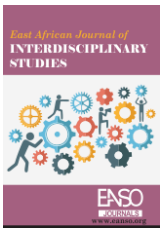
Article DOI: https://doi.org/10.37284/eajis.8.2.3378



East African Journal of Interdisciplinary Studies
eajis.eanso.org
Volume 8, Issue 2, 2025
Print ISSN: 2707-529X | Online ISSN: 2707-5303
Title DOI: https://doi.org/10.37284/2707-5303

EAST AFRICAN NATURE & SCIENCE ORGANIZATION

Original Article

Estimating the Extent of Money Muling: The Case of a University Campus in Nairobi, Kenya

Peter Kibet[1*]

[1] Dedan Kimathi University of Science and Technology, P. O. Box 234-20115, Kenya.
* Author's ORCID ID; https://orcid.org/0009-0002-6319-5450; Email:kibetpeter007@gmail.com

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

Date Published:
23 July 2025

Keywords:
Mules, Money muling, Money Laundering, Students, Extent, Demographics.

ABSTRACT

Money muling is not only a crime but is one of the major enablers of a 5 trillion United States Dollar (USD) criminal enterprise globally. Very little is known about money muling, yet it contributes significantly to money laundering, which is to blame for widespread terrorism, crime and proliferation financing globally. The lack of knowledge and data on this phenomenon significantly hampers efforts to measure, manage, and control money laundering and associated crimes. This study sought to assess and estimate the extent of money muling among university students at a university campus in Nairobi, Kenya, with the aim of adding to the literature and recommending tactical action. Using a sample of 121 respondents from a population of 174, the study found that there exist significant levels of money muling among respondents, with a 63% overall rate of involvement. Unwitting money muling was the most prevalent (90%), followed by complicit (44%) and witting (24%), respectively. This study also established that money muling was more prevalent among undergraduate students (93%), males (61%) and younger students aged below 40 years (93%). Consequently, several recommendations, including proposed amendments to the Proceeds of Crime and Anti-Money Laundering Act (POCAMLA) of 2009, targeted awareness and training of tertiary level students on financial crime and the need for better measurement and documentation of money laundering and crime statistics in universities and colleges ensued from the findings.

APA CITATION

Kibet, P. (2025). Estimating the Extent of Money Muling: The Case of a University Campus in Nairobi, Kenya. *East African Journal of Interdisciplinary Studies*, *8*(2), 1-18. https://doi.org/10.37284/eajis.8.2.3378.

CHICAGO CITATION

Kibet, Peter. 2025. "Estimating the Extent of Money Muling: The Case of a University Campus in Nairobi, Kenya". *East African Journal of Interdisciplinary Studies* 8 (2), 1-18. https://doi.org/10.37284/eajis.8.2.33678

HARVARD CITATION

Kibet, P. (2025) "Estimating the Extent of Money Muling: The Case of a University Campus in Nairobi, Kenya", *East African Journal of Interdisciplinary Studies*, 8(2), pp. 1-18. doi: 10.37284/eajis.8.2.3378.

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

IEEE CITATION

P., Kibet "Estimating the Extent of Money Muling: The Case of a University Campus in Nairobi, Kenya", *EAJIS*, vol. 8, no. 2, pp. 1-18, Jul. 2025.

MLA CITATION

Kibet, Peter. "Estimating the Extent of Money Muling: The Case of a University Campus in Nairobi, Kenya". *East African Journal of Interdisciplinary Studies*, Vol. 8, no. 2, Jul. 2025, pp. 1-18, doi:10.37284/eajis.8.2.3378.

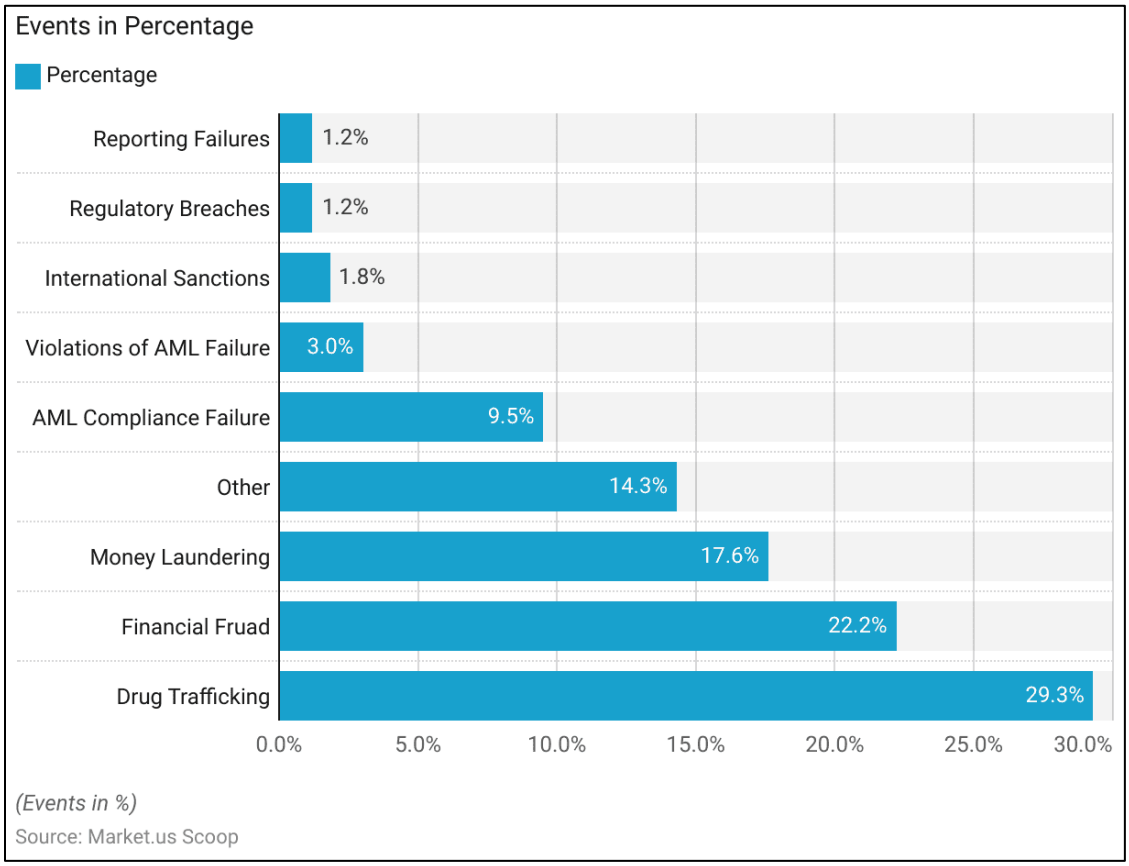
INTRODUCTION

The global scale of money laundering and money muling remains largely uncertain and underreported. However, some efforts have been made by some stakeholders to estimate its prevalence and impact. Money laundering refers to the process of concealing and disguising the illegitimate proceeds of crime as though they were legitimate by using a combination of actions and parties to avoid detection by the criminal justice process. Money muling, on the other hand, refers to the process of transferring or conveying proceeds of crime using indirectly involved parties (Federal Bureau of Investigation, 2021) with the same aim to conceal the real criminal source and nature of the proceeds. Money mules are the individuals who facilitate money muling and are classified into three categories: unwitting (unknowing), witting (ignorant) and complicit (culpable). They play a critical role in money laundering because they enable criminals from all realms to legitimise the proceeds of crime. Ironically, very little is known about the extent of this phenomenon.

Money laundering is an inchoate crime that enables criminals to sanitise and comingle proceeds from other crimes with legitimate proceeds in readiness for appropriation. Proceeds that have been laundered are invested in ventures such as businesses, luxury lifestyles, or are used to fund terrorism and proliferation financing initiatives (United Nations Office on Drugs and Crime, n.d.). Illegal drug trade and financial fraud are the two main sources of proceeds that are laundered globally (Financial Transparency Coalition, 2011; Market.us, 2024). Other sources of laundered proceeds emanate from corruption and bribery, tax evasion, organised crime and cybercrime. According to Europol (n.d), 90% of money mule transactions identified through the European Money Mule Actions (EMMA) in 2016 were linked to cybercrimes, including phishing attacks and scams.

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

Figure 1: Money Laundering Events Across the Globe



Note. Summary of money laundering events across the globe. Adapted from Market.us. (https://scoop.market.us/anti-money-laundering-software-statistics/)

LITERATURE REVIEW

Understanding Money Muling

Money mules are largely classified into three: unwitting, witting, and complicit money mules (Federal Bureau of Investigation, 2021). Unwitting mules participate in money muling unknowingly, either because they are entirely unaware or because their victimisers employ complex and clandestine tactics to disguise their intent to mule proceeds of crimes. Witting mules are individuals who engage in money muling despite disregarding warning signs. These signs may include bogus job advertisements and scams that money mule recruiters use to entice unsuspecting individuals, leading them to participate negligently. Complicit mules, on the other hand, are the highest ranking on the culpability scale and refer to individuals who are aware of money muling and deliberately elect to participate with the intent to earn a reward. This reward is often a percentage of the value being muled. Complicit mules may even go further to recruit other mules, create, popularise, and manage structured money muling rackets that criminals can hire to commit serial money laundering (FBI, 2021). In money muling, culpability rises with awareness; the more aware an individual is about money muling an individual is, the likelier they are to be a complicit money mule.

Measuring the extent of money muling accurately is difficult due to the complexity of the phenomenon and differences in the conceptualisation of money muling across different jurisdictions (Aston et al., 2009; Raza et al., 2020). Some jurisdictions have laws particular to money muling, while others adjudicate and prosecute money muling as an

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

inchoate crime to other crimes such as money laundering and fraud. Money mules are thus charged as accomplices to those crimes and not explicitly for money muling.

Extent of Money Laundering: Global Overview

Accurately determining the value of money laundered globally remains a significant challenge. The Financial Action Task Force (FATF), which is the organ responsible for implementing and overseeing the anti-money laundering (AML) framework globally, acknowledges and attributes this difficulty to the clandestine and widespread nature of money laundering and related activities. Consequently, FATF does not publish official figures on the extent of money laundering (FATF, n.d.). Nevertheless, it is estimated that money laundering constitutes between 2% and 5% of the annual global gross domestic product (GDP) (FATF, n.d.; United States Department of Justice [USDOJ], 2011). The United Nations Office on Drugs and Crime (2011) reported that in 2009, criminal proceeds amounted to 3.6% of global gross domestic product (GDP), with about 2.7% (an estimated USD 1.6 trillion) being laundered through the formal financial channels. Based on these estimates, it is projected that more than USD 5 trillion may be laundered annually in 2025. This statistic remains a landmark finding to date and forms the basis of reference when estimating the extent of money laundering as a percentage of annual GDP. MARKETSANDMARKETS (2023) estimated that the Anti-money laundering franchise will grow to about USD 6.8 billion by 2028 from USD 3.1 billion in 2023, with a Compound Annual Growth Rate (CAGR) of 17% annually. The money laundering franchise works in direct response to money laundering; thus, a growing franchise is an indicator of a direct positive correlation between money laundering and anti-money laundering efforts. Invezz (2023) reported that cryptocurrency-related money laundering surged by 68% in 2022, reaching USD 23.8 billion, compared to USD 14.2 billion in 2021. These statistics point to a proliferating trend in money laundering that is supported by nefarious activities, such as money muling, which very little is known about.

Extent of Money Laundering and Money Muling: Country Profile

The United Kingdom (UK) and the United States of America (USA)

According to Invezz (2023), an estimated USD 300 billion is laundered annually in the United States, while approximately EUR 100 billion is laundered each year in the United Kingdom. The UK and the USA are among the top highly compliant anti-money laundering jurisdictions globally, where the UK was ranked by the Basel Institute of Governance (2021) 93rd out of 110 countries (110 being the most compliant), with an index of 4.05. This was only seven ranks below the world's top ten. In the same rankings, the USA ranked 83rd out of 110 with an index of 4.60. Despite these two jurisdictions' favourable ranking, a significant rise in money mule activity has been recorded recently. In 2020, there were 17,157 suspected cases of money muling involving persons aged 21 to 30 years in the UK; this was a 5% rise compared to 2019. In 2023, there were 17,286 suspected cases of money muling in the UK, with 23% of these cases involving people under 21 years of age. Of all cases recorded, younger adults below the age of 30 years accounted for 64% (CIFAS, 2021, 2023). The United Kingdom Financial Intelligence Unit (UKFIU) reports that it receives over 460,000 Suspicious Activity Reports (SARs) annually, with a substantial number of these involving suspected cases of money laundering (National Crime Agency [NCA], n.d.). NCA estimates that the amount of money laundered annually in the UK could be anywhere between £36 and £90 billion (Rudd, 2016). These figures are consistent with reports by Invezz (2023) on the extent of money laundering in the UK.

In 2017, UK banks identified 8,500 money mule accounts owned by people under 21 years, some belonging to teenagers as young as 14 years old

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

(CIFAS, 2021). Santander Bank (UK) reported that it closes approximately 24,000 bank accounts each year due to suspected fraud, with nearly half of these (approximately 11,000) believed to be associated with money mule activities (Monaghan, 2019). These statistics indicate a concerning upward trend, from 8,500 suspected money mule accounts across multiple banks in 2017 to approximately 11,000 accounts within a single financial institution.

The USA is reportedly the leading source of proceeds laundered, with 46.3% followed by Italy (5.3%) and Russia (5.2%), according to Market.us (2024). In the same rankings, the UK is ranked 9th in the world with 2.4%. Among the top ten sources of criminal proceeds, Europe accounts for 60%, followed by Asia and North America with 20% each. This indicates that despite best efforts and favourable ranking in relation to compliance with AML regulatory requirements, there exists a great need to launder the proceeds of crime in these regions.

Kenya

Kenya is reportedly East Africa's economic hub with a GDP of 108 billion USD according to 2023 statistics reports (World Bank, 2025). It also has one of the highest digital penetration rates, with an estimated 77.3 million registered mobile money accounts at the end of the year 2023 (Statista, 2024). According to the Central Bank of Kenya (2022), the annual mobile money transaction turnover rose by close to KES 6 trillion in a decade from approximately KES 1 trillion in 2010 to KES 6.9 trillion in 2021. Kenyans transact an average of KES 18 billion via mobile money daily (Amadala, 2021), with diaspora remittances totalling USD 4.19 billion in 2023 (Global Forum on Remittances, Investment and Development, 2024). These statistics point to a robust economy with mass exchange and circulation of money, which is ideal for money launderers and money mules to comingle proceeds of crime with legitimate funds.

According to Reuters (2025), the European Commission added Kenya to its list of high-risk money laundering jurisdictions following the identification of deficiencies in the country's AML framework. This classification aligns with the United States' designation of Kenya in 2022 as a Country of Primary Concern regarding money laundering and financial crimes (U.S. Department of State, 2022). In 2024, the Financial Action Task Force (FATF) added Kenya to its grey list due to deficiencies in the detection and reporting of suspicious financial activities (FATF, 2025). Additionally, the Basel Institute on Governance (2021) ranked Kenya 9th globally and 4th in Africa in its Money Laundering and Terrorist Financing Risk Index, highlighting the country as a major hotspot for illicit financial activities... The high level of corruption and bribery further exacerbates this situation, where Kenya ranked 124th out of 180 with a score of 31/100 in the global corruption rankings in 2020 (Transparency International, 2021).

The Kenyan economy is characterised by emerging and thriving activities and businesses such as financial remittance service providers, mobile network operators, saccos, real estate, legal, and motor vehicle dealerships. These industries are largely cash-intensive and involve layered operations, which makes auditing for AML compliance difficult. This provides ideal means for the placement and layering of proceeds of crime. These sectors and industries also remain loosely regulated compared to the formal banking sector in Kenya, thus providing money launderers and mules opportunities to commit money laundering while remaining undetected.

While there does not exist a central repository of money muling statistics in Kenya, some resounding cases explain how deeply rooted money laundering and money muling might be. One such case involved a former county governor, where illegally acquired assets worth KES 235 billion were recovered by the state in a graft case that the accused

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

was in possession of unexplained wealth worth KES 2 billion in cash and assets (Business Daily Africa, 2024). Another case is that of a 23-year-old female student who was charged with facilitating the transfer of proceeds of crime worth KES 102 million through a bank account she had opened shortly before receiving the funds (Nation Media Group, 2023). These are some isolated cases that indicate what might be a severe problem that remains hardly accurately detected, measured, reported and documented.

Money Muling Among Students

Studies on crime among university students have reported a high prevalence of crimes such as theft (43.9%), room burglary (35.9%), physical assault (10%), sexual harassment (6.6%), and mugging (3.6%) among university students in Kenya (Chebii et al., 2017). Pryce et al. (2018) found that in a university in Kenya, more than 50% of crimes recorded were perpetrated by students themselves. However, like the referenced study, most other studies focus solely on violent and property crimes to the exclusion of white-collar crimes (especially financial crime commission and victimisation among university students in Kenya).

Recruiters of money mules employ meticulous recruitment methodologies since mules must provide confidence to the criminal that they will serve as a dependable proxy for laundering crime proceeds (sumsub, 2022). Attackers thus apply a robust screening and targeting methodology to identify potential money mules. Among those listed as potential targets for money muling are young people with access to bank and remittance accounts, identity documents, college-aged students and the emotionally and financially vulnerable (FBI, 2021; Rani et al., 2023; sumsub, 2022). College and university students consequently fall within a high-risk category for money muling. Students often spend significant time on the internet and social media platforms such as Telegram, X (formerly Twitter), and Facebook. These platforms are exploited by money mule recruiters who use deceptive tricks to lure potential mules (Sumsub, 2022). Such deceptive mechanisms include bogus job advertisements promising quick earnings and romantic scams.

In 2020, a university student in Hong Kong and her boyfriend were accused of laundering over USD 46 million through their bank accounts (Lo, 2020). Similarly, Amrit and 19-year-old Tarun Gupta, both students in the UK, disclosed that they had been approached by money launderers and had agreed (for a fee) to allow their bank accounts to be used for laundering criminal proceeds (Randhawa, 2016). In Kenya, a court ordered the forfeiture of KES 102 million suspected to be proceeds of crime that had been funnelled through the account of a 23-year-old female student (Nation Media Group, 2023). While these individual incidents highlight the alarming involvement of students in money laundering, they represent only a few documented cases and may not reflect the true scope of the problem. The actual extent of money muling among university students remains chiefly unknown and undocumented. This contributes to the ambiguity surrounding this phenomenon. This study, therefore, undertook deliberate efforts to measure, estimate, and report the prevalence of money muling among student respondents.

METHODOLOGY

This study employed a survey research design to answer the research questions. Respondents were asked to provide answers to questions that reflected their involvement, or non-involvement, in money muling-related activities. Surveys are ideal because they are highly flexible, versatile, and efficient in data collection. They also permit anonymity and privacy, especially when dealing with sensitive research topics such as the one studied herein (Lee et al., 2023).

The study targeted university students at an urban university campus within Nairobi city, the capital city of Kenya. University students were an ideal target population because they have been identified

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

as one of the most at-risk populations for money muling and financial crime (CIFAS, 2023; Europol, n.d; FBI, 2021).

One hundred and twenty-one respondents were targeted from a population of 174 students. Slovin's Formula was used to derive the sample size. This formula is simple, practical, flexible and ideal for scientific research (Ryan, 2013). The formula is as below.

$$\mathbf{n = N / (1+N(e)^2)} \quad (1)$$

Equation (1) is Slovin's formula, where **n** = Number of samples, **N** = Total population, **e** = Error tolerance/margin of error.

Cross-sectional data were obtained from the respondents using the Simple Random Sampling (SRS) technique. SRS is a probabilistic sampling technique that ensures that respondents to a study have an equal and non-zero chance of being included in the sample. It is simple, has high internal and external validity and is unbiased (Horton, 2021; Smith, 2020). A questionnaire was used to collect quantitative data from respondents. Questionnaires allow the researcher to decide on the type of data to collect, whether qualitative or quantitative. They also permit the researcher to ask both closed and open-ended questions, which allows respondents to express themselves in the best way they know how (McLeod, 2018). Of the 121 targeted respondents, there were 65 successful responses, representing a response rate of 54%. Although this response rate presented the risk for non-response bias because of the potential difference between those who responded and those who did not, it was nonetheless adequate for a study of a scientific nature, according to Creswell and Creswell (2023). This study covers a sensitive research area, which could have dissuaded respondents from responding for fear of self-implication despite best efforts to guarantee respondents that the data collected was purposely for academic research.

To assess and document demographic attributes, respondents were required to provide information about their gender, age, occupation, income levels, and level of education. The extent of money muling was measured by asking respondents to indicate whether they had sent or received money via mobile/bank, cash, or any other means on behalf of either an acquaintance (unwitting), a stranger (witting), or solely to be paid for executing such a transaction (complicit). This operationalisation of money muling was guided by the FBI's conceptualisation of the three existing forms of money muling. Additionally, respondents were required to provide information related to the frequency of involvement, values transacted, and the values received as rewards. Data analysis was conducted using Microsoft Excel version 2501 (Build 16.0.18429.20132) and involved calculating the frequencies, percentages, and modes for different data sets. The data analysed is presented in tables and figures.

Logistical and ethical considerations were made and observed following the research requirements of the National Commission for Science, Technology and Innovation (NACOSTI, n.d.).

RESULTS AND DISCUSSIONS

Sample

Most respondents (83%) were undergraduate students, while 9% were postgraduate students. Male respondents comprised 64.6% of the sample, while females accounted for 32.3%. Most respondents were aged between 31 and 40 years (47.7%), followed by those aged 20 to 30 years (30.8%), over 40 years (12.3%), and those under 20 years (3.1%). Approximately 92.3% of respondents were engaged in some form of employment, where the majority (73.8%) worked in the formal sector. The most common income range reported was between KES 10,000 and 50,000, representing 38.4% of respondents. Additionally, 92.3% of participants identified as religious, while 3.1% did not report any religious affiliation. The

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

demographic characteristics of the respondents are summarised in Table 1.

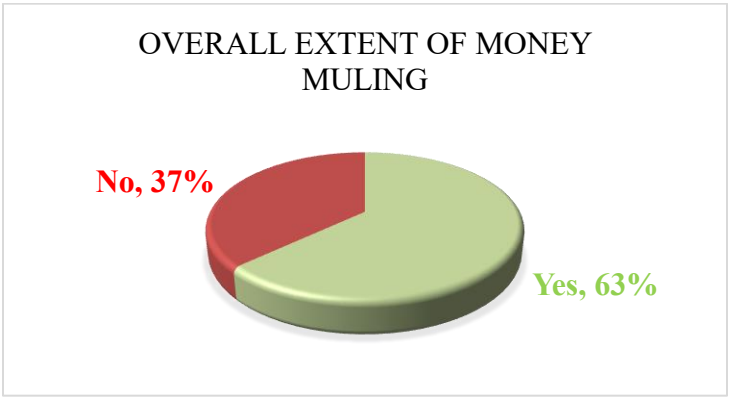
Table 1: Summary of Demographic Characteristics of Respondents

Demographic Attributes		No. Of Respondents	Percentage
GENDER	Male	42	64.6%
	Female	21	32.3%
	Did not say	2	3.1%
AGE	<20 Years	2	3.1%
	20-30 Years	20	30.8%
	31-40 Years	31	47.7%
	>40 Years	8	12.3%
	Did not say	4	6.1%
EMPLOYMENT STATUS	Formally employed	48	73.8%
	Self-Employed	12	18.5%
	Unemployed	3	4.6%
	Did not say	2	3.1%
INCOME (KES)	<10,000	7	10.8%
	10,000-50,000	25	38.4%
	50,001-100,000	23	35.4%
	>100,000	7	10.8%
	Did not say	3	4.6%
LEVEL OF EDUCATION	Undergraduate	54	83.1%
	Postgraduate	6	9.2%
	Did not Say	5	7.7%
RELIGIOSITY	Yes	60	92.3%
	No	2	3.1%
	Did not Say	3	4.6%

Extent of Money Muling among Respondents

The study established that money muling existed among respondents. Overall, 63% of respondents reported involvement in any or all three forms of money muling. Contrastingly, 37% of respondents indicated they had not been involved in any form of money muling. Only 9% of respondents reported having been involved in all three forms of money muling. These findings support assertions by the FBI and Europol that money muling is predominant among tertiary level students. The overall rate of money muling among respondents is presented in Figure 2.

Figure 2: Overall Extent of Money Muling

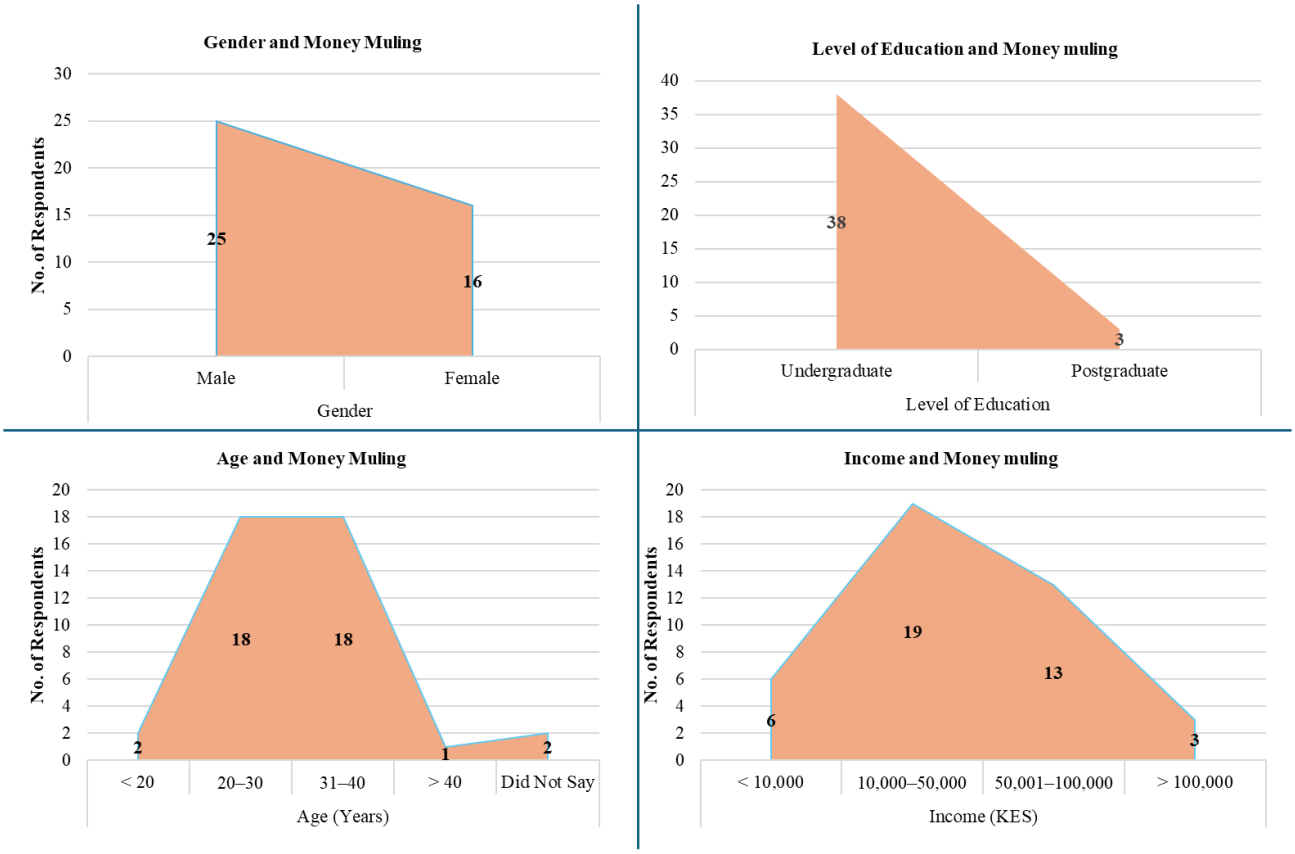


Article DOI: https://doi.org/10.37284/eajis.8.2.3378

Demographic Characteristics of Money Mules: Overall Extent

Among the 41 respondents who had been involved in any or all of the three forms of Money Muling, 25 were male, while 16 were female. Two were aged below 20 years, 18 were aged between 20 and 30 years, and 31 and 40 years consecutively. One respondent was aged above 40 years. Those serving in formal employment and those with incomes of between KES 10,000 and KES 50,000 comprised the majority of money mules. This is consistent with reports that younger individuals and males are more likely to practice money muling. The demographic characteristics of money mules (overall extent) are as presented in Figure 3.

Figure 3: Demographic Characteristics of Money Mules (Overall Extent)

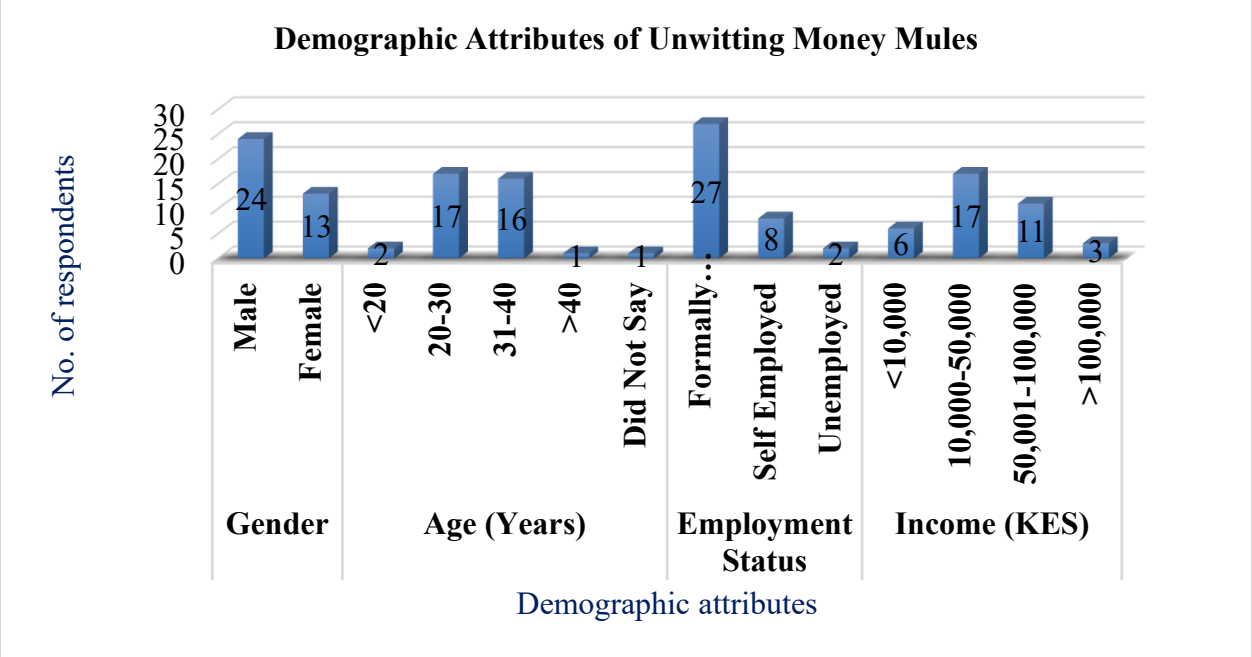


Extent of Money Muling: Unwitting Money Muling

Unwitting money muling in this study was conceptualised and operationalised as respondents transacting value on behalf of an acquaintance. Among the 41 respondents who had been involved in money muling, 37 fit into this category. This denoted a 90% rate of perpetration of unwitting money muling. Unwitting money mules were predominantly males, those aged between 20 and 30 years, those serving in formal employment, and those with incomes of between KES 10,000 and KES 50,000. The demographic characteristics of unwitting money mules are presented in Figure 4.

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

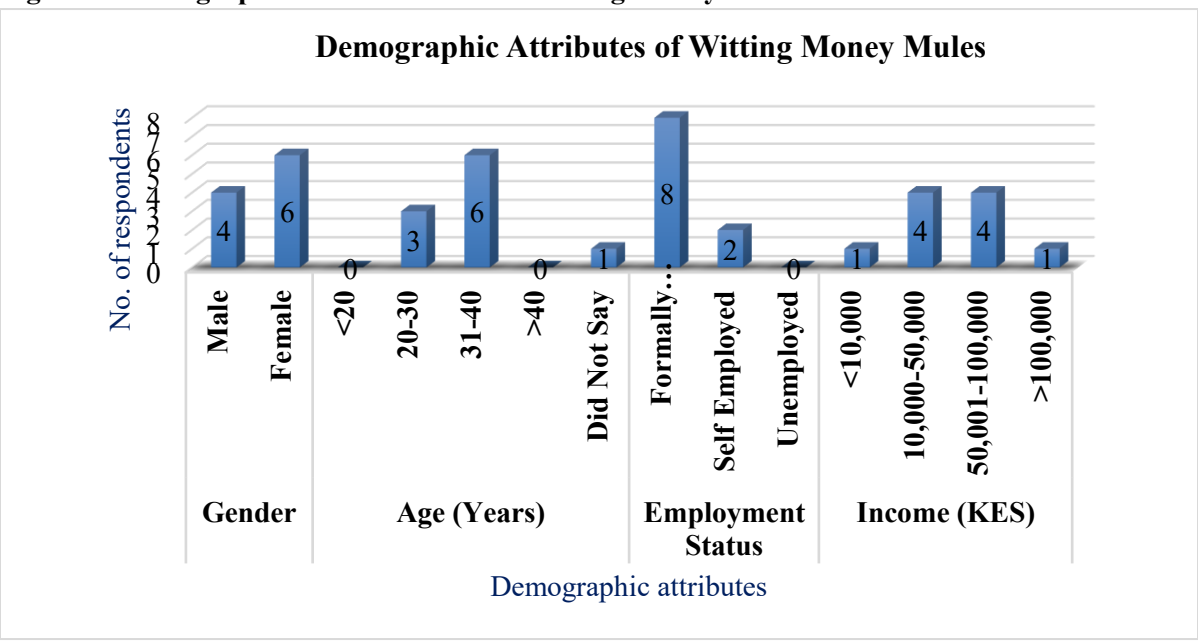
Figure 4: Demographic Characteristics of Money Mules



Extent of Money Muling: Witting Money Muling

Witting money mules in this study were operationalised as respondents who had facilitated the transfer of value on behalf of strangers. Among the 41 respondents who had been involved in money muling, 10 (24%) fit into this category of money mules. Females, those aged between 31 and 40 years, and those in formal employment were the majority for this form of money muling. The demographic characteristics of witting money mules are presented in Figure 5.

Figure 5: Demographic Characteristics of Witting Money Mules

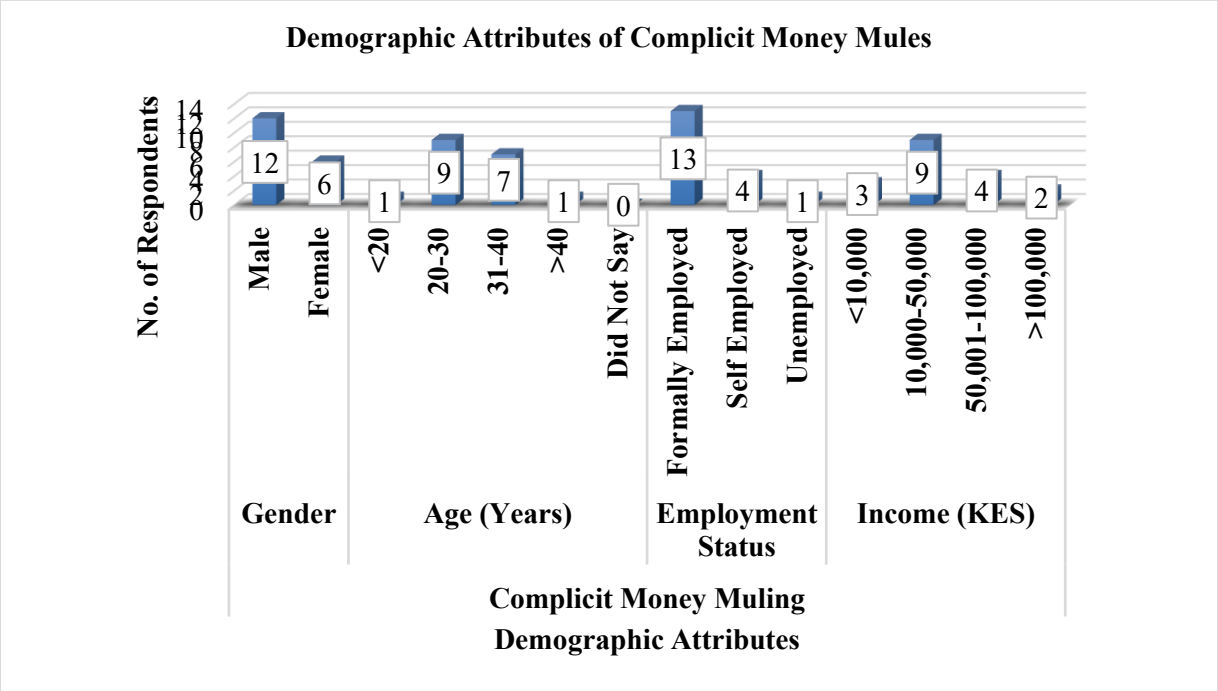


Article DOI: https://doi.org/10.37284/eajis.8.2.3378

Extent of Money Muling: Complicit Money Muling

Complicit money muling was the second most prevalent form of money muling, with 18 (or 44%) respondents. Complicit money muling is a form of money muling motivated by the promise of a reward for, or to enable, a transaction on behalf of another. Complicit money mules were predominantly males, those aged between 20 and 30 years, and those in formal employment. The demographic attributes of complicit money mules are represented in Figure 6.

Figure 6: Demographic Characteristics of Complicit Money Mules



Extent of Money Muling (Frequency, Value, and Reward)

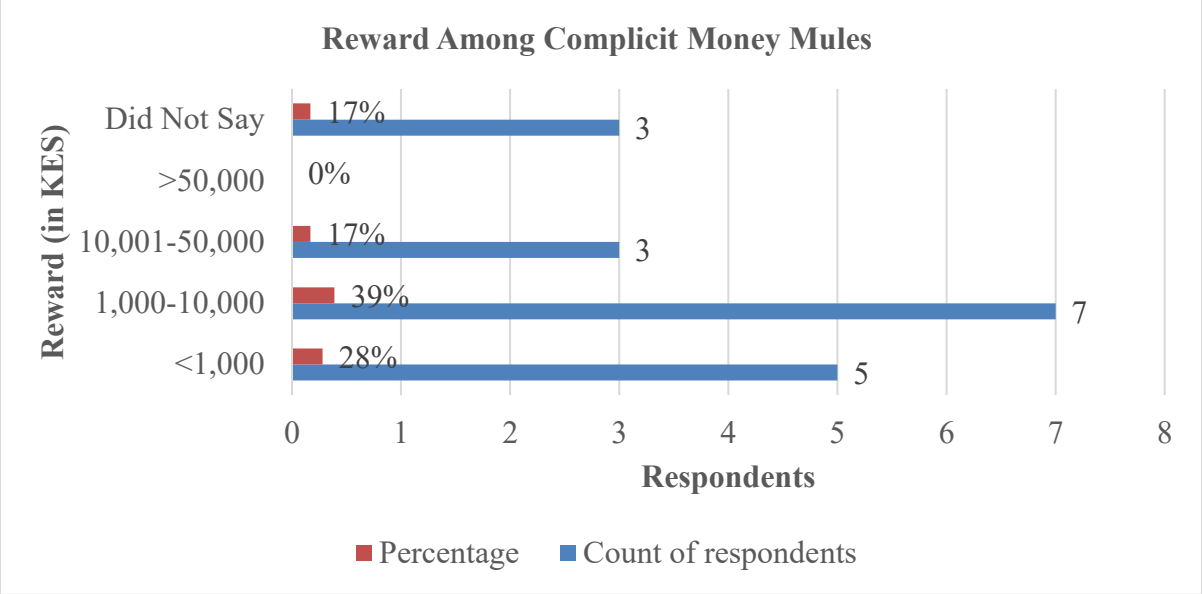
This study also sought to find out the frequencies and the values muled by respondents. Among unwitting money mules, most respondents (65%) had been involved in this behaviour between 2 and 5 times. This was followed by once (19%), more than 10 times (11%), and 6 to 10 times (5%). The majority (68%) of unwitting money mules had transacted between KES 1,000 and KES 50,000, followed by KES 50,001 to KES 250,000 (16%), less than KES 1,000 (14%), and more than KES 250,000 (2%). Most witting money mules (80%) had transacted between 2 and 5 times, while the remaining 20% had transacted once. 70% of witting money mules had transacted values between KES 1,000 and KES 50,000, while 30% had transacted values below KES 1,000. Where money muling was motivated by the promise of a reward, most respondents had transacted between 2 and 5 times (61%), followed by once (33%) and 6 to 10 times (6%). Complicit money mules had transacted values between KES 1,000 and 50,000 (61%), less than KES 1,000 (33%), and KES 50,001 to KES 250,000 (6%).

Complicit Money Muling Reward in Kenyan Shillings

Complicit money muling, unlike unwitting and witting money muling, is predominantly motivated by the promise of an incentive to the money mule for facilitating the money laundering transaction. Most complicit mules (39%) reported rewards of between KES 1,000 and KES 10,000. The results are presented in Figure 7.

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

Figure 7: Reward in KES Among Complicit Money Mules



DISCUSSION

The finding indicates the existence and high (63%) estimated prevalence of money muling among respondents. Although uniform statistics regionally and globally on the rate of crime among tertiary-level students are rare, the results on the rate of involvement in this phenomenon are higher when compared to documented rates. Chebii et al. (2017) found that only 43.9% had committed theft, which was the most common crime on campus. Pryce et al. (2018) reported that only 50% of crimes on college and university campuses are perpetrated by students. In the USA, young adults aged between 18 and 24 years accounted for 19% of all arrests and 21% of arrests for violent crimes in 2020 (Office of Juvenile Justice and Delinquency Prevention, 2022). This age bracket is predominantly comprised of tertiary-level students. Universitas Negeri Makassar (2023) reported that 50% to 70% of the students had been involved in financial crimes such as Ponzi schemes. Comparatively, the 63% rate of involvement in money muling is higher.

The most prevalent form of money muling was unwitting (90%), followed by complicit (44%). Witting money muling was the least prevalent form, with 24% of respondents. Most money mules were males, those aged between the broader age range of 20 to 40 years, those serving in formal employment, and those with a monthly income of between KES 10,000 and KES 50,000. Across all three forms of money muling, the frequency of 2 to 5 times was the most prevalent, indicating repeated involvement in this behaviour among respondents. The findings presented are consistent with the literature and the findings by reputable institutions such as the FBI (2021) and Europol (n.d) on the characteristics of most money mules. These findings also support research findings that have found links between age, gender, and crime. Hirschi and Gottfredson (1990) in the General Theory of Crime (GTC) concluded that males and younger individuals are more likely to commit crimes compared to females and older individuals. This is attributed to weak and underdeveloped self-control among younger individuals and access by males to more opportunities to commit crime when compared to females.

Diverging results in the measurement of the extent of witting money muling were, however, noted. Unlike the other two forms, females comprised the majority of witting money mules. While there are no conclusive results as to why this diverging observation was arrived at, factors such as trust

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

might explain this relationship. Findings by some scholars indicate that males are generally more trusting compared to females (Derks et al., 2014). Other studies, however, have found that individuals tend to trust people of the opposite gender more (Zhao & Zhang, 2016). Considering males comprise the majority of criminals (Hirschi & Gottfredson, 1990; National Police Service, 2018), this might explain the high rate of witting money muling among females, as male criminals would then attempt to take advantage of the higher trust by females on those of the opposite gender, consequently victimising them. Money mules have been known to exploit emotional vulnerabilities by using tricks such as catfishing to lure victims (FBI, 2021; Rani et al., 2023)

The findings on the frequency of involvement in money muling among respondents indicate a deliberate and repeated pattern of engagement. This repetition may reflect a behavioural bias or a consistent preference to participate in money muling, or alternatively, it may point to a significant lack of awareness. Therefore, respondents knowingly chose to participate repeatedly or were grossly ignorant of this phenomenon. The value between KES 1,000 and KES 50,000 was the most prevalent range of values. These somewhat small to average amounts are reflective of the most widespread form of remittance in Kenya. Ninety-six percent of households in Kenya have a mobile money account, according to Piper (2020). Mobile money is widely regarded as the most convenient and rapid means of transferring funds and making payments. However, it is also constrained by transaction limits, which restrict the volume of funds that can be moved at any given time. Most users rely on mobile money for bill payments, personal subsistence transactions, and small to medium-scale business activities. Money mules often exploit this platform through ‘smurfing’, a technique that involves conducting numerous low-value transactions across multiple accounts, to stay under reporting limits and evade detection by anti-money laundering (AML) systems and law enforcement agencies. The widespread availability and use of mobile money wallets significantly facilitates the execution of such schemes, as the small and medium values seldom raise suspicion.

Higher muled values (KES 50,001 to KES 250,000) were observed among unwitting mules (16%) and complicit mules (6%) but not among witting money mules. In unwitting money muling, the parties are known to each other; therefore, personal factors such as trust and affiliation between the parties might explain these higher amounts, especially when compared to witting money muling, where the money mule and the party seeking money muling services are strangers. Factually, trust in personal relationships is cited as a factor in understanding crime, especially among peers. Farrington et al. (2016) found that trust in parties and among peers fostered a sense of loyalty and solidarity that caused individuals to lower their resistance to crime because of strong emotion. These sentiments are shared by studies on gangs and crime. For instance, Densley (2013), in a study of gang operations, concluded that trust between members of criminal gangs fostered loyalty and secrecy, which made it easier for gang members to commit crimes. Among complicit money mules, the higher amounts could be attributed to the incentive offered. Often, money mule herders offer a percentage of the value muled as payment for services rendered (FBI, 2021). Therefore, higher values promise higher rewards.

Except for individuals earning less than KES 1,000, higher income levels were associated with decreased involvement in money muling. Respondents in higher income brackets reported lower rates of engagement in money muling compared to those earning less than KES 50,000. This suggests that increasing income, and, by extension, an improved standard of living, correlates with a reduced propensity to engage in such illicit activities. These findings support Agnew’s (2001) views on crime and strain. Additionally, stable income levels mean that individuals can afford access to educational and

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

informational resources (such as internet-enabled digital devices, media content, newspapers, magazines, and books), which contribute to better awareness of crime.

Five respondents who reported not transacting for strangers reported having been involved in complicit money muling. This suggests that the promise of an imminent financial reward caused a respondent, who would not initially transact for a stranger, to reconsider. This supports Agnew's arguments that strain, arising from the lack of, or inadequacy of, means and avenues, especially financial, to fulfil social goals, can predispose individuals to crime.

LIMITATIONS

The findings of this study are undoubtedly groundbreaking as far as the subject of money-muling-assisted money laundering is concerned. However, these findings were only the outcome of a study whose aim was to investigate and estimate the extent of money muling among a limited demographic. The study relied heavily on self-reports to measure the extent of money muling. This form of data collection, while dependable, can sometimes be marred by inadequacies such as misreporting and misrepresentation that arise from the sensitivity of the subject. Therefore, it cannot be ignored that such factors could have influenced the outcome of the measurement and estimation of the extent to which respondents engaged in money muling despite best efforts to ensure confidentiality. Additionally, the study used closed-ended matrices to measure the perpetration, the values muled and rewards, and the frequency of perpetration of money muling. This could have potentially impacted the variance and accuracy in reporting and documenting these measures of prevalence in the study. There is limited literature about money laundering and money muling, as well as official crime rates among university students in Kenya; this makes comparative analysis difficult. Also, this makes it almost impossible to conduct a contextual analysis of crime rates among different classes of crime within colleges and universities.

CONCLUSION AND RECOMMENDATIONS

This study concludes that money muling behaviour among university students exists and is highly prevalent, with unwitting money muling being the most prevalent form. Additionally, the findings reveal that most money mules are repeat mules who have engaged in money muling multiple times, indicating that many are either deliberate participants or are gravely unaware of their involvement in the activity. Demographic results reveal that most money mules comprise males, younger adults, and those with relatively lower incomes. This implies that the involvement in, and recruitment of money mules is not simply arbitrary but rather targeted.

Based on the findings and conclusions drawn from the study, the following recommendations are advanced. Firstly, a review of Part II of the Proceeds of Crime and Anti-Money Laundering Act (POCAMLA) of 2009, and its amendments, is necessary to address gaps in the legal definition of money laundering and affiliate offences such as money muling. This clarity will improve the accuracy of its measurement and provide a legal basis for prosecution and remedial action. Legal ambiguities hinder accurate identification, effective prosecution, and commensurate punishment of crime; therefore, a foundation in law is needed to address these ambiguities. Secondly, there is a need for the development of a structured, centralised, publicly accessible database to track incidents of money muling and money laundering in Kenya.

Efforts should be made by the criminal justice system in collaboration with tertiary-level institutions to improve crime detection and foster crime reporting and documentation. This can be achieved by fostering anonymity and victim identity protection, as well as adopting robust and advanced whistleblowing and crime reporting mechanisms. The Financial Reporting Centre (FRC), in

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

collaboration with private institutions, financial institutions, the Central Bank of Kenya, and the Criminal Justice System, should document and share details regarding incidents, sociodemographic characteristics of perpetrators and victims, and suspicious activity reports (SARs) that they receive and action. This will greatly contribute to the accurate measurement, documentation, and estimation of the trend of this phenomenon among different populations. Finally, institutions of higher learning should implement education and awareness programs to create awareness among students about the risks of financial crime. This can be achieved by developing and disseminating awareness materials through websites, institutional portals, and posters. Additional platforms such as seminars and webinars can also be leveraged to enhance outreach. Furthermore, short courses addressing topics such as financial crime, regulatory frameworks, and personal protection against financial offences should be introduced to students at the early stages of their academic journey. When complemented by robust and anonymous reporting mechanisms, such initiatives can enhance trust in institutional responses and encourage the reporting, detection, and prevention of suspicious financial activities. Ultimately, such efforts will not only protect students from the consequences of financial crimes but also improve institutional capacity for detecting and managing such crimes by equipping students with the necessary knowledge and promoting vigilance.

Future studies should aim to broaden and diversify the research population to gather more extensive data and derive richer insights. This can be achieved by sampling a larger and more varied group of respondents from different demographic or institutional backgrounds, using scientifically sound sampling techniques. Additionally, researchers are encouraged to incorporate mixed-method approaches that combine both qualitative and quantitative data collection tools. Such methodological considerations will allow for a more comprehensive understanding of participants' behaviours, motivations, and perceptions. Moreover, future research should explore emerging forms of money muling, such as those involving cryptocurrencies, to gain insight into which variants are most prevalent within specific populations and the relative magnitudes of their occurrence.

REFERENCES

Agnew, R. (2001). Building on the foundation of general strain theory: Specifying the types of strain most likely to lead to crime and delinquency. *Journal of Research in Crime and Delinquency, 38*(4), 319- 361. https://doi.org/10.1177/0022427801038004001

Amadala, V. (2021, August 12). Kenyans transact Sh18 billion daily via mobile money — CBK. *The Star*. https://www.the- star.co.ke/business/kenya/2021-08-12-kenyans-transact-sh18-billion-daily-via-mobile-money-cbk

Aston, M., McCombie, S., Reardon, B., & Watters, P. (2009). A preliminary profiling of internet money mules: An Australian perspective. *2009 Symposia and Workshops on Ubiquitous, Autonomic and Trusted Computing*, 482–487. https://doi.org/10.1109/UIC-ATC.2009.63

Basel Institute of Governance. (2021). *Basel AML Index 2021: 10th Public Edition Ranking money laundering and terrorist financing risks around the world report*. https://baselgovernance.org/sites/default/files/2021- 09/Basel_AML_Index_2021_10th%20Edition.pdf

Business Daily Africa. (2024, June 19). Obado surrenders high-end vehicles, houses in Sh2 bn case-deal. Business Daily Africa. Retrieved May 11, 2025, from https://www.businessdailyafrica.com/bd/economy/obado-surrender-high-end-vehicles-houses-in-sh2bn-case-deal-4663246

Central Bank of Kenya. (2022). *National Payments Strategy 2022– 2025*. https://www.centralbank.

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

go.ke/wp-content/uploads/2022/12/National-Payments-Strategy-2022-2025.pdf

Chebii, H.K.L., Ng'etich, K.A., & Bor, E. (2017). Crime Victimization Among University Students at Egerton University, Njoro Campus, Nakuru County, Kenya. *IOSR Journal of Humanities and Social Science, 22*(9). https://www.iosrjournals.org/iosr-jhss/papers/Vol.%2022%20Issue9/Version-7/F2209073646.pdf

CIFAS. (2021, March 25). *Money mules target 'Generation COVID'*. CIFAS. Retrieved March 08, 2022, from https://www.cifas.org.uk/newsroom/money-mules-target-generation-covid

CIFAS. (2023, July 12). *CIFAS and UK Finance launch lesson plans to educate students about the risks of money muling*. CIFAS. Retrieved March 08, 2022, from https://www.cifas.org.uk/newsroom/cifas-ukfinance-lessonsplans-moneymules

Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Densley, J. A. (2013). *How Gangs Work: An Ethnography of Youth Violence*. Palgrave Macmillan.

Derks, Jeffrey, Lee, C. Nikki & Krabbendam, Lydia. (2014). Adolescent trust and trustworthiness: Role of gender and social value orientation. *Journal of Adolescence*. *37*(8). Retrieved May 19, 2024, from https://www.sciencedirect.com/science/article/abs/pii/S0140197114001717

Europol. (n.d.). *Money Muling*. Retrieved July 28, 2021, from https://www.europol.europa.eu/crime-areas-and-trends/crime-areas/forgery-of-money-and-means-of-payment/money-muling

Farrington, D. P., Ttofi, M. M., & Piquero, A. R. (2016). Risk, promotive, and protective factors in youth offending: Results from the Cambridge study in delinquent development. *Journal of Criminal Justice, 45*, 63-70. https://doi.org/10.1016/j.jcrimjus.2016.02.014

Federal Bureau of Investigation. (2021, December 03). *Money Mules*: A Financial Crisis. Retrieved February 21, 2022, from https://www.ic3.gov/Media/Y2021/PSA211203#:~:text=Witting%20mules%3A%20ignore%20warning%20signs,begin%20as%20an%20unwitting%20mule.

Financial Action Task Force. (2025, February 21). Jurisdictions are under increased monitoring. Financial Action Task Force. Retrieved June 28, 2025, from https://www.fatf-gafi.org/en/publications/High-risk-and-other-monitored-jurisdictions/increased-monitoring-february-2025.html

Financial Action Task Force. (n.d.). *Faq: How Much Money is Laundered Per Year?* Retrieved February 21, 2021, from https://www.fatf-gafi.org/faq/moneylaundering/

Financial Transparency Coalition. (2011, October 25). *UNODC: Illicit Money: How Much Is Out There?* Retrieved February 02, 2021, from https://financialtransparency.org/reports/unodc-illicit-money-how-much-is-out-there/

Global Forum on Remittances, Investment and Development. (2024, November 1). *Diaspora remittances grew to a record Sh671 billion in a year*. Retrieved November 13, 2024, from https://gfrid.org/diaspora-remittances-grow-to-record-sh671-billion-in-a-year/

Hirschi, T., & Gottfredson, M. R. (1990). A general theory of crime. Stanford University Press.

Horton, M. (2021, May 17). Simple Random Sample: Advantages and Disadvantages. *Investopedia*. Retrieved December 11, 2021, from https://www.investopedia.com/ask/answers/042815/what-are-disadvantages-using-

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

simple-random-sample-approximate-larger-population.asp

Invezz. (2024). *Money laundering statistics: 2024 research*. https://invezz.com/research/money-laundering-statistics/?utm_source=chatgpt.com

Lee, J., Choi, Y. J., & Park, S. H. (2023). Survey-based research in clinical settings: Methodological considerations and best practices. *Journal of Korean Medical Science, 38*, e403. https://doi.org/10.3346/jkms.2023.38.e403

Lo, C. (2020, June 23). University student and boyfriend arrested on suspicion of laundering US$46 million in Hong Kong. *South China Morning Post*. Retrieved May 11, 2022, from https://www.scmp.com/news/hong- kong/politics/article/3090304/university- student- and- boyfriend- arrested- suspicion?module=perpetual_scroll_0&pgtype=article&campaign=3090304

Market.us. (2024). Anti-money laundering software statistics: Trends, growth, and market insights. *Scoop Market Research.* https://scoop.market.us/anti-money-laundering-software-statistics/

MARKETSANDMARKETS. (2023, September) *AML Market*. Retrieved July 09, 2024, from https://www.marketsandmarkets.com/Market-Reports/anti-money-laundering-solutions-market-95490454.html

McLeod, S. (2018). Questionnaire: Definition, Examples, Design, and Types. *SimplyPsychology*. Retrieved January 13, 2022, from https://www.simplypsychology.org/questionnaires.html#:~:text=Questionnaires%20provide%20a%20relatively%20cheap,a%20large%20sample%20of%20people.&text=Often%20a%20questionnaire%20uses%20both,qualitative%20data%20can%20be%20obtained.

Mwirigi, J. (2013). The dynamics of religiosity and spirituality in Kenyan public universities. *International Journal of Education and Research*, 1(6), 1- 16. https://www.ijern.com/journal/June-2013/04.pdf

Nation Media Group. (2023, May 25). Felista Nyamathira Njoroge loses a Sh102 million gift to the government. Nation Africa. Retrieved May 19, 2025, from https://nation.africa/kenya/news/felista-nyamathira-njoroge-loses-sh102m-gift-to-government-4246270

National Commission for Science, Technology and Innovation. (n.d.). *Guidelines on research licensing and institutional affiliation*. https://www.nacosti.go.ke/nacosti/Docs/QUICK%20downloads/Guidelines_On_Research_Licensing_And_Institutional_Affiliation_compressed.pdf

National Crime Agency. (n.d.). *Money laundering and illicit finance*. Retrieved August 20, 2022, from https://www.nationalcrimeagency.gov.uk/what-we-do/crime-threats/money-laundering-and-illicit-finance

National Police Service of Kenya. (2018). Annual Crime Report - 2018. National Police Service of Kenya. Retrieved June 28, 2025, from https://nationalpolice.go.ke/sites/default/files/2024-08/Annual%20Crime%20Report%20-%202018.pdf

Office of Juvenile Justice and Delinquency Prevention. (2022). *Trends in youth arrests for violent crimes*. U.S. Department of Justice. Retrieved June 28, 2025, from https://ojjdp.ojp.gov/publications/trends-in-youth-arrests.pdf

Piper, K. (2020, September 11). What Kenya can teach its neighbors — and the US — about improving the lives of the “unbanked”. *Vox*. Retrieved March 21, 2024, from https://www.vox.com/future-perfect/21420357/kenya-mobile-banking-unbanked-cellphone-money

Article DOI: https://doi.org/10.37284/eajis.8.2.3378

Pryce, D. K., Wilson, G., & Fuller, K. (2018). *Gender, age, crime victimization, and fear of crime: Findings from a sample of Kenyan college students*. ResearchGate. https://www.researchgate.net/publication/324074206_Gender_age_crime_victimization_and_fear_of_crime_findings_from_a_sample_of_Kenyan_College_students

Randhawa, K. (2016, September 12). Criminals are paying London foreign students for bank details in 'money mule' fraud. *Evening Standard*. Retrieved May 11, 2022, https://www.standard.co.uk/news/crime/criminals-paying-london-foreign-students-for-bank-details-in-money-mule-fraud-a3342901.html

Rani, M. I. A., Nazri, S. N. F. S. M., & Zolkaflil, S. (2023). A systematic literature review of money mule: Its roles, recruitment, and awareness. *Journal of Financial Crime*. https://doi.org/10.1108/JFC-10-2022-0243

Raza, M., Zhan, Q., & Rubab, S. (2020). Role of money mules in money laundering and financial crimes: A discussion through case studies. *Journal of Financial Crime*. Advance online publication. https://doi.org/10.1108/JFC-02-2020-0028

Reuters. (2025, June 10). The *EU includes Monaco in the updated list of high-risk jurisdictions for money laundering*. https://www.reuters.com/en/eu-includes-monaco-updated-list-high-risk-jurisdictions-money-laundering-2025-06-10/

Rudd, A. (2016, November 10). *Home Secretary's speech to the FCA's Financial Crime Conference*. GOV.UK. https://www.gov.uk/government/speeches/home-secretarys-speech-to-the-fcas-financial-crime-conference

Ryan, T. (2013). *Sample size determination and power* (1st ed.). John Wiley & Sons.

Statista. (2023). *Registered mobile money accounts in Kenya from 2021 to 2023*. https://www.statista.com/statistics/1188510/registered-mobile-money-accounts-in-kenya/

sumsub. (2022, January 21). *What's Money Muling and How Does It Affect Businesses?* Retrieved February 21, 2021, from https://sumsub.com/blog/money-muling/

Transparency International. (2021). *Corruption Perceptions Index 2020, Sub-Saharan Africa*. Retrieved September 03, 2021, from https://www.transparency.org/en/cpi/2020/index/ken

U.S. Department of State. (2022). *2022 investment climate statements: Kenya*. Retrieved December 15, 2022, from https://www.state.gov/reports/2022-investment-climate-statements/kenya/

United Nations Office on Drugs and Crime. (2011, October 25). *UNODC estimates that criminals may have laundered USD 1.6 trillion in 2009*. Retrieved February 02, 2021, from https: //www.unodc.org/unodc/en/press/releases/2011/October/unodc-estimates-that-criminals-may-have-laundered-usdollar-1.6-trillion-in-2009.html

United Nations Office on Drugs and Crime. (n.d.). *Money laundering: Overview*. United Nations. https://www.unodc.org/unodc/en/money-laundering/overview.html

Universitas Negeri Makassar. (2023). *Prevalence and measures for curbing Ponzi schemes in public tertiary institutions* [Article]. *Elektika Kontemporer*, 11(2). https://ojs.unm.ac.id/elektikakontemporer/article/view/51074

World Bank. (2025). *Kenya overview*. The World Bank. https://www.worldbank.org/en/country/kenya/overview

Zhao, Na & Zhang, Jianxin. (2016). Gender differences in trusting strangers: Role of the target's gender. PsyCh Journal. 5(2). Retrieved May 19, 2024, from https://onlinelibrary.wiley.com/doi/epdf/10.1002/pchj.120

