

# Do Ability and Skill Competency Mapping Influence Employee Retention? Evidence from Bayelsa and Cross-Rivers States Civil Service Commissions, Nigeria

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## Abstract

## Original Research Article

This study investigated the influence of ability and skill mapping as dimensions of competency mapping on employee retention in civil service commission in Bayelsa and Cross-Rivers States, South-South, Nigeria. Cross-sectional survey design was employed and structured questionnaire was the major data collection instrument. The study population comprised 389 employees of civil service commission in the selected states and a sample of 197 was obtained via probabilistic sample size determination formulae. Questionnaire was administered on the 197 respondents out of which 187 copies were retrieved. Data obtained were analyzed using descriptive, diagnostic and inferential statistical methods. The multiple regression results showed that ability mapping (t-value = 7.17; Prob. = 0.000 < 0.05) and skill mapping (t-value = 6.44; Prob. = 0.000 < 0.05) significantly and positively influence employee retention. On this note, it was recommended that management should see skill and ability mappings as imperative strategic human resource management mechanisms of enhancing retention of employees. Hence, during employee recruitment, selection and placement, ability and skill of employees should be sternly emphasized. Also, Nigerian civil service commission should formulate policies targeted at enhancing skill and ability mappings of employees via training and development programmes. This study contributes to knowledge by using competency Ice-Berg model in describing the ability and skill mappings and employee retention nexus and established that ability and skill mappings significantly influence the retention rate of employees in Nigerian civil service commission.

**Keywords:** Employee Commitment, Employee Motive, Talent Management, Talented Workforce, Traits.

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## 1. INTRODUCTION

A major concern of strategic human resource management (SHRM) is to bring organizations and employees together with the aim of fulfilling the goals of the organization and employees. Hence, for organizations to fulfil short-term and long-term goals, cordial relationship between the organization and employees is required jointly with a workforce that is knowledgeable, skilled and capable (Kaur, Geetika, Sayeeduzzafar & Pretty, 2023). In recent times, jobs demanding highly skilled knowledge-employees are on the increase while the low-skilled jobs are decreasing (Szafranski, Selma, Magdalena & Gerhard-Wilhelm, 2022). This calls for

competency mapping.

Competency mapping is a process of identifying specific competencies for an organization and it is a very imperative SHRM activity (Anusha, 2018). The discourse on competency mapping has gained more prominence because well managed organizations ought to have well-defined job roles and competencies needed to perform each job roles in the most efficient way. Ashokkumar and Vanitha (2023) asserted that competency mapping process identifies the strengths and weaknesses of employees so as to enable employees better understand themselves, integrate adequately in the workplace and be able to identify need for career development where

necessary.

Competency is one vital process describing how a job role can be done in an excellent way (Ruchi, 2019; Helen, Cherie, Shalom & Benrimoj, 2019). Competency has been broadly distinguished from capability; for instance, capability describes what employees have to do only and not how employees can perform job roles (Himani & Ritu, 2017; Waghmare, Shriniket, Siddhant, Abhinandan & Anuj, 2021; Udaya, Bhaskara & Mallika, 2022). A core-competency is one that competency cannot be imitated and it is a pillar upon which employees take a job (Sanjeev & Luxmi, 2022).

According to Erica and Emilio (2022), competency mapping is one of the most priceless functions of human resource managers because it seeks to identify job-related and behavioural-based competencies of employees in organizations. To this end, Garima, Richa and Swati (2022) see competency as an anthology of knowledge, skills, motives, ability, attitude, and behaviour required to perform a job role efficiently. Given that competency mapping is an anthology or collection of factors enhancing work-related outcomes like employee satisfactions, commitments, retention, performance, productivity, among others, several dimensions of it has emerged in the literature.

In recent times, employee retention is one of the most vital dynamics of stern competition that organizations are facing. In such scenario, it becomes important to understand that employees can be retained if their competencies are mapped, developed and used in the right direction (Ashokkumar & Vanitha, 2023). Employee retention entails management of talents which ensure that organizations attract, retain, motivate and develop talented employees now and in the future (Gatakaa & Lumwangi, 2023). The goal of retention is to avert loss of talented or competent employees which could adversely affect quality service delivery, productivity and performance (Monari, 2021).

Worlikar and Artee (2017); David, Holmes, Melanie and John (2018); Toopalli and Nalla (2019); Jain and Bhavya (2021); and Monari (2021) identified several dimensions of competency mapping to include knowledge, skills, ability, behaviour, motives, commitments, and traits. This study employed two competency mapping measures namely, ability and skill; hence, the study investigated the influence of ability mapping and skill mapping on employee retention in civil service commission in two states of South-South, Nigeria which are Bayelsa and Cross-Rivers States.

Arising from the objective of the study, the following hypotheses were formulated to guide the study. (i) Ability mapping has no significant influence on employee retention in civil service commission. (ii) Skill mapping has no significant influence on employee retention in civil service commission.

## 2. REVIEW OF RELATED LITERATURE

### 2.1 Ability Mapping

The terms ability and skill mapping have been

employed interchangeably in some literature; however, both concepts carry different meaning (Dialoke & Nkechi, 2009). According to Singh and Singh (2019), ability mapping refers to the potential of employees to carry out a job, task or function. On the other hand, skill mapping connotes the potential possessed by employees to carry out a job, task or function exceptionally well. Hence, ability mapping connotes the capacity to perform a skill. Ability is usually more stable than skills, as employees inherit it and they require minimal efforts to maintain it (Dietz & Zwick, 2020; Diriye, 2015).

Ability mapping encompasses knowledge, skills, expertise and capabilities needed to carry out a specific job, task or function in a most successful manner (Szafranski, et al, 2021; Waghmare, et al, 2021; Toopalli & Nalla, 2019; Dissanayake & Fernando, 2019). A study by Waghmare, et al. (2021) showed that ability mapping significantly increases employee retention; interestingly, the above views have been shared and upheld by Maciej, et al (2022). In view of the above assertion, this study argues that there is the likelihood that ability mapping may influence the level of employee retention; hence the use of ability mapping as a measure of competency mapping in relationship with employee retention.

### 2.2 Skill Mapping

Skill mapping is one of the most imperative competencies required on a job. During recruitment and selection process by human resource managers, great emphasis is placed on employee skills together with the qualifications they bring to the job (Lafave, Michelle & Lafave, 2021; Kaur, et al., 2023). Among the skill mapping required by employees on the job include personal qualities and values which enable the employees to thrive on the job. These skills are referred to as 'skills of employees, or 'skills of workplace'.

Furthermore, skills mapping may also encompass good communication skills, motivation and initiatives, leadership skills, dependability, instruction-following, teamwork, patience, emotional resilience and control and adaptability skills. Studies by Erica and Emilio (2022); Coombe, Christina and Priscilla (2022) suggest that skill mapping has an influencing role on employee retention and performance.

### 2.3 Employee Retention

The concept of employee retention has been extensively defined in the strategic human resource management literature. According to Jaskiran, Geetika, Sayeeduzzafar and Pretty (2023), employee retention refers to the ability of an organization to retain, attract, motivate and grow talented workforce. As noted by Toopalli and Nalla (2019), employee retention is designed to avoid loss of skill and talented workforce, which when they leave the organization, may negatively affect organizational performance and productivity.

Anusha (2018) opined that the goal of employee retention is to avoid increased recruitment and training costs for newly

employed workforce when the old ones leave. In the literature, there are numerous ways to encourage employee retention which according to David et al. (2018); and Helen, Cherie, Shalom and Benrimoj (2019) include empowering employees, career growth, fair treatment, openness, regular communication and feedback, recognition and more recently, competency mapping.

Consequently, employee retention can be influenced by competency mapping. Himani and Ritu (2018) showed that employee retention is vital in assessing organizations' ability to decrease recruitment and training costs. Hence, employees can be retained on a basis of creativity and/or novelty (Worlikar & Artee, 2017). From the foregoing, a conceptual model shown in Figure 1 was designed to guide the estimation of empirical model of the study.

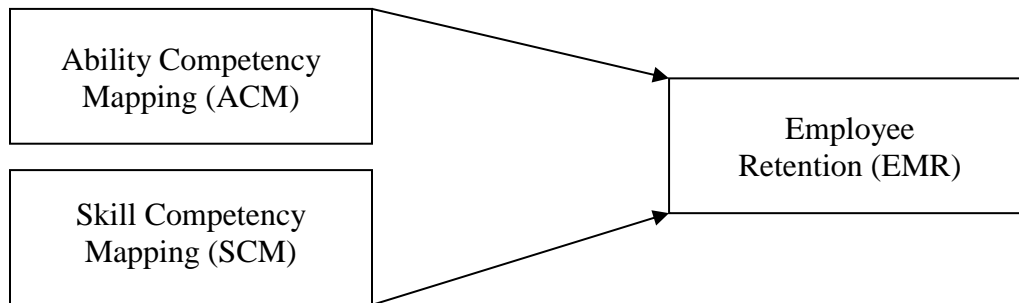


Figure 1: Conceptual Model  
Source: Researchers' Conceptualization

## 2.4 Empirical Review

### 2.4.1 Ability Mapping and Employee Retention

Szafranski et al. (2022) evaluated how ability and self-image competency mapping affect the level of performance of employees in era of industrial revolution in India. Data obtained were analyzed via descriptive and inferential statistical techniques. Findings showed that competency mapping positively and significantly influence the level of employee performance in India

Samuel and Chipunza (2019) studied employee retention and turnover using ability and motivational variables. Questionnaire was the main data collection instrument and data obtained from the survey were analyzed via descriptive and inferential statistical techniques. Findings indicated that competency and motivational variables had significant positive influence on the level of employee retention and turnover.

Singh and Singh (2019) studied the relationship between ability competency mapping and employee retention. Questionnaire was the main data collection instrument and data obtained from the survey were analyzed via descriptive and inferential statistical technique. The result reported a positive significant relationship between ability mapping and employee retention.

Smithesh and Shameem (2018) carried out a research on ability competency mapping and its effect on deliverables in the real estate sector in India as well as how competency mapping contributes to increasing performance appraisal process, selection, and hiring process. Questionnaire was the main

instrument of data collection and data obtained were analyzed using regression. Findings revealed that ability mapping had positive significant effect on deliverables in the real estate sector as well as contributing to increased performance appraisal, selection and hiring processes in India

David, et al. (2018) examined how the development of ability competency mapping can serve as a tool for undergraduate professional degree students in mechanical engineering department in the United Kingdom. Questionnaire was the major instrument of data collection and data obtained were evaluated via regression statistical tool. The regression results revealed that ability mapping had positive significant effect on undergraduate professional degree students' performance in the United Kingdom

Gowrishankka and Iyyappan (2017) investigated whether ability competency mapping impacts on the performance of organizations in Bangalore using survey design. The regression results revealed that ability mapping established expectations for organizational performance, thus resulting in a systematic method to improved job satisfaction and better retention of employees.

Hytter (2017) examined the relationship between ability competency mapping and employee retention in France and Sweden. Data was obtained using questionnaire and collected data analyzed using regression. The study found that while competency mapping had a strong significant influence on employee retention in France, a small effect was found for Sweden

Nagesh, Kulenur and Jagadeesh (2017) examined whether employee ability competency mapping influences organizational performance. Questionnaire was the main data collection instrument and data obtained from the survey were analyzed via descriptive and inferential statistical technique. Findings indicated that employee ability competency mapping influences organizational performance significantly and positively.

A study by Shraddha and Kumar (2016) on ability competency mapping as a strategic tool for enhancing employees' performance in India using survey design; data obtained were analyzed using the principal component analysis and findings revealed that ability competency mapping significantly and negatively influence employee performance in India.

## 2.4.2 Skill Mapping and Employee Retention

Waghmare, et al. (2021) investigated the relationship between skill competency mapping and employee retention. The regression results revealed that skill competency mapping significantly and positively enhance employees' retention.

Ramola and Rangnekar (2020) examined workers' understanding of numerous skills and how these skills were used by workforce in contributing to organisational performance. The identified competency mapping skill includes communication, technical, data analysis, and leadership. The analysis using regression model revealed that communication, leadership and data analysis are among numerous competencies employees possess and because they possess these skills, it can lead to increased organizational performance in terms of sales and profit.

Neha (2020) carried out an examination on skill competency mapping and organizational performance in India using a sample of 150 employees. Data obtained were analyzed using simple percentage and ANOVA statistical tool. Specifically, the study found that skill competency mapping results to increased organizational performance in among the India companies examined.

Sakthi (2018) focused on employee understanding of diverse types of mapping skills and how these mapping skills aid employees' contribution to organisational growth as well as employee retention. The regression result indicated that technical, communication and leadership mapping skill lead to increased organizational growth and ability of organization to retain employees, particularly those that are embodies with technical, leadership and communication mapping skills

Soundara and Kumar (2015) analyzed the relationship between skill competency mapping and organizational performance and productivity of package industry at Puducherry State, India. A total of 70 respondents were employed and data obtained were analyzed using factor, correspondence, chi-square and principal component statistical techniques. Findings indicated that skill competency mapping significantly and positively influence organizational performance and productivity in India

Gaspar (2012) carried out a research on perception of human resource executives on skill competency mapping for superior

results of public and private organizations. Data obtained from the questionnaire were analyzed using regression analysis and the study reported that when competency-based selection methods are healthy, comprehensive and structured performance is increased. On the other hand, the study revealed that human resource executives role significantly influence skill competency mapping for superior results.

## 2.5 Theoretical Framework

This study used Competency Ice-Berg Model (CIBM) as its theoretical anchorage. The CIBM identifies varied enhancing-factors of employees and that these enhancing-factors positively drive performance, retention, satisfaction and commitment levels of employees. According to the CIBM, the enhancing-factors include skill, knowledge, self-image, trait and motive (Gatakaa & Lumwangi, 2022; Garima, Richa & Swati, 2022).

According to CIBM, skill is the capability of employees to do something adequately; knowledge is seen as information employees' use in specific areas; self-image refers to identity, personality and worth of employee; trait implies a specific aspect of employees' attitude and behaviour and lastly, motives which are dynamics that drive employees' behaviour in a specific area of need for achievements, attainment and power (Ashokkumar & Vanitha, 2023)

The relevance of CIBM to this current study is that it assists in describing the dynamics that drive employee retention which include skill, ability and other dynamics. Thus, for organization to enhance employee retention, satisfaction, performance and commitment, there is the need for management to promote competency mapping.

## 3. RESEARCH METHOD AND PROCEDURE

The study used cross-sectional survey research design. This design enabled the researchers to obtain information on ability and skill competency mapping and employee retention from a cross-section of employees in civil service commission in two states – Bayelsa and Cross-Rivers. The study population consists of employees of civil service commission in the headquarters of the two states totalling 389 employees (Bayelsa State, 207 & Cross-Rivers State, 182). Taro Yamane sample size formula was used in obtaining a sample size of 197 employees (Bayelsa State, 105 & Cross-Rivers State, 92).

Structured questionnaire was employed in obtaining the views of respondents on the influence of ability and skill competency mapping on employee retention. The questionnaire was designed on 5-point scales: 1 = Strongly Disagree and 5 = Strongly Agree to assess how respondents agree or disagree with questionnaire items. Skill and ability competency mappings and employee retention scales were adopted from Shivanjali and Tripti (2019); Ashokkumar and Vanitha (2023); Gatakaa and Lumwangi (2023).

The test-retest method was employed to determine the level of



reliability of the research instrument. The procedure entails the use of 20 employees of civil service commission outside the study area. Data obtained in the process was correlated via

Cronbach alpha and the results are shown in Table 1. The high Alpha coefficients show that the instrument is reliable.

**Table 1: Cronbach Alpha Reliability Result**

Variable of Study	Alpha Coefficients
Employee Retention	0.73
Ability Competency Mapping (ACM)	0.79
Skill Competency Mapping (SCM)	0.80

Source: Researchers' Computation (2024)

The independent variables of the study are ability and skill competency mapping while the dependent variable is employee retention. The model estimation based on multiple regression analysis is captured by equations 1 and 2.

$$EMR = f(ACM, SCM)$$

Equation 1

$$EMR = \beta_0 + \beta_1 ACM + \beta_2 SCM + \varepsilon_i$$

Equation 2

Where: EMR = employee retention.

ACM = ability competency mapping.

SCM = skill competency mapping.

$\beta_0$ - $\beta_2$  = coefficients of the regression.

$\varepsilon$  = error term.

## 4. RESULTS AND DISCUSSION

Data obtained in the study were analyzed using descriptive, diagnostic and inferential statistics.

**Table 2: Descriptive Statistics**

Variables	Mean	Std. Dev.	Skewness	Kurtosis
EMR	2.8411	0.7791	0.3389	2.9489
ACM	2.7305	0.9016	0.3553	3.0916
SCM	2.6559	0.9479	0.3725	3.2412

Source: Researchers' Computation (2024)

Table 2 revealed that ability and skill competency mappings had mean scores of 2.7305 and 2.6559 respectively while employee retention had mean score of 2.8441; this implies that respondents perceived that skill and ability competency mappings are practiced as a way of employee retention. The standard deviation which is a measure of dispersion from the mean displayed low values. Implicitly, respondents were unanimous in their responses as their responses pointed to the same direction. To further illuminate the data, skewness and kurtosis statistics were computed to reveal the symmetrical properties of the distribution. Employee retention (2.9489) had

smallest kurtosis which is smallest value of kurtosis and skill competency mapping (3.2412) the highest. Skewness values showed that ability and skill competency mapping skewed towards one direction (positive) with employee retention. More importantly, the kurtosis values were not far from 3; indicating that the variables are normally distributed.

In addition to the descriptive statistics, the correlation matrix was also computed to show the correlation among variables.

This result is presented in Table 3.

**Table 3: Pearson Correlation**

Variables	Employee Retention	Ability Competency Mapping	Skill Competency Mapping
EMR	1.0000		
ACM	0.0171	1.0000	
SCM	0.0473	0.0233	1.0000

Source: Researchers' Computation (2024)

Table 3 shows the Pearson correlation coefficients. The coefficient for ACM IS 0.0171 while that of SCM is 0.0473, both carrying positive signs; an indication of positive relationship between ability and skill competency mappings

and the retention of employees.

To test for multicollinearity, the variance inflation factor (VIF) was computed and the result displayed in Table 4.

**Table 4: Variance Inflation Factor**

Variable(s)	VIF	1/VIF
ACM	1.02	0.98039
SCM	1.01	0.9900
VIF (Mean)	1.02	

Source: Researchers' Computation (2024)

Table 4 revealed the VIF for ACM and SCM to be respectively 1.02 and 1.01 and mean VIF as 1.02. All these values are less

than the benchmark value of 10. This implies an absence of multicollinearity in the model (Osazevbaru & Tietie, 2024).

**Table 5: Multiple Regression Results**

F-Value	= 9.47	Prob-F	= 0.000
R-Squared	= 0.831	R-Squared Adjusted	= 0.727
Parameters	Coefficients	t-value (Prob. Value)	
ACM	0.3623	7.17	(0.000)
SCM)	0.2474	6.44	(0.000)
_Constant	0.3617	22.01	(0.000)

Source: Researchers' Computation (2024)

Table 5 shows the multiple regression result for ability and skill competency mapping and employee retention. The coefficient of the explanatory variables ACM and SCM are respectively 0.3623 and 0.2474. These values are positive indicating that they have positive influence on employee retention (the dependent variable). In addition, the probability values of the t-statistics are less than 0.05 implying that they are significant. Therefore, ability competency mapping (ACM) and skill competency mapping (SCM) have significant positive influence on employee retention. Hereby, the hypothetical propositions are rejected. This result is supported by the value of the coefficient of determination  $R^2$  which is 0.831, indicating that ability and skill competency mapping jointly explained about 83% of the systematic variations in employees' retention while 17% accounts for other variables not included the regression model. Thus, the model of ability and skill competency mappings provides good fit to the data since unexplained variation is just 17%. Furthermore, F-statistics (9.47, Prob.-value 0.000, < 5% level of significance) shows good model fitness and supports the rejection of the hypotheses of the study. Clearly, ability and skill competency mapping weld significant influence on employee retention.

The multiple regression results ( $R^2 = 0.831$ ) showed that ability and skill competency mappings account for 83% variation in employees retention. Also, the study showed that there is positive significant relationship between ability and skill competency mappings and employee retention in civil service commission in selected States. These findings were supported by Gatakaa and Lumwangi (2023); Jaskiran, et al, (2023); and Jayasri and Srilalitha (2022) who found that competency mappings significantly and positively affect employee retention.

## 5. CONCLUSION AND RECOMMENDATIONS

This study investigated the influence of ability and skill competency mapping on employee retention in civil service commission of Bayelsa and Cross-Rivers States. Using the multiple regression results, the study found that ability and skill competency mapping significantly and positively influence employee retention. On the basis of this, it was recommended that: (i) management should see skill and ability mappings as imperative SHRM mechanisms of enhancing retention of employees; thus, during recruitment, selection and placement of employees, ability and skill of employees should be sternly emphasized. (ii) The civil service commission should formulate policies targeted at enhancing skill and ability mappings of employees v ia training and development programmes.

This study contributes to knowledge by using competency Ice-Berg model in describing how ability and skill competency mappings affect employees' retention. Also, the study

## 4.1 Discussion

Corporate organizations seek to retain a talented workforce because they contribute to the success, growth and performance of the organization. For organizations to retain a talented workforce, Gatakaa and Lumwangi (2023) asserted that organizations must therefore engage in the use of skill and ability competency mappings. This study was carried out with the view to investigating if ability and skill competency mappings affect employee.

contributes to knowledge by establishing that ability and skill competency mappings significantly positively influence retention rates of employees in Nigerian civil service commission.

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