THE MODERATING EFFECT OF EDUCATIONAL ENTRY LEVEL TO THE SERVICE ON THE RELATIONSHIP BETWEEN THE LEADERSHIP DEVELOPMENT TRAINING AND PERFORMANCE OF THE NATIONAL POLICE SERVICE IN KENYA.

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ABSTRACT

Development of Police Leadership entails not only basic police training or formal education but systematic leadership development training that takes cognizance of the scalar chain and exposure to a range of policing experience. This study reviewed related studies and explored the moderating effect of educational entry level on leadership development training needs in the middle level cadre of the Kenya National Police Service, required to deal with continuing security challenges and improved performance. The study targeted officers in the Kenya National Police Service, to provide vital and useful opinion regarding the determinants of leadership development training with a view to enhancing uptake and mainstreaming requisite leadership development training in the middle level officer’s career progression. The study also explored leadership development training needs as it relates to gender, knowledge, skills and attitudes. The study participants were entirely the National Police Service officers drawn from the different cadres and departments who have attended leadership development training at Kenya School of Adventures and Leadership (KESAL) by December, 2017. The data was collected using a questionnaire which comprised of a 5-point Likert scale and thematic questions, from police officers after a stratified and random sampling process of different officer cadres of non-commissioned and gazetted officers. The study was limited to knowledge gaps, leadership training curriculum and leadership training appraisal system, retained knowledge and moderating effect of educational entry level on performance of the National police Service. A qualitative and quantitative method was used to capture data on the middle level officer’s leadership skills and what determines their leadership development training needs. Primary data was collected using a semi structured questionnaire; while secondary data was collected through thematic review of literature on police leadership development training. Qualitative data was analysed using thematic method while quantitative data was analysed using descriptive statistics, analysis of variance and regression using Statistical Program for Social Societies (SPSS). The study contributes to the body of knowledge in regards to leadership development and sheds light on what determinates leadership development training needs and leadership skills gaps for performance in National Police service in Kenya. The results of the study revealed that the knowledge gaps, training appraisal system and retained knowledge positively influenced the performance of the National Police Service. The study recommends that for effective training plans in NPS, the government and other stakeholders need to constantly organize regular seminar and other refresher courses aimed at creating awareness on the emerging issues and technologies that can be used to deal with emerging crimes and terrorism in the country. This will
ensure that the National Police Service becomes effective, responsive and vibrant in early crime detection and prevention.

Introduction

Despite Kenya government’s allocation of substantial amount of money to recruit and train police officers, there is still an increase of three to four percent of crime and continued perception of corruption within the service. The high rate of criminal activities committed in this country, require the working force of the NPS to be highly vigilant and effective in combating and investigating crimes and this can be enhanced through proper training and development (Sultana & Noor.,2014).

Baseline Survey on Policing Standards and Gaps (2012), established that there is a gap on leadership and investigation skills which require training intervention. The report also indicates that 61% of respondents involved in the survey indicate that there has been police misconduct in the administration of justice. This situation coupled with emerging security threats from violent extremism demonstrated by terrorism activities in Kenya, shows that there is need for better performance which demands leadership and training interventions. According to Sanders & Henderson (2013), police agencies are experiencing real leadership crisis due to heavy recruitment coupled by little supervisor training, this was collaborated by the Pricewaterhouse Coopers report, (2015) that recommended the need for the Kenya police service to review its Human Resources Management policies of recruiting, and training for purposes of motivating, retaining talent and improving performance in the National police service. Moreover, the constitution of Kenya (2010) established National Police Service as to improve efficiency in service delivery in the police sector. This can only be achieved if there is good performance of National police service. Recently, research also indicates that over 58 % of citizens are dissatisfied with performance in the police force in Kenya (Transparency International, 2016). However, the empirical evidence on the link between leadership development training and performance of police force in Kenya is evidently lacking.

Empirical literature

Bruns and Magnan (2014) sought to conduct a study entitled ‘Police Officers Perspectives on Higher education: Is the Degree necessary ingredient for the performance and behavior of the police officers?’ In efforts to better understand the relationship between higher education and police performance in the United States, qualitative data from 61 police officers of all ranks and educational backgrounds from the Midwest examined attitudes pertaining to the necessity of a college-educated force. Explanations were offered as to why officers did or did not believe a college education is an essential ingredient to police work. Overall views express the significance of a college education with incongruence in the amount of education officers should attain.

Shahmer et al., (2010) conducted a study on the comparison the performance of graduate entry and school leaver medical students. The study established that graduate-entry students performed well as school-leaver students prior to entering the full-time clinical element of the course despite having significantly lower A-level grades which can be replicated in an organization. In a study of 210 officers in the Baltimore Police Department, Finnigan (1976) found a significant relationship between education and performance. He also found that criminal justice majors performed equally to other majors and that social science majors outperformed business majors.
A study of 418 Michigan State Police Troopers found that troopers with an associate’s degree or higher performed better in the academy than troopers with high school degrees, troopers with a bachelor's degree had higher job performance ratings than troopers with high school degrees, and troopers with a criminal justice degree performed equally to other majors (Weirman, 1978). Daniel (1982) studied 10 police departments in St. Louis County, Missouri and found that officers with high school diplomas had more than twice as many absences as their counterparts with college degrees. Worden (1990) found that education was not related to officer performance in police-citizen encounters. Reming (1988) found no education differences between supercops and average cops. Smith and Ostrom (1974) reported no positive relationship between education and police attitudes.

Edwards (2017) sought to establish the Perceived Value of Higher Education Among Police Officers. The purpose of the study was to examine whether police officers perceive higher education to be important in improving their job performance and promotional opportunities, whether the perception of higher education varied by several independent variables, and the types of suggestions that officers might have for improving the college curriculum. The study revealed a mixed view of the perceived value of higher education. Officers who had completed bachelor's degrees and those officers employed by municipal agencies had a significantly more positive perception of higher education. No significant differences were found between the independent variables and the perceived value of a criminal justice related degree or the importance of career-related competencies. This study also found several common suggestions for improvement to the higher education curriculum, including more hands-on experience, instructors with experience as law enforcement officers, and improved writing and interpersonal communication skills.

Methodology

This study adopted the positivism approach which advocates for application of the methods of the natural sciences to the study on social reality and more. The approach is consistent with a descriptive survey design in order to establish the determinants of leadership training needs on performance of the national police service in Kenya.

The study identified a target population of 4065 officers from the National Police Service, who have undergone leadership development training as of October, 2017 and who cut across the ranks and deployed in various departments and units, from where they share a common management platform (Police Personnel Data, October 2017). The officers were selected from the various ranks and departments because they are among trainees attended the training supported by the National Police Service in all levels of cadres at Kenya School of Adventure and Leadership (KSL). This also informed the sample frame.

This study used stratified random sampling technique to select the required sample from 4065 police officers. From this target population, a sample of 384 was determined using the formula $n = \frac{z^2pq}{e^2} = 384$. The Fishers formula was used to determine the appropriate sample size of this study. This was because the target population consists of a large number of units (police officers) (Yates, 2004). The study assumed 95% desired level of confidence, which is equivalent to standardized normal deviate value of 1.96, and an acceptable margin of error of 5% (standard value of 0.05). $n = \frac{z^2pq}{e^2} = 384$; Where: $n = \text{the desired sample size (if target population is large)}$
z = the standard normal deviate at the required confidence level. P = the proportion in the target population estimated to have characteristic being measured. q = 1-p d = the level of statistical significance set.

Assuming 50% of the population have the characteristics being measured, q=1-0.5 Assuming we desire accuracy at 0.05 level. The Z-statistic is 1.96 at this level. Therefore n= (1.96)2(0.5)(0.5)/(0.05)2 =384. This is then distributed proportionally in the strata. The nine top senior officers were used to provide data for triangulation and qualitative analysis.

Moderated multiple regression (MMR) statistical tool was used to test whether educational entry level moderates the relationship between leadership development training and performance of NPS (Aguinis & Gottfredson, 2010). Using SPSS, the regression models was tested on how well they fit the data. The model fitness was estimated using the coefficient of determination which helps to explain how closely the predictor variables explain the variations in the dependent variable. The significance of each independent variable was also tested. The t-test statistic was used to test the significance of each individual predictor or independent variable and hypothesis. The p-value for each t-test was used to make conclusions on whether to reject or accept the null hypotheses. The benchmark for this study for accepting or rejecting the null hypothesis was a level of significance of 5 percent. If the p-value was less than five percent the null hypothesis was rejected and the alternate hypothesis was accepted. Also if the p-value was greater than 5 percent the null hypothesis was accepted and the alternate hypothesis was rejected.

Research findings

Response Rate
Out of the 385 questionnaires administered, 382 were fully filled and returned, which represents 95.50% response rate. Out of these, 18 questionnaires representing 4.50% were disqualified due to incompletion, not being returned or those unwillingly to participate in the study as well as those with omissions and other errors identified in data cleansing and verification process.

Demographic Information
The study sought to establish the demographic characteristics of the sampled population. The majority of the respondents (83.1%) were male while female accounted for 16.9%. This shows that both male and female were represented in the study though male gender category was most mainly dominant. In addition, more than half of the respondents (51.4%) was within the age category of 31 to 40 years. This shows that most police officers were fairly young hence energetic to perform the tasks ahead. The findings show that most respondents had served in the service for 5-10 years and above 15 years as accounted by 31.7% and 30.4% respectively. Those who had served for Less than 5 years11-15 years accounted for 17.4% and 20.5% respectively. This shows that most respondents were well experience in the police service and therefore knowledgeable with the information sought in the study. In terms of the ranks of the Police Officers, majority were Constables as accounted by 55.1%. The Non-commissioned Officers and Inspectors accounted for 42.9% and 2.1% respectively. The findings further show that most respondents’ Level of Education when joining the National Police Service was secondary education as accounted by 63.6%. Those who had Primary education accounted for 4.4% while Diploma holders accounted for 13.5%. Bachelors and Masters Degrees accounted for 17.9% and 0.5% respectively. This shows that most respondents joined the police service after O’ level hence had no professional training before joining the service. These findings generally show
that the study gathered responses from diverse categories of the respondents within the police service.

Table 1: Demographic Information

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>Categories</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender of the Respondents</td>
<td>Male</td>
<td>320</td>
<td>83.1</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>65</td>
<td>16.9</td>
</tr>
<tr>
<td>Age Categories</td>
<td>21-30</td>
<td>103</td>
<td>26.8</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>198</td>
<td>51.4</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>59</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>Above 50</td>
<td>25</td>
<td>6.5</td>
</tr>
<tr>
<td>Duration of service</td>
<td>Less than 5 years</td>
<td>67</td>
<td>17.4</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>122</td>
<td>31.7</td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>79</td>
<td>20.5</td>
</tr>
<tr>
<td></td>
<td>Above 15 years</td>
<td>117</td>
<td>30.4</td>
</tr>
<tr>
<td>Rank of the Police Officers</td>
<td>Constables</td>
<td>212</td>
<td>55.1</td>
</tr>
<tr>
<td></td>
<td>Non-commissioned Officers</td>
<td>165</td>
<td>42.9</td>
</tr>
<tr>
<td></td>
<td>Inspectorates</td>
<td>8</td>
<td>2.1</td>
</tr>
<tr>
<td>Education level when joining the service</td>
<td>Primary</td>
<td>17</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>245</td>
<td>63.6</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>52</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s Degree</td>
<td>69</td>
<td>17.9</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Overall Total (N)</td>
<td></td>
<td>385</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Reliability analysis

As can be observed in the Table below, all the five training policy factors scored Cronbach’s alpha value of 0.831 and factor loadings of between 0.799 and 0.995. The study, therefore, retained all the indicators since according to Stevens (2012), factor loading of 0.70 and above should be used as the minimum criterion in determining the variables to be eliminated. The Cronbach’s alpha value remained as 0.831 since all the training policy factors were retained and used for further analysis. The Cronbach alpha above 0.80 corroborated with Zinbarg (2005) that an alpha coefficient of 0.80 or higher indicates that the gathered data are reliable as it has a relatively high
internal consistency and can be generalized to reflect opinions of all respondents in the target population about the study problem. The study hence considered retention of the indicators of Education entry level, as suitable factors for influencing leadership development variables on the performance of the National Police service in Kenya.

### Table 2: Education Entry Level Reliability and Factor Analysis Results

<table>
<thead>
<tr>
<th>Factor Loadings</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>My entry education level enables me to know and utilize resources in my work</td>
<td>0.876</td>
</tr>
<tr>
<td>My understanding in leadership training does not depend on my academic qualifications</td>
<td>0.808</td>
</tr>
<tr>
<td>I easily make decisions without consulting</td>
<td>0.995</td>
</tr>
<tr>
<td>There are some challenges in following the standard procedures in police work</td>
<td>0.905</td>
</tr>
<tr>
<td>I find police leadership training enjoyable</td>
<td>0.915</td>
</tr>
<tr>
<td>My academic entry qualifications are not necessary in my police work</td>
<td>0.900</td>
</tr>
<tr>
<td>I always provide feedback on all my assignments</td>
<td>0.799</td>
</tr>
</tbody>
</table>

**Diagnostic Analysis**

**Measurement of Sampling Adequacy**

To examine whether the data collected was adequate and appropriate for inferential statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) which was used to measure Sampling Adequacy as well as Barlett’s Test of Sphericity. Kaiser-Meyer-Olkin (KMO) is an index measure of sampling adequacy used to gauge the analysability of the data. High index values, that is, the KMO values closer to 1, the more adequate is the sample data (Turyakira 2012). Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) is a measure of sampling adequacy that tests whether the partial correlations among variables are small. The values of KMO range from 0 to 1 with 0.5 being the accepted threshold. KMO values equal to or greater than 0.5 indicate that factor analysis will be useful for the variables under consideration while KMO values less than 0.5 indicate that factor analysis will be inappropriate (Cerny & Kaiser, 1977). The results in Table 4.10 indicate that all the constructs that is. performance of NPs, knowledge gap, leadership training curriculum, leadership training appraisal system, Retained knowledge and Education entry level, had KMO values of greater than 0.5.

Proefschrift (2012) concede that Bartlett’s test of sphericity requires information on the approximate chi-square value, degrees of freedom (df) and the p significance value confidence.
level of significance. On the other hand, Bartlett’s test of sphericity tests whether the correlation matrix is an identity matrix. The null hypothesis of this test is that the correlation matrix is an identity. Thus a significance Chi square of the Bartlett's test indicate that the correlation matrix is not an identity and factor analysis is recommendable.

According to Yount (2006), the more the observed frequencies differ from the expected frequencies, the larger the chi square. Furthermore, when the chi square exceeds the appropriate critical table value, it is declared significant. This would mean that the difference between observed and expected values is greater than expected by chance. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 while the Barlett’s Test of Sphericity should be significant that is, P < 0.05 (Field, 2009). The results of KMO and Bartlett’s Test of Sphericity were as shown in Table 3. The findings showed that the KMO statistic was 0.783 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2009). In addition to these high levels of KMO test, the Bartlett’s Test of Sphericity was also highly significant (Chi-square = 4494.176 with 1275 degree of freedom, at p < 0.05). These results provide an excellent justification for further statistical analysis to be conducted. This led to the conclusion that the data collected was statistically adequate for any desired statistical test to be conducted.

**Table 3: KMO and Bartlett’s Test**

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>0.783</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bartlett’s Test of Sphericity</strong></td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>4494.176</td>
</tr>
<tr>
<td>df</td>
<td>1275</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Multicollinearity**

A situation in which there is a high degree of association between independent variables is said to be a problem of multi-collinearity which results into large standard errors of the coefficients associated with the affected variables. During multi-collinearity diagnostics analysis, Field (2009) suggests that a tolerance value of less than 0.1 indicates a serious collinearity problem. In addition, when the Variance Inflated Factor (VIF) values are greater than 10, then there is cause for concern. In a regression model that best fits the data, independent variables correlate highly with dependent variables but correlate, at most, minimally with each other. This problem was solved by ensuring that there was a large enough sample as multicollinearity is not known to exist in large samples. Multi-collinearity can also be solved by deleting one of the highly correlated variables and re-computing the regression equation. From Table 4, the tolerances are all above 0.2. If a variable has collinearity tolerance below 0.2, it implies that 80% of its variance is shared with some other independent variables. The variance inflation factors (VIFs) are also all below 5. The VIF is generally the inverse of the tolerance. Multicollinearity is associated with VIF above 5 and tolerance below 0.2. The accepted variables were therefore determined not to exhibit multicollinearity. Since the accepted variables did not exhibit multicollinearity, they were fit to be used for analysis.

**Table 4: Multicollinearity**


### Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Gap</td>
<td>.5817</td>
<td>3.9248</td>
</tr>
<tr>
<td>Training Curriculum</td>
<td>.6711</td>
<td>2.7843</td>
</tr>
<tr>
<td>Training Appraisal System</td>
<td>.8718</td>
<td>2.4733</td>
</tr>
<tr>
<td>Retained knowledge</td>
<td>.6443</td>
<td>1.9210</td>
</tr>
<tr>
<td>Education Entry level</td>
<td>.6542</td>
<td>2.6798</td>
</tr>
</tbody>
</table>

### Autocolinearity

The study used Durbin-Watson test to test whether the residuals from the multiple linear regression models are independent. The null hypothesis of Durbin-Watson test is that the residuals from multiple linear regression model are independent. According to Greene, (2012) rule of thumb, values of Durbin-Watson values close to 2 indicate rejection of the alternative hypothesis. The finding shows that the Durbin-Watson values for reliability, assurance and response time are 1.767, 1.987 and 1.786 respectively and are all close to 2. This implies that the residuals from the regression model where the dependent variables are reliability, assurance and response time, and the independent variables; knowledge gap, leadership training curriculum, training appraisal system and Education entry level are independent. The following Table 5 presents the results for Durbin-Watson test.

#### Table 5: Durbin - Watson Test of Autocorrelation

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
<th>Durbin-Watson Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge gap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training appraisal system</td>
<td>Reliability</td>
<td>1.767</td>
</tr>
<tr>
<td>Retained knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge gap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training appraisal system</td>
<td>Assurance</td>
<td>1.987</td>
</tr>
<tr>
<td>Retained knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge gap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training appraisal system</td>
<td>Response time</td>
<td>1.786</td>
</tr>
<tr>
<td>Retained knowledge</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Homoscedasticity
A variable with a non-constant variance is termed heteroscedastic. Fitting an OLS model also assumes that the residual terms have a constant variance and are therefore referred to as homoscedastic (Razitis & Kalantzi 2012). Adoption of the OLS model requires the residual terms not to be heteroscedastic but be homoscedastic. A Breuch-pagan test was performed on the residual terms of the overall model to test with statistical significance the existence of either heteroscedasticity or homoscedasticity. Rotich, Wanjau and Namusonge (2015) used the Breusch-Pagan statistic to test for homoscedasticity in their study. The Breuch-pagan statistic tests the null hypothesis that there is a constant variance of the residual terms form an OLS regression where a small p-value of the Chi-square indicates Heteroscedasticity. Table 4.13 presents the results of the homoscedasticity test on the residuals of the overall regression model. The data exhibits homoscedasticity if the p-value value of Breuch-pagan Chi-squared statistic is greater than 0.05 (Wanjau & Mwangi, 2014). From the results the P-value of the Chi-square statistic is 0.255 and thus we fail to reject the null hypothesis and conclude that the error terms exhibit homoscedasticity.

Table 6: H$_0$: The Residuals exhibit homoscedasticity

<table>
<thead>
<tr>
<th>Breuch-Pagan statistic</th>
<th>P-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residuals</td>
<td>5.334</td>
<td>0.255</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fail to reject H$_0$</td>
</tr>
</tbody>
</table>

**Normality Test**

The model fitted assumes that the residuals follow a normal distribution. The study thus had to confirm that the assumption applied for the data collected. A classical assumption when fitting a maximum likelihood estimate model is that the residuals are normally distributed and the residuals are likely to be normally distributed if the dependent variable itself also follows a normal distribution (Shenoy & Madan 1994). For confirmation of normality of the residuals, a statistical test for normality was conducted in the study as shown in Table 7. The Shapiro-Wilk test was thus carried out which tested the null hypothesis that the data is normally distributed as follows

H$_0$: The data is normally distributed
H$_a$: The data is not normally distributed

The criterion is to reject the null hypothesis if the p-value of the Shapiro-Wilk statistic is less than 0.05. From the Shapiro-Wilk test for normality, the p-value of the Shapiro-Wilk statistics was found to be 0.107 which was greater than 0.05 confirming that the residuals for the fitted multiple regression model are normally distributed.

Table 7: Normality Test

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized Residual</td>
<td>215</td>
<td>0.107</td>
</tr>
</tbody>
</table>

**Normality Test on the Variables**
An assessment of the normality of data is a pre-requisite for many statistical tests because normal data is an underlying assumption in Classical Linear Regression Modelling (CLRM) as well as parametric testing. A normality test is used to determine whether sample data has been drawn from a normally distributed population (within some tolerance) and that the data set is well-modelled by a normal distribution. It is also important as it enables a researcher to compute the likelihood of a random variable underlying the data set to be normally distributed (Cooper & Schindler, 2011).

**Descriptive Analysis for Moderator**

The fifth objective of the study sought to determine whether educational entry level has any moderating effect on leadership development training and performance of the National Police Service in Kenya. Five-Point Likert Scale comprising of strongly agree, agree, neutral, disagree, strongly disagree was used where by the mean scores were computed and the findings were presented in Table 8. The findings show that most of the respondents agreed with the statement that: My entry education level enables me to know and utilize resources in my work (4.04), there are some challenges in following the standard procedures in police work (4.06), I find police leadership training enjoyable (3.82) and I always provide feedback on all my assignments (4.21). In addition, most respondents were neutral on the statement that; My understanding in leadership training does not depend on my academic qualifications (2.80), I easily make decisions without consulting (2.74). Further, most respondents disagreed that their academic entry qualifications were not necessary in their police work (1.82).

This implies that the entry education level enables the trainees to know and utilize resources in the work place and that there were some challenges in following the standard procedures in police work. The trainees find police leadership training enjoyable and always provided feedback on all their assignments. In addition, the trainees acknowledge that their academic entry qualifications were necessary in their police work. These finding are consistent with Ngode (2010) who argued that most staff especially in the public sector are not satisfied with the education they received from their former schools. This showed that knowledge from school is not enough and therefore Organizations must participate in developing the existing staff knowledge by offering training opportunities in several areas of their profession. These training should however consider staff’s previous education level in order for it to be relevant to the staff.

**Table 8: Moderating Effect of Education level Entry to the Service**

<table>
<thead>
<tr>
<th>N Statistic</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>My entry education level enables me to know and utilize resources in my work</td>
<td>4.04</td>
<td>1.032</td>
<td>1.066</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My understanding in leadership training does not depend on my academic qualifications</td>
<td>2.80</td>
<td>1.457</td>
<td>2.124</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I easily make decisions without consulting</td>
<td>2.74</td>
<td>1.351</td>
<td>1.824</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There are some challenges in following the standard procedures in police work.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadershi</td>
<td>4.06</td>
<td>.054</td>
<td>1.069</td>
<td>1.143</td>
</tr>
<tr>
<td>Enjoyable</td>
<td>3.82</td>
<td>.056</td>
<td>1.107</td>
<td>1.226</td>
</tr>
<tr>
<td>Necessary</td>
<td>1.82</td>
<td>.059</td>
<td>1.164</td>
<td>1.354</td>
</tr>
<tr>
<td>Feedback</td>
<td>4.21</td>
<td>.048</td>
<td>.948</td>
<td>.898</td>
</tr>
</tbody>
</table>

**Inferential Analysis for Moderator**

The study sought to investigate the moderating effect of education entry level on the relationship between leadership training and development on performance of National police Service. To draw conclusions on the objective regarding the moderating effect of educational entry level on the relationship between the leadership development training and performance of National Police Service in Kenya, the Moderated Multiple Regression model was adopted. This model involved generating a transformation variable as an interaction variable between leadership development training and the educational entry level. The effect of a moderating variable is characterized statistically as an interaction that affects the direction and/or strength of the relationship between dependent and independent variables (Fakhrul & Selvamalar, 2014). The interaction variables were generated as intersections between the independent variables and educational entry level. The interaction variables were then used in the hierarchical moderated multiple regressions.

Table 9 presents the analysis of moderating effect from the moderated multiple regression analysis of educational entry level and performance of National Police Service in Kenya. Hierarchical regression was used as a stepwise regression analysis that produced and tested three models. Model one only constituted of the leadership development training without considering the moderating variable. Model two was fitted including the moderating variable educational entry level and model three included the interaction variables between the leadership development training and the moderator educational entry level. The fitness of all the three models were tested using, $R^2$ and ANOVA (F) and the coefficients of the models tested using t statistics. Model 1 results produced an $R^2$-square of 0.608 implying that the variation in the independent variable in the model explains 60.80% of the variation in performance of National Police Service in Kenya.

The second model was found to have an $R^2$-square of 0.604. This shows that the variance of performance explained in the 2nd model is 60.40%, with an $R^2$-change of 0.004. The $R^2$-change in the second step is significant as shown by the change in F that has a p-value of 0.000 which is less than 0.05. The P-value of the change in F being less than 0.05 implies that the direct inclusion of the moderating variable educational entry level has a significant change in the $R^2$-square and a significant improvement on the model from model one to model 2. The third model was fitted adding the interaction variables of the moderator and other independent variables. The third step of the MMR modelling had an $R^2$-square of 0.714 implying that the variation in performance explained in the 3rd model is 71.40%. Model there is an improvement of the first two models with a significant positive change in the $R^2$-square. The change in $R^2$-square for model three is 0.023 which is significant as shown by the P-value of the F-change which was found to be less than 0.05. The p-value of the F-change is 0.001. This implies that inclusion of the interaction
variables significantly improves the model. This further implies that the moderating variable educational level of entry has a moderating influence on the relationship between leadership development training and Performance of National Police Service. The study by Ngode (2013) and Michael & Sharon (2014) on the impact of educational entry on organizations performance: The findings revealed that organizations without a educational entry level on a retained knowledge are merely asking employees to acquire job knowledge and skill in their individual ways on a haphazard and unorganized basic. The educational entry level provides the skills and knowledge in many job areas often become obsolete in frighteningly short periods of time training policies are therefore critical for sustainability. Application of the entry level in training is important since it enable the employees to perform tasks easily and effectively.

Model 1 results show that all the educational entry level had a significant influence on performance of National Police Service. The coefficients also showed a positive relationship between all the variables and performance of national Police Service. This is according to the significance values and the coefficients obtained against each variable. The result of the model generates an equation given as:

\[ Y = 0.002 + 0.300X_1 + 0.355X_2 + 0.329X_3 + 0.522X_4 \]

Model 2 results show that addition of the moderating variable to the initial model doesn’t improve the model. It however found that in the joint model with the leadership development training, the moderating variable education entry level also had a insignificant direct influence on performance of National Police Service. The p-value of the t-statistic for the variable educational entry level was found to be 0.211 which is greater than 0.05. The result of the 2nd model generates an equation given as:

\[ Y = 0.132 + 0.260X_1 + 0.343X_2 + 0.329X_3 + 0.522X_4 + 0.098Z \]

The results for model 3 show that addition of the interaction variables significantly improves the model on the influence of the leadership development training on performance of the National Police Service in Kenya. The change statistics show a p-value of 0.000 which is less than 0.05 which imply an improvement on the explanatory power by the moderating effect. The individual interaction variables were also found to all have significant influence on performance. The interaction variables between training curriculum and training appraisal system and educational entry level were found to be have p-values of 0.022 and 0.010 which are both less than 0.05 implying significance at 0.05 level of significance. The final model generated an equation given by;

\[ Y = 0.004 + 0.270X_1 + 0.322X_2 + 0.323X_3 + 0.575X_4 + 0.004Z + 0.042X_1Z + 0.338X_2Z + 0.434X_3Z + 0.065X_4Z \]
Table 10: Moderating Effect Model Estimation

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>t</td>
<td>sig.</td>
<td>Beta</td>
<td>t</td>
<td>sig.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.002</td>
<td>1.045</td>
<td>.002</td>
<td>.132</td>
<td>1.147</td>
<td>.003</td>
</tr>
<tr>
<td>Knowledge gap</td>
<td>.300</td>
<td>4.908</td>
<td>.000</td>
<td>.260</td>
<td>4.094</td>
<td>.000</td>
</tr>
<tr>
<td>Training curriculum</td>
<td>.355</td>
<td>7.432</td>
<td>.000</td>
<td>.343</td>
<td>6.026</td>
<td>.000</td>
</tr>
<tr>
<td>Training appraisal system</td>
<td>.329</td>
<td>8.321</td>
<td>.000</td>
<td>.329</td>
<td>7.435</td>
<td>.000</td>
</tr>
<tr>
<td>Retained knowledge</td>
<td>.522</td>
<td>9.569</td>
<td>.000</td>
<td>.532</td>
<td>9.050</td>
<td>.000</td>
</tr>
<tr>
<td>Educational Entry level</td>
<td></td>
<td></td>
<td>.098</td>
<td>1.043</td>
<td>.211</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>Interaction Effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge gap intersection</td>
<td>.042</td>
<td>1.090</td>
<td>.320</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Educational Entry level</td>
<td>Training curriculum intersection</td>
<td>.338</td>
<td>2.009</td>
<td>.022</td>
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</tr>
<tr>
<td>Educational Entry level</td>
<td>Training appraisal system and Educational Entry level</td>
<td>.434</td>
<td>2.875</td>
<td>.010</td>
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<tr>
<td>Retained knowledge intersection</td>
<td>.065</td>
<td>1.333</td>
<td>.268</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Educational Entry level</td>
<td>Model fitness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>.780</td>
<td></td>
<td>.788</td>
<td></td>
<td>.845</td>
<td></td>
</tr>
<tr>
<td>R Square</td>
<td>.608</td>
<td></td>
<td>.620</td>
<td></td>
<td>.714</td>
<td></td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>.584</td>
<td></td>
<td>.595</td>
<td></td>
<td>.689</td>
<td></td>
</tr>
<tr>
<td>ANOVA F</td>
<td>33.242</td>
<td>0.000</td>
<td>28.033</td>
<td>0.000</td>
<td>20.261</td>
<td>0.000</td>
</tr>
<tr>
<td>R Square Change</td>
<td>.608</td>
<td></td>
<td>.004</td>
<td></td>
<td>.023</td>
<td></td>
</tr>
<tr>
<td>Change in F</td>
<td>14.908</td>
<td>0.000</td>
<td>1.087</td>
<td>0.000</td>
<td>8.432</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Discussion on the Moderator

These findings are consistent with those of other scholars. Dabale, Jagero and Nyauchi (2017) sought to determine the relationship between training and employee performance in Mutare City Council, Zimbabwe. Correlational research design was used in this study, with an attempt to describe and measure the degree of association between performance and training especially the educational entry level. It was established that there was a strong positive relationship between training especially the educational entry level and performance of employees. It was recommended that all stakeholders, be involved in one way or the other in training to enhance employee knowledge, skills, ability, competencies and behavior.

The previous research have focused primarily on the effects of educational level on core task performance (Karatepe, Uludag, Menevis, Hadzimehmedagic & Baddar, 2006; Kaufman, 1978; Maglen, 1990). However, as noted above, there are numerous other job-related behaviors that legitimately fall under the umbrella of organizational performance, too (Borman & Motowidlo, 1997; Hunt, 1996; Rotundo & Sackett, 2002). Thus, educational level impact on multiple dimensions of performance.

Stahl (2009) established that in practice the nature, content and extent of training received by personnel should be reconciled with the needs of the organization for staff trained in particular fields in consideration with the educational entry level. Training needs to be given under the guidance of a knowledgeable instructor. It is necessary that, person responsible for the training of a particular employee or group of employees should have the necessary knowledge, skills and attitudes to do a meaningful job in consideration with the educational entry level. Shahmer et al., (2010) conducted a study on the comparison the performance of graduate entry and school leaver medical students. The study established that graduate-entry students performed well as school-leaver students prior to entering the full-time clinical element of the course despite having significantly lower A-level grades which can be replicated in an organization.

The study results are in consistent with a study of police commitment in Australia suggests that police officers have relatively low levels of commitment probably resulting from educational entry level a culmination of poor experiences with organizational management (Beck & Wilson, 1997). An analysis of the relationship between career stage and police officer work commitment suggests that there is probably a two stage model of career development where employees usually begin with educational entry level of an officer which determine the high level of work commitment that falls after a few years, only to increase again as employees gain promotion (McElroy et al., 1999).

Thomas and Feldman (2009) conducted a study on how broadly education contribute to job performance and argued that most organizations use education as an indicator of a person’s skill levels or productivity (Benson, Finegold, & Mohrman, 2004), they frequently employ it as a prerequisite in hiring decisions. However, over the past two decades, there has been very little research directly examining the relationship between educational level and job performance. This is particularly surprising given that it was during this time when educational opportunities increased substantially (Trusty & Niles, 2004), when many organizations raised their educational qualifications for jobs (Kroch & Sjoblom, 1994), and when the conceptualization of job performance expanded considerably to include more extra role behaviors (Welbourne, Johnson, & Erez, 1998). In the study, they provided a quantitative analysis of the relationship
between education level and a wide range of in role and extra role performance dimensions. The study established that if highly educated workers contribute only marginally more to organizational effectiveness than less educated workers do, then the higher costs of staffing with highly educated workers are unlikely to be recouped. For example, many organizations subsidize current employees to acquire bachelors or advanced degrees (Benson et al., 2004) but do not rigorously assess the short-term returns (for example, improved performance) or long-term returns (for example heightened occupational commitment) on those investment.

The study findings are in line with the findings by Edwards (2017) who established officers who had completed bachelor’s degrees and those officers employed by municipal agencies had a significantly more improvement on their performance. This study also found several common suggestions for improvement to the higher education curriculum, including more hands-on experience, instructors with experience as law enforcement officers, and improved writing and interpersonal communication skills to enhance performance of National Police Service. Scholars have often argued that the college-educated police officer is better prepared than their high school graduate counterparts due to their increased exposure to new surroundings and cultures, which should increase their ability to be better problem-solvers and decrease their prejudice and bias (Palmiotto, 1999; Rainford, 2016). Some evidence also exists that exposure to higher education can encourage more mature and humanistic police professionalism and can help officers develop better overall communication skills (Carlan & Byxbe, 2000; Carter & Sapp, 1990).

**Descriptive Analysis for Dependent Variable**

The study sought to examine the influence of leadership development training on performance of the National Police service in Kenya, attributed to the influence of knowledge gaps, leadership training curriculum, leadership training appraisal system and Retained knowledge. The study was particularly interested in three key indicators, namely reduction of crimes, response time and number of officers available with all the three studied over a 5 year period, running from 2012 to 2016. Table 4.29 below presents the findings. The study results reveal reduction of citizen complaints across the 5 year period running from the year 2012 to 2016. Performance of NPS in terms of reduction of citizen complaints with a majority affirming 1%-20% in 2012 (38.7%), 1%-20% in 2013 (39.8%), 1%-20% in 2014 (40.3%), 1%-20% in 2015 (40.9%) and 1%-20% in 2016 (41.5%). A similar trend was recorded on the performance of NPS in terms of improvement on the response to time 1%-20% in 2012 (38.9%), 1%-20% in 2013 (35.8%), 1%-20% in 2014 (45.9%), 1%-20% in 2015 (40.8%) and 1%-20% in 2016 (36.3%). Performance of NPS in terms of increase in number of arrests with a majority affirming 1%-20% in 2012 (37.9%), 1%-20% in 2013 (35.9%), 1%-20% in 2014 (38.5%), 1%-20% in 2015 (39.0%) and 1%-20% in 2016 (36.2%). It can be deduced from the findings that performance of National Police Service have considerably improved as influenced by among other attributes, the influence of knowledge gaps, leadership training curriculum, leadership training appraisal system.

**Table 11 Performance of National Police Service**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced by 1%-20%</td>
<td>38.7</td>
<td>39.8</td>
<td>40.3</td>
<td>40.9</td>
<td>41.5</td>
</tr>
</tbody>
</table>
Reduced by 21%-40%  32.8  28.3  28.5  27.3  28.5
Reduced by more than 40%  28.7  32.1  30.9  32.4  30.4

**Response Time**

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved by 1%-20%</td>
<td>38.9</td>
<td>35.8</td>
<td>45.9</td>
<td>40.8</td>
<td>36.3</td>
</tr>
<tr>
<td>Improved by 21%-40%</td>
<td>35.8</td>
<td>30.8</td>
<td>22.8</td>
<td>26.5</td>
<td>32.8</td>
</tr>
<tr>
<td>Improved by more than 40%</td>
<td>25.6</td>
<td>33.4</td>
<td>31.3</td>
<td>32.7</td>
<td>30.9</td>
</tr>
</tbody>
</table>

**Arrest Rates**

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased by 1%-20%</td>
<td>37.9</td>
<td>35.9</td>
<td>38.5</td>
<td>39.0</td>
<td>36.2</td>
</tr>
<tr>
<td>Increased by 21%-40%</td>
<td>36.2</td>
<td>31.3</td>
<td>31.2</td>
<td>35.3</td>
<td>30.7</td>
</tr>
<tr>
<td>Increased by more than 40%</td>
<td>25.9</td>
<td>32.8</td>
<td>30.3</td>
<td>25.7</td>
<td>33.1</td>
</tr>
</tbody>
</table>

**Discussion on the Dependent Variable**

The study findings imply that the performance of the National Police Service has particularly improved as the reduction of citizen complaints, response time and increase number of arrests ranged between 1%-20% for the last 5 years. The study findings are in agreement with the findings by Sultana et al., (2012) who stated that Kenya government’s allocation of substantial amount of money to recruit and train police officers, there is still an increase of three to four percent of crime and continued perception of corruption within the service. The high rate of criminal activities committed in this country, require the working force of the NPS to be highly vigilant and effective in combating and investigating crimes and this can be enhanced through proper training and development to enhance service delivery in terms of reduction of crimes and increase of number of officers available. Were (2013), also recommended the need to enhance leadership development training needs to improve performance of the National Police Service in Kenya.

The study results are in tandem with the findings by Lersch and Kunzman (2001) analyzed official officer complaint data of a large sheriff’s department, making the distinction among serious and less-serious complaints. They found no significant relationship between officer’s education levels and the more serious policy complaints. However, officers who lacked a college degree were more likely to receive less serious complaints and have these complaints sustained than those with either a two or four-year college education. Terrill and Ingram (2016) examined complaint data for eight medium to large size police departments across the USA for approximately two years. Results showed that officer education did not have a significant effect on allegations of misconduct by citizens or the percentage of these allegations which were found by the police departments to have merit as determined by the officer educational entry level.

The study findings are inconsistent with the findings by Ingram (2016) who examined complaint data for eight medium to large size police departments across the USA for approximately two years. Results showed that officer education did not have a significant effect on allegations of misconduct by citizens or the percentage of these allegations which were found by the police departments to have merit.
(2012) established that use of force and officers’ educational entry level are not related. When all police officers, regardless of job title, were included in the analysis, use of force was not impacted by the police officers’ education levels. However, a significant relationship between education level and use of force did emerge when specific job duties were examined. Therefore, leadership development training was important to enhance police performance as established in this study. Bruns and Bruns’ 2015 found that education level had no impact on officers’ frequency of citizen complaints. It should be noted that they used officers’ self-reported complaint data, which may be less accurate than evaluation of official records. Taken together, the available research regarding the impact of police officer education on officer complaints is mixed. However, the current study findings has established that leadership development training can enhance performance of police offers in consideration with the officer educational entry level to the police force.

The study results reinforces earlier findings by Paoline, Myers and Worden, 2000; Paoline, 2001 who established that that college education may have a modest but negative effect on police occupational attitudes. Paoline et al., (2015) examined the role of education on police officers’ occupational outlooks. The study results showed that officers officer educational entry level without leadership development training had a lower level of job satisfaction and less favorable views toward administration compared to lower-educated officers.

Hypothesis testing

hypothesis, the results of the regression model reveal statistically significant relationship between the moderating effect of educational entry level to the service and the performance of the National Police Service (p-value<0.05). This consequently supported acceptance of the alternate hypothesis that educational entry level to the service moderates the relationship between leadership development training and performance of the National Police Service. This leads to adoption of the alternate hypothesis which postulated that the educational entry level to the service moderates the relationship between leadership development training and performance of the National Police Service (dependent variable).

Summary of Hypotheses Testing

This section presents the Interpretations and a detailed summary of testing of hypotheses as presented in Table 13. The table summary shows the alternate hypotheses, Hypothesis Test criteria, Result of the Test and Overall Decision.

Table 13: Summary of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis criteria</th>
<th>Test criteria</th>
<th>Result of the Test</th>
<th>Overall Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ha5:</td>
<td>Educational entry level to the service moderates the relationship between leadership development training and the performance of the National Police Service in Kenya</td>
<td>Reject Ha5 if p-value &gt;0.05 otherwise fail to reject Ha5 if P-value ≤0.05</td>
<td>p-value ≤α (p-value&lt;0.05)</td>
<td>Accept Ha5</td>
</tr>
</tbody>
</table>
Regression Analysis (Combined Effect Model)

A regression model was fitted to determine whether independent variables notably, \( X_1 = \text{Knowledge gap}, \)
\( X_2 = \text{Training Curriculum}, \)
\( X_3 = \text{Training appraisal system}, \)
\( X_4 = \text{Training Policy} \) simultaneously affected the dependent variable \( Y = \text{Performance of the National Police Service} \). As a result, this subsection examines whether the multiple regression equation can be used to explain the nature of the relationship that exists between the independent variables and the dependent variable. The multiple regression model was of the form:

\[
\beta_0 = \text{Constant} = \text{Performance of the National Police Service}; \quad X_1 = \text{Knowledge gap}, \quad X_2 = \text{Training Curriculum}, \quad X_3 = \text{Training appraisal system}, \quad X_4 = \text{Retained Knowledge}, \quad X_5 = \text{Education entry level};
\]

\( \beta_i = \text{Coefficients of regression for the independent variables } X_i \text{ (for } i = 1, 2, 3, 4, 5) \)

\( \epsilon = \text{error term} \)

Linear regression is an approach to modelling the relationship between a scalar variable \( y \) and one or more variables denoted \( x \). In linear regression, data are modelled using linear functions, and unknown model parameters are estimated from the data (Fowler, 2004). Such models are called linear models. Most commonly, linear regression refers to a model in which the conditional mean of \( Y \) given the value of \( x \) is an affine function of \( x \) (Doane & Seward, 2008). SPSS was used as a tool of analysis. Any linear relationship generated called for linear regression to test the direction and magnitude of the relationship.

According to Green and Salkind (2003) regression analysis is a statistical process of estimating the relationship between variables. It helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable. The chance of non-linear relationships is high in the social sciences, therefore it is essential to examine analysis for linearity (Osborne & Waters, 2002). If linearity is violated all the estimates of the regression including regression coefficients, standard errors, and tests of statistical significance may be biased (Keith, 2006). If the relationship between the dependent and independent variables is not linear, the results of the regression analysis will under or overestimate the true relationship and increase the risk of Type I and Type II errors (Osborne & Waters, 2002). When bias occurs it is likely that it does not reproduce the true population values (Keith, 2006). Violation of this assumption threatens the meaning of the parameters estimated in the analysis (Keith, 2006).

As can be observed in Table 4.32, the regression model of performance of NPS coefficient of determination R Square was 0.808 and R was 0.899. The coefficient of determination R Square indicated that 80.80% of the variation on performance of NPS can be explained by the set of independent variables, namely; \( X_1 = \text{Knowledge gap}, \quad X_2 = \text{Training Curriculum}, \quad X_3 = \text{Training appraisal system}, \quad X_4 = \text{Retained Knowledge}. \) The remaining 19.20% of variation in performance of NPS can be explained by other variables not included in this model. This shows that the model has a good fit since the value is above 80%. This concurs with Graham (2002) that R-squared is always between 0 and 100%: 0% indicates that the model explains none of the variability of the response data around its mean and 100% indicates that the model explains the variability of the response data around its mean. In general, the higher the R-squared, the better the model fits the data. The adjusted R square is slightly lower than the R square which implies that the regression model may be over fitted by including too many independent variables. Dropping one independent variable will reduce the R square to the value of the adjusted R-square.

The study further used Analysis of Variance (ANOVA) in order to test the significance of the overall regression model. Green and Salkind (2003) posit that Analysis of Variance helps in determining the significance of relationship between the research variables. The results of Analysis of Variance (ANOVA)
for regression coefficients in Table 4.26 reveals that the significance of the F statistics is 0.009 which is less than 0.05 and the value of F (12.587) being significant at 0.05 level of significance. The value of F is large enough to conclude that the set coefficients of the independent variables are not jointly equal to zero. This implies that at least one of the independent variables has an effect on the dependent variable. Table 4.32 presents the beta coefficients of all independent variables versus performance of NPS. As can be observed from Table 4.26, Knowledge gap (X₁) had a coefficient of (0.307) which is greater than zero. The t statistic is 2.063 which has a p-value of 0.020 which is less than 0.05 implies that the coefficient of X₁ is significant at 0.05 level of significance. This shows that knowledge gap has a significant influence on performance of NPS.

The coefficient of training curriculum (X₂) was 0.338 which was greater than zero. The t statistic of this coefficient is 1.949 with a p-value of 0.007 which is less than 0.05. This implies that the coefficient 0.338 is significant. Since the coefficient of X₂ is significant, it shows that training curriculum has a significant effect on performance of NPS. Table 4.26 also shows that training appraisal system (X₃) had a coefficient of 0.442 which is greater than zero. The t-statics is 3.689 which has a p-value of 0.003 which is less than 0.05 implies that the coefficient of X₃ is significant at 0.05 level of significance. This shows that training appraisal system has a significant positive influence on performance of NPS.

Table 4.32 further shows that Retained Knowledge (X₄) had a coefficient of 0.543 with a t static of 3.3.974 which has a p-value of 0.002 which is less than 0.05. This implies that the coefficient of X₄ is significant at 0.05 level of significance. This shows that Retained Knowledge has a significant positive influence on performance of NPS. Finally, Table 4.32 demonstrates that education level entry to the service (X₅) had a coefficient of 0.636 which is greater than zero. The t statistic of this coefficient is 3.923 with a p value of 0.000 which is less than 0.05. This implies that the coefficient 0.636 is significant. Since the coefficient of X₅ is significant, it shows that education level entry to the service has a significant effect on performance of NPS. The constant term is -0.535. The constant term is the value of the dependent variable when all the independent variables are equal to zero. The constant term has a p value of 0.004 which is less than 0.05. This implies that the constant term is significant. Therefore, the general form of the equation was to predict performance of NPs from \( X₁ = \text{Knowledge gap}, X₂ = \text{Training Curriculum}, X₃ = \text{Training appraisal system}, X₄ = \text{Retained Knowledge} \): \( Y = \beta_0 + \beta_1X₁ + \beta_2X₂ + \beta_3X₃ + \beta_4X₄ + \epsilon \) becomes: \( Y = 0.035 + 0.307X₁ + 0.338X₂ + 0.442X₃ + 0.543X₄ + 0.636X₅ \). This indicates that Performance of NPS = -0.535 +0.307*Knowledge Gap+0.338*Training Curriculum+ 0.442*Training Appraisal Systems + 0.543*Retained Knowledge.

Summary

The study sought to determine whether educational entry to National Police Service training has any moderating effect on leadership training and performance of the National Police Service in Kenya. The findings revealed that the education level at entry enabled the trainees to know and utilize resources in the workplace and that there were some challenges in following the standard procedures in police work. In addition, majority of the trainees find police leadership training enjoyable and always provided feedback on all their assignments. Further, the trainees acknowledged that their academic entry qualifications were necessary in their police work. The results of Pearson Correlation test revealed a significant positive Correlation between Education at entry to the service and Performance of NPS. This means that Education at entry to the service significantly moderated the relationship between the independent variables and the Performance of NPS.
Recommendations
For effective training plans in NPS, the government and other stakeholders should organize seminar and other regular refresher courses aimed at creating awareness on the emerging issues and technologies that can be used to deal with emerging crimes and terrorism in the country. This will ensure that the National Police Service becomes effective, responsive and vibrant in early crime detection and prevention.

There is need for police leadership training to encompass strategies for managing junior police officers. This is important especially when it comes to tough decision making process. To effectively implement the training results, it is necessary that performance reward system should be designed to support the training efforts and recognized when performance is improved as the result of training.

The police leadership training need to increase more issues of professionalism and teamwork. This is because if the police service becomes professional and work as a team, they can results in an effective service that is receptive to the needs of the citizen. Management should involve the trained staff in the decision making which are connected to the department.

The police leadership need to adopt a hybrid type of leadership that encompasses both autocratic and democratic leadership styles due to the nature of the work of the police officers. If the police service becomes too soft to the citizens, its led to an increase to criminality in the county and when the police service becomes too brutal, they violate the citizen’s human rights hence the need for a balance. The police leadership training need to focus more on the various key attributes that are critical to the success of the police service. These includes; Control, Integrity and accountability, Transparency, Public speaking, Planning and Honesty.

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