

LEVERAGING COMMUNITY-BASED DIGITAL LITERACY PROGRAMMES ON YOUTH CRIME MANAGEMENT IN KISII COUNTY, KENYA

^{1*}Jacob Kola Odhiambo, ²Mildred Luhmayo & ³James Ogolla

¹Postgraduate student, School of Arts and Social Sciences, Kisii University, Kenya

²Senior Lecturer, Department of Political and Peace Studies

³Lecturer, Department of ICT, Kisii University, Kenya

*Email of the Corresponding Author: jacobkola@gmail.com

Publication Date: July 2026

ABSTRACT

Purpose of Study: This study examined the effect of community-based digital literacy programmes on youth crime management in Kisii County, Kenya.

Problem Statement: Youth crime remains a persistent developmental and security concern in Kisii County. Conventional punitive approaches have inadequately addressed the socio-economic factors contributing to youth involvement in crime. Although digital literacy programmes are increasingly implemented as tools for youth empowerment, employability, and social integration, limited empirical evidence exists regarding their effectiveness in managing youth crime within Kisii County.

Methodology: The study adopted a mixed-methods research design. The target population comprised 420 youth participants and key programme stakeholders drawn from Marani, Kisii Main Stage, Keumbu, and Gusii Technical Institute. Using the Yamane formula, a sample of 205 youth participants was selected. Data were collected through questionnaires and interviews and analysed using descriptive statistics, Pearson correlation, simple linear regression, and thematic analysis.

Result: Access to digital literacy programmes positively influenced youth empowerment and crime-management outcomes (Mean=3.81, SD=.634). The programmes improved participants' confidence (Mean=3.94) and employable skills (Mean=3.81). Digital literacy access had a statistically significant positive relationship with youth crime management ($r=.487$, $p<.001$) and explained 23.7% of the variance in crime-management outcomes ($R^2=.237$, $p<.001$).

Conclusion: Community-based digital literacy programmes enhance youth crime management by improving employability, confidence, and digital citizenship.

Recommendation: Digital literacy programmes should strengthen practical income-generation and employment components to translate acquired skills into sustainable economic opportunities and reduce youth vulnerability to crime.

Keywords: *Digital Literacy Programmes, Youth Crime Management, Community-Based Intervention, Youth Empowerment, Kisii County.*

INTRODUCTION

Youth crime remains a pressing global challenge that calls for interventions beyond traditional punitive approaches. Digital literacy has increasingly been recognised as a tool for youth empowerment and crime prevention, particularly as technology becomes central to economic participation. International bodies note that equipping young people with digital skills improves employability and offers constructive alternatives to criminal behaviour (UNODC, 2021). In Europe, countries such as Finland and Estonia have implemented digital literacy programmes for at-risk youth that combine technical training with mentorship, reporting reductions in juvenile delinquency (Livingstone et al., 2022).

In the Americas, the United States has integrated digital skills training into youth rehabilitation programmes alongside cognitive-behavioural interventions, with participants showing improved self-efficacy and reduced recidivism (Anderson & Rainie, 2022). Canada's Youth Employment and Skills Strategy has similarly linked digital literacy training to improved employment outcomes and reduced criminal involvement among marginalised youth (Government of Canada, 2023), although equitable access to technology remains a challenge in underserved areas.

In Asia, Singapore's Skills Future initiative and South Korea's community-based digital skills programmes have demonstrated that pairing technical training with mentorship and community support can reduce youth unemployment and crime (Tan & Koh, 2021; Kim & Park, 2023). African nations are also increasingly adopting digital literacy as part of youth development strategy. Nigeria's National Digital Literacy Framework targets youth in high-crime urban areas, linking structured digital education and entrepreneurship training to reduced involvement in cybercrime (Adeyemi et al., 2022), while Ghana's Youth Employment Agency reports similar outcomes (Agyeman & Ofori-Dankwa, 2021). In Southern Africa, South Africa's Khulisa Social Solutions programme combines digital training with psycho-social support to reduce recidivism among young offenders (Maseko & Mthembu, 2022), though comparable initiatives in Botswana and Namibia show inconsistent results due to weak community integration (Moyo & Ncube, 2021).

In Kenya, youth crime remains closely tied to unemployment and limited educational opportunity. Youth aged 15–24 account for approximately 43% of crime arrests nationally, with unemployment in this group exceeding 39% (Kenya National Bureau of Statistics, 2022). The government's Digital Literacy Programme, though initially focused on primary education, has gradually expanded into community settings (Ministry of Education, 2021), yet only about 28% of Kenyan youth have meaningful access to digital devices and internet connectivity (Communications Authority of Kenya, 2023), a gap that is more pronounced in rural counties. Where structured digital literacy programmes have reached youth, evidence points to improved cognitive skills, employability, and social integration (Wambugu & Njoroge, 2022), and selected Community

Policing Programme sites report reduced gang involvement (National Crime Research Centre, 2021). However, systematic evaluation of these initiatives remains limited.

Kisii County faces particularly acute youth crime challenges. The Kisii County Integrated Development Plan (2023) records youth unemployment at 52%, well above the national average, alongside a rise in petty crime, substance abuse, and gang activity linked to the county's limited formal employment base (Kisii County Government, 2023). Community-based digital literacy efforts in the county remain nascent. Four centres currently operate which are Gusii Technical Institute, Kisii Main Stage, Keumbu, and Marani of which only Gusii Technical Institute offers structured ICT courses; the rest function more informally, offering basic computer training or internet access. Reliable data on participation levels and impact on youth crime remain largely undocumented, resting mainly on informal accounts (Mogaka & Mose, 2023). The Kisii County Community Policing Framework (2022) acknowledges the need for preventive interventions but offers no specific strategy for integrating digital literacy, and the county's Digital Literacy Strategy (2021–2025) focuses on infrastructure with little attention to crime prevention outcomes.

While global literature links youth empowerment broadly to crime reduction, empirical studies examining how community-based digital literacy programmes specifically influence youth crime management remain scarce, particularly in African contexts (Adeyemi et al., 2022), and no documented study has examined this relationship in Kisii County specifically. This study addresses that gap by examining how access, participation, and community integration in digital literacy programmes relate to youth crime management outcomes in Kisii County, generating localised evidence to inform policy, programme design, and future research across similar settings in Kenya and the wider region.

STATEMENT OF THE PROBLEM

Kenya envisions digitally empowered youth who are gainfully employed and positively integrated into their communities. Ideally, community-based digital literacy programmes should equip young people with essential technological skills, foster responsible digital citizenship, and create pathways towards legitimate employment, thereby reducing their vulnerability to criminal activities (Mwangi & Ndirangu, 2022). However, Kisii County experiences escalating youth crime rates, with juvenile delinquency cases increasing by 38% between 2019 and 2023 (National Crime Research Centre, 2023). Only 12% of youth in informal settlements access structured digital skills training (Kenya National Bureau of Statistics, 2021), whilst participation rates remain dismally low at 18% (Ochieng & Kamau, 2020). Additionally, 73% of young people lack basic digital competencies required for modern employment (Communications Authority of Kenya, 2022), leaving vulnerable youth without positive role models or guidance (Njoroge et al., 2021).

Consequently, youth unemployment stands at 67% in Kisii County (Kenya Youth Employment and Opportunities Project, 2022), creating fertile ground for criminal recruitment. Crime-related costs reach KES 2.3 billion annually (Kenya Institute for Public Policy Research and Analysis, 2023), whilst youth offender recidivism exceeds 52% (Directorate of Criminal Investigations, 2022). Despite this gravity, scholarly gaps exist in understanding community-based digital literacy programmes' role in youth crime management within Kenya. Previous studies neglect community-based approaches in rural settings (Wambugu & Kyalo, 2021), insufficiently exploring how digital skills acquisition, community engagement, and mentorship mediate the relationship between digital literacy and crime reduction.

This study sought to bridge these gaps by examining how community-based digital literacy programmes can be leveraged for youth crime management in Kisii County, informing evidence-based frameworks for integrating digital literacy into community crime prevention strategies.

RESEARCH OBJECTIVE

To assess the level of access to community-based digital literacy programs among youth in Kisii County.

RESEARCH QUESTION

What is the current level of access to community-based digital literacy programs among youth in Kisii County?

THEORETICAL FRAMEWORK

Empowerment Theory

Empowerment Theory, developed by scholars such as Barbara Solomon (1976) and Julian Rappaport (1987), examines how individuals and communities gain control over their lives and take an active role in shaping their social environment. The theory emphasises building personal, interpersonal, and political power so that individuals particularly marginalised populations can act to improve their circumstances. Empowerment operates at several levels: individual (psychological empowerment through self-efficacy and critical consciousness), organisational (participation in community structures), and community (collective action and resource mobilisation). Applied to youth crime management, the theory suggests that equipping youth with digital literacy skills strengthens their sense of agency, self-worth, and decision-making capacity, thereby reducing their vulnerability to criminal behaviour.

This theory directly informs the study's objective of assessing how access to digital literacy programmes influences youth crime management in Kisii County. Empowerment Theory holds that access to educational resources and skill-building opportunities is fundamental to breaking cycles of marginalisation. When youth in Kisii County gain access to community-based digital literacy programmes, they acquire not only technical skills but also critical thinking, digital citizenship awareness, and greater self-confidence, all markers of empowerment relevant to crime management. The theory also helps explain how digital skills acquisition, as an intervening variable, contributes to psychological empowerment by enabling youth to envision futures beyond criminal involvement, reducing the hopelessness that often precedes offending among marginalised youth.

Empowerment Theory has, however, attracted several criticisms. First, it lacks a universally accepted definition of empowerment: different scholars treat it as a process, an outcome, a psychological state, or a community capacity, making it difficult to operationalise and measure consistently across studies (Zimmerman, 2000; Perkins & Zimmerman, 1995).

Second, critics argue that the theory places heavy emphasis on individual agency while giving insufficient attention to structural barriers such as poverty, inequality, unemployment, discrimination, and weak governance. Even when individuals gain knowledge and skills, their ability to exercise control over their lives may remain constrained by broader socioeconomic and political conditions (Rappaport, 1987; Christens, 2012).

Third, the theory assumes that greater participation and access to resources automatically translate into positive behavioural outcomes. In practice, empowerment interventions do not always achieve this, since outcomes also depend on institutional support, community culture, economic opportunity, and policy environment. Empowerment alone may therefore be insufficient to address complex social problems such as crime, unemployment, or exclusion (Perkins & Zimmerman, 1995; Christens, 2012).

Opportunity Theory

Opportunity Theory, developed by criminologists Richard Cloward and Lloyd Ohlin (1960), extends strain theory by arguing that criminal behaviour arises not only from blocked legitimate opportunities but also from the availability of illegitimate ones within a person's social environment. The theory holds that youth turn to crime when they lack lawful means of achieving valued goals such as economic success and social recognition. Conversely, when legitimate opportunity structures education, vocational training, and employment pathways are accessible and viable, youth are more likely to pursue pro-social routes to success. The theory therefore stresses the importance of creating and expanding legitimate pathways for marginalised populations as a way of reducing crime.

Opportunity Theory is central to the study's objective of examining how community integration of digital literacy programmes influences youth crime management in Kisii County. The theory explains how community-integrated programmes create legitimate opportunity structures by linking digital skills training to employment prospects, entrepreneurship, and social participation. When programmes are embedded within the community through partnerships with local businesses, government agencies, and civil society, they create direct pathways from skill acquisition to economic inclusion addressing access to employment, a key indicator of youth crime management in this study. The theory also highlights how community engagement, as an intervening variable, strengthens programme effectiveness by ensuring that skills taught match local labour market needs. By expanding legitimate opportunities for advancement, community-integrated digital literacy programmes can reduce the relative appeal of criminal activity.

The theory has, nonetheless, faced several criticisms. It has been said to emphasise the availability of opportunities while underestimating individual characteristics such as self-control, moral values, and psychological factors that also shape whether a person offends since many individuals exposed to similar opportunities do not turn to crime (Gottfredson & Hirschi, 1990). It has also been criticised for focusing largely on socioeconomic disadvantage while paying little attention to crimes committed by individuals from affluent backgrounds, such as white-collar crime, cybercrime, and corporate fraud, which suggests that limited legitimate opportunity cannot explain all forms of offending (Siegel & Welsh, 2022).

Further, the theory assumes criminal opportunities are relatively stable and clearly structured within communities, yet technological and digital advances have transformed crime such as cyber fraud, identity theft, and online scams now occur in virtual spaces beyond the neighbourhood context the theory was built around (Yar, 2018).

It also offers limited explanation for why people exposed to identical opportunities behave differently, pointing to the role of family support, education, resilience, and individual motivation (Akers & Sellers, 2013), and it struggles to account for spontaneous or expressive crimes such as those arising from emotional conflict or substance abuse that occur without deliberate weighing of opportunity (Siegel & Welsh, 2022). Finally, concepts central to the theory, such as legitimate and

illegitimate opportunity structures, are difficult to operationalise consistently across different cultural and social contexts, limiting the theory's empirical testing (Cullen, Agnew, & Wilcox, 2021).

EMPIRICAL REVIEW

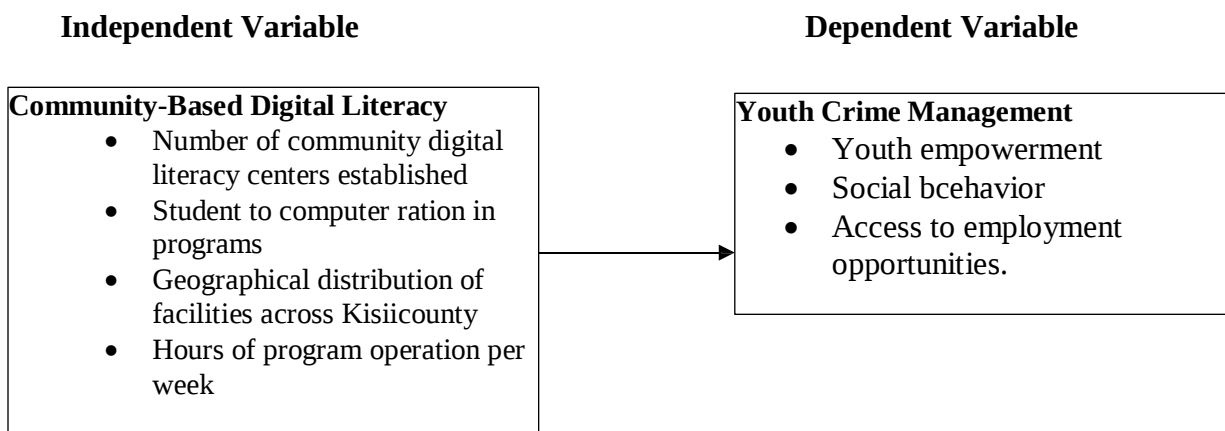
Access to digital literacy programmes has increasingly been recognised globally as a key component of youth development. As digital connectivity expands, programmes have shifted from basic computer training toward broader digital citizenship education covering online safety, data privacy, and responsible technology use (Chen & Zhang, 2024). In developed countries, community-based programmes have shown measurable benefits: centres offering digital literacy training in the United States report increased youth engagement alongside reduced juvenile delinquency in surrounding neighbourhoods (American Youth Development Institute, 2023), while similar patterns have been observed across European Union initiatives, particularly in urban areas (European Commission, 2024). The World Bank (2023) frames access to digital literacy as a protective factor against youth crime, though it notes that rural and disadvantaged communities remain underserved.

Across Africa, digital literacy has gained recognition as a tool for addressing youth unemployment and crime, reflected in continental strategies such as the African Union's Digital Transformation Strategy (2023). In South Africa, townships with active Community Technology Centres have recorded lower youth crime rates than comparison areas, attributed to practical skills training in areas such as coding and e-commerce that create legitimate income opportunities (Nkomo & Sibanda, 2024). Nigeria's National Youth Digital Skills Initiative has similarly reached a large number of youth, with participants reporting improved employment outcomes and reduced contact with law enforcement (Adebayo et al., 2023). Even so, the African Development Bank (2024) notes that while many African countries have launched digital literacy programmes, far fewer have achieved sustainable implementation with measurable crime-reduction outcomes.

Kenya has positioned itself as a regional leader in digital literacy, supported by wide mobile money infrastructure and a national programme that has reached a large number of learners since 2016. National data suggest that counties with greater digital literacy programme coverage tend to report lower youth crime rates, and that programme participants are less likely to engage in criminal activity within two years of completion (Ministry of Education, 2023; National Crime Research Centre, 2024). Community-based delivery through partnerships with technical institutions, community centres, and religious organisations has achieved higher completion rates than school-based alternatives (Digital Economy Blueprint, 2022).

Within Kisii County specifically, initiatives such as the Gusii Technical Institute Digital Initiative, Keumbu Hub, and programmes in Marani have collectively trained several hundred youth in coding, digital marketing, and basic ICT skills (Kisii County Government Report, 2023; County ICT Report, 2024). However, county data indicate that fewer than half of youth aged 15–24 have dependable access to these facilities, and only a minority benefit from regular digital training (County Government, 2025; KNBS, 2022).

CONCEPTUAL FRAMEWORK



METHODOLOGY

Research Design

The researcher adopted a mixed-methods strategy, incorporating both qualitative and quantitative techniques. This approach was preferred because it combines quantitative data with detailed qualitative insights, allowing for a fuller grasp of the study problem. Quantitative data were collected through structured questionnaires, which provided measurable information on the extent to which community-based digital literacy programmes have been implemented and their influence on youth crime management outcomes. Qualitative data was gathered through interview guides administered to programme coordinators and facilitators, community leaders and stakeholders, and law enforcement officers which enabled the researcher to explore the experiences and perceptions of key stakeholders, allowing for a deeper understanding of the challenges and benefits of such interventions in managing youth crime. Both qualitative and quantitative data were collected simultaneously but analysed separately and then integrated to provide a more comprehensive view of the research problem. This design allowed for the triangulation of findings, thereby enhancing the validity and reliability of the study results. By using both approaches, the study was able to assess not only the statistical trends associated with digital literacy interventions but also the lived experiences of the individuals involved, offering a holistic perspective on the effectiveness of community-based digital literacy programmes as a strategy for youth crime management.

Research Site

The study was conducted in Kisii County with specific study sites being Marani Sub County, Kisii Main Stage and Gusii Technical College. These areas were selected due to their large share of residents below 35 years of age.

Data Analysis

Data analysis in this study combined both quantitative and qualitative approaches. Quantitative data collected from the questionnaires were analysed using SPSS version 29, while qualitative data from interviews were analysed thematically. SPSS version 29 was used to code, input, and analyse the numerical data. Descriptive statistics, including frequencies, percentages, means, and standard

deviations, were used to summarise the findings. Inferential statistics, namely Pearson correlation and regression analysis, were used to examine the relationships between community-based digital literacy programmes and youth crime management. Qualitative data from interviews were analysed through thematic interpretation. Responses were reviewed, grouped into themes, and presented narratively in line with the study's objectives.

FINDINGS AND DISCUSSION

The study began by establishing the response rate. A total of 205 questionnaires were distributed to youth participants across four selected areas which are Marani Sub-County, Kisii Main Stage, Keumbu, and Gusii Technical Institute in Kisii Central Sub-County. Of these, 189 were returned, giving a response rate of 92.2%. Questionnaires administered to programme coordinators, facilitators, community leaders, stakeholders, and law enforcement officers through census sampling yielded 28 completed responses out of 32 targeted, a rate of 87.5%. Interview guides were administered to 24 key informants, of whom 22 participated, representing a response rate of 91.7%. According to Kothari (2004), a response rate above 60% is considered sufficient for data analysis. The overall response rate of 91.2% was therefore deemed adequate to support meaningful analysis and conclusions.

Table 1: Response Rate

Category	Target	Returned	Percentage
Youth Questionnaires	205	189	92.2
Stakeholder Questionnaires	32	28	87.5
Interview Guides	24	22	91.7
Total	261	239	91.2

Source: Field Data, 2025

As indicated in Table 1, a majority of the administered instruments were returned and duly completed. The overall response rate of 91.2% is considered adequate for analysis and generalisability of findings. The high response rate is attributable to the use of trained research assistants who personally administered the questionnaires and the use of simple, clearly worded questions in both English and Kiswahili. This aligns with Mugenda and Mugenda (2003), who argue that a response rate of 70% and above is sufficient for drawing valid research conclusions.

Access to Digital Literacy Programmes and Youth Crime Management

This objective examined how access to digital literacy programmes influences youth crime management in Kisii County.

Awareness and Accessibility of Digital Literacy Programmes

Findings showed that 72.5% (137) of youth respondents were aware of digital literacy programmes in their communities, while 27.5% (52) were not. Among stakeholders, 89.3% (25) confirmed that such programmes existed in their areas. These results point to a moderately high level of awareness overall, though a notable proportion of youth remain uninformed about available opportunities.

This finding aligns with Mutua (2021), who observed that awareness of digital literacy initiatives in rural Kenya is limited by weak outreach and constrained community mobilisation resources. The higher awareness recorded in urban areas such as Kisii Main Stage, compared with rural areas

like Marani Sub-County, reflects the urban-rural digital divide noted in the Kenya National ICT Policy (2020).

Means of Learning about Digital Literacy Programmes

Respondents most commonly learned about digital literacy programmes through friends and peers (34.4%, 65), followed by community leaders (22.2%, 42), programme facilitators (17.5%, 33), school or college (15.3%, 29), and social media (8.5%, 16); 2.1% (4) cited other means. These results highlight the importance of peer networks and community leadership in spreading awareness of digital literacy opportunities, supporting the treatment of peer influence as an intervening variable in this study.

Accessibility of Digital Literacy Programme Locations

Regarding physical accessibility, 41.3% (78) of youth respondents rated programme locations as very accessible, 36.5% (69) as moderately accessible, and 22.2% (42) as not accessible. Among stakeholders, 35.7% (10) rated programmes as very accessible, 42.9% (12) as moderately accessible, and 21.4% (6) as slightly accessible. The sizeable share of youth reporting inaccessibility raises concern about geographical barriers to participation. As one law enforcement officer explained, many at-risk youths in remote areas struggle to reach digital literacy centres due to distance and transport costs and argued that bringing such programmes closer to vulnerable youth is necessary if they are to meaningfully reduce crime (Law Enforcement Officer, Kisii Central Sub-County, November 2025).

Barriers to Accessing Digital Literacy Programmes

Respondents could select more than one barrier to access. Among youth, distance and transportation challenges were the most common barrier (48.1%, 91), followed by cost and fees (39.7%, 75), lack of awareness (31.7%, 60), time constraints (26.5%, 50), and lack of interest (14.3%, 27); only 8.5% (16) reported no barriers. Among stakeholders, inadequate infrastructure was cited most often (71.4%), followed by limited funding (64.3%), geographical barriers (57.1%), lack of awareness (42.9%), and cultural resistance (21.4%). These findings correspond with Ndemo and Weiss (2017), who identified infrastructure gaps and financial constraints as major obstacles to digital inclusion across sub-Saharan Africa.

Table 2: Barriers to Accessing Digital Literacy Programmes

Barrier	Frequency	Percentage
Distance/Transportation	91	48.1
Cost/Fees	75	39.7
Lack of Awareness	60	31.7
Time Constraints	50	26.5
Lack of Interest	27	14.3
No Barriers	16	8.5

Source: Field Data, 2025

Table 2 illustrates that distance and transportation were the most frequently cited barriers to programme access, reported by 91 (48.1%) of youth participants. Cost and fees were cited by 75 (39.7%), followed by time constraints (26.5%), lack of awareness (31.7%), and lack of interest (27%). These findings demonstrate that structural and economic barriers are the most significant

impediments to accessing digital literacy programmes among youth in Kisii County. Njiraini et al. (2021), who argued that the digital divide in Kenya is largely driven by socio-economic disparities rather than individual disinterest in digital engagement.

Table 3: Descriptive Statistics for Access to Digital Literacy Programmes

Statement	N	Min	Max	Mean	Std. Dev.
Equipped me with employable skills	189	1	5	3.81	.621
Improved my confidence about the future	189	1	5	3.94	.578
Improved my understanding of responsible digital citizenship	189	1	5	3.78	.643
Gave me practical income-generating skills	189	1	5	3.72	.694
Average Mean				3.81	.634

Source: Field Data, 2025

The descriptive statistics in above table show that youth participants generally agreed that access to digital literacy programmes contributed positively to their empowerment and prospects for economic self-sufficiency, with individual means ranging from 3.72 to 3.94. The overall average mean of 3.81 (SD = .634) indicates strong agreement that programme access positively influenced outcomes relevant to youth crime management. This is consistent with Tapera (2021), who found that youth access to digital skills training in sub-Saharan Africa significantly improved employment prospects and reduced behavioural risk factors linked to criminal engagement.

Qualitative Findings on Access to Digital Literacy Programmes

Interviews with programme coordinators, community leaders, and law enforcement officers offered further insight into access-related challenges. Programme coordinators identified limited funding as the main barrier to expanding access, with several noting that dependence on donor support made sustainability uncertain. One coordinator explained that willing youth were often turned away due to insufficient computers, unreliable internet connectivity, and inadequate training space.

Community leaders pointed to geographical distance as a major obstacle, particularly in Marani Sub-County, where youth must travel far to reach digital literacy centres. One community elder noted that while many young people were eager to learn, the cost of transport to the nearest centre was often prohibitive.

Law enforcement officers similarly observed that most youth encountered in criminal cases had never participated in a digital literacy or vocational programme, and suggested that greater accessibility could prevent many such cases from arising. These qualitative accounts reinforce the quantitative findings and underline the close relationship between programme access and youth crime management outcomes.

Table 4: Correlation Matrix

Variable	Access to Digital Literacy Programmes	Youth Crime Management
Access — Pearson	1	
Correlation		
Sig. (2-tailed)		
N	189	
Youth Crime Management		
Pearson Correlation	.487	1
Sig. (2-tailed)	.001	
N	189	189

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

Source: Field Data, 2025

The Pearson correlation coefficient of $r = .487$ ($p < .001$) indicating a moderate, positive, and statistically significant relationship between access to digital literacy programmes and youth crime management. This suggests that improvements in programme access are associated with better youth crime management outcomes in Kisii County, a finding consistent with Mugo et al. (2018), who found that increased youth access to structured skills development programmes significantly reduces involvement in criminal activity.

Presented below are regression analysis results on access to digital literacy programmes and youth crime management.

Table 5: Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error
1	.487a	.237	.233		.26814

The R-Square value of .237 indicates that access to digital literacy programmes accounts for 23.7% of the variation in youth crime management outcomes, a meaningful share, suggesting programme access is a significant determinant of youth crime management in Kisii County.

Table 6: ANOVA

Model	Sum Squares	of df	Mean Square	F	Sig.
Regression	1.421	1	1.421	58.047	.001b
Residual	4.578	187	.0245		
Total	5.999	188			

The ANOVA result, $F(1, 187) = 58.047$, $p < .001$, confirms the regression model is statistically significant. Access to digital literacy programmes significantly predicts youth crime management. The null hypothesis that access to digital literacy programmes has no significant relationship with youth crime management is therefore rejected.

Table 7: Regression Coefficients

Model	B	Std. Error	Beta	t	Sig.
(Constant)	2.124	.284		7.479	.000
Access to Digital Literacy Programmes	.341	.077	.487	4.446	.000

The resulting regression equation is:

$$Y = 2.124 + 0.341X$$

This indicates that for every unit increase in access to digital literacy programmes, youth crime management outcomes improve by 0.341 units, holding other factors constant. This is consistent with Nduati (2020), who found that increased access to structured community interventions significantly reduced youth criminal risk factors in Kenyan counties.

CONCLUSION

The study concluded that access to digital literacy programmes is a statistically significant and practically meaningful determinant of youth crime management in Kisii County. While awareness of programmes is relatively high among youth, physical, financial, and logistical barriers continue to limit equitable access, particularly for the most at-risk youth. Youth who successfully access these programmes gain digital skills, employment prospects, and improved confidence, all of which reduce the likelihood of criminal engagement. This is consistent with the opportunity theory (Cloward & Ohlin, 1960), which posits that crime arises when individuals lack legitimate means to achieve socially valued goals. By expanding access to digital skills training, communities create legitimate pathways to economic inclusion that reduce the structural frustrations underpinning youth criminality.

RECOMMENDATIONS

National and county governments, working with NGOs, development agencies, and private sector partners, should invest in expanding the reach and affordability of digital literacy programmes in Kisii County. Data collection revealed that only two of the county's eleven sub-counties namely Kisii Central and Marani currently have community-based digital literacy programmes. Law enforcement data further suggested that sub-counties without such programmes recorded higher levels of criminal activity than those with them. To address this gap, additional centres should be established in underserved areas such as Marani sub-county, mobile digital literacy units deployed to reach dispersed communities, and programme fees subsidised or waived for youth from low-income households. Solar-powered digital hubs and mobile internet connectivity could also help close existing infrastructure gaps. Addressing these structural barriers is essential to reaching the youth who are most at risk yet least likely to access current programmes.

Law enforcement agencies should formalise collaboration with digital literacy programme coordinators as part of a wider community crime prevention strategy. This could include joint outreach events, referral pathways for at-risk youth identified by police, and data sharing on youth crime trends to inform programme targeting. A county-level interagency coordination committee bringing together law enforcement, community organisations, programme providers, and youth representatives would give this collaboration a lasting structure.

The Kisii County Government should develop a formal Digital Literacy and Youth Crime Prevention Policy, integrating digital skills training into its youth development and public safety

frameworks. This policy should provide dedicated funding, establish monitoring and evaluation systems, and mandate coordination among the Education, Youth Affairs, ICT, and Security departments. At the national level, the Ministry of ICT and the Ministry of Interior and Coordination of National Government should jointly develop guidelines for integrating digital literacy into community policing, drawing on evidence from models such as Kisii County's.

REFERENCES

- Adebayo, O. A. Mohammed, S., & Usman, A. (2023). *Impact of digital literacy programs on youth employment in Nigeria: A longitudinal study*. African Journal of Development Studies, 18(2), 45-67.
- African Development Bank. (2023). *African Economic Outlook 2023: Mobilizing Private Sector Financing for Climate and Green Growth in Africa*.
- African Union. (2024). *Digital transformation strategy for Africa implementation progress report*. African Union Commission.
- American Youth Development Institute. (2023). *Community-based digital literacy programs: Impact assessment report*. Washington, DC: AYDI Publications.
- Chen, L., & Zhang, M. (2024). *Evolution of digital literacy programs: From basic skills to digital citizenship*. International Journal of Educational Technology, 41 (2), 156-174.
- Economic Community of West African States. (2023). *ECOWAS digital economy programme: Youth crime prevention outcomes*. ECOWAS Commission.
- European Commission. (2023). *Digital education action plan 2021-2027: Mid-term evaluation report*. Publications Office of the European Union.
- European Commission. (2024). *Digital communities for youth development: Best practices from EU member states*. Brussels: European Commission Digital Education Unit.
- European Union. (2024). *Digital Communities Project: Final evaluation report*. Brussels: EU Publications Office.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage Publications.
- Gusii Technical Institute. (2023). *Digital initiative impact assessment report 2021-2023*. Gusii Technical Institute.
- International Association of Community Technology Centers. (2024). *Global survey of community technology centers: Impact and best practices*. Washington, DC: IACTC Publications.
- Kenya Association of Manufacturers. (2022). *Youth employment and digital literacy: Impact assessment study*. KAM Publications.
- Kenya Community Development Foundation. (2023). *Evaluation of community-based digital literacy programs in Kenya*. KCDF Research Report.
- Kenya Institute for Public Policy Research and Analysis. (2022). *Digital literacy and youth development: County-level analysis*. KIPPRA Policy Brief.

- Kenya National Bureau of Statistics. (2023). *Economic Survey 2023*.
- Kenya National Bureau of Statistics. (2023). *Kenya demographic and health survey 2022: Key indicators report*. KNBS.
- Kenya National Bureau of Statistics. (2024). *Kenya demographic and health survey 2022*. Nairobi: KNBS.
- Kisii County Digital Literacy Coordinating Committee. (2023). *County digital literacy program assessment 2023*. Kisii County Government.
- Kisii County Youth Development Office. (2023). *Youth development strategy and crime prevention outcomes*. Kisii County Government.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques (2nd ed.)*. New Age International Publishers.
- Ministry of Education, Kenya. (2023). *Digital literacy programme impact assessment report*. Nairobi: Ministry of Education.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. African Centre for Technology Studies.
- Mwangi, A. N., Kiprotich, S., & Wanjala, M. (2024). *Participation patterns in digital literacy programs: A multi-county analysis in Kenya*. *African Educational Research Journal*, 12(3), 201-218.
- National Crime Research Centre, Kenya. (2024). *Youth crime trends and prevention strategies: Annual report 2023*. Nairobi: NCRC.
- Nkomo, S., & Sibanda, P. (2024). *Community technology centers and youth crime prevention in South African townships*. *African Security Review*, 33(2), 145-162.
- Organisation for Economic Co-operation and Development (OECD). (2024). (Placeholder - search for relevant OECD reports on youth skills, digital education, or crime prevention in developed countries).
- Republic of Kenya. (2013). *The Kenya national commission for science, technology and innovation act, 2013*. Government Printer.
- Republic of Kenya. (2019). *Kisii County integrated development plan 2018-2022*. County Government of Kisii.
- World Bank. (2023). *Global digital inclusion initiative: Progress report and lessons learned*. Washington, DC: World Bank Publications.
- Yin, R. K. (2018). *Case study research and applications: Design and methods (6th ed.)*. Sage Publications.