapted closed ended questionnaire. Data were analyzed with the use of descriptive statistics and a multiple regression analysis technique. Study findings revealed that: first, task autonomy was the most important variable that influences job satisfaction at Makerere University (Mean=4.58; SD=.821), while the feedback was the least considered variable (Mean=1.25; SD=.565). Second, task significance were found to significantly influence job satisfaction. Finally, it was established that task variety and task identity were found to have insignificant effects on job satisfaction. Therefore, the study concluded that Job characteristics of autonomy and task significance were the likely pre-requisites of JS while task variety, task identity and feedback were not. The study also recommended that Makerere University Human Resource Directorate should prioritize academic freedom to enhance job autonomy. Further still, relevant authorities should organize meetings and conferences tailor-made towards empowering the academic staff towards enhancing task significance. However, task variety, task identity and feedback should not be overemphasized.*

**Key words:** *Job satisfaction, Job Autonomy, Task Variety, Task Identity, Task Significance, Feedback*

---

Date of Submission: 03-02-2022

Date of Acceptance: 16-02-2022

---

## **I. Introduction**

Several Theories and Models (e.g. Equity Theory, The Job Characteristics Theory, Affect Events Model, The Herzberg's Two Factor Theory and Smerek and Petersons' Assessment Model) have been proposed and used to analyze job satisfaction among the academic staff in institutions. On the basis of analyses using these models, interventions have been designed and implemented. A faulty analysis would result into interventions that do not address job satisfaction per say. For instance, Makerere University has been implementing several interventions such as providing 50% tuition waiver for staff biological children, tuition waver for those registered for further studies at Makerere University and scholarship for those abroad, 'top up' allowances for all staff, health insurance; all aimed at improving job satisfaction of its academic staff but with minimal success, raising questions on the appropriateness of previous job satisfaction analysis models used by Makerere University.

This study adopts Hackman and Oldham (1975) job characteristic model due to the fact that tends to treat job satisfaction as multi-dimensional construct rather than a static concept. This model has been used in studies of Johari and Yahya (2016) in assessing the predicting role of job characteristics on job performance among public servants in Malaysia. Their study findings revealed that task significance and feedback significantly influence job performance and the relationships are mediated by work involvement. Hussein (2018) identified the need for re-enriching the work of the workers by test and apply the job characteristics model to the sample of 211 participants from the official media sector by using the job diagnostic survey based on five main dimensions of the tasks (Skills diversity, task identity, task significance, autonomy, and feedback). Their study results indicated that the motivation potential scores are often below than required level. Hence, this study uses Hackman and Oldham (1985) Job Characteristic Model which has been successfully used elsewhere to analyze job satisfaction among the academic staff at Makerere University in order to determine its applicability.

## II. Conceptual background

The term job satisfaction has been defined by Hoppock (1935) one of the classical writers on job satisfaction as a combination of psychological, physiological as well as the circumstances of the environment which cause the employee to say: "I am happy with my job". Locke (1969) in his article what is job satisfaction defined it as an emotional-affective response to a job or to specific aspects of the job. Locke (1969) conceptualized job satisfaction in terms of; work it 'self, pay, promotion, supervision and relationship with co-workers. Smerek and Peterson (2007) defined job characteristics as the main core dimensions of the job. In this study, job characteristics will mean; feedback in terms of frequency, autonomy with which the job is performed, job variety in terms of the skills needed to perform the job and task identity in terms of the ability to perform a job from start to finish.

## III. Problem Statement

Employees, who are satisfied, tend to care more about the quality of work; they are committed and more productive to the organization as well (Bakotic, 2016). In Makerere University, efforts to enhance job satisfaction among the academic staff have been expended in terms of improved remuneration, internet connections in offices, improved avenues for human resource development and established health insurance schemes (Nakkazi, 2015; Muhindo, 2016). Despite these improved measures towards job satisfaction, strikes have persisted within the University in recent years (Nalubega, 2016; Angulo & Walubiri, 2013; Okoth, 2015). Frequent strikes give an impression of dissatisfaction among the academic staff. Could it be that, the interventions are not addressing the root causes of job dissatisfaction? If so proper job satisfaction analysis needs to be done, otherwise, Makerere University will continue using interventions that do not actually address the root causes of job satisfaction. Therefore this paper presents findings of a study that attempted to understand job satisfaction among the academic staff using a more comprehensive and a holistic intervention of Hackman and Oldham (1975) developed the Job Characteristic Model.

## IV. Theoretical Review

Hackman and Oldham (1975) developed the Job Characteristic Model as depicted in Figure 1.

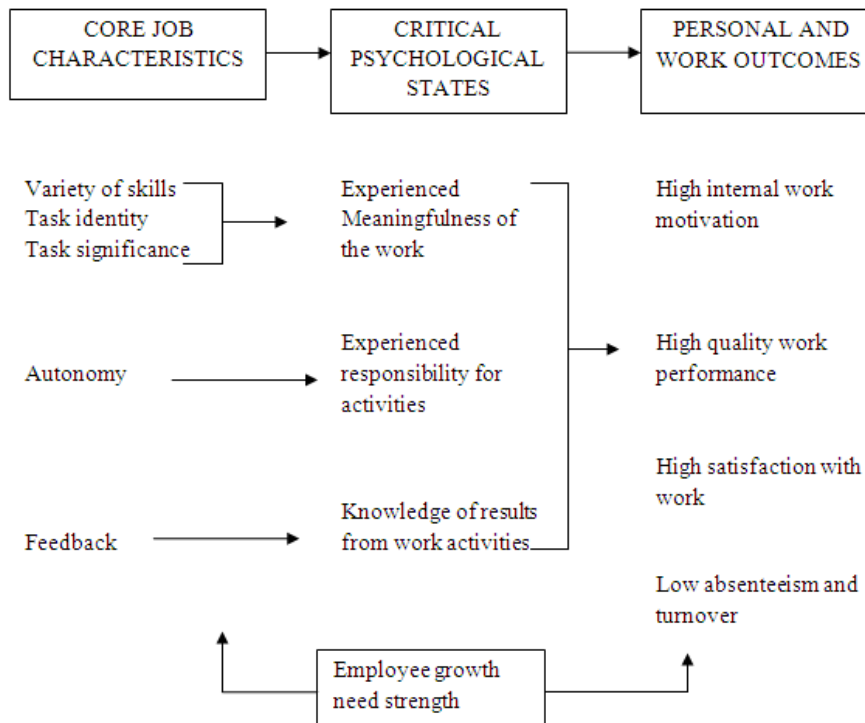


Figure1: The Job Characteristics Model

Source: Hackman & Oldham (1975).

The Job Characteristic Model proposed that high work satisfaction was a positive personal and work outcome that can be obtained when three critical psychological states are present for a given employee (experienced meaningfulness of the work, experienced responsibility for the outcomes of the work, and knowledge of the results of work activities). All the three psychological states must be present for the positive outcomes to be realized.

The Job Characteristic Model further proposed that these critical psychological states are created by the presence of five core job dimensions of skill variety, task identity, task significance, skill variety and feedback. Experienced meaningfulness of the work is enhanced primarily by three of the core dimensions: skill variety, task identity, and task significance. Skill variety according to Hackman and Oldham (1975) is the degree to which a job requires a variety of different activities in carrying out the work and involves the use of different skills and talents of the individual. Task identity was defined by Hackman and Oldham (1975) as the degree to which the job requires completion of a whole and identifiable piece of work-that is one that involves doing a job from the beginning to the end with a visible outcome. Task significance was defined by Hackman and Oldham (1975) as, the degree to which the job has substantial impact on the lives or work of people in other departments in the organization or in the external environment.

Figure 1 further stated that experienced responsibility for work outcomes is increased when a job has autonomy. Job autonomy was defined by Hackman and Oldham (1975) as the degree to which the job gives the employee substantial freedom, independence, and discretion in scheduling the work and in determining the procedures to be used in carrying it out. In addition, knowledge of results is increased when a job is high on feedback. Feedback was defined by Hackman and Oldham (1975) as the degree to which carrying out the work activities required by the job results in the individual obtaining direct and clear information on the results of his performance. Therefore individual growth need strength is shown in figure 4 as a moderator of the other theory-specific relationship.

## V. Literature Review

**5.1 Job Autonomy and Job Satisfaction.** Voet and Walles (2015) examined the relationship between the implementation of cutbacks and job satisfaction of top-level managers in European central government organizations. The study findings revealed that job autonomy may function as a mechanism to explain decreased job satisfaction as a result of cutbacks implementation. Lopes, Lagoa & Calapez (2014) investigated the relationship between work autonomy, work pressure and job satisfaction. They found out that job satisfaction is most affected by an increase in work pressure when this is not accompanied by greater work autonomy. In Singapore, Nalla, Paek and Lim (2017) studied the determinants of security guards' job satisfaction. Their regression analysis suggested that job autonomy, was a strong predictor of security guards' job satisfaction. However, in the United States of America, Ko, Frey, Osteen and Ahn (2015) examined how immigrant status affects determinants of job satisfaction and found out that job autonomy was not a significant predictor US-born and immigrant workers job satisfaction. These empirical gaps made it necessary for this study to further test the relationship between job autonomy and job satisfaction.

**5.2 Task Variety and Job Satisfaction.** Lambert, Qureshi, Hogan, Klahm, Smith and Frank (2015) examined how the job variables of job autonomy, job variety, training and supervision were associated with involvement job satisfaction and organizational commitment among Indian police officers from Sonipat and Rohtak districts of the state of Haryana in republic of India. The study findings revealed that job variety had a positive significant relationship with job satisfaction. In contrast, Jiang, Lambert, Liu and Zhang (2018) studied how work environment variables are linked to job satisfaction among U.S. correctional staff. The study results indicated that job variety had significant positive associations, whereas dangerousness had a significant negative relationship with job satisfaction. In a related finding, Lakshmi and Vanithmani (2012) studied the impact of enterprise resource planning systems over the job characteristics model and its' influence over the job satisfaction of enterprise resource planning. The study results indicated that task variety had a negative influence on job satisfaction. These contradictory results made it indispensable for this study to further test the relationship between task variety and job satisfaction.

**5.3 Task Identity and Job satisfaction.** Wegman, Hoffman, Carter, Twenge and Guenole (2018) employed a cross-temporal meta-analysis to examine changes in five core job characteristics (e.g., task identity, task significance, skill variety, autonomy, and feedback from the job) as well as changes in the relationship between job characteristics and job satisfaction. The study results indicated that there was a significant relationship between job satisfaction and task identity. The study results revealed that task identity and significance was a negative predictor of job satisfaction. In relation to the above study, Andrew, Haris, Zakariah and Zekaria (2016) studied the relationship between job characteristics and job satisfaction among employees at Craun Research Sdn. Kuching, Sarawak. The results indicated that job characteristics are significantly correlated with job satisfaction with the highest correlation being between task identity and job satisfaction. In a contrasting view, Azah, Safari, Thirupalu and Subhan (2012) studied job characteristics as a predictor of work motivation and job satisfaction in both public and private sector banks in Andhra Pradesh. These gaps, therefore, made it imperative in the context of Uganda for this empirical study to analyse the relationship between task identity and job satisfaction.

**5.4 Task Significance and Job Satisfaction.** Rhodes (2014) explored officers' perceptions of their task significance and job satisfaction. He found out that patrol officers had a lower level of task significance and

conflict and were satisfied along one dimension of job satisfaction. On their part, Riasuden and Vankatesakumar (2014) identified the relationship of task characteristics with life satisfaction having job satisfaction as a variable. The study results indicated that task significance had an important but inverse relationship with job satisfaction. In Andhra Pradesh, Azah, Safari, Thirupalu and Subhan (2012) studied job characteristics as a predictor of work motivation and job satisfaction in both public and private sector banks. The results revealed that task identity and significance was negative predictor of job satisfaction. Nevertheless, while all the studies revealed that there was a relationship between task identity and employee job satisfaction, all the studies were skewed outside Uganda. Therefore, it was considered essential to further test the relationship between task identity and employee job satisfaction in the context of Uganda.

**5.5 Feedback and Job Satisfaction.** Raina and Roebuck (2016) examined the critical importance of effective downward communication in its relationship to job satisfaction, organizational commitment and the employees' propensity to leave an organization. They found out that feedback is a significant predictor of job satisfaction. Ali and Haider (2012) investigated the impact of internal communication on employee job satisfaction in Pakistan banks. Their regression results revealed a significant impact of all three dimensions of communication on employee job satisfaction. On their part, Sharma (2015) tested the relationship between communication satisfaction and job satisfaction by analyzing the significance of different dimensions of communication satisfaction with the view that satisfaction is multifaceted. The study found out a strong positive relationship and statistically significant correlation between overall communication satisfaction and job satisfaction scores, indicating that when staff members feel satisfied with communication in their workplace. These empirical gaps, therefore, made it imperative in the context of Uganda for this empirical study to analyze the relationship between feedback and job satisfaction.

## **VI. Methodology**

### **6.1 Sample and Procedure**

A sample of 304 academic staff that included professors, associate professors, senior lecturers, lecturers and assistant lecturers provided data. The academic staffs were from all the ten colleges of Makerere University. The study was a correlational study with quantitative data collected using a questionnaire survey. The academic staff that provided data were selected from a sampling frame giving each academic staff in the population the opportunity to participate in the study. The researchers personally collected data and observed research ethics throughout the whole process of collecting data. The researchers thus sought informed consent from the respondents, ensured anonymity and confidentiality during data collection, respected the privacy of the respondents and reported data with honesty by ensuring that data presentation, analysis and interpretation were strictly based on the data collected.

### **6.2 Instrumentation**

Since the study used a quantitative approach which in particular was the survey design, data were collected using a Self-Administered Questionnaire (SAQ). The SAQ was adopted from previous studies and validated to fit in this study. This was based on the premise that validities and reliabilities of the SAQ items could be taken for granted initially. The SAQ was divided into three sections that were A through C. The question items in section A were nominal questions on background characteristics. Section B and C question items were ordinal questions on the dependent variable (job satisfaction of academic staff) and independent variable (dimensions of the job characteristics model). Section B covered dimensions on job characteristics and had questions on job autonomy, task identity, task variety, task significance and feedback adopted from Hackman and Oldham (1975). Section C was on the dependent variable Job satisfaction (DV) which had eight questions all adopted from Smerek and Peterson assessment model. The five-point Likert scale (where 5 = Strongly Disagree, 4 = Disagree, 3 = Neutral, 2 = Agree, 1 = Strongly Agree) was adopted for the questions in sections C.

### **6.3 Data Management**

The researcher analyzed data was done at different levels, namely at univariate, bivariate level and multi-variate. At univariate level, data analyses were based on percentages from the frequency tables and descriptive statistics. At bivariate level, the researcher correlated the dependent variable (DV) with each of the dimensions of JCM. At multi-variate level, multiple regression models were run with each regressed against the DV on the dimensions of JCM.

## VII. Results and discussion

### a. Background Characteristics

**Table 1: Demographic characteristics of the respondents**

Item	Categories	Frequency	Percent
Age group	Less than 30 years	40	13.6
	31-40 years	137	46.6
	41-50 years	98	33.3
	51+ years	19	6.5
	Total	294	100.0
Gender	Male	177	60.2
	Female	117	39.8
	Total	294	100.0
Level of education	Post graduate diploma	12	4.8
	Masters	126	50.2
	PhD	101	40.2
	Others	12	4.8
	Total	251	100.0
Marital status	Single	31	10.8
	Married	214	74.3
	Divorced/separated	15	5.2
	Others	28	9.7
	Total	288	100.0
Length of service	Less than 3 years	5	18
	4-6 years	85	29.9
	7-9 years	82	28.9
	10+	112	39.4
	Total	284	100.0
Category of department/ school	Humanities	148	59.9
	Sciences	118	40.1
	Total	294	100.0

The findings in Table 1 revealed that on age group of the respondents in years showed that the modal percentage 46.6% of the respondents were between 31-40 years , followed by 33.3% who were between 41-50 years while the rest were aged either 30 years and below(13.6%) or 51 years plus(6.5%). Data on gender revealed that the respondents were predominately male (60.2%). Concerning the level of education attained by the respondents showed that the modal percentage (50.2%) of the respondents were those who had masters degrees followed by 40.2% with PhD degrees. In regard to the marital status, the modal percentage 74.4% comprised the married. Pertaining to the number of years the respondents had been employed in the university, the modal percentage 39.4% of the respondents had been in the university for 10 years plus followed by 29.9% that had been in the university for 4-6years. On the respondents' length of service revealed that the model percentage (53.4%) were of 5-10 years' experience, followed by lecturers with 10 years and above experience (25.1%) and academic staff with experience 10 years and above (21.5%) were of less than 5 years had least experience.

**Table 2: Descriptive Statistics of Hackman and Oldham Job Characteristics Dimensions**

Item	Means	SD
Job autonomy	3.69	0.97
Task identity	3.12	0.313
Task variety	4.68	1.45
Task significance	3.01	0.757
Feedback	3.45	1.19

Table 2 shows the descriptive value of the variable under investigation. Items for each factor were measured using five point likert scale that range from 1 as strongly disagreed, 2 as disagree, 3 as not sure, 4 as agree and 5 as strongly agree. The result indicates that all measures either moderate or highly scored with minimum value of 3.00. Accordingly the result imply moderate scores of task identity, task significance as well as feedback while there were high scores on job autonomy and task variety.

**7.2 Correlation of Job Satisfaction on the dimensions Hackman and Oldham JCM**

Table 3 illustrates the correlation coefficients indicating that job autonomy ( $r=0.460$ ,  $p=0.000<0.01$ ), task identity ( $r=0.187$ ,  $0.002<0.01$ ), task significance ( $0.291$ ,  $0.000<0.01$ ), feedback ( $r=0.232$ ,  $0.000<0.01$ ) had a positive and significant relationship with job satisfaction among the academic staff. This implies that Hackman and Oldham (1975) questions on job autonomy, task identity, task significance and feedback were related and applicable in analyzing job satisfaction at Makerere University. However, task variety ( $0.72$ ,  $0.251>0.01$ ) was not significantly related to job satisfaction. This implies that Smerek and Peterson questions on task variety were not applicable in the analyze of job satisfaction at Makerere University. To confirm the correlations, a multiple regression was run to find out whether Job Satisfaction predicted job characteristics.

Table 3: Correlation matrix of job satisfaction and job characteristics

	JS	JA	TV	TI	TS	FB
JS	1	.460	.072	.187	.291	.232
JA		1	.209	.263	.116	.630
TV			1	.240	-.199	.244
TI				1	.087	.182
TS					1	.164
FB						1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**7.3 Regression of Job Satisfaction on the dimensions Hackman and Oldham JCM**

At the confirmatory level, to ascertain whether Job characteristics predicted job satisfaction that is, to test the five hypotheses ( $H_1-H_5$ ) in this study, the dependent variable namely, JS was regressed on JC the third independent variable of Job Autonomy (JA), Task Variety (TV), Task Identity(TI), Task Significance (TS), And Feedback (FB).

Table 4: Regression of Job Satisfaction on Job Characteristics

Hygiene factors	Standardized Co-efficient	Significance
Job autonomy	.448	.000
Task variety	.053	.053
Task identity	-.004	.951
Task significance	.245	.000
Feed back	-.129	.082
Adjusted R <sup>2</sup> =0.202		
F=12.306; p=0.000		

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The results in Table 4 shows that, the five Job characteristics explained 20.2% of the variations in JS (adjusted R =0.202). This means that 79.8% of the variation was accounted for by extraneous variables not considered in this study. The regression model was good/ significant ( $F=12.306$ ,  $p=0.000<0.05$ ). In this regard, only two of the job characteristics of job autonomy and task significance ( $P<0.5$ ) proved to be statistically positive significant predictors of JS while task variety, task identity and feedback were not. Therefore at the confirmatory level, hypothesis  $H_1$  and  $H_4$  were supported while  $H_2$ ,  $H_3$  and  $H_5$  were not.

**VIII. Discussion**

The first hypothesis of this study conjectured that job characteristic affected job satisfaction among the academic staff in Makerere University. This hypothesis was broken into sub hypothesis  $H_1-H_5$  respectively relating JS to job autonomy, task variety, task identity, task significance as well as feedback. Hypothesis fourteen ( $H_1$ ) to the effect that job autonomy was a positive significant correlate of job satisfaction was accepted. This study finding was in agreement with the findings of other scholars. For instance, Voet and Walles (2015) they found out that job autonomy may function as a mechanism to explain decreased job satisfaction as a result of cutbacks implementation. However, Ko, Frey, Osteen and Ahn (2015) found out that job autonomy predicted US-born and immigrant workers job satisfaction.

Hypothesis fifteen ( $H_2$ ) to the effect that task variety was not a correlate of job satisfaction was rejected. This study finding was in agreement with the findings of other scholars. For instance, Rhodes (2014) found out that patrol officers had a lower level of task significance and conflict and were satisfied along one dimension of job satisfaction. Lambert, Qureshi, Hogan, Klahm, Smith and Frank (2015) examined how the job variables of job autonomy, job variety, training and supervision were associated with involvement job

satisfaction and organizational commitment among Indian police officers from Sonipat and Rohtak districts of the state of Haryana in republic of India. Using a sample of 827 police officers who filled in a questionnaire and ordinary least square regression analysis, they found out that job variety had a positive significant relationship with job satisfaction among police officers from Sonipat and Rohtak districts of the state of Haryana in republic of India.

Hypothesis sixteen (H3) to the effect that task identity was a significant correlate of job satisfaction was accepted. These study findings were dissimilar with the findings of other scholars. For instance, Wegman et al. (2016) established that task identity was not a positive correlate of job satisfaction. Hypothesis seventeen (H4) to the effect that task significance was a positive significant correlate of job satisfaction was accepted. This study finding was in agreement with the findings of other scholars. For instance, Khalil (2017) found out a positive significant relationship between task significance and job satisfaction. Hypothesis eighteen (H5) to the effect that feedback was a positive correlate of job satisfaction was accepted. This study finding was in agreement with the findings of other scholars. For instance, Raina and Roebuck (2016) they found out that feedback is a significant predictor of job satisfaction.

## IX. Conclusions

This study was conducted with the aim of applying Hackman and Oldham's (1975) job characteristics model in the analysis of job satisfaction among the academic staff at Makerere University, Uganda. It can be concluded that Job characteristics of autonomy and task significance were the likely pre- requisites of JS while task variety, task identity and feedback were not. The study recommended that Makerere University Human Resource Directorate should prioritize academic freedom to enhance job autonomy; relevant authorities should organize meetings and conference tailor-made towards empowering the academic staff about task significance. However, task variety, task identity and feedback should not be overemphasized.

## References

- [1]. Ahimbisibwe, P. (2011, August 29). Makerere: Striking through the years. Retrieved from: <http://www.monitor.co.ug/News/Education/688336-1226914-15b454d/index.html>.
- [2]. Ali, A., & Haider, J. (2012). Impact of internal communications on employee job satisfaction: A case of some Pakistani banks. *Global Advanced Research Journal of Management and Business Studies*, 1(10), 38-44.
- [3]. Andrew, L., Haris, N., Zakariah, H., & Zekaria, N. A. (2016). Job characteristics and job satisfaction among employees: A case study at Craun Research Sdn. Bhd., Kuching, Sarawak. *International Academic Research Journal of Business and Technology*, 2 (2), 165-171.
- [4]. Angulo, I., & Walubiri, M. (2013, October 8). Makerere university students stranded as lecturers resume strike. New vision. Retrieved from [www.newvision.co.ug/.../648108-makerere-students-strand](http://www.newvision.co.ug/.../648108-makerere-students-strand).
- [5]. Azash, S., Safare, R., Thirupalu, N., & Subhan, B. (2012). Job characteristics as predictors of work motivation and job satisfaction of bank employees. *International Journal of Business and Management Tomorrow*, 12(1), 1-7.
- [6]. Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60(2), 159-170.
- [7]. Haprock, R. (1935). *Job satisfaction*. New York: Harper.
- [8]. Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work*. New York: John Wiley & Sons.
- [9]. Jiang, S., Lambert, E. G., Jin, D. Z. K., & Xiang, J. (2016). Effects of work environment variables on job satisfaction among community correctional staff in China. *Criminal Justice and Behavior*, 20(10), 1-12. doi: 10.1177/0093854816633493
- [10]. Kagolo, F., & Nanteza, W. (2016, August 22). Style up or face the axe-lecturers told. Retrieved from: <http://newvision.co.ug/new-vision/news/1295001/style-axe-lecturers-told/>
- [11]. Ko, J., Frey, J. J., Osteen, P., & Ahn, H. (2015). Moderating effects of immigrant status on determinants of job satisfaction: Implications for occupational health. *Journal of Career Development*, 42(5), 396-411.
- [12]. Lakshmi, S., & Vanithmani, M. R. (2012). Impact of job characteristics on job satisfaction among ERP system users. *International Journal of Medical Education*, 2, 53-55.
- [13]. Lambert, E. G., Qureshi, H., Hogan, N. L., Klahm, C., Smith, B., & Frank, J. (2015). The association of job variables with job involvement, job satisfaction and organizational commitment among Indian police officers. *International Criminal Justice Review*, 25(2), 194-213.
- [14]. Lien, P. T. (2017). Factors Affecting Lecturer Job Satisfaction: Case of Vietnam Universities. *International Journal of Academic Research in Economics and Management Sciences*, 6(2), 138-148.
- [15]. Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, 4, 309-336.
- [16]. Lopez-Cabarcos, M. A., Pinho, A. I. M., & Vazquez-Rodriguez, P. (2014). The influence of organizational justice and job satisfaction on organizational commitment in Portugal's hotel industry. *Cornell Hospitality Quarterly*, 56(3), 258-272.
- [17]. Muhindo, C. (2016, June 8). University teaching employees get pay rise. New vision. Retrieved [http://www.newvision.co.ug/new\\_vision/news/1426480/University-teaching-employees-pay-rise#sthash.vKx01vZH.dpuf](http://www.newvision.co.ug/new_vision/news/1426480/University-teaching-employees-pay-rise#sthash.vKx01vZH.dpuf)
- [18]. Nalla M. K, Rydberg, J., & Meško, G. (2011). Organizational factors, environmental climate, and job satisfaction among police in Slovenia. *European Journal*, 8(2), 144-156.
- [19]. Nalubega, L. (2016, July 22). Makerere lecturers give government ultimatum on salary "MUASA chairperson" we are calling for the immediate release of our June salaries and the five months arrears of incentives for the teaching staff before tomorrow ends. Retrieved from: <http://News/Education/Makerere-lecturers-government-ultimatum-salary-688336-3305288-wi00nt/index.html>.
- [20]. Okoth, C. (2015, August 14). University non- academic maintain strike. New vision. Retrieved from: <http://www.newvision.co.ug/new>
- [21]. Sharma, P. R. (2015). Organizational communication: perceptions of employee's members' level of communication satisfaction and job satisfaction. *Unpublished PhD dissertation East Tennessee State University*.

- [22]. Smerek, R. E., & Peterson, M. (2007). Examining Herzberg's theory: Improving job satisfaction among non-academic employees at a university. *Research in Higher Education*, 48(2), 229-250.
- [23]. Voet, J. V., & Walles, S. V. (2015). How cutbacks and job satisfaction are related: the role of top level public managers' autonomy. *Review of Public Personnel Administration*, 38(1), 5-23.
- [24]. Wegman, L. A., Hoffman, B. J., Carter, N. T., Twenge, J. M., & Guenole, N. (2016). Placing job characteristics in context: cross temporal meta-analysis of changes in job characteristics since 1975. *Journal of Management*, 44 (1), 352-386.

ERIA MUWANGUZI. "Applying Hackman and Oldham (1975) Job Characteristic Model in the analysis of Job Satisfaction at Makerere University: An Empirical Paper." *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 12(01), (2022): pp. 20-27.