



HUMAN CAPITAL VARIABLES AND EMPLOYEE SATISFACTION: AN ASSESSMENT OF TVET IN FEDERAL POLYTECHNIC ILARO (FPI)

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Abstract

This study investigated the effect of Human Capital and employee satisfaction in Technical and Vocational Education and Training (TVET) in the Federal Polytechnic, Ilaro (FPI). The study adopted the survey design and a sample size of 147 was drawn from a population of 526 academic staff of the institution with the use of Taro Yamane. Simple random probability method was used for sampling selection & primary data was collected through questionnaire administration. The data was analyzed using multiple regression analysis tool in Statistical Package for Social Science (SPSS). The study revealed that there is a strong positive relationship between the variables of human capital (knowledge acquisition & human skills) and employee satisfaction. The study further recommended that more attention should be given to the absorption of employees with relevant knowledge and skills to enhance the performance of the organisation.

Keywords: Human capital, Employee satisfaction, Knowledge acquisition, Human skills.

Introduction

Humans are central to any organisation. Their ideas, actions and inactions have consequences on the organisation. When highly informed, trained and motivated, they are more likely than not propellants of the organisation. Taking a look at the factors of production as explained in basic economics, we can say that the factor of labour is arguably the most important. For instance, the factor of capital needs labour to yield profit just as land need labour to work on it, build on it or produce in it. Furthermore, the entrepreneur cannot individually mix other factors without the knowledge, strength and/or skills of labour. Thus the submission is that labour or the workforce or workers or staffs or employees (or whatever nomenclature we choose to give them) are as essential as the being of any organisation. This indispensable role engenders the concept of human capital.

Although it is believed that there is no holistically accepted definition of human capital by all scholars involved in its study, there are some themes that are acceptable and referred to by any scholar or institution that aims to describe human capital. These themes are fairly captured in a definition provided by the Organisation for Economic Cooperation and Development (OECD). According to this Institution, human capital can be seen as the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being (Keeley, 2007). Business Dictionary defined Human Capital as an asset of an organisation implying recognition of the importance and monetary worth of the skills and experience of its employees. Since individuals are the lifeline of an organisation, their knowledge acquisition, skills, expertise and other variables become what drives the organisation. Knowledge Acquisition is the process of extracting, structuring and organizing knowledge from one source, usually human experts, for general usage. Such knowledge can be acquired through a variety of learning activities as; training, formal education, experimentation, imitation and self-direct learning (Min & Nien 2008). Human Skills is the ability to interact, work or relate effectively with people. These skills enable managers to make use of human potentials in the organisation and motivate the employees for better results. Thus, as part of the responsibilities of the organisation such variables ought to be maintained so that the individual(s) will be satisfied in the course of performing assigned duties.

This study aims to measure the satisfaction of employees of the Federal Polytechnic Ilaro (FPI) which is a Technical and Vocational Education and Training (TVET) institution. This becomes important because owing to the fact that the development of a society is partly dependent on the technical knowhow of its workforce, much is expected from technical and vocational education. Previous studies have basically focused on human capital variables as it affects organizational performance and organizational effectiveness. However, from whom much is expected, much must have been given to meet expectations hence the need to measure the satisfaction of these

employees. Our objective is thus to test the effect of employee satisfaction on human skills and knowledge acquisition. This study intends to test the following hypotheses

H₀: There is no significant relationship between Human skills and employee satisfaction.

H₀: There is no significant relationship between knowledge acquisition and employees satisfaction.

The concept of human capital is rooted in economic science development (Alika and Aibieyi, 2014). A reference point in the understanding of human capital is one of Adam Smith's definitions of capital where he clearly sees it as: The acquisition of talents during education, study, or apprenticeship, costs a real expense, which is capital in a person. Those talents are part of his fortune and likewise that of society (Goldin, 2019).

Knowledge acquisition is the process of gaining knowledge from a human master or a gathering of specialists for the improvement of knowledge-based frameworks. It includes an arrangement of procedures and strategies that endeavor to inspire knowledge of an area authority through some type of direct communication with the master. Jayshril & Kalaiselvi (2018). Because knowledge is a critical factor affecting the performance of an expert system, knowledge acquisition is *a priori* a fundamental task of any knowledge engineering enterprise. Knowledge acquisition refers to the knowledge that a firm can try to obtain from external sources. External knowledge sources are important and one should therefore take a holistic view of the value chain (Afolayan, White & Mason-Jones, 2016). Sources of such can include; suppliers, competitors, partners/alliances, customers, and external experts. Knowledge acquisition can occur through collaboration, consulting, informal interaction with knowledge experts, training and other knowledge developments activities. Thus, the acquisition of knowledge focuses on identifying and seeking new knowledge and recognizing existing knowledge (Rusly, Sun & Corner, 2015). However, the mere existence of knowledge in an organisation does not automatically transfer into competitive advantage neither does it guarantee competitive advantage. What is recognised as important for competitive advantage is the availability of the right knowledge, at the right time, in the right place, and also the ability to create, acquire, transfer, utilize and protect difficult to imitate the knowledge asset(s) of the organisation (Bustinza et al.,2010). This is supported by Engin & Saaticioglu, (2007) who are of the opinion that the effective use of knowledge is important in every organisation. The acquisition of knowledge either by organisations or individuals is considered critical to the success of the organisation in a dynamic and uncertain business environment.

On the other hand, human skills, are becoming more in demand by employers as customers typically prefer to do business with organizations they know, like and trust. If you desire to excel personally and professionally, you need to cultivate and market your human skills. Human skills are the skills we use in order to relate with one another. A person with higher human skills easily engages the audience, potential customer or current customer. They're able to connect with people and those people feel like they know the individual personally. Katz suggests that the technical, perceptual, and human skills are some of the most essential skills for managers' effectiveness (Hersey & Blanchard, 2005). Moreover, the most important skill of a manager is the ability to adjust and negotiate in a proper manner, which is considered to be the most effective factor in the completion of organization goals (Haman, 2010; Brien & Small man, 2011; Smith, 2010).

Rokfler states that: "In this earthy world, I would like to spend a huge prosperity for the manner of interaction with others than for any other thing" (Moshabbaki, 1998). Therefore, the importance of human skill training for the managers of different organizations, especially the educational organizations and particularly schools is increasingly needed. So, the managers of educational systems should focus on the contributing factors of human relationships; that is common interests, individual differences, the human dignity, motivation and cooperation in the affairs as well as trusting the staff (Namvaran, Rabavi & Avarsin, 2013).

According to Sageer, *et al* (2012) satisfaction refers to the level of fulfillment of one's needs, wants and desire. Satisfaction depends basically upon what an individual wants from the world, and what he gets. Employee satisfaction is a measure of how happy workers are with their job and working environment. We can rightly argue that satisfaction is a feeling that evolves from being happy with what is being done and the outcome of what is done. Such is feeling is necessary for positive results in an individual's job. The responsibility of attaining such a feeling to a large extent depends on the organisation. George and Jones (2008) opine that job satisfaction is the collection of feeling and beliefs that people have about their current job. People's levels of degrees of job satisfaction can range from extreme satisfaction to extreme dissatisfaction. Beyond this, people also can have attitudes about various aspects of their jobs such as the kind of work they do, their coworkers, supervisors or subordinates and their pay. Hossain and Roy (2016) contend that the way in which the organizations manage its peoples can influence its performance. The employee participation, empowerment and job design, including team based production system, extensive employee training and performance contingent incentive are widely believed to improve the performance of organisation.

Employee satisfaction is a worker's sense of achievement and success on the job. It is generally perceived to be directly linked to productivity as well as to personal well-being. Job satisfaction implies doing a job one enjoys, doing it well and being rewarded for one's efforts. Job satisfaction further implies enthusiasm and happiness with one's work. Job satisfaction is the key ingredient that leads to recognition, income, promotion, and the achievement of other goals that lead to a feeling of fulfillment (Aziri, 2011). Employees are more loyal and productive when they are satisfied (Sageer, *et al* 2012). Employee job satisfaction, according to Manuere (2017), is an important technique used by organisations to motivate workers to work hard and to become more productive. Several studies have found a positive correlation between employee job satisfaction and company performance (Chan *et al*, 2000; Chandrasekar, 2011; Zohir, 2007).

Human Capital Theory (HCT) as initially formulated by Gary Becker in 1962 and further popularized by Rosen in 1976, argues that individual workers have a set of skills or abilities which they can improve or accumulate through training and education. Sonnentag, (1995), posits that HCT studies usually assume that experiences are translated into knowledge and skills. Human Capital Theory contends that education is not a consumption good, but rather an investment leading to higher earnings in the future. As an investment, the demand for education solely depends upon two important approaches which is not present in the traditional consumption view of education. First, the individual considers the opportunity cost of foregone earnings while in school, and second, he/she considers the expected earnings in the labour market after graduation. Also, this theory predicts that the longer the period of investment, the greater the return. Thus, higher earnings should be correlated with higher levels of education.

According to Huff (2018) the management of human capital is diffused throughout an organization. All management decisions and actions that affect the nature of the relationship between the organization and its employees are seen as important. As a result, all management actions can positively or negatively affect the potential of human capital to influence organization performance. While analysing the relationship between human capital development and job satisfaction Yaya (2016) cites that since human capital development, according to Akintayo, is a key element in improving a firm's assets and employees in order to increase productivity as well as sustain competitive advantage, it is fair to say that to sustain competitiveness in the organization, human capital becomes an instrument used to increase productivity and enhanced job satisfaction of the workforce.

Osibanjo, Kehinde & Abiodun (2012) conducted a study of human resource management and employee job satisfaction among bank workers. The study attempts to determine the effect of training and development, working conditions and human resource factors on employee job satisfaction. Questionnaire was used to collect data from a sample size of 200 while correlation and regression were used to test the hypothesis which revealed that human resource management has a positive effect on employee job satisfaction. The study further concluded that equitable rewards system such as pay, working conditions, training and development, fair treatment, and fair human resources practices are determinants of employee job satisfaction.

Another study by Oyeniyi, Afolabi and Olayanju (2014) analysed the effect of human capital management practices and job satisfaction among Nigeria bank staffs. The study used five HRM practices such as compensation practice, supervisory role practice, promotion practice, training practice and performance evaluation practice. Questionnaire was used to collect data from respondents. Purposive sampling was employed to select six (6) banks while simple random sampling method was used to select ten (10) respondents from each bank totaling sixty (60) as sample size from their head office in Lagos. Multiple regression was used to analyze the data in order to determine the effect of HRM practices on job satisfaction and the result revealed that compensation practice, promotion practice, training practice and performance evaluation have positive effect on job satisfaction among Nigerian banks staff but only supervisory role practice has inverse effect on job satisfaction.

Many scholars have argued that employee job satisfaction is highly correlated to both employee productivity and firm performance. Employee job satisfaction increases employee productivity, employee involvement and reduces the likelihood of staff-turnover (Manuere 2017). Citing Ostroff, Manuere further writes that companies that have a pool of more satisfied workers are effective in implementing strategy compared to companies with disgruntled employees. Huff (2018) asserts that high levels of expenditures in training and development, empowering workers with decentralized decision making authority, and encouraging participation, pay for performance, the use of self-managed work teams, and flexible job designs, among others, are commonly associated with improved performance in public agencies.

Methodology

The study adopts a quantitative research design under the survey research method. The population of the study comprises of members of Academic staff of Federal Polytechnic, Ilaro which is 526. Taro Yamane technique was used to determine the sample size of 147 samples. Primary data was employed in the collection of data for the study. The data was collected using a structured questionnaire while regression analysis was used to examine the relationship between the variables of human capital and employee satisfaction with the aid of statistical package for social sciences (SPSS).

Table 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.736	.735	12

Source: Field survey

Table 1 shows a cronbach's Alpha value $\alpha = .736$ which implies that the instrument of measurements in the study is highly reliable because the general assumption is that if the α -value is above 0.70 (70%), then the instrument is reliable.

Presentation and Discussion of Results

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.525
Bartlett's Test of Sphericity	Approx. Chi-Square	3239.103
	Df	66
	Sig.	.000

Source: Field survey

The associated P – value of the KMO statistics in table 2 $P < 0.5$ implies that the instruments is adequate to do justice to necessary statistical measurement in this study.

Table 3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.127	26.059	26.059	3.127	26.059	26.059	2.509
2	2.442	20.350	46.409	2.442	20.350	46.409	2.535
3	2.249	18.745	65.154	2.249	18.745	65.154	2.419
4	2.029	16.905	82.059	2.029	16.905	82.059	2.590
Extraction Method: Principal Component Analysis.							
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Source: Field survey

Table 3 shows a total variance explained value of 82.06 percent which implies that the questionnaire is adequately loaded with necessary items for necessary statistical measurement. The implication of this is that the questions contained in the instrument is sufficient in measuring the hypotheses developed.

Regression

Table 4: Descriptive Statistics

	Mean	Std. Deviation	N
ES	13.8567	1.70071	300
KA	13.9433	1.53230	300
S	13.9167	1.50241	300

Source: Field survey

Table 4 shows a brief descriptive characteristics/features of the data used for the analysis in this study presented in the above table and it also shows Employee Satisfaction (ES), Knowledge Acquisition (KA), and Skills (S) which have mean value of 13.9, 13.9, & 13.9 with associated standard deviation value of 1.7, 1.5, and 1.5 respectively.

Table 5: Correlations Matrix

		ES	KA	S
Pearson Correlation	ES	1.000	.871	.860
	KA	.871	1.000	.935
	S	.860	.935	1.000

Source: Field survey

Table 5 reveals all the independent variables are positively correlated with the dependent variable. KA, and S correlated at .871, and .860. This implies that ES is highly positively related with KA and S.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.881 ^a	.775	.774	.80872
a. Predictors: (Constant), KA, S				
b. Dependent Variable: ES				

Source: Field survey

Table 6 reveals that the explanatory variables (Knowledge Acquisition and Skills) jointly accounted for about 77 percent of the total variation in the outcome variable Employee Satisfaction. This is evident by the R-square value $R^2 = .775$. This implies that 77.4% of variation in employee satisfaction is caused by Knowledge acquisition and skills while the remaining 22.6% variation is caused by factors not captured in the model.

Table 7: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	670.592	2	335.296	512.668	.000 ^b
	Residual	194.245	297	.654		
	Total	864.837	299			
a. Dependent Variable: ES						
b. Predictors: (Constant), KA, S						

Source: Field survey

The Anova value which is the result of the joint significance of the independent variables, reveals a probability value which is less than 5 percent, i.e. [$f(2/297) = 335.296, P < 0.05$].

This implies that the null hypothesis of no significant relationship between Human Capital Variables (proxy by knowledge acquisition and skills) and Employee Satisfaction is rejected at 5 percent significant level and accept the alternative hypothesis at 95 percent confidence interval.

Table 8: Correlation Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.093	.440		-.211	.833	-.958	.772
	KA	.585	.086	.527	6.798	.000	.416	.754
	S	.416	.088	.368	4.744	.000	.244	.589

a. Dependent Variable: ES

Source: Field survey

Table 8 reveals both relative effect and relative significance of each of the explanatory variables on the dependent variable. Knowledge Acquisition (KA) is the most potent factor in prediction of Employee Satisfaction (ES) (a unit increase in KA results in .585 increase in ES); follows by Skills (a unit increase in S results in .416 increase in ES).

Furthermore from the result in table 8 and the hypothesis of this research, it is revealed that:

- i. There is a positive significant relationship between KA and ES. This is evident by the statistical value $\beta = .585$, $t = 6.798$, $P < .05$ which implies that the null hypothesis of no significant relationship between KA and ES is rejected at 5 percent confident interval level and the alternative hypothesis accepted at 95 percent confidence interval.
- ii. There is a significant relationship between HS and ES as portent by the statistical value $\beta = .416$, $t = 4.744$, $P < .05$ which implies that the null hypothesis of no significant relationship between HS and ES is rejected at 5 percent confident interval level and the alternative hypothesis accepted at 95 percent confidence interval.

Conclusion and Recommendation

The study objective was to explore the effect of human capital variables on employee satisfaction. The study established that there is strong positive relationship between joint effect of knowledge acquisition and human skills on employee satisfaction. Consequently, it is observed that all the two independent variables are significant to employee satisfaction. This result indicates that the model is adequate and sufficient in relating the dependent and the independent variables. The results have also confirmed that when employees are provided with ample chance of human capital development they become satisfied with the organizations and when they are satisfied with the organization, they will automatically perform better in the organization which will ultimately lead to the satisfaction of the customers of the organizations. It is universally accepted that when employees and customers are satisfied from the organization, it means organization is performing well.

The study recommends that organisations should give more attention to the orientation and absorption of employees who have acquired the relevant and appropriate knowledge and skills which will increase their productivity and enhance the performance of the organisation in the long run.

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