

Modeling Human Resource Competencies as Significant Predictors of Employee Satisfaction

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Abstract – Human Resource Competencies are knowledge, skills, and characteristics significant in defining employees' satisfaction. Its demonstration in an organization provides an opportunity to design a platform intended to remedy deficiencies and thereby increasing satisfaction and adequate performance among employees. Anchored on the Human Resource Integrative Model, this descriptive-correlational study intends to measure the influence of the human resource competencies to employee satisfaction among government agencies. Using Data Mining Technique, data from the Agency HR Climate Survey was retrieved from the website of the Civil Service Commission at <https://goo.gl/2wkCiC>. Descriptive analysis of data reveals that government employees assessed their human resource personnel competencies as intermediate and advance. At first, this level of HR personnel competencies would give us a favorable idea that HR competencies at the advance level would yield towards employee satisfaction. Ordinal regression analysis, however, shows that none of these variables are significant predictors of the latter. Despite this result, the odds ratio manifests that Learning and Development competencies and, Record Management and other competencies are more likely to affect employee satisfaction. This study concludes that valuing employees by constantly monitoring their records and status in the organization, as well as providing them with opportunities of learning or relearning new skills and competencies through training and development are HR competencies that promote and encourage practical, though not statistical, satisfaction among government employees in the Philippines.

Keywords – Data Mining, Descriptive-Correlational, Human Resource Model, Learning and Development, Ordinal Regression, Record Management

INTRODUCTION

Human Resource Competencies (HRCs) are a set of knowledge, skills, abilities and personality characteristics contributing to effective human resource performance that enables the organization to accomplish its goals [1]. Its importance, configuration, and development are considered highly significant in defining employees satisfaction [2] and the performance of the organization to achieve a competitive advantage [3], [4]. Moreover, human resource competencies have been recognized by the Civil Service Commission in the attainment of becoming the center of excellence in human resource and organization development [5]. This study, therefore, argues that human resource competencies significantly defines employee satisfaction in an organization.

The demonstration of a set of human resource competencies is a crucial foundation among human

resource professionals to effectively perform their changing roles and responsibilities [6] in the organization. It does not only provide them an effective way to make organizational audit [7], it also becomes the platform for a training curriculum designed to remedy deficiencies, and thereby increasing satisfaction and adequate performance [8] among employees.

Heathfield [9] utilized employee satisfaction to describe whether employees are happy and contented in fulfilling their needs and desires at work. The importance of employee satisfaction in an organization cannot be overemphasized. Literature suggested that it leads to employee loyalty [10], productivity [11], reduced turnover [12], lesser absenteeism [13], customer satisfaction [14], higher employee engagement, employee motivation and positive morale in the workplace [15].

The Global Human Resource Competency Survey [16], despite its indicative result on the relative importance of the human resource competencies, supports that human resource competencies will certainly help HR professionals to deliver value to its organization. The study, further, reduces the core function of these competencies – the employees' satisfaction - the attainment of such is the significant responsibility of the human resource personnel. It is a realization, however, that in the exercise of the human resource competencies, the principal, most crucial, and the most difficult one to attain is to ensure that an employee is satisfied [12].

The exercise and implementation of the set of human resource competencies define the strategic responsibility of the human resource personnel to ensure that employees are productive because they are satisfied. Employee satisfaction can be considered as one of the most important goals of an organization as it cannot achieve its objectives without keeping their employees satisfied. The empowering of human resource professionals will ultimately lead to higher employee satisfaction and better public service. According to the CSC [17], being a human resource professional is not just familiarizing and understanding the responsibility of the official assignment but being able to apply various competencies to a certain degree of competence that will ultimately lead to employee satisfaction and performance.

The significant importance of employee satisfaction resulted in various international studies and investigations – pure or applied. They were and have been conducted continuously to establish universally accepted correlates and significant indicators of employee satisfaction. Sager, Rafat and Agarwal [18] suggested some correlates like organization development, policies on compensation and benefits, promotion and career development, job security, working environment and conditions, relationship with supervisor, leadership styles, and workgroups. Other factors that determine employee satisfaction are perceived fairness of promotion system, social relationships, job itself [19], trust in management and peers [20], HRM practices [21] and HR competencies [2]. All of these are, however, studies conducted for the betterment of private manufacturing and service organizations. There is a dearth in studies focusing on the public sector. Fewer investigations were made to investigate the impact of the competency level of HR professionals employed in the government service on

employee satisfaction, specifically on the implementation of HR programs and activities.

Employee satisfaction, being equal to importance in all organizations, must not only provide information for private entities. It is of equal significance that there should also be a discussion and analysis on factors affecting employee satisfaction among government institutions. This study intends to provide one – the influence of the human resource competencies to employee satisfaction among government agencies. Result of the study would direct human practitioners into a profound understanding of job satisfaction and a way to a better comparison of such between private and public institutions. Thus, this study.

OBJECTIVES OF THE STUDY

This study aims to measure the predictive relationship of human resource competencies to employee satisfaction among government agencies in the Philippines. Specifically, it aims to determine the level of human resource competencies among government agencies in the Philippines in terms of: Recruitment, Selection, and Placement Competency, Learning and Development Competency, Performance Management Competency, Rewards and Recognition Competency and Records Management and other Competencies; determine the employees' level of satisfaction on the practice of human resource competencies among government agencies in the Philippines; and determine if human resource competencies significantly predict satisfaction of employee in the various government agencies of the Philippines.

FRAMEWORK OF THE STUDY

Human Resource Integrative Model [22] connects human resource framework to key result areas of an organization. The model stressed that human resource practices and functions were key drivers in enhancing employee satisfaction.

It also anchored on the work of Brockbank, Ulrich, & Beatty [23] who espoused that to function effectively, human resource professionals must master a set of competencies. Competent human resource professionals must have personal credibility, knowledge, and behaviors to ensure the proper implementation of HR practices and functions.

From the review of related literature, the framework below has been formulated to serve as a guide for this study. It showed human resource competencies in various human resource areas as a significant predictor

of employee satisfaction in a public organization, more specifically, among government agencies.

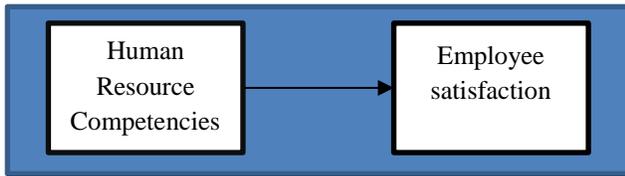


Figure 1. Conceptual Framework of the Study

METHODOLOGY

This study employed a predictive cross-sectional design. The design aims to predict some variables of interest, typically called the criterion using information from other variables called the predictors. It also observed the one-time collection of data. The development of the proper set of predictors for a given variable is often the focus of this design [24]. The analytical strategy, however, will start with descriptive-correlation. Once a standard correlational value for prediction is attained, (e.g., the coefficient of determination (R²-value)), the predictive analysis will follow.

Collections of data observed the basic principle of data mining. It is the process of extracting patterns and relationships from data rather than pre-formulated hypothesis [25]. It is through this design that a deterministic model helpful in determining employees’ satisfaction be explored and established through regression analysis. Inputs of the proposed model are human resource competencies of human resource personnel, which the researchers assumed to be hypothetically factors affecting employee satisfaction.

Data were retrieved from the website of the Civil Service Commission at <https://goo.gl/2wkCiC>. A total of 5,790 government employees responded to the Agency HR Climate Survey which was administered online by the Civil Service Commission on the first semester of CY 2012. It was only made to gather new knowledge and experiences of employees on the agency human resource management programs and practices. The survey included, among others, the assessment of the competency level of the human resource professionals in their respective agencies and the level of employee satisfaction. The researcher ensured no violations of online ethical standards as the data observes anonymity and was published for public use and further analysis. The use of data further provides the civil service commission a new perspective of looking at the performance of the human

resource personnel in doing their job. Descriptive, correlational, and predictive analysis will be conducted to establish a predictive model between human resource competencies and employee satisfaction among public institutions.

This study adopted the CRISP-Data Mining Model which follows the following procedure:

Project Understanding. A preliminary stage that deals on the understanding of the purpose of the study. This phase translates the purpose into a data mining problem and thus, design to attain the objectives.

Data Understanding. The initial familiarization and examination of the quality of the data retrieved. Preliminary insights on the nature of data provide an interesting idea for the hypothesis.

Data Preparation. Finalization of data set for modeling purposes. The preparation of the final data is exploratory by nature and does not follow any prescribed order. Tasks can range from filtering to the transformation of data for modeling techniques.

Modeling. The use of appropriate modeling technique sets the flow of the modeling analysis. The choice of technique is important as it determines the fitness and practical utilization of the model.

Evaluation. At this period, the developed model is evaluated to ensure a high predictive result. A review on the steps of model development to determine if tests and assumptions are considered sufficiently.

Deployment. Model is not the end. It is, instead, the beginning of more complex analysis as the model will be implemented in the field. The phase will define what actions can be done to make use of the created model.

RESULTS

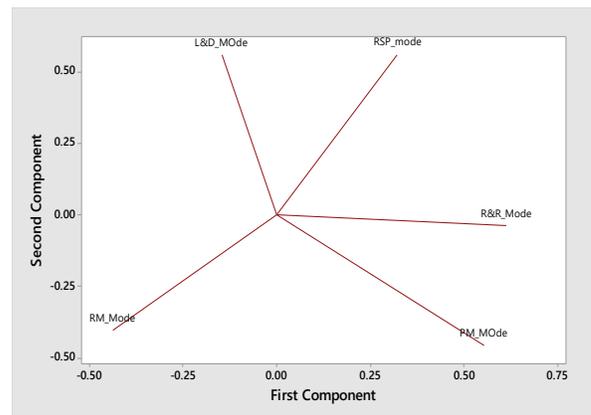


Fig. 2. Loading Plot of the Initial Components Identified
Descriptive analysis of data reveals that government employees assessed their human resource personnel

competencies as intermediate and advance. With a high percentage of response seen in these two levels, HR competencies among government offices delivered the necessary competencies as expected, but not superior as desired by some idealistic employee – someone who yearns perfection of service delivery.

Defined as a personnel-related concept, these competencies are referring to a set of behavioral dimensions of HR professionals’ effective performance at work [1]. The result reveals that HR personnel of various government offices in the Philippines is doing their best in order to contribute to the strategic operation of their respective agencies.

Table 1. Competency Level per Human Resource Competencies

HR Competencies	Response (N=5790)							
	Basic		Intermediate		Advance		Superior	
	f	%	f	%	f	%	f	%
RSP ^a	178	0.03	2122	0.37	2943	0.51	547	0.09
L & D ^b	211	0.04	2992	0.52	2483	0.43	104	0.02
PerMa ^c	1	0.00	1840	0.32	2215	0.38	765	0.13
R & R ^d	924	0.16	1856	0.32	2236	0.39	774	0.13
RM & others ^e	47	0.01	2833	0.49	2861	0.49	49	0.01

^aRecruitment, Selection, and Placement Competency; ^bLearning and Development Competency; ^cPerformance Management Competency; ^dRewards and Recognition Competency; ^eRecords Management and other Competencies

Further descriptive analysis shows that these level of evaluation on the HR practices and programs as a manifestation of the HR personnel’s level of competency leads towards satisfaction of the employees. The majority of the participants of the study are obviously satisfied with the implementation of the various practices of the HR personnel.

To ensure the unique contribution of each predictor variable to the dependent variable, multicollinearity test was conducted using the Principal Component Analysis (PCA). Multicollinearity test leads to the elimination of variables that are highly collinear - variables that measure the same concept. Eliminating and excluding the multicollinearity issue is advantageous in selecting the best possible model by providing the most precise estimate possible [26], [27]. Result of the analysis revealed that every variable is a unique contributor to the satisfaction level of HR competencies (Fig. 3). Ordinal regression analysis, however, shows that none of these variables are significant predictors of the latter.

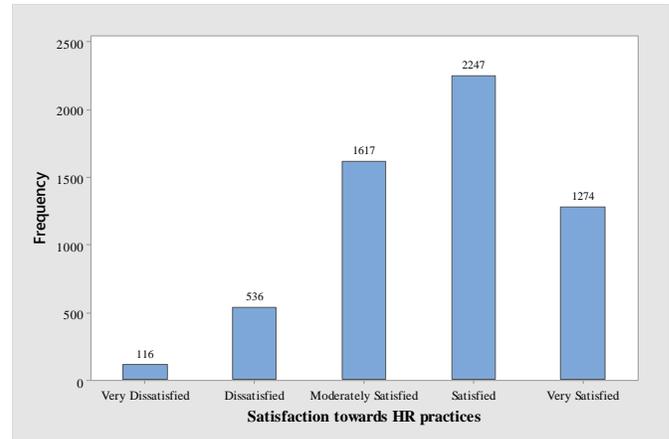


Fig. 3. Level of Satisfaction on the Practice of Human Resource Competencies

Table 2. Ordinal Regression Analysis to Identify Significant Predictors of Employee Satisfaction

Predictor	Coefficient	SE Coefficient	Z	P	Odds Ratio
Const (1)	-3.65	0.24	-15.34	0.00	
Const (2)	-1.90	0.22	-8.50	0.00	
Const (3)	-0.21	0.22	-0.96	0.34	
Const (4)	1.41	0.22	6.35	0.00	
RSP	-0.04	0.04	-1.05	0.29	0.96
L & D	-0.01	0.05	-0.04	0.97	1.00
RM & other Competencies	0.01	0.06	0.09	0.93	1.01
R & R	-0.02	0.03	-0.66	0.51	0.98
PerMa	-0.01	0.03	-0.51	0.61	0.99

Note: Test for All Slopes equal to zero (p-value = 0.871)

Analysis of the goodness-of-fit test was applied to verify the adequacy and acceptability of the model. This is also to determine whether the predicted probabilities deviate from the observed probabilities in a way that the distribution does not predict. The goodness of fit tests for model adequacy shows that the model is fit for the data with p-value > .05 [35]. Model adequacy would guarantee the applicability of utilization in the prediction process.

Table 3. Goodness of Fit

Method	Chi-Square	DF	P
Pearson	11542.4	11535	0.479
Deviance	9075.6	11535	1.000

Note: if p-value < .05, the model does not fit the data

With an adequate model, there is also a need to verify the fitness and accuracy of the model in relation to the observed data. The number of concordant and discordant pairs in the proposed model shows this relatedness. The proportion of concordant/discordant pairs is a measure of the level of agreement between the model predictions and the observations [27]. Table 4 shows the proportion of concordant pairs (49%) compared with the discordant pairs (47%); a result that is desirable.

Table 4. Measures of Association between the Response Variable and Predicted Probabilities

Pairs	Number	Percent	Summary Measures	
Concordant	5884719	48.9	Somers' D	0.02
Discordant	5662164	47.1	Goodman-Kruskal Gamma	0.02
Ties	481354	4.0	Kendall's Tau-a	0.01
Total	12028237	100.0		

Note: The higher the concordance ratio, the better is the model.

DISCUSSION

At first, the descriptive result on the level of HR personnel competencies would give us a favorable idea that HR competencies at the advance level would yield towards employee satisfaction. Having HR personnel whose competencies are adjudged at an advanced level is a positive development on the credibility of the HR personnel considering that an advanced level of competency reflects a strong foundation for them to contribute to one of the many strategic priorities of the organization [1] – employees’ satisfaction.

Thus, from the review of the literature and the preliminary descriptive analysis, this study hypothesizes that human resource competencies predict employee satisfaction. Result of the inferential analysis, however, revealed that relational data on the HR competencies and employee satisfaction is not enough to support this hypothesis. In effect, Ordinal Regression Analysis, though the model is adequate, provides evidence that none among human resource competencies are significant predictors of employee satisfaction.

These empirical findings show that a high level of HR competencies among government agencies in the Philippines, actually, does not provide enough evidence to guarantee employee satisfaction. Though various studies from other Asian and Nigerian

countries [28], [1], [29] reveals a significant relationship between these two variables, this study from the Philippines conducted nationwide, speaks otherwise.

A closer look at the result, which is contrary to what is commonly uphold would give us a perspective that it is not enough that HR professionals must possess the necessary competencies. Filipino HR professionals must be able to design it well, implement and monitor periodically, and provide a constructive feedbacking mechanism to their employees’ in terms of meeting the expected outputs/outcomes from them. In this manner, competencies are communicated and felt directly by the employees. This scenario reflects how HR competencies must become an effective HR practice to create employee satisfaction [23], [30]. A hypothetical discussion would arise that failure to translate HR competencies to HR practices explains this non-significant result.

Despite this result and looking at the odds ratio, it is still a fact that L and D competencies and, RM and other competencies are 1.01 times more likely to affect employee satisfaction, though the odds does not guarantee significant effect to the latter. A closer look at these two predictors, one could see that these two variables are highly probably and practically, though not statistically, the primary sources of employee satisfaction. Thus, it is but proper to give attention to these variables for their practical significance.

About job experiences, once employed, employees would be satisfied and complimented when opportunities are given to enhance and expand more their knowledge and expertise by sending them to various training and seminars. Cole [31] enumerated benefits of training which ranges from establishing employees’ high morale to less personnel turn-over – benefits that show employees are motivated and satisfied when they are given chances to acquire and improve knowledge, skills, and attitudes towards work-related tasks [32].

Moreover, being sent to training and development programs allows the employees to create a new perspective to execute and accomplish specific work or new impending opportunities that await [33]. It develops in them a sense of importance and confidence in performing a job that closes the gap between recent function and anticipated future operation [32]. This, somehow, defines a sense of satisfaction within them with that degree of anticipation that they will have a place in the organization after the training.

The reality of training as a practical component of job satisfaction is exemplified by Divyaranjani and Rajasekar [34] stating that:

“...employees should be given cross-training, and make them volunteer to do something different... the form of job redesigning should be done to make the jobs more interesting and challenging, improving quality of work life...”

Records Management, on the other hand, contributes practically to employee satisfaction with an odds ratio of 1.01. This means that HR personnel with a strong competency on record filing is 1.01 times, creating a chance for an employee to be satisfied – especially on document retrieval, report making, and record updating.

HR professionals who maintain complete and orderly files and other HR records would undoubtedly promote client satisfaction among employees. Regular updating and monitoring of employee records would instil to the employees’ mind that they are served, valued, and are given importance [2] by the organization. Such personal inculcation of organizations’ commitment to regular monitoring of their employees’ records will guarantee commitment and further satisfaction from the latter.

These related findings should encourage HR professionals to strengthen their competencies, especially in developing a system of close monitoring of its employee status – in all aspects – to show them how important they are in the organization. This close monitoring would lead towards a very effective human resource development plan that would include identification of potential employees to take other roles, thus, sending them to training and other program development.

Moreover, this study also should make the HR professional realized that the most imperative and practical way to satisfy employee in the organization is to let them feel that they are valued by providing adequate opportunities, internally or externally, to develop and enhance their skills and competence to work their assigned task. Thus, this study believes that employee training and development precedes performance and rewards when employee satisfaction is considered. HR personnel, therefore, must master these competencies to provide appropriate service to employees in this area.

CONCLUSION AND RECOMMENDATION

Valuing employees by constantly monitoring their records and status in the organization, as well as

providing them with opportunities of learning or relearning new skills and competencies through training and development are HR competencies that promote and encourage practical satisfaction among government employees in the Philippines.

The advanced performance of the HR personnel together with the satisfying response of their practice of the human resource competencies manifests the governments’ effort to be responsive and reflective on the significant needs of all government employees especially on the aspect of professional development, performance management, and reward system. With a sustainable practice of effective and efficient human resource competencies among HR personnel, an engaged and productive employee would be expected among government offices which would make a difference in the country’s mode of services.

In like manner, appropriate and relevant programs for employee development and reward system can better improve the self-worth among government employee. A development program based on the records of career planning devised and agreed by the employee and the management exhibits not only a strong and dynamic organization but also a practice that allows every member to create a new perspective on how to better improve one’s performance in their respective offices.

Reward system is seen as a positive and practical, though not significant, factor of job satisfaction among government employees. A strengthened reward system makes every employee more accountable and corporate in their assigned tasks. Monetary or non-monetary, an equitable reward system would attract employees to be more competent and excellent in providing services to the clientele. This does not only provide a better government image; it will likewise provide inner satisfaction among employees.

A well-defined program for human resource development is necessary for implementation among government offices. This will answer personal and professional needs among government employees that ultimately makes them satisfied and productive personalities in the government service.

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