

Relationship Between Level of Schooling and Incarceration Among Inmates of Kamiti and Langata Maximum Prisons in Kenya

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Abstract

The role of education as a human capital investment cannot be underpinned since it increases future legitimate work opportunities. Individuals optimally choose how much time to allocate each period to investment in human capital, legitimate work, and crime to maximize their expected lifetime outcome. Despite the educational attainment of Kenyans, the incarceration rate is as high as 60-80% above Africa's average of 37%. The objective of the study was to: Determine the relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons. The target population comprised 1,440 male and female inmates. The study employed a correlational survey research design. The sample comprised 313 inmates. A simple random sampling technique was used to select the participants. The data collection tool used was the questionnaire. To ascertain the reliability of instrument, the test re-test technique was used and a correlation coefficient value of 0.7 or more was acceptable. Quantitative data was analyzed using both descriptive and inferential statistics. ANOVA was used to determine the variance of the responses of the levels of schooling. There was a strong negative relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons ($r = -0.701$). The results were presented in the form of tables and figures. The study concluded that the primary school level has a higher predictive power of committing multiple crimes. The study recommended addressing inequities in the schooling of inmates. Components of technical education within the primary school curriculum need to be strengthened to reap optimal returns of skills acquired among inmates and thus in the long run individuals would avoid committing crimes or repeating crimes.

Keywords: *Level of schooling, Incarceration, Inmate, Crime, Human capital*

1.0 Introduction

Education has broader social and economic benefits for individuals and society at large. According to the United Nations General Secretary, “The basis for progress in every country is education which is a fundamental right” (UNESCO, 2014). Education is economically significant by providing better opportunities for scientific and technological advancement while developing human skills and creative abilities. John Hattie (2012) observes that learners need to be able to think about problems and solve them, work in teams, take initiative, and bring diverse perspectives to their approaches in life. He further contends with the fundamental aim of basic education in Portugal; which is meant to provide pupils with experiences that encourage civic maturity and social and emotional maturity, creating positive attitudes and habits in their relationships and cooperation with others, whether within the family or in conscientious, responsible intervention in the situations they find themselves in.

Outcome-based education (OBE) has been adopted in education systems around the world. The European Union has proposed an education shift to focus on outcomes. Worth noting is that the United States has over the years adopted OBE program. In 2005, Hong Kong adopted an outcome-based approach for its universities (Kerry, 2011). According to Mohayidin et al. (2008), Malaysia implemented OBE in all of its public-school systems in 2008. Allais and Stephanie (2007), observe how OBE program in South Africa evolved and later borrowed ideas about competency-based education and vocational education from New Zealand and Australia.

The creation of a well-rounded learning experience is dependent on levels of schooling. The levels are anchored on a vision of learning that covers three domains: Cognitive, Socio-Emotional, and Behavioural (UNESCO, 2015). They also help learners make responsible decisions (proactive behaviour) and be resilient when faced with dangerous or threatening situations (responsive behaviour) (Taylor et al., 2017). In some cases, early primary students have difficulty distinguishing probable dangers from all possible dangers (Tobin & Sugai, 2005). This formed the focal point of this study by looking at schooling duration and academic achievement from primary education as a measure of schooling and how it related to incarceration.

1.1 Problem Statement

In Kenya, the 8.4.4 system proponents had a vision where the main outcome of the vocational component would be to prepare students who did not continue with secondary education to be self-employed and become self-reliant in the non-formal sector. However, the implementation of the system did not meet its very vision and this omission was the focus of the present study that investigated the level of schooling and how it relates to incarceration among inmates of Kamiti and Langata Maximum prisons. Evidence shows on average an emergence of social vices that is increased crime, drug abuse, and anti-social behavior estimated as follows: in Europe (74%), the Americas (51 %), the Near and Middle East (46%), Asia and the Pacific region (40%) and Africa (37%) (UNODC, 2010). According to the United Nations Office on Drugs and Crime, in 2015 acknowledged that social vices led to reduced cognitive efficiency which led to poor academic performance, and therefore the learning outcomes as envisioned by the national goals of education were far from reality. One major challenge has been to strike a balance between academics and the acquisition of an appropriate range of skills, values, and attitudes that enable one to be a useful member of society.

1.2 Objective of the Study

To determine the relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons.

1.3 Research Hypothesis

H₀₁: There is no significant relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons.

H_{A1}: There is a significant relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons.

2.0 Literature Review

2.1 Schooling and Incarceration

Academic skills are essential for successful tertiary study. The major goal of basic education is to foster an increase in acquisition of sound moral values and help children grow up into integrated citizens, self-reliant and self-disciplined. Independent study skills, digital and numeracy skills, communication, and writing are inculcated as one develops academic knowledge. The main methodological contribution of Lochner and Moretti (2004) is the use of changes in state-specific compulsory schooling laws over time as instrumental variables for schooling. Intuitively, this strategy measures the extent to which an increase in a state's compulsory schooling age leads to an immediate increase in educational attainment and reductions in subsequent crime rates for affected cohorts. Because the laws only affect schooling at low levels (mainly grades 8-12), their instrumental variable (IV) estimates reflect the impact of an additional year of high school on crime. Lochner and Moretti (2004) find that a one-year increase in average education levels in a state reduces state-level arrest rates by 11 percent or more.

Few recent statistics from Europe and the United States highlight the strong connection between education and crime. In 1997, 75 percent of state and 59 percent of federal prison inmates in the US did not have a high school diploma (Harlow 2003). In 2001, more than 75 percent of convicted persons in Italy had not completed high school (Buonanno & Leonida 2006). Meghir et al. (2011) and Hjalmarsson et al. (2011) use micro-data and Swedish compulsory schooling reforms to identify the causal effect of education on crime. Even murder appears to be quite responsive to changes in educational attainment and school quality (Lochner & Moretti 2004, Weiner et al., 2009). Schooling experiences is embedded in school quality. The support of developing academic skills and literacy aspects is integral to student schooling experiences.

Individuals who plan to heavily engage in crime (e.g. Because they are particularly good at it, enjoy it, or live-in areas with plenty of illicit opportunities) are likely to choose to leave school at a young age (Lochner, 2004). Arrests or incarceration associated with a juvenile crime may also cause some youths to drop out of school early (Hjalmarsson, 2008). Lochner and Moretti (2004) examine state-level male arrest rates by criminal offense and age (five-year age categories beginning at ages 20-24 through 55-59) from the FBI's Uniform Crime Reports (UCR) for the US in 1960, 1970, 1980, and 1990. Levels of academic achievement and reading proficiency form critical facets of schooling that this research looked into.

Students' non-academic attributes are associated with academic performance (Durlak et al., 2011). Ostensibly, other research shows student composition of the school one attends influences a range of student outcomes (Palardy, 2015). In Michigan, approximately 80% of first-time offenders coming into the Department of Corrections (DOC) system do not have a

documented High School Diploma (HSD) or General Equivalency Diploma (GED). Cullen, Jacob, and Levitt (2006), found that those who won lotteries to high-achievement public schools reported nearly 60 percent fewer arrests on a ninth-grade student survey. These winners also reported getting into less trouble at school, and school administrative data suggests that they had lower incarceration rates during school ages.

Merlo and Wolpin (2009) take a very different approach to estimating the relationship between schooling and subsequent crime. On average, attending school at age 16 reduces the probability of a black male ever committing a crime over ages 19-22 by 42 percent and the probability of an arrest over those ages by 23 percent. Anderson (2009) estimates that increasing the compulsory schooling age from 16 to 17 or 18 years of age reduces arrests at the affected ages by nearly 10 percent, with similar impacts on both violent and property crime. This anchors the current study and thus focuses on schooling experiences such as student engagement at school, student dispositions, and student interpersonal and intrapersonal skills. A recent study by Loeb et al. (2019) found that the growth rate of these skills varies substantially across schools irrespective of the school-going age.

Dropping out of school does not automatically result in a life of crime, but high school dropouts are far more likely than high school graduates to be arrested or incarcerated (Wise, 2016). The report finds that both school climate and discipline play large roles in whether a student graduates from high school and how likely a student is to be arrested or incarcerated. Suspended students, the report notes, are twice as likely to drop out as those who have not been suspended. African American high school students are at least twice as likely as their non-black peers to be suspended. Indeed, schooling practices facilitate achievement (West et al., 2018).

Davis et al. (2014) presented a rigorous and systematic review of correctional education programs in the United States. The overall analysis suggested that correctional education had a positive and statistically significant effect on three domains that are key for reinsertion into civil society: recidivism (going back to prison because of additional crimes), post-release employment, and reading and math scores. However, this present study paid attention to the relationship between schooling and incarceration.

3.0 Methodology

This study adopted a correlational survey research design to meet the objectives of the study. A correlational survey design was the most appropriate since it helped establish the relationship between the level of schooling and training and incarceration. The study was conducted at Kamiti and Langata Prisons both located in Nairobi County. Nairobi County was chosen because of its cosmopolitan nature which may be reflected in the types and categories of prisoners held therein. The target population was a total of 1,440 male and female inmates aged between 18 and 54 years old. According to Kamiti Maximum Prison lockup sheet of July 2017, Kamiti Maximum Prison houses about 912 male inmates (18-54 years) of whom 732 are first-time offenders, 112 are second-time offenders, and 68 are serial offenders. Langata Women houses about 528 female inmates (26-44 years) of whom 424 are first-time offenders, 80 are second-time offenders and 24 are serial offenders. The current study used a simple random sampling technique that helped avoid bias. All units of the target population (male and female inmates) had an equal chance of being selected (Orodho, 2008; Mugenda, 2012). The sample size was 313 inmates which comprised 198 male inmates and 115 female inmates. The data for this study was collected using a questionnaire. The study used one type of questionnaire for both male and female inmates. Data was analyzed using SPSS software, Version 26. Quantitative data was generated from the questionnaires on academic achievement and literacy

level. Descriptive analysis techniques in form of frequencies and percentages were done to establish the KCPE and KCSE scores. A Pearson correlation was done. Moreover, the results were presented in form of figures, tables, and graphs.

4.0 Results and Discussion

4.1 Respondents' Age Distribution

The study sought to establish the age distribution of selected respondents. Figure 1 presents the findings obtained.

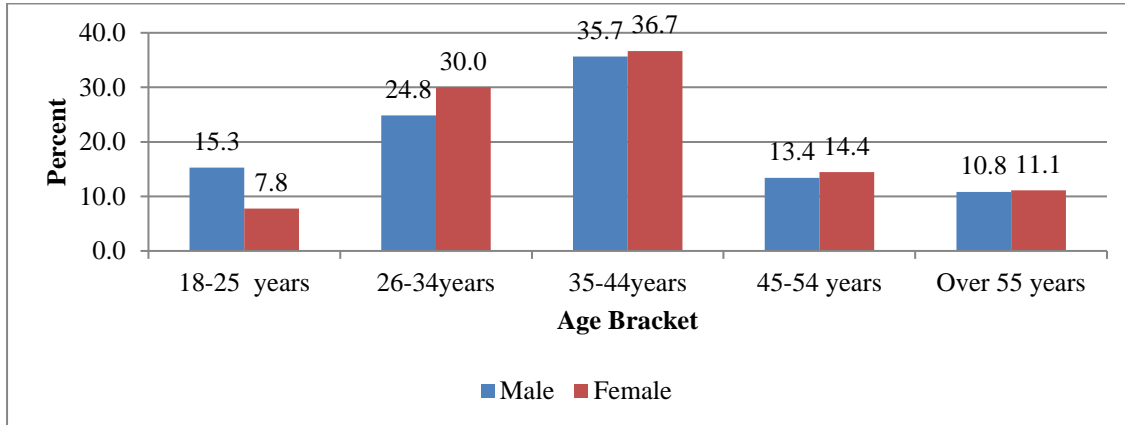


Figure 1: Age Distribution of Respondents

From the findings in Figure 1, respondents in the study were of different age groups. Most of the respondents were aged between 35 and 44 years as shown by 35.7% for males and 36.7% for females. It could also be seen from the figure that majority of both male and female prisoners in Kenya are aged between 26 and 44 years. It was worth noting that this comprised the working-age population. Also, most prisoners below the age of 25 years are male as shown by 15.3% compared to 7.8% of females of the same age. It was therefore evident that the selected sample was age-diverse and therefore adequate to provide conclusive research findings.

4.2 Respondents' Number of Times Imprisoned

The study sought to establish the number of times the selected respondents had committed a crime and been imprisoned. The findings obtained were presented in Figure 2.

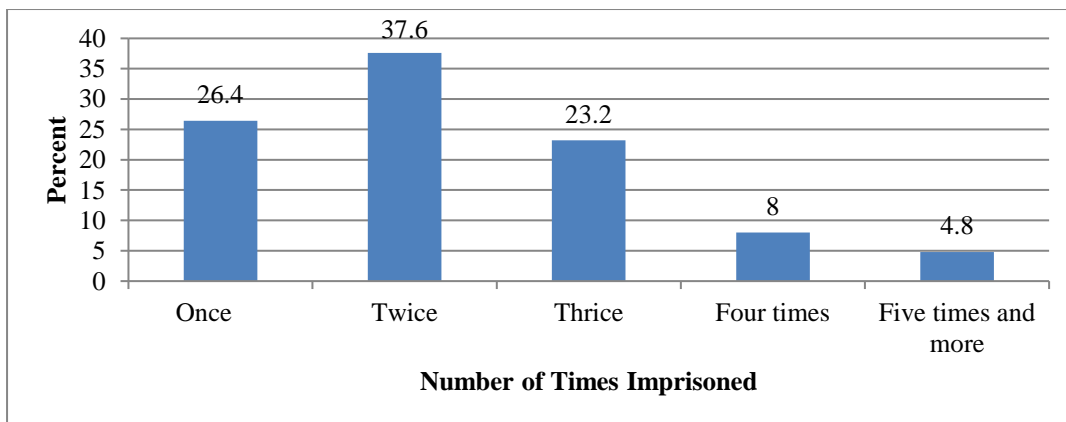


Figure 2: Respondents' Number of Times Imprisoned

From the findings in Figure 2, 37.6% of the respondents indicated that it was their second time being imprisoned, 26.4% indicated that it was their first imprisonment, 23.2% were in prison for the third time, 8% were in for their fourth time, and 4.85 were in for fifth or more times. These findings showed that majority of the prisoners both male and female were repeat offenders. Therefore, the selected sample was very adequate in determining whether their level of schooling and training related to incarceration.

4.3 Level of Schooling and Incarceration in Kamiti and Langata Maximum Prisons

The study sought to determine the relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons. The formulated hypothesis was that:

H₀₁: There is no significant relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons.

The respondents were asked to answer different questions that related to their educational background. First, the respondents were asked to indicate their level of education. Figure 3 presents the findings obtained.

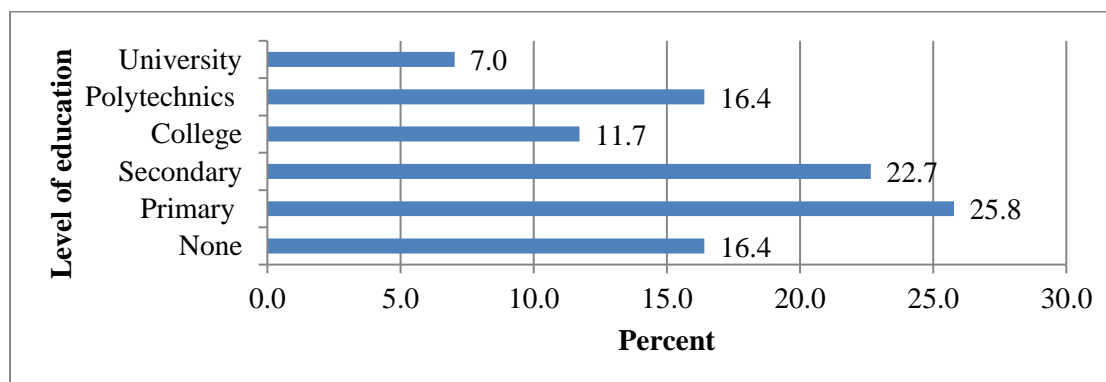


Figure 3: Inmates' Level of Education

Based on the findings in Figure 3, the selected inmates had different levels of education, and the higher the level of education the lower the number of prisoners. 25.8% of the inmates had a primary level of education, 22.7% had a secondary level and 16.4% had no education at all. It was also seen that 16.4% had a polytechnic level of education, 11.7% had a college level, and 7% had a university level. It was therefore concluded that the level of education could be attributed to the crime rate. This was in agreement with the findings of Lochner and Moretti (2004) that a one-year increase in average education levels in a state reduces state-level arrest rates by 11 percent or more.

The study also sought to establish how likely it was for an offender to go back to crime based on their different levels of education. The findings were as presented in Table 1.

Table 1: Likelihood of Going Back to Crime Based on Level of Education

Basic level education	Very likely	Likely	Moderate	Unlikely	Very unlikely
Nursery	89.9	7.1	1.5	0.4	1.1
Lower primary (class1-3)	88.1	10.1	0.0	1.5	0.4
Middle primary(class4-6)	81.7	12.3	4.1	1.1	0.7
Upper primary (class7-8)	79.5	9.7	5.6	3.4	1.9
Average	84.8%	9.8%	2.8%	1.6%	1.0%

Secondary level	Very likely	Likely	Moderate	Unlikely	Very unlikely
Form 1	75.0	20.5	1.5	2.2	0.7
Form 2	74.3	14.6	3.7	4.1	3.4
Form 3	78.7	7.5	4.9	4.9	4.1
Form 4	38.8	32.8	1.5	20.9	6.0
Average	66.7%	18.8%	2.9%	8.0%	3.5%
Tertiary level	Very likely	Likely	Moderate	Unlikely	Very unlikely
Vocational	10.1	6.7	20.1	39.2	23.9
College	8.6	6.3	13.4	50.7	20.9
Polytechnic	7.1	5.6	19.0	44.8	23.5
Average	8.6%	6.2%	17.5%	44.9%	22.8%
University level	Very likely	Likely	Moderate	Unlikely	Very unlikely
Higher Diploma	3.0	10.4	4.5	73.5	8.6
Undergraduate	1.9	1.5	0.7	82.5	13.4
Masters	0.4	0.7	0.0	11.6	87.3
Doctorate	0.0	0.0	0.4	2.2	97.4
Average	1.3%	3.2%	1.4%	42.4%	51.7%

The findings in Table 1 showed that as the level of education increased, the likelihood of offenders going back to crime decreased. It was seen that on average, 84.8% of those with basic levels of education [that is nursery, lower primary (class 1-3), middle primary Class (4-6), and upper primary Class (7-8)] were very likely to go back to crime with only 1.6% and 1% being unlikely and very unlikely. The findings also showed that on average, 66.7% of those with a secondary level of education are very likely to go back to crime and 18.8% are likely.

The findings also showed that for those with a tertiary level of education (vocational training, college education, and polytechnic) that on average, 44.9% were unlikely to go back to crime and 22.8% were very unlikely. On average, there was a 17.5% moderate chance that those with a tertiary level of education would go back to crime with 8.6% and 6.2% very likely and likely would go back to crime respectively.

Regarding those with a university level of education (Higher Diploma, Undergraduate, Master, and Doctorate), the findings showed that on average, 51.7% were very unlikely to go back to crime and 42.4% were unlikely. The findings also showed that 97.4% of those with a doctorate, and 87.3% of those with a master's level were very unlikely to go back to crime. Also, 82.5% of those with undergraduate and 73.5% were unlikely to go back to crime.

Comparing all these four levels of education, it was seen that those with a university level of education were more unlikely to go back to crime while those with Basic level education being more likely to go back to crime. Therefore, it was evident that the level of education would determine the probability of offenders going back to crime. This was in line with the findings of Lochner (2004) that individuals who plan to heavily engage in crime (e.g. Because they are particularly good at it, enjoy it, or live-in areas with plenty of illicit opportunities) were likely to choose to leave school at a young age. It also agreed with Wise (2016) that high school dropouts were far more likely than high school graduates to be arrested or incarcerated.

Respondents were also asked their opinion on the number of years it took them to complete school and if it had a relationship with incarceration rate in Kamiti and Langata Maximum prisons. Figure 4 presents the findings obtained.

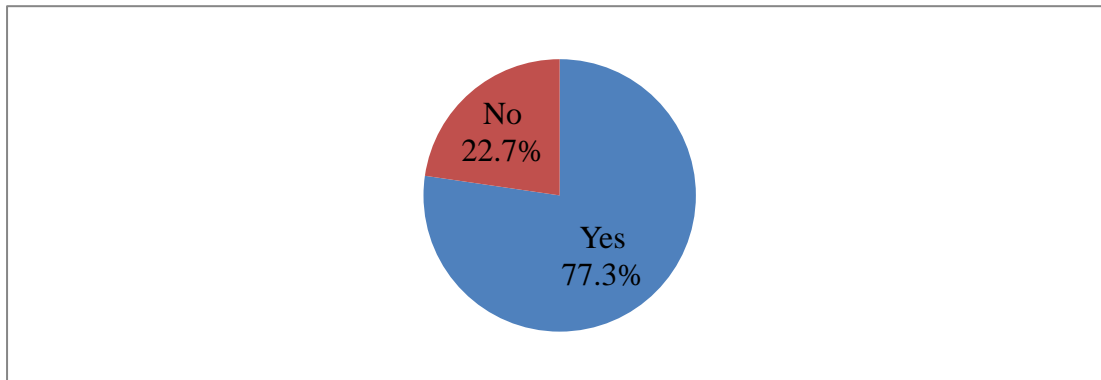


Figure 4: School Duration Affected Rate of Incarceration

The findings in Figure 4 showed that 77.3% of the inmates agreed that the number of years it took them to complete school had a relationship with their incarceration. Only 22.7% of the inmates did not agree on the relationship between the rate of incarceration and the length of time taken to complete school. Therefore, based on majority of the inmates it was agreed that the number of years it took individuals to complete school had a relationship with incarceration rate in Kamiti and Langata Maximum prisons. This agreed with Lochner and Moretti (2004) that an increase in a state’s compulsory schooling age led to an immediate increase in educational attainment and reductions in subsequent crime rates for affected cohorts.

For those who agreed that schooling years affected the crime rate, they were asked to indicate the extent to which schooling duration affected the incarceration rate in Kamiti and Langata Maximum Prisons. Table 2 presents the findings obtained.

Table 2: Extent to Which Schooling Years Affect Incarceration Rate

Extent	Frequency	Percent
Great extent	112	54.2
Moderate extent	72	34.6
Low extent	23	11.2
Total	207	100.0

The findings in Table 2 showed that 54.2% of the respondents agreed that schooling years affected incarceration rate in Kamiti and Langata Maximum Prisons to a great extent. In addition, 34.6% agreed that the effect was to a moderate extent and 11.2% indicated the effect was to a low extent. Therefore, as indicated by majority (54.2%) of the respondents, it was concluded that the schooling years affect incarceration rate in Kamiti and Langata Maximum Prisons to a great extent. This agreed with Anderson (2009) who found that increasing the compulsory schooling age from 16 to 17 or 18 years of age reduces arrests at the affected ages by nearly 10 percent, with similar impacts on both violent and property crime.

This study tested the relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons. The significance of the relationship was tested at a 5% level of significance. The correlation findings were presented in Table 3.

Table 3: Correlations

		Incarceration	Schooling	Pre-job training	On-the-job training	Gender
Incarceration	Pearson Correlation Sig. (2-tailed)	1				
Schooling	Pearson Correlation Sig. (2-tailed)	-.701** .001	1			
Pre-job training	Pearson Correlation Sig. (2-tailed)	-.835** .010	.461 .258	1		
On-the-job training	Pearson Correlation Sig. (2-tailed)	-.765** .003	.196 .254	.499	1	
Gender	Pearson Correlation Sig. (2-tailed)	-.698** .001	.325 .168	.264 .078	.198 .470	

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

Based on the findings presented in Table 3, there was a strong negative relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons ($r = -0.701$). The relationship was significant since the p-value obtained (0.001) was less than the selected level of significance (0.05). This implied that schooling was related to incarceration among inmates of Kamiti and Langata Maximum Prisons. The relationship was also significant. The findings also showed that schooling had a statistically significant influence on incarceration among inmates of Kamiti and Langata Maximum Prisons as shown by ($\beta = -0.797$, $P = 0.001$). The influence of schooling on incarceration among inmates of Kamiti and Langata Maximum Prisons was also seen to be negative.

5.0 Conclusion

The study tested H_{01} : There is no significant relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons. The study found that schooling had a statistically significant influence on incarceration among inmates of Kamiti and Langata Maximum Prisons. The influence of schooling on incarceration was also found to be negative. This implied that a unit improvement in schooling resulted in a decrease in incarceration among inmates of Kamiti and Langata Maximum Prisons. Based on the findings, the study rejected the null hypothesis and accepted the alternative H_{A1} : There is a significant relationship between schooling and incarceration among inmates of Kamiti and Langata Maximum Prisons.

6.0 Recommendations

Schooling was found to have a negative significant influence on incarceration among inmates of Kamiti and Langata Maximum Prisons. The study thus recommends improvement of schooling of inmates. For those who have been imprisoned and had not attained any qualification, providing them with an opportunity to learn a skill could help them survive after they have been released thus reducing the rate of becoming second-time offenders. Also, there is a need to strengthen post-secondary training since higher education in prison programs reduces recidivism and translates into reductions in crime, savings to taxpayers, and long-term

contributions to the safety and well-being of the communities to which formerly incarcerated people return.

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