EFFECT OF SCIENTIFIC PERSONNEL SELECTION PRACTICES ON EMPLOYEES' PERFORMANCE OF KENYA PORTS AUTHORITY

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ABSTRACT: *The main objective of this study was to examine the effect of scientific personnel selection on the performance of employees at Kenya Ports Authority. The study specifically sought to determine the effect of the three components of scientific personnel selection namely: Cognitive ability, Personnel dimensions and psychometric ability on the performance of employees at Kenya Ports Authority.The study was carried out at Kenya Ports Authority where 144 senior managers represented the units of analysis for this study. Quantitative research design was adopted for this study. Specifically a descriptive survey aimed at a targeted population from a representative sample. A structured questionnaire was used to collect data relevant for the study. The questionnaire used Likert scale to collect the quantitative data. The sampling technique used was stratified where the population was subdivided into sub groups. A pilot study was carried out on 26 respondents. A range of methods were employed to summarize the data including descriptive statistics, bivariate and multivariate analysis. Data was analyzed using tables and presented using descriptive and inferential statistics such as mean, standard deviation, correlation and regression analysis. A statistical package for social sciences (SPSS) was used to analyze quantitative data..The results of the study revealed that the correlation between cognitive, personality dimensions, psychomotor ability and employee performance was highly significant at (p-value = 0.000). The regression results indicated that the scientific personnel selection practices explained 17% variation in the employee performance. The study recommends that KPA should adhere to scientific personnel selection practices when recruiting and filling up vacant positions.*

KEYWORDS: Scientific Personnel Selection, Employee Performance, Cognitive Ability, Psychomotor Ability And Personality Ability

INTRODUCTION

Chinese civil servant exams, established in AD 605, may be the first documented "modern" selection tests, and have influenced subsequent examination systems(Hanna, 2014). To achieve competitive advantage through people, organizations must be able to select individuals who have exceptional skills and whose talents, values, and motives best fit the organization's culture, structure, and reward systems. It is true that talent is rare and vital to organizational success, the organization's system of selection must include processes that allow companies to accurately identify aptitude, ability and other characteristics in applicants that are recognized as contributing to organizational effectiveness(Collins & Kehoe, 2009). This need underscores the pivotal role of the staffing function and the importance of scientific selection testing in the development of sustainable competitive advantage since it is, to a great extent, these instruments that allow an organization to identify desirable candidates.

For managers to create capable and competitive organizations, the focus has shifted from structure, forms, rules and roles to capability (Robertson& Cooper, 2009). Technological advancements are reducing the workforce and the remaining employees now require a different set of skills and abilities than before(Adegbemi, Tella & Osobam, 2012).Employees should not only be able to adapt to the changing work environment but should also have the necessary ability to use new and complex equipment(Caldwell, 2012).Continuous change and competition in the work environment necessitate increased efficiency and productivity, which require different and enhanced skills and abilities. It is therefore important that the right people with the right skills are selected and employees are developed to enable them to meet the organizational demands of the future (Gilmore, 2008).

Today's executives understand that the human resource is the most important resources in organizations. However, when it comes to actually assessing which job candidates are likely to perform most effectively and make the most significant contributions, a large number of organizations employ rudimentary and haphazard approaches to selecting their workforces (Elaine, Rapson & Le, 2008).According to Kamau and Korir (2013), in a presidential task force on the reforms of parastatals, the performance of State Corporations has been a matter of ongoing concern in an environment of resource scarcity and mounting needs. A number of policy issues and challenges afflict state corporations in Kenya, including; Weak human resource and institutional capacity to attract and retain the skill sets needed to drive performance, an inadequate performance management framework that effectively links performance of state corporations to national development goals and fails to adequately link individual performance to institutional performance(Kamau *et. al*., 2013).

The Kenya Ports Authority falls in this category of State Corporations where recruitment and selection of employees is mainly based on political influence. The selection procedures do not follow any selection best practises hence has given rise to poor performance, attitude problems exhibited by employees and the wrong perception in their performance of work (Mutiso, 2015). Indeed the issue of industrial strikes at KPA is majorly contributed by most employees who are illtrate. All of these predicaments are stemming up due to poor selection practises.

This represents a serious disconnect for organizations that purport to have a strategic focus on increasing their competitive advantage through effective talent management. The disconnect stems from the fact that many organizations fail to use scientifically proven assessments to make selection decisions, even though such assessments have been shown to result in significant productivity increases, cost savings, decreases in attrition and other critical organizational outcomes that translate into literally millions of dollars (Elaine *et al.,* 2008). Thus, there are real and very substantial bottom-line financial results associated with using effective selection tools to guide selection decisions (Elaine *et al*., 2008).This study therefore, seeks to gain an empirical insight into the various scientific personnel selection practices in the State Corporations, with special reference to the Kenya Ports Authority in Mombasa County with the aim of determining best practices.

Specific Objectives

i)To determine the effect of cognitive ability on performance of employees at Kenya Ports Authority.

ii)To establish the effect of psychomotor ability on   performance of employees at Kenya Ports Authority.

iii)To evaluate the effect of personality dimensions on performance of employees at Kenya Ports Authority.

Research Hypotheses

The study tested the following hypotheses:

i)Ho1:There is no significant effect of Cognitive ability on performance of employees at Kenya Ports Authority

ii)Ho2: There is no significant effect of Psychomotor ability on performance of employees at Kenya Ports Authority

iii)Ho3: There is no significant effect of Personality dimensions on   performance of employees at Kenya Ports Authority

THEORETICAL FRAMEWORK

Existing literature pointed out theories that explained the rationale of scientific personnel selection. The main theories considered in this section included:

The Cattell-Horn-Caroll Theory

This theory is the most comprehensive and empirically supported psychometric theory of the structure of cognitive abilities to date (McGrew, 2012). The theory represents the intergrated work of Raymond Cattell, John Horn, and John Carroll. Flanagan, Alfonso and Ortiz (2012) found out that the theory has been widely used as the foundation for selecting, organising, and interpreting tests of intelligence and cognitive abilities.

And most recently, the theory has been used for classifying intelligence and achievement batteries andneuropsychological tests to: (a) facilitate interpretation ofcognitive performance; and (b) provide a foundation fororganizing assessments for individuals suspected of having a learning disability(Flanagan, Alfonsp, Mascolo & Sotelo- Dynega, 2012;Flanagan, Alfonso, Ortis, & Dynda, 2010; Flanagan *et al.,* 2012). This enables organisations to identify those employees having difficulties in learning and provide more extensive training once they join the organisation.

Cattell's 16PF Trait theory

McLeod (2014) found that Eysenck's and Cattell disagreed on the view that personality cannot be understood by just looking at only two or three dimension of behavior. InsteadCattell argued that it was necessary to look at a much larger number of traits in order to get a complete picture of someone's personality. Whereas Eysenck based his theory based on the responses of hospitalized servicemen, Cattell collected data from a range of people through three different sources of data. L-data - this is life record data such as school grades, absence from work etc. Q-data - this was a questionnaire designed to rate an individual's personality. T-data - this is data from objective tests designed to 'tap' into a personality construct(McLeod, 2014). McLeod (2014) found out that Cattellanalized the T-data and Q-data using a mathematical technique called factor analysis to look at which types of behaviour tended to be grouped together in the same people. And he identified 16 personality traits common to all people.

Cattell made a distinction between source and surface traits. Surface traits are very obvious and can be easily identified by other people, whereas source traits are less visible to other people and appear to underlie several different aspects of behavior. Cattell regarded source traits are more important in describing personality than surface traits. This enable organisations to get background history of potential employees from other organisation and analyze the behaviour of the employees in their previous employment hence a necessary tool for selection of employees.
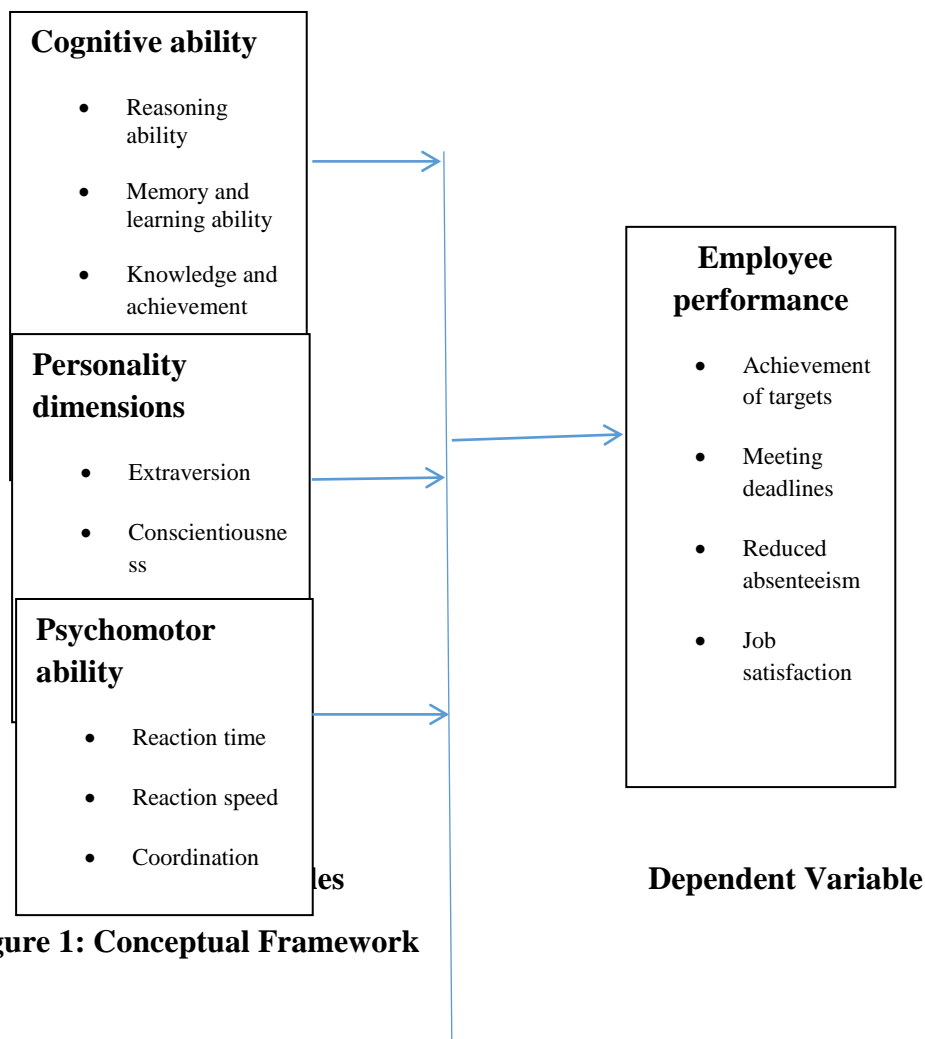
Conceptual Framework

Figure 1: Conceptual Framework

Cognitive Ability and employees performance

Matlin (2009) defined cognitive ability as the capacity to learn from experience and to adapt to one's environment. He stated that Cognitive assessment is widely used for selection and placement as well as for prediction of performance or success. Gilmore (2008), highlighted that the continuous change and competition in the working environment necessitate increase in efficiency and productivity which requires different and enhanced skills and abilities. He furthers explained the importance of having the right people with the right skills in the organisation in order to meet the desired objectives of the organisation.

Employee productivity is critical in determining the success of an organization and one of the crucial tasks for organizational psychologists is to assist businesses to select the 'best' employees from a pool of applicants. A key area of interest concerns the relationship between job performance and cognitive ability, and numerous studies have been conducted in an effort to determine whether cognitive ability is a significant predictor of job performance. Of course, an important question is: To what extent do organizations employ cognitive tests as part of their approach to employee selection? (Green & Macqueen, 2008). The U.S. Military was the first to conduct large-scale ability testing, assessing almost two million individuals during World War I. This testing initiated considerable interest, with private sector organizations adopting cognitive testing for their business needs (Green *et al.,* 2008).

Psychomotor ability and employees performance

Piaw (2012) stated that psychomotor tests are typically apparatus tests focusing on speed, coordination and other characteristics of movement responses required for job performance, such as, manual dexterity and leg and foot movements required for a specific occupation. Edinger, Means, Carney and Krystal (2008) stated that psychomotor tests are relevant to those positions in which motor skills are relevant. They have traditionally been designed for specific occupations and usually rely on the principle of simulation (Piaw, 2012).

Personality Dimensions and employees performance

A person's cognitive and psychomotor abilities alone seldom explain his or her job performance. Other factors, like motivation and interpersonal skills, are very important. As one consultant put it, most people are hired based on qualifications, but most are fired for non-performance,and nonperformance (or performance) "is usually the result of personal characteristics, such as attitude, motivation, and especially, temperament"(Dessler, 2011). Employers use personality tests to measure and predict such intangibles. For example, as part of its selection process for CEO candidates, Hewlett-Packard put its eventual choice, Carleton Fiorina, and other finalists through a two-hour, 900-question personality test. Candidates had to indicate whether statements like "When I bump into a piece of furniture, I usually get angry" were true or false(Travis & Jean, 2009). Personality tests measure basic aspects of an applicant's personality, such as introversion, stability, and motivation. Many of these tests are projective.

Research Design

A descriptive survey design was used in this study. The survey design was well suited to studies in which entities were used as a unit of analysis in order to measure generalizations (Kombo & Tromp, 2006). Cooper and Schindler (2014) observed that descriptive studies are structured with clearly stated questions to be investigated. The descriptive design was selected in this study because it would allow the researcher to gather numerical and descriptive data to assess the relationship between the variables. This made it possible for the researcher to produce statistical information on the effect of scientific selection of personnel on employee performance.

EMPIRICAL FINDINGS

Normality test for employee performance

According to Sekaran and Bougie (2011) condition of normality is essential for one to fit a linear regression model. From the figure 2 below the results show that the concentration is close to the line and skewedness has gone to the corners which reflect that the dependent variable is normally distributed. Similarly, such data is the best for carrying out every manner of inferential and parametric analysis because probability of outliers is not existent (Sekaron & Bougie, 2011). In addition, it is noted that the data is appropriate for every type of analysis which considers causal relationships between independent variables and dependent variable. It was hence statistically necessary to fit the multiple linear regressions because Employee Performance (dependent variable) data was normal in distribution. Figure 2 shows a Q-Q plot on employee performance assuming a normal distribution which is validated by a histogram shown in figure 3.
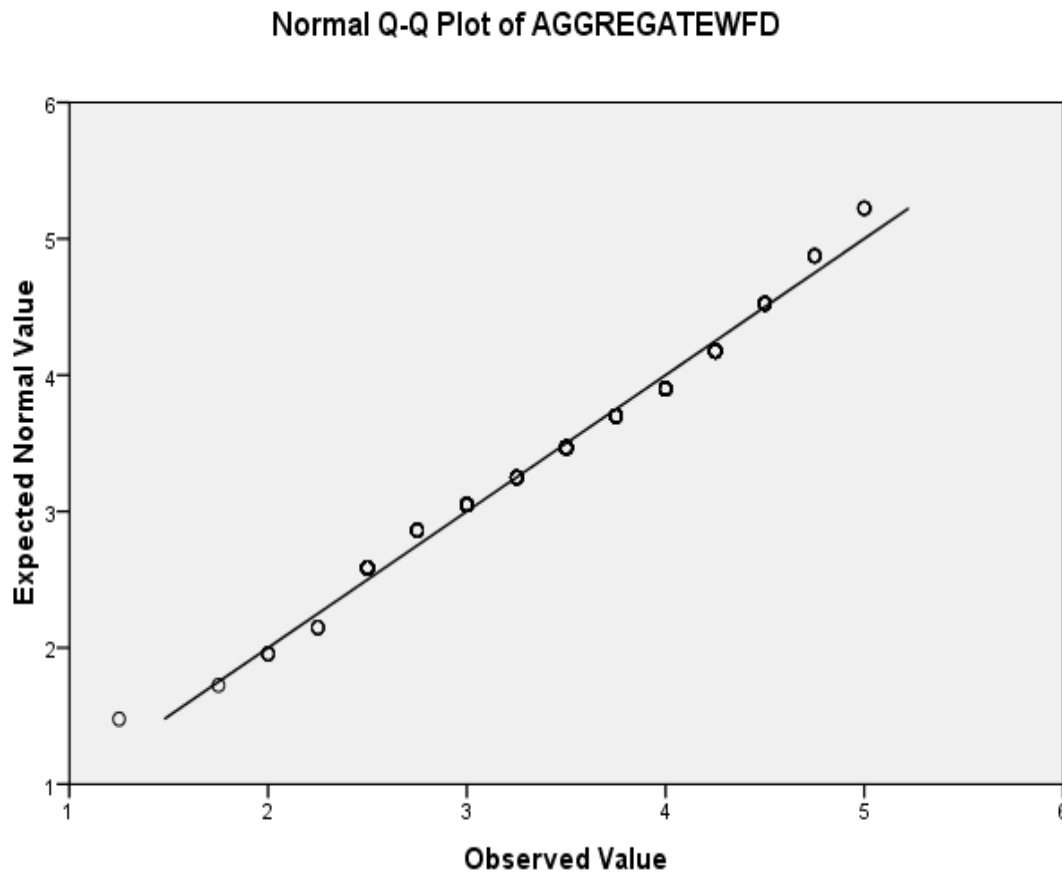
Figure 2:Q-Q Plot for employee performance
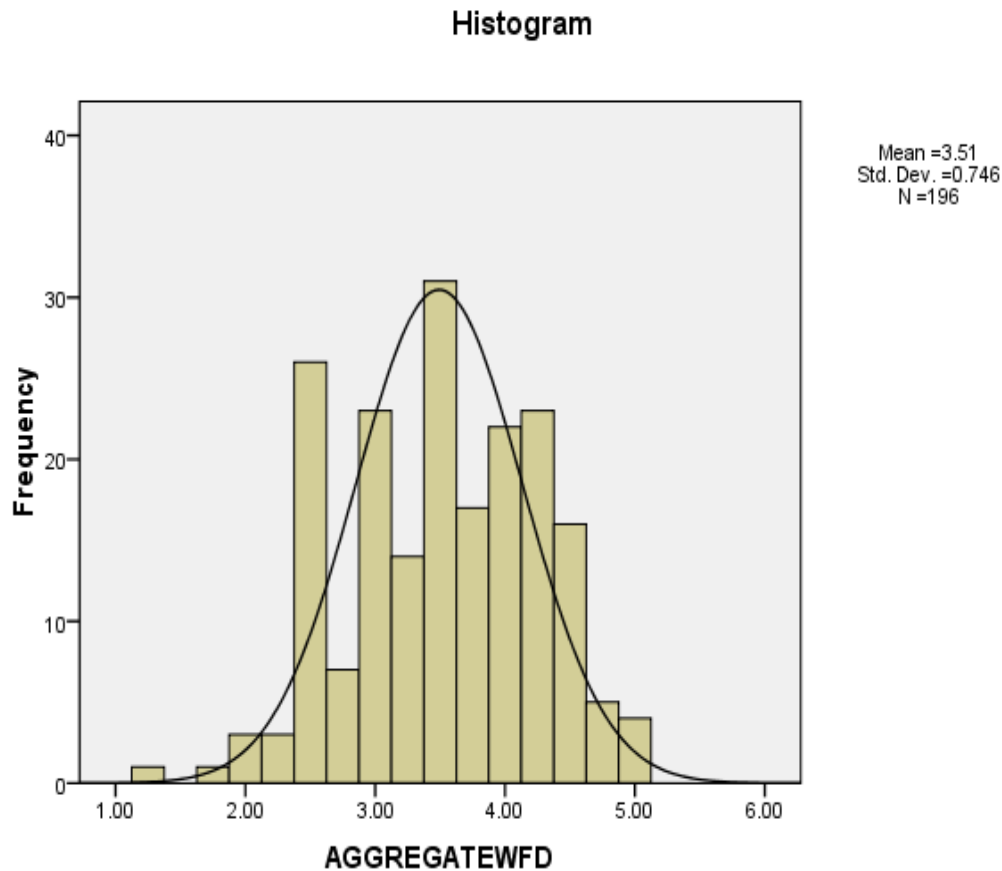
Figure 3 : Histogram for employee performance

Cognitive ability and employee performance

The researcher distributed questionnaires which sought to determine the effect of cognitive ability on employee performance at Kenya Ports Authority. The questions were subjected to correlation and regression analysis and the findings were as follows:

Correlation matrix of cognitive ability and employee performance

Correlation coefficient shows the measure of linear relationship between two or more variables. Table 1 shows the Pearson correlation coefficients between the independent variable (cognitive ability) and the dependant variable (employee performance).

Table 1: Pearson correlation on cognitive ability and employee performance

		Employee Performance	Reasoning Ability	Memory and Learning Ability	Knowledge and Achievement Ability
Employee Performance	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	136			
Reasoning Ability	Pearson Correlation	.210**	1		
	Sig. (2-tailed)	.003			
	N	136	136		
Memory and Learning ability	Pearson Correlation	.039	.237**	1	
	Sig. (2-tailed)	.588	.001		
	N	136	136	136	
Knowledge and Achievement Ability	Pearson Correlation	.147*	.415**	.346**	1
	Sig. (2-tailed)	.039	.000	.000	
	N	136	136	136	136

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

*. Correlation is significant at the 0.05 level (2-tailed).

The table above shows a significant and positive correlation between reasoning ability (RA) and employee performance (EP) of 0.210 at the 0.01 level of significance and knowledge and achievement ability (KAA) and employee performance (EP) of 0.147 at 0.05 level of significance. However, the relationship between memory and learning ability (MLA) and employee performance (EP) is positive but with insignificant correlation coefficient of 0.039 at 0.05 level of significance (p-value = 0.588).

Simple regression results of cognitive ability and employee performance

Regression analysis is done so as to establish whether cognitive ability as independent variable can be relied upon in explaining the dependant variable (employee performance). Table 2 shows coefficient of determination (R-square) of 0.050. In other words, cognitive ability could explain 5% of changes in employee performance (EP) at Kenya Ports Authority. These results are in agreement with the argument by Steward (2007) who highlighted that there exists an effect of cognitive ability on employee performance. Steward argued that if selection of personnel is not done scientifically, then firms would not get the right personnel and hence influence employees performance. On the other hand, Table 3 shows a positive beta coefficient of 0.267 for reasoning ability (RA), a negative coefficient of -0.048 for memory and learning ability (MLA) and a positive coefficient of 0.106 for knowledge and achievement ability (KAA). This means that a unit change in reasoning ability (RA) brings about 0.267 change in employee performance in the same direction while a unit change in memory and learning ability (MLA) brings about a -0.048 change in employee performance

in the opposite direction. Similarly, a unit change in knowledge and achievement ability brings about a 0.106 change in employee performance in the same direction. The p-value for reasoning ability (RA) is 0.019 which is less than the set 0.05 level of significance. This means that reasoning ability (RA) is statistically significant in explaining employee performance at Kenya Ports Authority. However, memory and learning ability (MLA) and knowledge and achievement ability (KAA) had p-values of 0.661 and 0.306 respectively which were all more than the set 0.05 level of significance and therefore statistically insignificant in explaining employee performance at Kenya Ports Authority.

Table 2: Model fitness: Cognitive ability and employee performance

Variable	R	R-square	STD error of the estimate
Coefficient	0.223	0.050	0.73259

Table 3: Regression coefficient – Cognitive ability and employee performance

Indicator	Beta	STD error	T	Significance
Constant	3.076	0.171	17.970	0 .000
RA	0.267	0.113	2.363	0.019
MLA	-0.048	0.109	-0.439	0.661
KAA	0.106	0.103	1.026	0.306

Personality abilities and employee performance

The questions on this variable sought to determine the effect of personality ability on employee performance. The personality ability included conscientiousness, emotional stability and extraversion. Various tests were performed on this variable: correlation and regression analysis and the results are as follows:

Pearson correlation –personality abilities and employee performance

Correlation co-efficient shows the measure of linear relationship between two variables, the relationship could be negative or positive .Table 4 indicates the pearson correlation co-efficient between the independent variable personality abilities, and the dependent variable, employee performance. There is a significant and positive correlation of conscientiousness of 0.211, p-value 0.003 and extraversion of 0.266, p-value 0.000 respectively and employee performance. However, there is an insignificant and positive correlation of 0.113, p-value 0.115 between emotional stability and employee performance.

Table 4: Correlation matrix of personality abilities and employee performance

		Conscientiousness	Emotional stability	Extraversion	Employee performance
Conscientiousness	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	136			
Emotional stability	Pearson Correlation	.214[**]	1		
	Sig. (2-tailed)	.003			
	N	136	136		
Extraversion	Pearson Correlation	.393[**]	.230[**]	1	
	Sig. (2-tailed)	.000	.001		
	N	136	136	136	
Employee performance	Pearson Correlation	**.211[**]**	**.113**	**.266[**]**	**1**
	Sig. (2-tailed)	.003	.115	.000	
	N	136	136	136	136

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

Simple regression analysis on personality abilities .

The regression analysis was performed so as to establish whether personality ability as independent variable could be relied upon in explaining the change in the dependent variable employee performance. Table 5 depicts the co-efficient of determination (R square) of 0.082 which shows that the model can explain 8.2% of the variations in the dependent variable of employee performance. In other words, personality dimensions could explain 8.2% of changes in employee performance at Kenya Ports Authority.The results are in agreement with Osborne (2005) who indicated that personality ability has an impact on performance and this depended on the qualifications of the employees.

Table 6 shows significant and positive beta co-efficient which reflects a positive relationship between personality abilities (Conscientiousness, emotional stability and exrarversion) and employee performance of 27.5%, 24.3% and 2.6% respectively. This means that a unit change in conscientiousness, emotional stability and extraversion in any direction generates 0.275, 0.243 and 0.026 change in any employee performance in the same direction respectively. As much as the conscientiousness and emotional stability were significant, extraversion was insignificant with p-value of 0.637 at 0.05 significance level. These results are in agreement with studies of Judge and llies (2002) who found that conscientiousness is a significant predictor of employee performance.

Table 5: Model fitness-personality abilities

Variable	R	R-square	Std error of the estimate
Co-efficient	0.286	0.082	0.71999

Table 6:Regression coefficient of personality and employee performance

Indicator	B	Std error	T	Sig
Constant	2.699	0.203	13.287	0.000
Conscientiousness	0.275	0.110	2.499	0.013
Emotional stability	0.243	0.116	2.099	0.037
Extraversion	0.026	0.054	0.473	0.637

Psychomotor abilities and employee performance

The study sought the effect of psychomotor ability on employee performance. Various tests done included: correlation analysis and regression analysis and the results of the analyses were as follows:

Pearson correlation for psychomotor ability and employee performance

Since correlation co-efficient is a measure of linear relationship between two or more variables, it was performed on psychomotor ability and employee performance. Table 7 depicts the pearson correlation co-efficient between the independent variable, psychomotor ability and the dependent variable, employee performance. In this study, there is a significant and positive correlation of 0.411 between psychomotor ability and employee performance.

Table 7: Correlation matrix for psychomotor ability and employee performance

		Employee performance	Psychomotor ability
Employee performance	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	136	
Psychomotor ability	Pearson Correlation	.411[**]	1
	Sig. (2-tailed)	.000	
	N	136	136

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

The correlation coefficient between employee performance and psychomotor ability was found to be 0.411 at (p-value = 0.000). These results depict that there was a highly significant correlation between employee performance and psychomotor ability. This reflects that the relationship between the two variables is close. The results are in agreement with the arguments by Lievens *et. al.,*(2002) who highlighted that the way firms conduct personnel selection resulted into either improvement of the performance of employees or not. They observed that if personnel selection was scientific, objective and professional, then there was a likelihood of improved employee performance.

Simple regression results for psychomotor ability and employee performance

Regression analysis was carried out so as to establish whether psychomotor ability as independent variable could be relied upon in accounting for the dependent variable-employee performance as hypothesized in this study. Table 8 shows the co-efficient of determination (R- square) of 0.169 which depicts that the model could explain 16.9% of variations in the dependent variable, employee performance. Table 9 shows a significant positive beta of 0.657. This meant that psychomotor ability is significant in describing employee performance at Kenya Ports Authority. It meant also that a unit change in employees' psychomotor ability brings about 0.657 positive change in employee performance. In agreement with the findings of the study on the significance of Psychomotor ability on employee performance, previous studies researched by Steward and Knowles (2008) highlight that large firms consider acquiring of appropriate skills via scientific personnel selection. This makes the researcher to drop the null hypothesis that psychomotor ability has no significant effect on employee performance and accept the alternative hypothesis that psychomotor ability can be relied upon in describing employee performance at Kenya Ports Authority because it is significant at 0.05 level of significance.

Table 8: Model fitness-Psychomotor ability and employee performance

Variable	R	R-square	Std error of the estimate
Co-efficient	0.411	0.169	0.68134

Table 9: Regression co-efficient psychomotor ability and employee performance

Variable	B	Std error	T	Sig
Constant	2.595	0.154	16.892	0.000
Psychomotor ability	0.657	0.104	6.288	0.000

Multiple linear regression results

Multiple Regression analysis was carried out to investigate the effect of independent variables (cognitive ability, personality dimensions and psychomotor ability) on the dependent variable (employee performance and) to test the research hypotheses. Sekaran (2008) notes that standard multiple regression is conducted for hypotheses testing.

Model Summary

In order to test the research hypotheses, a standard multiple regression analysis was conducted using cognitive ability, personality ability and psychomotor ability as independent variables and employee performance as the dependent variable. Table 10 below depicts the model summary results.

Table 10: Model Summary-scientific personnel selection

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.413[a]	.170	.157	.68448

a. Predictors: (Constant), Psychomotor ability, Cognitive ability, Personality dimensions

From the Model Summary in Table 10 above, it is clear that the adjusted R-squared was 0.157 indicating that a combination of cognitive ability, personality ability and psychomotor ability explained 15.7 percent of the variation in the employee performance at Kenya Ports Authority but leaving a balance of 84.3 percent being explained by other variables not in the study. The findings are in agreement with Jancowicz (2009) who highlights that firms whose performance was beyond reproach are those which make sure that selection of personnel is scientific but not compromised. Bowles and Lintis (2002) also argued that the scientific personnel selection determined whether firms got the right persons who were ready to deliver.

Analysis of Variance

The ANOVA in Table 11 shows the degree of fitness of the regression model.

Table 11: ANOVA[b]- scientific personnel selection

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.458	3	6.153	13.132	.000[a]
	Residual	89.954	132	.469		
	Total	108.412	135			

a. Predictors: (Constant), Pyschomotor ability, Cognitive ability, Personality dimensions

b. Dependent Variable: Employee performance

From the ANOVA Table 11 above, it is clear that the overall standard multiple regression models is significant in predicting how cognitive ability, personality dimensions and psychomotor ability determine employee performance at Kenya Ports Authority. The regression model obtained a high degree of fit as shown by R-square of 0.170 (F=13.132; P-value =0.000<0.05). These findings are in agreement with the studies of Shury *et.al*.,(2008) who highlighted that the type of employees scientifically selected determines whether they would perform or not.

Regression coefficients

It was also important to determine how cognitive ability, personality ability and psychomotor ability affected employee performance at Kenya Ports Authority. Table 4.30 below presents the regression results.

Table 12: Multiple regression Coefficients[a]- scientific personnel selection

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.537	.201		12.627	.000
	Cognitive ability	.169	.070	.311	2.415	.020
	Personality ability	.283	.110	.340	2.588	.013
	Psychomotor ability	.628	.129	.393	4.859	.000

a. Dependent Variable: Employee performance

Table 12 above presents the regression results on how cognitive ability, personality ability and psychomotor ability affected employee performance. The multiple regression equation was that: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$ and the multiple regression equation became: $Y = 2.537 + 0.169 X_1 - 0.283 X_2 + 0.628 X_3$. As depicted in Table 4.30, there was positive and significant effect of cognitive ability on employee performance ($\beta = 0.311$; t=2.415; P<0.05). There was positive and significant effect of personality ability on employee performance ($\beta = 0.340$; t=2.588; P<0.05). Additionally, there was a positive and significant effect of psychomotor ability on employee performance ($\beta = 0.393$; t= 4.859; P>0.000). In supporting these results, Armstrong (2008) highlights that if personnel selection is done scientifically, then a firm is capable of selectiong employees who are committed to the needs of the firm. Armstrong further argues that employees who are scientifically selected tend to have high productivity. Similarly, Kloot and Martin (2008) highlight that scientific selection of personnel was a critical issue of human resource management function because it would have a direct influence on employee performance. Steward and Knowles (2000) further argue that if personnel selection is done scientifically, it would have a positive effect on employee performance because it would enable firms to select the best employees. Strategic plans for Kenya Ports Authority for the period 2011 to 2016 highlight that selection of personnel shall be done on merit and scientifically.

Tests of hypotheses

In order to test the research hypotheses, standard multiple regression analysis was conducted using the three independent variables; cognitive ability, personality dimensions and psychomotor ability as the predicting variables and employee performance as the dependent variable.

Objective One: To determine the effect of cognitive ability on performance of employees at Kenya Ports Authority

Hypothesis One: H_O1: There is no significant effect of Cognitive ability on performance of employees at Kenya Ports Authority

Hypothesis test results: Since the results shows a p-value of 0.020 which is lower than the alpha at the level of significance of 0.05 (5%), the researcher failed to reject the H_{O1} that cognitive ability has no significant effect on employee performance at Kenya Ports Authority but accepted the Ha_1 that cognitive ability has significant effect on employee performance at Kenya Ports Authority. The results in Table 12 fail to provide support for H_{O1}. Therefore,

cognitive ability was found to have significant effect on employee performance ($\beta=0.311$; t=2.415; P<0.020 at 0.05 level of significance) and hence accept the Ha_1. These results were in agreement with the findings of DeRue and Morgeson (2007) who established that the objective of effective selection is to decide who the right people are by matching individual characteristics with the requirement of the job.

Objective Two: To establish the effect of psychomotor ability on performance of employees at Kenya Ports Authority.

Hypothesis Two: H_O2: There is no significant effect of Psychomotor ability on performance of employees at Kenya Ports Authority

Hypothesis test results: At a level of significance of 0.05(5%), the p-value was 0.000 which was less than the alpha and therefore the $H0_2$ was rejected that psychomotor ability has no significant effect on employee performance at Kenya Ports Authority whereas the researcher accepted the Ha2 that psychomotor ability has significant effect on employees performance at Kenya Ports Authority.The results in Table 12 failed to provide support for H_{O2} and therefore these results accepted the Ha_2. Therefore, psychomotor ability was found to have significant effect on employee performance ($\beta = 0.393$; t = 4.859; P<0.000 at level of significance of 0.05) and hence failed to reject H_O2.

Objective three: To evaluate the effect of personality dimensions on performance of employees at Kenya Ports Authority.

Hypothesis three: H_{O3}: There is no significant effect of Personality dimensions on performance of employee at Kenya Ports Authority

Hypothesis test result: At level of significance of 0.05(5%), the p-value was 0.013 which was lower than the alpha and therefore the researcher failed to reject the H_O3 that personality dimensions has no significant effect on employee performance at Kenya Ports Authority but accepted the Ha3 that personality dimensions has significant effect on personality dimensions at Kenya Ports Authority. The results in table 12 failed to provide support for H_{O3} and therefore H_{O3} was rejected and instead the Ha_4 was accepted. Hence, personality dimensions was found to have statistically significant effect on employee performance ($\beta = 0.340$; t = 2.588, P<0.013 at level of significance of 0.05). These results are in support of the findings of Barrick and Mount (2004) who argue that the traits that best predict job performance are conscientiousness and emotional stability. The results also support findings of Mount and Barrick (1998) who examined the relationships between conscientiousness and job proficiency and reported a significant relationship.

CONCLUSIONS

Based on the findings of this study, the conclusions are drawn. The results reveal that cognitive ability, personality dimensions and psychomotor ability have significant and positive effect on employee performance at Kenya Ports Authority. These findings indicate that the existing cognitive ability, personality dimensions and psychomotor ability are so suitable for improving employee performance at Kenya Ports Authority. These results were an emphasis on the role of cognitive ability, personality dimensions and psychomotor ability

in providing a suitable environment for developing employee performance at Kenya Ports Authority.

RECOMMENDATIONS

Based on the findings of this study and the conclusions drawn, the following recommendations were made:

Managerial recommendations

1. The existing cognitive ability should be modified towards modern cognitive ability practices so as to improve employee performance at Kenya Ports Authority.

2. Managers of Kenya Ports Authority should focus more on personality dimensions so as to improve employee performance.

3. In modifying psychomotor abilities, education programs on psychomotor ability for employees and managers should be given key priority at Kenya Ports Authority.

4. Job specifications should be established and be followed strictly during selection.

5. Interview panels should be formed and be made to be professional but not biased.Hence panels should be vetted and their integrity ascertained.

Policy recommendations

1. Policy makers should establish cognitive abilities that could be modified so as to facilitate employee pwerformance at Kenya Ports Authority.

2. Policy makers should decide on the mechanisms to encourage personality dimensions at Kenya Ports Authority.

3. The government should develop very clear and elaborate regulatory framework and policies so as to guide the operations of Kenya Ports Authority in employee performance.

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