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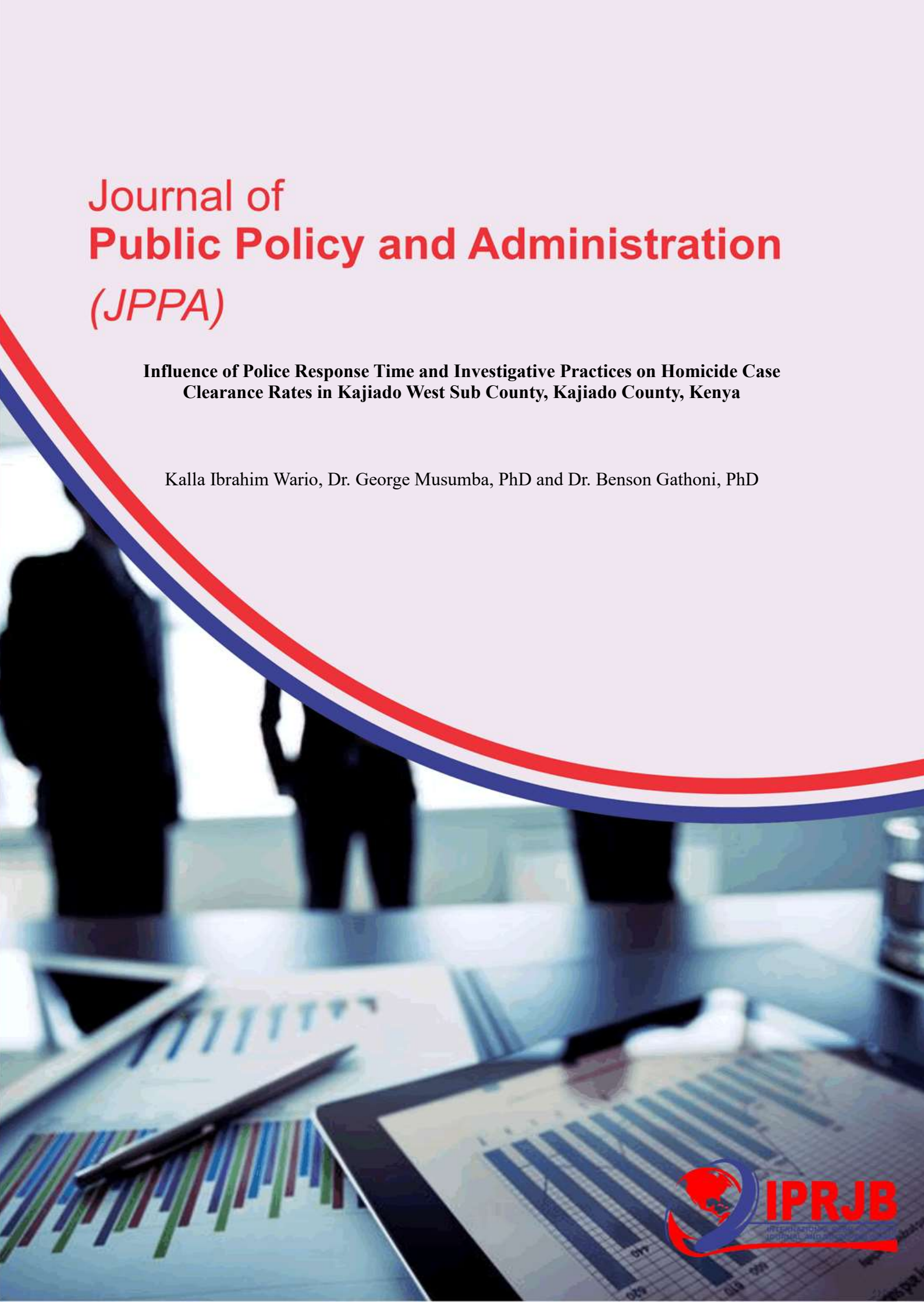

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Influence of Police Response Time and Investigative Practices on Homicide Case Clearance Rates in Kajiado West Sub County, Kajiado County, Kenya

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Abstract

Purpose: This study examines the influence of police response time and investigative practices on homicide case clearance rates in Kajiado West Sub County, Kenya. Police response time is crucial for securing crime scenes, preserving evidence, and identifying suspects, while investigative practices such as forensic analysis, witness collaboration, and crime scene management play a significant role in case resolution.

Methodology: The study employed a descriptive research design, utilizing both primary and secondary data collected from 109 police officers through structured questionnaires and official crime records. Data analysis was conducted using SPSS Version 24.0, incorporating descriptive and inferential statistics, including multiple linear regression analysis.

Findings: Findings reveal that police response time significantly impacts homicide case clearance, with a strong correlation ($r = 0.734$, $p < 0.01$) and 53.9% of clearance rate variance explained by response time. Investigative practices also have a significant impact ($r = 0.746$, $p < 0.01$), explaining 55.6% of the variance in homicide clearance rates. Regression analysis confirms that improving response time ($B = 0.596$, $p = 0.000$) and investigative practices ($B = 0.599$, $p = 0.000$) significantly enhance clearance rates.

Unique Contribution to Theory, Practice and Policy: To enhance homicide case clearance in Kajiado West Sub County, police response time should be reduced to below 30 minutes by increasing patrol vehicles and upgrading dispatch systems.

Keywords: *Police Response Time, Investigative Practices, Homicide Clearance, Law Enforcement, Forensic Analysis, Kajiado West Sub County*

JEL Codes: *K14, K42*

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INTRODUCTION

The clearance rate functions as a key metric for assessing police performance (Baughman, 2020). A reduction in clearance rates signifies a decline in the ability of law enforcement to administer justice to victims and their families while also weakening the preventive impact of policing activities (Asher, 2023; Verlaan & Ruiter, 2021). Several factors influence homicide clearance rates, including police response time and investigative practices. Timely arrival at crime scenes enhances evidence collection and suspect identification (Vidal & Kirchmaier, 2017), while advanced investigative methods such as crime scene management, forensic analysis, and witness collaboration improve case resolution (Leipold, 2021; Braga & Dusseault, 2018). However, across many regions, homicide clearance rates remain low due to inefficiencies in police response and investigation methods.

Globally, homicide clearance rates vary significantly. In the United States, clearance rates declined to 41.1% in 2020, leaving nearly six out of ten cases unresolved (Robinson et al., 2024). This downward trend is attributed to delayed police response, limited investigative resources, and outdated forensic procedures (Richardson et al., 2019). Similarly, in sub-Saharan Africa, clearance rates are impeded by weak forensic capabilities, inadequate policing resources, and governance issues (Kivoi, 2022). For instance, South Africa's homicide clearance rates remain significantly low, with only 17% of gun-related homicides solved by law enforcement (Braga & Dusseault, 2018). Ghana also reports similar challenges, where non-fatal gun-related cases have a clearance rate of just 32%. These statistics emphasize the widespread difficulties faced by law enforcement agencies in clearing homicide cases across different regions.

Kenya, like many other countries, has witnessed fluctuations in homicide rates. Between 2015 and 2018, over 8,000 homicide cases were reported, with the highest numbers recorded in Kilifi and Kiambu Counties (NPS, 2019). The country's clearance rates remain suboptimal due to slow police response, resource shortages, and inefficiencies in investigative procedures (Kivoi, 2022). While some urban regions have slightly higher clearance rates due to better policing infrastructure, rural areas continue to struggle with resolving homicide cases efficiently.

Kajiado West Sub County, located in Kajiado County, has seen a steady rise in homicide cases, reflecting broader national and regional trends. However, clearance rates in this area remain notably low due to delayed police response, inadequate forensic support, and logistical challenges associated with rural policing (Mwai, 2024). These limitations not only hinder the ability of law enforcement to bring perpetrators to justice but also contribute to public distrust in the criminal justice system.

This study aims to examine the impact of police response time and investigative practices on homicide clearance rates in Kajiado West Sub County, bridging the gap between national trends and local law enforcement challenges. By addressing critical deficiencies in policing strategies, the findings will offer insights into improving law enforcement effectiveness, influencing policy decisions, and strengthening justice system reforms in Kenya.

Statement of the Problem

Homicides contribute significantly to the societal burden of crime, with their clearance rates often serving as an indicator of police effectiveness (Cook & Ludwig, 2022). Effective homicide investigations require prompt police response, proper forensic analysis, and well-coordinated investigative practices (Braga & Dusseault, 2018). However, existing research

highlights persistent challenges in homicide clearance, including delayed police response, resource constraints, and investigative inefficiencies (Kivoi, 2022).

Despite numerous studies on crime clearance rates globally, there is limited research focusing on how specific factors such as police response time and investigative practices influence homicide case clearance in Kenya. While studies in other regions, such as the U.S. and Europe, have examined police performance in solving homicides (Vidal & Kirchmaier, 2017; Braga et al., 2019), their findings may not be directly applicable to Kenya due to contextual differences in policing structures, legal frameworks, and resource allocation.

At the national level, studies have primarily focused on police training, general crime rates, or the role of forensic investigations (Maina, 2017), but have not specifically addressed the direct impact of police response on homicide clearance rates. Additionally, existing research often examines urban areas with better policing infrastructure, leaving out rural regions like Kajiado West Sub County, where logistical challenges such as poor infrastructure and delayed emergency response significantly impact homicide investigations (Mwai, 2024). This study seeks to bridge this gap by investigating how police response time and investigative practices affect homicide clearance rates in Kajiado West Sub County. By addressing these specific factors, the study will provide empirical insights that can inform law enforcement strategies, resource allocation, and policy reforms aimed at improving homicide case resolutions in Kenya.

LITERATURE REVIEW

Theoretical Review

This study is based on three key theories: Resource-Based View (RBV) Theory, Knowledge-Based Theory (KBV), and McKinsey 7S Framework.

Resource-Based View (RBV) Theory

The RBV Theory (Porter, 1991) postulates that an organization's effectiveness is determined by the strategic utilization of its resources, including personnel, equipment, and technology (Lemarleni et al., 2017). Within law enforcement, resource availability is a crucial determinant of response time, influencing the ability to arrive at crime scenes promptly, preserve evidence, and enhance suspect apprehension (Makina & Oundo, 2020). Existing literature highlights that when police departments are adequately equipped with vehicles, forensic tools, and trained personnel, their ability to solve crimes significantly improves. Conversely, resource deficiencies contribute to delayed responses and reduced homicide clearance rates (Weisburd, 2022). While RBV effectively explains the role of internal resource allocation, it has been criticized for overlooking external constraints, such as geographical barriers, legal frameworks, and community engagement in crime-solving (Utami & Alamanos, 2023). This study builds on existing research by assessing how resource availability influences police response time and its impact on homicide case clearance rates in Kajiado West Sub County.

Knowledge-Based Theory (KBV) and Police Investigative Practices

The KBV Theory (Sveiby, 2001) expands on RBV by emphasizing knowledge as a fundamental resource in organizational performance. In the context of law enforcement, forensic expertise, crime scene management, and suspect interrogation skills play a critical role in enhancing homicide case clearance rates (Kaplan et al., 2001). Studies have shown that investigators with specialized training in forensic science and case analysis are more effective in processing evidence and identifying perpetrators (Braga & Dusseault, 2018). Conversely,

inadequate forensic knowledge leads to mismanaged evidence, wrongful arrests, low conviction rates, and case dismissals (Asanta & Sirera, 2024). Previous research in Kenya has highlighted gaps in forensic capabilities and investigative expertise, emphasizing the need for continuous training to improve homicide solvability. This study extends existing literature by examining how investigative knowledge, forensic skills, and procedural expertise influence homicide clearance rates in Kajiado West Sub County.

McKinsey 7S Framework

The McKinsey 7S Framework (Pearce & Robinson, 2007) evaluates organizational effectiveness by analyzing seven interdependent factors: Strategy, Structure, Systems, Shared Values, Style, Staff, and Skills (Karami, 2005). This model has been widely used in law enforcement research to assess how investigative coordination, case tracking, and forensic analysis contribute to case clearance (Prince et al., 2021). Structured investigative systems, crime scene protocols, and coordination between forensic experts and legal authorities improve homicide clearance rates. However, weaknesses in investigative structures, such as poor case tracking, lack of procedural standardization, and forensic delays, have been identified as major obstacles to successful case resolutions (Mambo, 2019). Research suggests that efficient investigative structures significantly enhance homicide clearance by ensuring timely evidence collection, systematic suspect processing, and inter-agency collaboration. This study applied the McKinsey 7S Framework to analyze how structured investigative processes, forensic coordination, and case tracking impact homicide clearance rates in Kajiado West Sub County.

LITERATURE REVIEW

Police response time is a critical factor in homicide case clearance, as timely arrival at crime scenes enhances evidence preservation and suspect apprehension. Vidal and Kirchmaier (2017) found that faster response times significantly improved clearance rates, while DeAngeloet al., (2021) highlighted persistent delays that hinder case resolutions. However, Shults (2019) noted that response effectiveness varies due to resource limitations and geographic factors. Existing research does not clearly define ideal response times for homicide cases or differentiate between cleared, inactive, and prosecutable cases. Most studies focus on urban settings, leaving rural areas like Kajiado West Sub County understudied. This study aims to bridge this gap by assessing how response time, arrival efficiency, and evidence collection influence homicide clearance in a rural context.

Effective investigative practices, including forensic analysis, case tracking, and witness collaboration, are essential for homicide clearance. Braga and Dusseault (2018) found that cases with structured investigative procedures had higher resolution rates. Similarly, Prince et al., (2021) emphasized the role of departmental policies and forensic coordination in improving clearance rates. Despite advancements in investigative techniques, case clearance remains low, with the FBI (2019) reporting a 55% clearance rate in the U.S., even with improved forensic capabilities. In Kenya, Mambo (2019) identified weaknesses in case tracking and procedural delays, which limit successful homicide investigations. This study seeks to examine how investigative coordination, evidence handling, and procedural efficiency affect homicide clearance in Kajiado West Sub County.

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METHODOLOGY

Research Design

The study adopted a descriptive research design to examine the influence of police response time and investigative practices on homicide clearance rates in Kajiado West Sub County, Kenya. This approach enabled the collection of both qualitative and quantitative data, providing an in-depth understanding of law enforcement challenges. It was useful for identifying factors affecting homicide case resolution and analyzing relationships between key variables (Kothari, 2014).

Location of the Study

The study was conducted in Kajiado West Sub County, located in Kajiado County, Kenya. Kajiado West comprises five wards: Magadi, Keekonyokie, Iloodokilani, Ewuaso, and Mosiro. According to the Kenya National Population Census (2019), Kajiado West Sub County has a population of approximately 104,300, with Ngong as its main town. Currently, about 150 police officers are assigned to criminal investigations in the area.

Target Population

The study targeted 150 police officers in Kajiado West Sub County involved in criminal investigations (NPS, 2022). These officers were drawn from forensic sections, General Duty Officers, and investigation units**.** The target population was selected to assess the influence of police response time and investigative practices on homicide case clearance.

Table 1: Target Population

Ward	Category	Total per ward
Magadi Ward	Forensic Sections/CSI	3
	General Duty Officers	22
	Investigations Unit	5
	Total	**30**
Keekonyokieward	Forensic Sections/CSI	2
	General Duty Officers	24
	Investigations Unit	5
	Total	**31**
Iloodokilaniward	Forensic Sections/CSI	3
	General Duty Officers	24
	Investigations Unit	5
	Total	**32**
Ewuuasoward	Forensic Sections/CSI	2
	General Duty Officers	21
	Investigations Unit	3
	Total	**26**
Mosiro ward	Forensic Sections/CSI	5
	General Duty Officers	21
	Investigations Unit	5
	Total	**31**
Total		**150**

Sample Size and Sampling Technique

The sample size was determined using Yamane's (1967) formula, which ensures statistical accuracy while maintaining an optimal sample size:

$$n = \frac{N}{}$$

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$1+ N(e)^2$

Where;

n is the sample size,

N is the population size, (150)

e is the level of precision (0.05).

$$n = \frac{150}{1+ 150(0.05)^2}$$

n = 109 Police officers

Based on the Yamane's formulae, the sample size constituted 109 police officers within the criminal investigations departments. The respondents were sampled using simple random sampling technique. Table 2 shows the sample size distribution.

Table 2: Sample Size

Category	Population	Sample size	Proportion
Forensic Sections/CSI	15	(15/150) *109=11	(11/109) *100= 13.8%
General Duty Officers	112	(112/150) *109=81	(81/109) *100=74.6%
Investigations Unit	23	(23/150) *109=17	(17/109) *100=21.1%
Total	**150**	**109**	**100%**

Source: National Police Service, Kajiado West Sub County (2022)

Data Processing and Analysis

The study utilized primary and secondary data to examine the influence of police response time and investigative practices on homicide clearance rates in Kajiado West Sub County. Structured questionnaires were used for primary data collection, while police reports, case files, and crime records provided secondary data. Data was processed and analyzed using SPSS Version 24.0, incorporating descriptive statistics (frequencies, means, standard deviations, and percentages) and inferential statistics. Pearson correlation measured associations, while multiple linear regression assessed the predictive strength of police response time and investigative practices in homicide case clearance. The regression model is as follows

$Y=\beta_0+ \beta_1X_1 + \beta_2X_2 + e$

Where;

Y= the dependent variable (Homicide Case Clearance Rates)

β= Regression constant (the value of Y when $X_1=X_2= 0$)

β_i is the coefficient for X_i (where $_{i= 1, 2}$)

β_1, β_2 = Change in Y with respect to a unit change in X_1, X_2 respectively.

Independent variables are:

X_1 = Police response time

X_2 = Police investigative practices

β_i (where $_{= 0, 1, 2}$) are coefficients

e = Error term assumed to be normal in distribution with mean zero and variance σ^2

FINDINGS

The study examined the influence of police response time and investigative practices on homicide case clearance rates in Kajiado West Sub County, Kajiado County, Kenya. The findings revealed significant relationships between these variables and case resolution outcomes.

Demographic Information

The study analyzed demographic data of 109 police officers involved in homicide investigations in Kajiado West Sub County, including CSI, General Duty Officers, and Detectives. Most respondents were male, had over five years of experience, and had basic investigative training, though few had specialized forensic training. These findings emphasize the need for continuous capacity-building and forensic training to improve homicide case clearance rates in the region.

Descriptive Findings

Influence of Police Response Time on Homicide Case Clearance Rates

Table 3: Police Response Time

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
The average response time of the police officers in homicide cases is less than thirty minutes	22.35	21.18	24.71	14.12	17.65	2.84	1.39
The police officers take more than one hour for them to arrive at the crime scene in homicide cases	11.76	14.12	22.35	28.24	23.53	3.38	1.31
The time taken by the detectives in evidence collection in the crime scene is less than 1 hour	18.82	29.4	22.4	14.1	15.3	2.78	1.33
The detectives take a more than 24 hours in analyzing the evidence collected in homicide cases which hinders the homicide case clearance rates	5.9	15.3	24.7	32.9	21.2	3.48	1.16

The findings indicate significant delays in police response times to homicide scenes. A large proportion of respondents (43.53%) disagreed that officers arrived within 30 minutes, while 51.77% agreed that it took over an hour to reach crime scenes (mean = 3.38). Delays were also noted in evidence collection, with 29.4% disagreeing that detectives completed this within an hour (mean = 2.78). Additionally, 54.1% agreed that evidence analysis took over 24 hours, impacting case clearance (mean = 3.48). These findings highlight the need for operational improvements in response time, crime scene management, and forensic analysis to enhance homicide clearance rates.

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Influence of Investigative Practices on Homicide Case Clearance Rate

Table 4: Police Investigative Practices

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
The evidence collection procedures used by detectives in Kajiado west Sub County are simplified hence homicide cases are being handled efficiently	18.8	7.1	27.1	28.2	18.8	3.21	1.355
The crime scene security practices and procedures have helped in crime scene management hence enabling the police officers to investigate homicide cases efficiently	14.1	11.8	22.4	28.2	23.5	3.35	1.343
There are well laid down procedures and practices of evidence protection including proper storage and retrieval therefore enabling the police officers to clear homicide cases effectively	10.6	15.3	27.1	22.4	24.7	3.35	1.297
One of the practices used by police officers in Kajiado West Sub County in the investigation of homicide cases is collaboration with witnesses to help in giving accurate information on murder cases	12.9	12.9	28.2	28.2	17.6	3.25	1.262
The police investigative practices in Kajiado West Sub County involves team policing involving investigation unit, forensic unit and specialized unit	9.4	16.5	28.2	4.2	24.7	3.35	1.279
As part of the police investigative practices in Kajiado West Sub County, there are follow up procedures to ensure that homicide cases are cleared within the shortest time possible	11.8	14.1	21.2	27.1	25.9	3.41	1.330

The results show moderate agreement on police investigative practices in Kajiado West Sub County (Mean scores: 3.21–3.41), indicating partial effectiveness. Evidence collection (3.21) had neutral to moderate agreement, highlighting inefficiencies. Crime scene security (3.35) and evidence protection (3.35) showed some effectiveness but require improvement. Witness collaboration (3.25) was inconsistent, while team policing (3.35) and follow-up procedures (3.41) suggested structured coordination. These findings underscore the need to enhance evidence collection, witness collaboration, and follow-up procedures to improve homicide case clearance rates.

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Inferential Analysis

Correlation Results

A correlation study was carried out to determine the link between the dependent variable (Homicide Case Clearance) and the independent factors (Police Response Time and Police Investigative Practices and Police Training)

Table 5: Correlation Analysis

		Police Response Time	Police Investigative Practices	Homicide Case Clearance
Police Response Time	Pearson Correlation	1	.864**	.734**
	Sig. (2-tailed)		0	0
	N	85	85	85
Police Investigative Practices	Pearson Correlation	.864**	1	.746**
	Sig. (2-tailed)	0		0
	N	85	85	85
Homicide Case Clearance	Pearson Correlation	.734**	.746**	1
	Sig. (2-tailed)	0	0	
	N	85	85	85

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

The results show strong positive correlations between police response time, investigative practices, and homicide case clearance rates. Police response time and investigative practices are highly correlated ($r = 0.864$, $p < 0.01$), indicating that faster response enhances investigative effectiveness, consistent with Vidal & Kirchmaier (2017). Additionally, police response time and homicide clearance rates have a strong correlation ($r = 0.734$, $p < 0.01$), supporting Bennett (2018), who found that a 10% increase in response time led to a 5% decline in clearance rates.

Investigative practices and homicide clearance rates also show a strong correlation ($r = 0.746$, $p < 0.01$), suggesting that effective evidence collection and forensic analysis significantly improve case clearance. These findings align with Braga and Dusseault (2018), who reported a 23% increase in homicide clearance rates due to structured investigative practices. Similarly, Prince et al., (2021) found that enhanced forensic coordination improved clearance rates by 30%.

All relationships are statistically significant ($p = 0.000$), underscoring the need for faster police response and improved investigative practices to increase homicide case resolution. The findings confirm prior research, highlighting the role of timely response and efficient investigations in improving homicide clearance rates, particularly in rural settings like Kajiado West Sub County.

Regression Analysis

Influence of Police Response Time on Homicide Case Clearance Rates

Table 6 A Model Summary of Bivariate Regression Analysis between Police Response Time and Homicide Case Clearance Rates

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.734[a]	.539	.534	.61574

a. Predictors: (Constant), Police Response Time

The bivariate regression analysis shows a strong positive relationship between police response time and homicide case clearance ($R = 0.734$), indicating that faster response times lead to

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higher clearance rates. The R^2 value of 0.539 suggests that 53.9% of the variance in clearance rates is explained by police response time, emphasizing its critical role in investigations. The Adjusted R^2 of 0.534 confirms the model's reliability, while the standard error of 0.61574 indicates a good fit. These findings align with previous studies, reinforcing that delayed response negatively impacts case resolution by affecting evidence preservation and suspect identification

Table 7: ANOVA for Police Response Time and Homicide Case Clearance Rates

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.831	1	36.831	97.143	.000[b]
	Residual	31.469	83	.379		
	Total	**68.299**	**84**			

a. Dependent Variable: Homicide Case Clearance
b. Predictors: (Constant), Police Response Time

The ANOVA results confirm a highly significant relationship between police response time and homicide case clearance (p = 0.000). The F-statistic (97.143) indicates the model's robustness, with the regression sum of squares (36.831) exceeding the residual sum (31.469), showing that police response time significantly impacts case clearance. These findings support prior research emphasizing the importance of timely police response in improving investigative outcomes and public trust.

Table 8: Regression of Coefficients for Police Response Time and Homicide Case Clearance Rates

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.038	.205		9.959	.000
	Police Response Time	.596	.060	.734	9.856	.000

a. Dependent Variable: Homicide Case Clearance

The regression results show a strong positive relationship between police response time and homicide case clearance (B = 0.596, Beta = 0.734, p = 0.000), confirming statistical significance. A one-unit increase in police response time leads to a 0.596-unit rise in clearance rates. The t-statistic (9.856) further validates the impact, emphasizing that timely response significantly improves homicide investigations.

The model:

$Y=\beta_0+ \beta_1X_1 + e$

Where;

Y= the dependent variable (Homicide Case Clearance Rates)

β= Regression constant (the value of Y when $X_1 = 0$)

β_i is the coefficient for X_i (where $i= 1$)

β_1= Change in Y with respect to a unit change in X_1

Independent variables are:

X_1 = Police response time (0.596)

e = Error term assumed to be normal in distribution with mean zero and variance σ^2

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Y=2.038+ 0.596 (Police response time) + e

Influence of Investigative Practices on Homicide Case Clearance Rates

Table 9: A Model Summary of Bivariate Regression Analysis between Police Investigative Practices and Homicide Case Clearance Rates

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.746[a]	.556	.551	.60434

a. Predictors: (Constant), Police Investigative Practices

The results show a strong positive correlation (R = 0.746) between police investigative practices and homicide case clearance rates. The R^2 value of 0.556 indicates that 55.6% of the variance in clearance rates is explained by investigative practices, confirming their significant impact. The Adjusted R^2 (0.551) supports the model's reliability, while the standard error (0.60434) reflects a good fit. These findings align with prior studies emphasizing that effective evidence collection, forensic analysis, and witness collaboration improve case resolution**.**

Table 10: ANOVA for Police Investigative Practices and Homicide Case Clearance Rates

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.985	1	37.985	104.003	.000[b]
	Residual	30.314	83	.365		
	Total	**68.299**	**84**			

a. Dependent Variable: Homicide Case Clearance
b. Predictors: (Constant), Police Investigative Practices

The ANOVA results confirm a statistically significant relationship between police investigative practices and homicide case clearance rates (F = 104.003, p = 0.000). The regression sum of squares (37.985) indicates that investigative practices explain a large portion of the variance in case clearance, supporting their critical role in solving homicides.

Table 11: Regression of Coefficients for Police Investigative Practices and Homicide Case Clearance Rates

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.956	.206		9.502	.000
	Police Investigative Practices	.599	.059	.746	10.198	.000

a. Dependent Variable: Homicide Case Clearance

The regression results show a strong positive relationship between police investigative practices and homicide case clearance rates (B = 0.599, Beta = 0.746, p = 0.000). A one-unit improvement in investigative practices increases clearance rates by 0.599 units, confirming their critical role in solving homicide cases.

The model:

$Y=\beta_0+ \beta_3X_3 + e$

Where;

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Y= the dependent variable (Homicide Case Clearance Rates)

β= Regression constant (the value of Y when $X_3 = 0$)

β_i is the coefficient for X_i (where $i = 3$)

β_3= Change in Y with respect to a unit change in X_3

Independent variables are:

X_3 = Police Investigative Practices (0.599)

e = Error term assumed to be normal in distribution with mean zero and variance σ^2

Y=1.956 + 0.599 (Police Investigative Practices) + e

Summary

The study found a strong relationship between police response time, investigative practices, and homicide case clearance rates in Kajiado West Sub County, aligning with previous research.

Police response time accounted for 53.9% of the variance in clearance rates ($R^2 = 0.539$, p = 0.000). 51.77% of respondents reported officers taking over one hour to reach crime scenes, while 54.1% confirmed evidence analysis took over 24 hours, reducing case solvability. A one-unit improvement in response time increased clearance rates by 0.596 units (B = 0.596, p = 0.000). These findings support Vidal and Kirchmaier (2017), who found that faster response times improved homicide clearance rates, and Bennett (2018), who reported a 10% increase in response time led to a 5% drop-in clearance rates.

Investigative practices explained 55.6% of homicide clearance variation ($R^2 = 0.556$, p = 0.000), with a strong positive correlation ($r = 0.746$, $p < 0.01$). Only 28.2% of respondents agreed that evidence collection procedures were effective, and 27.1% confirmed proper follow-up procedures, indicating investigative inefficiencies. A one-unit improvement in investigative practices increased clearance rates by 0.599 units (B = 0.599, p = 0.000). These findings align with Braga and Dusseault (2018), who found structured investigations increased homicide clearance rates by 23%, and Prince et al., (2021), who reported 30% improvement with strong forensic coordination.

The findings highlight the need for faster police response, better investigative procedures, and enhanced forensic capabilities to improve homicide clearance rates in Kajiado West Sub County.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concluded that the police response and the methodologies employed in investigations are pivotal factors influencing the clearance rates of homicides. This metric is essential as it reflects the efficacy of law enforcement in fulfilling one of its primary responsibilities. It reveals the capacity of police to apprehend offenders and gather adequate evidence following a crime, thereby enabling the judicial system to process cases effectively and impose appropriate penalties when necessary for homicide clearances in Kajiado West Sub County. Prompt police action significantly increases the chances of securing crime scenes, maintaining vital evidence, and identifying potential suspects, while delays can obstruct case resolution due to evidence degradation and diminished witness cooperation. Furthermore, proficient investigative techniques, including forensic examinations, meticulous evidence collection, and

the safeguarding of crime scenes, are associated with improved homicide clearance rates. Nonetheless, the study identified several obstacles, such as inadequate forensic resources, a lack of specialized training for investigators, limited funding, and poor coordination among departments, which adversely affect the quality of homicide investigations. To enhance homicide clearance rates in the area, it is crucial to tackle these issues through improvements in infrastructure, investments in forensic capabilities, enhanced training for police personnel, and robust witness protection initiatives. Ultimately, refining law enforcement strategies and optimizing resource distribution will bolster the effectiveness and efficiency of police responses and investigative efforts in resolving homicide cases.

Recommendations

To improve homicide case clearance in Kajiado West Sub County, police response time should be reduced to below 30 minutes by increasing patrol vehicles, upgrading GPS-enabled dispatch systems, and improving roads in crime-prone areas.

Investigative practices should be strengthened by standardizing evidence collection and creating a centralized forensic database. Better coordination between DCI, forensic units, and the judiciary should aim to increase clearance rates.

Investment in forensic resources and training is essential. At least 80% of homicide detectives should receive specialized forensic training, and forensic funding should increase by 20% to provide DNA analysis and fingerprint tools.

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