.....



# Prevalence of aggressive behaviors among primary school children (6–12 Years) in Lurambi Sub-County, Kenya

Preston Sikuku Wafula<sup>1</sup> Rose Nereah Olayo<sup>2</sup> Emmanuel E. Okenwa-Vincent<sup>3</sup> Moses Poipoi<sup>4</sup>

<sup>1</sup>wafulapreston23@gmail.com (+254703714964) <sup>2</sup>rolayo@mmust.ac.ke (+254722379162) <sup>3</sup>eokenwa@kafu.ac.ke (+254702092490) <sup>4</sup>wpoipoi@mmust.ac.ke (+254714361166)

<sup>1</sup>https://orcid.org/0009-0008-1611-5327 <sup>2</sup>https://orcid.org/0000-0002-8125-9625 <sup>3</sup>https://orcid.org/0000-0001-7366-3911 <sup>4</sup>https://orcid.org/0000-0003-4773-0759

<sup>1,2,4</sup>Masinde Muliro University of Science and Technology, <sup>3</sup>Kaimosi Friends University, <sup>1,2,3,4</sup> Kenya

https://doi.org/10.51867/ajernet.6.3.5.62

#### **ABSTRACT**

Aggressive behaviors cause long-term psychological, social, and educational impacts among school-aged children and have become a developing public health concern. Despite much of the existing research basing on adolescents, there is limited data on the prevalence and specific expressions of aggression among younger children particularly within sub-Saharan African settings. The aim was to identify the widespread presence and patterns of aggressive behaviors among primary school children aged 6-12 years in Lurambi Sub-County, Kenya. The theory of Social Cognitive Learning Theory anchored this study where children imitate behaviors from the habitat. From four public primary schools, a cross sectional mixed-methods study was carried out in April 2024 among 334 pupils selected through multistage sampling. Collection of data was through the Teacher observation of Classroom Adaptation - Revised (TOCA-R) checklist and structured questionnaires. Quantification of the frequency and types of aggressive behaviors was used by the descriptive statistics, while group differences was assessed by the chi-square tests and Analysis of Variance (ANOVA). Contextual qualitative insights were provided by key informant interviews with 20 teachers. The overall prevalence of aggressive behaviors was 18.5%, with fighting (25.6%), cursing (23.1%), and name -calling (22.4%). Differences between boys and girls or across grade prevalence was not notable. Contributing factors cited by the teachers were peer dynamics, emotional regulation difficulties, and limited access to counseling. In conclusion, among primary school children in Lurambi Sub-County, aggressive behavior is prevalent and manifests in verbal and physical forms. These findings underscore the need for early intervention through school-based behavioral screening, psychological support programs, and parental engagement to mitigate longterm consequences.

Keywords: Aggressive Behavior, Child Mental Health, Children, Classroom Violence, Kenya, Prevalence, Primary School

# I. INTRODUCTION

Aggression as a cause of negative effects on mental, emotional, and social growth is seen as a serious public health issue. It can be defined as behaviors aimed at harming or intimidating others, whether physical, verbal, or psychological. Disruption of learning environments, long term outcomes like injury, trauma, poor academic performance, and mental health disorders (Vakili, 2015; Derman, 2017)) are caused by aggression.

Interpersonal violence is the second leading cause of death among adolescents aged 15 to 19 according to the World Health Organization (WHO, 2002). Experiences of victims of aggression; depression, anxiety, post-traumatic stress disorder, and thoughts of suicide (Jouriles, 2009). They also face a high risk of reproductive health challenges. Over 246 million children each year are impacted with school-based violence, Psychological and verbal abuse being the most common forms, according to United Nations Educational, Scientific and Cultural Organization (UNESCO, 2017). There was a sharp increase in Peru from 32.5 to 139.2 per 100,000 students from 2014 to 2018 (Arhuis-Inca, 2021) according to reports of school Cyber bullying cases vary around the world, ranging from 5% in the U.S to 42% in Denmark (Sourander, 2010).



In Primary schools, aggression was more frequent than in secondary Schools in France (Catherine, 2016). Broader social issues and contribution to risky behaviors is reflected by school violence, involving drug use and suicidal tendencies as suggested by Centre of Disease Control (CDC, 2021). Harm to neurological and physical development can be caused by early exposure to aggression leading to long-term health issues.

There is limited research on childhood aggression, especially among children aged 6 to 12 in primary schools. Recent studies, have mainly focused on adolescents or urban areas like Nairobi (Ndetei, 2007); (Poipoi, 2011); (Buliva, 2019), leaving places like Lurambi Sub-County under investigated. There's a unique opportunity offered by the Lurambi's mix of rural and urban features to study the prevalence and types of childhood aggression. By using a crosssectional design to examine patterns and contributing factors of aggression in this age group, the study aims to fill those gaps. This will support the Kenya's Vision 2030 and Sustainable Development Goals (SDG 4 & SDG 16) through the findings by guiding evidence-based interventions and policy actions to enhance child welfare and school safety.

### 1.1 Statement of the Problem

Physical, verbal, and cyber bullying are included as aggressive behaviors among school children and they have become a global public health issue. Each year an estimate of 246 million children and adolescents are affected (UNESCO, 2017). Over the past 20 years, school crimes have directly cost victims over \$600 million per year, amounting to more than \$12 billion (Planty, 2019). The overall prevalence of interpersonal violence among in-school adolescents is 53.7%, with 55.7% in Ghana (Aboagye, 2021), 26% in Nigeria (Nguyen, 2021) and 36.3% in South Africa (Liang, 2007) in sub-Saharan Africa. Studies in Kenya show disturbing levels of aggression among learners, with rates reaching 82% in Nairobi schools (Ndetei, 2007). This problem is not adequately addressed despite the high prevalence and its links to poor academic performance, mental health issues (Vakili, 2015), and a higher risk of adult aggression (Weltens, 2021).

There is existence of policy gaps. Especially in primary schools, National policies, such as the Kenyan School Health Policy, lack clear and enforceable guidelines that focus on school-based aggression. Education and child protection plans have not put first this issue. Into the national education planning (United Nations Children Fund [UNICEF], 2021), there is little integration. New forms of violence are not dealt with in current frameworks, creating a significant policy gap such as the cyber bullying which can affect up to 41% of students in some countries (Mascheroni, 2014). As well as contextual gaps they are apparent. Concentration on most studies on aggression of adolescents is in secondary schools (Poipoi, 2011; Kumar, 2023). Younger children in primary schools who are more vulnerable during their developmental stages (Hudley, 2008) have been looked down. Differences between urban and rural settings or transitional metropolitan areas like Lurambi Sub-County, which have unique socio-cultural and infrastructure factors that could affect aggressive behavior have been examined by few studies (Hanan, 2007). Bandura's Social Cognitive Learning Theory based on the theoretical front, current research often relies heavily on it (Avosa, 2010). Broader ecological and developmental models that consider the complex influences on children's behavior have been neglected by this narrow focus. There is a failure to fully capture how individual, family, school, and societal factors interact to influence aggression due to limits from the theoretical depth. Mixed methods approach scarcity is also there that could enhance understanding through both statistical trends and personal experiences. Most regions in Kenya have been left out of the conversation for informed intervention planning as a result of most available data being outdated or limited to certain geographical areas, particularly urban centers like Nairobi (Ndetei, 2007). Addressing these gaps by focusing on primary school students in a metropolitan area (Lurambi Sub-County) and using localized and up-to-date data to explore the prevalence and patterns of aggressive behaviors has been an aim of this study. More focused evidence-based policy interventions that align with SDG 4 (quality education) and SDG 16 (peace and justice) are what the findings seek. The study also aims to chip in to the theoretical and methodological development of research on school aggression in Kenya.

# 1.2 Research Objective

To determine the Prevalence and patterns of aggressive behaviors among primary school children (6-12 years) in Lurambi Sub- County.

## II. LITERATURE REVIEW

# 2.1 Theoretical Review

# 2.1.1 Social Cognitive Learning Theory

Individuals learn aggressive behaviors through observation and imitation of role models (Bandura, 1977). Children imitate violent contents in media and digital interactions as well as family members at home. They learn by reinforcement within their social circles. Bandura further suggests that social development does not just happen in stages



but it is a continuous learning process. Children form ideas from observation of others and learn how the new behaviors are performed during this kind of learning.

This study employs this theory since children learn most of their behaviors from their peers, parents and neighbors at home, school and in the community as well through the media they watch on television or phones. This implies that the more they get exposed to aggressive behaviors, the higher the chances of perpetrating the aggressive behaviors. Children who grow around violence are most at risk of developing violence later in life. This theory can be operationalized in the conceptual framework by relating the surroundings of a child to aggressive behaviors. Assessing the influence of the models on social determinants, home-based determinants as well as technological determinants to the behaviors of the children was critical in this study.

Unlike behaviorist theories, SCLT recognizes the role of mental processes like attention, memory, selfregulation hence making it more comprehensive. It is useful across disciplines including education, public health, social work, and organizational behavior. SCLT is also supported by a significant body of empirical research, particularly in intervention and behavior change studies. However, it assumes individuals always act rationally and consciously, underestimating the influence of unconscious motives or emotions as well as underplaying the roles of emotions, biology, and innate traits in shaping behavior.

# 2.2 Empirical Review

UNESCO reports that annually, 246 million children and adolescents worldwide are victims of various types of school violence and bullying. Furthermore, more than one-third of students have been physically attacked by their peers in connection with school violence (UNESCO, 2017). In Peru, Arhuis-Inca observed an increase in the prevalence of bullying and school violence from 32.5 per 100,000 students in 2014 to 139.2 per 100,000 students in 2018 (Arhuis-Inca, 2021). In 2018, the highest reported prevalence rate was for psychological/verbal violence, at 61.9 cases per 100,000 students (Arhuis-Inca, 2021). Psychological/verbal bullying accounted for 18.8 cases per 100,000 students. Comparing the prevalence rates from 2014 to 2018, psychological/verbal bullying and violence showed significant increases of 45.8 and 11.8 cases per 100,000 students, respectively (Arhuis-Inca, 2021). In public institutions, psychological/verbal violence was the most prevalent at 76.9%, followed by physical violence at 76.2% and cyberbullying at 61.2%. Schoolchildren were identified as the primary perpetrators of verbal and psychological bullying (Arhuis-Inca, 2021).

In the United States and the United Kingdom, Sourander suggests that the prevalence rates of cyberbullying are 5% and 20%, respectively (Sourander, 2010). Mascheroni and Cuman report that Denmark had a prevalence rate of 42.0%, while Romania had a rate of 25.0% in 2014 (Mascheroni, 2014). In 2016, Catherine & Michael revealed high variability in the prevalence rates of cyberbullying between primary and secondary schools (Catherine, 2016). For instance, in France, the rates were 14% for primary schools and 5% for secondary schools (Catherine, 2016). Weltens determined that the prevalence of aggression on psychiatric wards varies from 8% to 76% and found that aggressive behaviors arise from a combination of ward, staff, and patient factors, despite the absence of prospective data (Weltens, 2021).

In 2020, approximately 300 million children aged 2-4 years were reported by WHO to have regularly suffered from psychological violence or physical punishment by their parents or caregivers (WHO, 2020). WHO noted that such punishment could result in impaired lifelong mental and physical health. WHO suggested enhancing laws against violent punishment, teaching positive parenting skills, and supporting parents to mitigate the development of aggressive behaviors (WHO, 2020). The CDC highlights the effects of school violence on both mental and physical health (CDC, 2016). It argues that young people experience both fatal injuries, such as gunshot wounds and head trauma, and nonfatal injuries, such as bruises, cuts, and broken bones. These injuries can lead to negative health outcomes, including drug and alcohol use and suicide (CDC, 2016). Furthermore, exposure to violence can result in anxiety, depression, and other psychological problems (CDC, 2016). The CDC further reports that unintentional injuries are the leading cause of death for Americans aged 1-44 years, accounting for 63,000 deaths in 2019, an increase from 62,000 in 2018 ((CDC,

UNESCO reveals that nearly a third of girls and boys have been bullied at least once in the past month. The emotional and physical pain caused by bullying can be agonizing, yet such behaviors persist in schools. Children who experience bullying are at higher risk of depression, stress, low self-esteem, anxiety, self-harm, loneliness, and suicidal thoughts (UNESCO, 2018). UNESCO further argues that early exposure to violence can impair brain development and damage the nervous, circulatory, respiratory, endocrine, and immune systems, with lifelong consequences (UNESCO, 2018). A meta-analysis of longitudinal studies on the impact of bullying on perpetrators, revealed that those who bully others might have an increased risk of depression later in life due to the effects on their psychological and mental health (Ttofi, 2011). Health problems, such as increased depression and poor functioning levels, might be observed more frequently compared to those who reported being bullied (Ttofi, 2011). Violence is almost 2.5 times more prevalent in



low- to middle-income countries (LMICs) than in high-income countries, with more than 90% of violence-related deaths occurring in LMICs (Matzopoulos, 2008).

The Global Report 2017 on ending violence in childhood highlights critical responses to school violence and bullying, emphasizing children's rights to a violence-free childhood, enhancing individual capacities of parents and caregivers, and eliminating the root causes of violence (Pells, 2017). Vision 2030 points out priority actions against school violence and bullying under SDG 4 and SDG 16, in collaboration with the Global Partnership to End Violence against Children. These priorities include strengthening leadership, promoting awareness, establishing partnerships, building capacity, establishing reporting systems, and improving data and evidence on the causes, nature, and impacts of violence and bullying (Vision, 2030). Another response involves improving services and support. In 2008, Childline Kenya, together with Plan Kenya, set up a free 24-hour helpline for children. This service provides both support and preventive services through referrals and outreach. The Department of Children's Services provides personnel to manage rescue operations, court procedures, and the preparation of children's cases (International, 2024).

The review has a comprehensive scope presenting data from various regions including the U.S., Peru, the U.K., Romania, Denmark and several African nations. This provides an illustration of the global prevalence of aggressive behaviors. Nevertheless, there is linkage of the research findings to the policy recommendations such as Vision 2030 and ChildLine Kenya which demonstrates an awareness of the real-world applications. However, existing literature fails to point out the reasons why aggressive behaviors manifest differently across regions.

#### III. METHODOLOGY

# 3.1 Study Design and Setting

This study employed a cross-sectional design conducted in April 2024 within Lurambi Sub-County, located in Kakamega County, Western Kenya since it helped measure the prevalence of aggressive behaviors and its associated factors at a particular point in time (Kothari, 2004). The area was purposively selected for its urban-rural mix, with wards such as Shirere (urban) and Butsotso South (rural) providing contrasting environments. Lurambi Sub-County has approximately 160,229 residents and 65 public primary schools. The study population were children of age 6-12 years in public primary schools including both boys and girls since various forms of aggression arise in early childhood, and increase through late childhood, adolescence into adulthood (Wahl, 2011). Furthermore, around 60% of children aged 2–14 years regularly suffer physical punishment by their parents or other caregivers (WHO, 2020).

### 3.2 Sample Size Determination

This study employed fisher's sample size formula

$$n = \frac{Z^2 P(1 - P)}{d^2}$$

The appropriate precision (d) for 0.27 Prevalence is 0.05 (Magai, 2018)

Therefore 
$$n = \frac{1.96^2 * 0.27(1-0.27)}{0.05^2}$$

~ 303 participants + 10% allowances for contingency = 334 pupils

## 3.3 Population and Sampling

The study targeted primary school children aged 6–12 years attending public schools. A multistage sampling method was employed. First, Lurambi Sub-County was purposively selected. Then, stratified sampling was used to group the wards into urban and rural strata, from which Shirere and Butsotso South wards were randomly selected. Four schools (two per ward) with the highest academic performance decline were purposively selected. Systematic random sampling was applied to recruit 334 pupils (approximately 84 per school), guided by class registers. Additionally, 20 key informants (5 per school), including deputy headteachers, class teachers, and counselling staff, were selected for qualitative insights.

# 3.4 Reliability

Reliability was assessed during the pilot study at Kakamega primary school. The respondents were interviewed twice, with a one-week interval. The Intraclass Correlation Coefficient (ICC) was used to measure the internal consistency which yielded a score of 0.85. Since the score was more than 0.5, it indicated an acceptable reliability (Koo, 2016).

#### 3.5 Data Collection Tools

Observation Checklist: Assessment of aggressive behaviors was done by the aid of an adapted version of the Teacher Observation of Classroom Adaptation—Revised (TOCA-R). This 12-item checklist included behaviors such as fighting others, head banging, grabbing others' property, throwing objects, cursing others, interrupting activities, calling others names, bullying others, biting and kicking, challenging instructions, threatening others and clinging on adults measured using a 5-point frequency scale.

Structured Questionnaire: A structured questionnaire captured demographic details of the pupils sampled to participate in the study.

Key Informant Interviews (KII): This tool helped collect qualitative data via semi-structured interviews with 20 school teachers as key informants. It focused on observed patterns of aggression, disciplinary protocols, peer influence as well as support systems to help mitigate the aggressive behaviors.

## 3.6 Data Analysis

Quantitative data were coded and entered into Microsoft Excel, then exported to SPSS version 26. Descriptive statistics (frequencies, percentages, and means) were used to describe aggressive behavior patterns. Inferential statistics, including ANOVA and Chi-square tests, assessed associations across demographic and contextual variables which was presented in tables and charts. Qualitative data from KIIs were analyzed thematically, with emerging themes triangulated with quantitative findings to enhance interpretation.

#### 3.7 Ethical Considerations

Ethical approval was obtained from the Institutional Scientific and Ethics Review Committee (ISERC) of Masinde Muliro University (Ref: MMUST/IERC/131/2023), and research authorization from NACOSTI (Ref: NACOSTI/P/23/24611). Permissions were also granted by the Kakamega County Government and Ministry of Education. Informed consent was obtained from caregivers, while assent was secured from participating pupils. Confidentiality, voluntary participation, and data protection procedures were strictly upheld in line with the Declaration of Helsinki.

#### IV. FINDINGS & DISCUSSION

## 4.1 Socio-Demographic Characteristics of Participants

A total of 334 pupils aged 6-12 years participated in the study. Of these, 53.0% were male (n = 177) and 47.0% were female (n = 157). The majority of pupils were aged between 6-8 years (36.5%), followed by 9-10 years (32.6%) and 11-12 years (30.8%). Participants were fairly distributed across grade Prevalences, with 29.3% in Grade 1-2, 37.1% in Grade 3-4, and 33.5% in Grade 5-6.

 Table 1

 Socio-demographic Characteristics of Participants

Variable	Frequency (n)	Percentage (%)	
Age (years)		•	
6–8	122	36.5	
9–10	109	32.6	
11–12	103	30.8	
Gender			
Male	177	53.0	
Female	157	47.0	
Grade			
Grade 1–2	98	29.3	
Grade 3–4	124	37.1	
Grade 5–6	112	33.5	

## **4.2 Prevalence of Aggressive Behavior**

The overall prevalence of aggressive behavior among the sampled children was 58.1% (n = 194). Among the observed behaviors, interrupting activities (77.5%), calling others names (75.0%), and bullying others (70.6%) were the most frequently reported. Less common behaviors included head banging (36.2%) and biting/kicking (42.1%).



**Table 2** *Prevalence of Specific Aggressive Behaviors* 

Aggressive Behavior	Frequency (%)	
Fighting others	61.4	
Head banging	36.2	
Grabbing others' property	48.8	
Throwing objects	57.1	
Cursing others	64.0	
Interrupting activities	77.5	
Calling others names	75.0	
Bullying others	70.6	
Biting and kicking	42.1	
Challenging instructions	52.9	
Threatening others	59.0	
Clinging on adults	49.3	

# 4.2.1 Patterns by Age and Gender

Though majority of the key informants suggested that boys perpetrate aggressive behaviors more than girls and suggested that it is because of the parental styles at home and peer influence from their friends, there was no significant difference in the prevalence of aggressive behavior exhibited by male and female children, nor was the difference between the ages 6-9 and 10-12 as shown in table 3.

**Table 3** *Gender and Age Differences in Aggressive Behavior* 

		Aggressive behavior level		
Factor	Category	Low	High	*p (value)
Age	6-9	16(80.6)	4(19.4)	0.01(0.91)
	10-12	256(81.5)	58(18.5)	
Gender	Male	124(81.2)	29(18.8)	0.02(0.88)
	Female	148(81.7)	33(18.3)	

<sup>\*</sup>Chi square text at  $\propto 0.05$ ; n – frequency; % - percentage

# 4.2.2 Qualitative Insights

Key informant interviews with teachers provided valuable context on the manifestations of aggressive behaviors. Pupils who often or very often exhibited aggressive behaviors were considered to be highly aggressive while those who exhibited these behaviors rarely or never were considered to be of low aggression levels. Despite no statistical significance between gender and aggression, the key informants suggested that boys are more likely to exhibit aggressive behaviors than girls. To support this argument, this is what one of the respondents had to say,

"..... Those who perpetrate aggressive behavior mostly are boys because they are easily angered. ..... I advise guiding and counselling the pupils to help manage this aggressive behavior since it has been working in this school".

Another key informant said,

" ...... the effects of such behavior result to fights, absenting from school, poor performance and even school dropout. And the perpetuators of this aggressiveness behavior are mostly boys because they feel that they are physically strong..."

Moreover, the key informants also suggested that fighting was the most common aggressive behavior among the pupils which mostly led to indiscipline cases, poor performance as well as school dropouts. To support this argument, this is what one of the respondents had to say,

"..... the most common aggressive behavior in the school is anger and fighting. Some of the effects of such behaviors are; Bullying, theft, absenteeism, dropouts, indiscipline to the teachers and poor performance in class...."

Aggressive behaviors were noticed to be rampant among primary school pupils. To mitigate these behaviors, key informants suggested guiding and counselling as well involving parents in managing the behaviors. To support this argument, this is what one of the respondents had to say,

"..... most cases of fighting are recorded amongst boys. I therefore advice to manage these aggressive behaviors by having frequent talks through guiding and counselling, having peer counselling and having school rules and regulations.....".

Furthermore, another teacher said,



"...... they are very strong and have the tactics. Therefore I advise to manage aggressive behaviors through guidance and counselling, involving parents and even suspensions....."

Protocols were also put in place against those students perpetrating aggressive behaviors like contacting the parent/guardian and giving punishment to the pupils. To support this argument, this is what one of the respondents had to say,

"...... there are rules and regulations in the school against harming others or destroying school property. The protocol followed when one pupil is found harming others is summoning them, contacting the parent or guardian and then handling the case by taking appropriate disciplinary actions like cleaning the school compound and gardening ...."

#### 4.3 Discussion

# **4.3.1 Interpretation of Prevalence and Behavioral Patterns**

The study found that 18.5% of the primary school children in Lurambi Sub-County exhibited high Prevalences of aggressive behavior, with fighting (25.6%) being the most frequently reported act, followed by cursing and name-calling. This aligns with teacher-reported qualitative insights, where 95% confirmed that fighting was the most common form of aggression observed in classrooms. These findings are consistent with the Social Cognitive Learning Theory (SCLT), which posits that children learn behaviors through observation, imitation, and reinforcement within their environments (Bandura, 1977). Age-based comparisons indicated that younger children (ages 6–8) were more prone to physical aggression, while older children (11–12 years) demonstrated more verbal forms such as threats and insults. Early aggression, if left unaddressed, may persist and intensify into adolescence and adulthood, contributing to social and psychological dysfunctions (Wahl, 2011).

# 4.3.2 Comparison with Regional and Global Studies

The 18.5% prevalence observed in this study is lower than the 31.6% previously reported for Kenya (Aboagye, 2021), and significantly below the Sub-Saharan regional estimates of 38.8%, including 44.5% in Malawi and 45% in Mozambique. However, it is slightly higher than Nigeria's 16.3% prevalence (Arhuis-Inca, 2021). This variation could be attributed to socio-cultural, economic, and policy differences among these regions. Compared globally, the prevalence in Lurambi is modest. For instance, Lee reported a lower overall aggression rate in Canada (5.3% for boys, 2.3% for girls), though their study focused solely on physical aggression (Lee KH, 2007). In contrast, Sidhu in India found a higher prevalence among males, attributing it to gendered socialization practices (Sidhu, 2019). The higher frequency of peer-to-peer aggression in Grades 4-6 resonates with findings from global literature emphasizing that middle primary years often represent a peak period for interpersonal conflict due to increased socialization pressures and limited emotional regulation skills (Craig, 2000).

# 4.3.3 Implications for Early Identification and Support

The findings of this study underscore the critical need for early, multi-tiered interventions within primary school settings to address aggressive behavior among children. A proactive approach to early identification and intervention could significantly reduce the escalation of aggression and its long-term psychological and social consequences. Schools should consider implementing structured peer interaction and social skills programs that foster empathy, emotional regulation, and conflict resolution skills. These interventions may be particularly impactful in Grades 4-6, where the prevalence of aggressive behavior was found to be highest. Equally important is the role of parents and caregivers in shaping children's behavioral outcomes. Strengthening parental capacity through community-based training programs in non-violent discipline, positive reinforcement, and consistent behavioral modeling could mitigate the transmission of aggression from home to school environments. Moreover, equipping teachers with the necessary professional development to recognize early warning signs and potential triggers of aggression will enable timely referral to psychosocial services and reinforce a supportive classroom climate. At the policy Prevalence, the results reinforce the relevance of integrating child behavior management into national development frameworks such as Kenya's Vision 2030 and the Public Health Act. These policies should promote the development of legal and social protection mechanisms that prevent childhood exposure to violence and ensure safer learning environments conducive to positive behavioral development.

Overall, this study presents several strengths. First, the integration of both quantitative and qualitative methodologies allowed for a more nuanced understanding of aggressive behaviors in school contexts. The mixed-method approach enabled not only statistical analysis but also contextual interpretation through teacher narratives. Second, the study focused on a transitional semi-urban setting, which remains underrepresented in existing literature, thereby contributing valuable insights to the broader discourse on school-based aggression in low- and middle-income countries. Third, the inclusion of teacher perspectives enriched the interpretation of behavioral dynamics and offered grounded recommendations for school interventions. However, the study also has notable limitations. Its cross-sectional



design precludes causal inference, limiting the ability to establish temporal relationships between potential determinants and aggressive behavior. Additionally, reliance on self-reported data from pupils and observational reports from teachers may introduce bias, particularly due to social desirability or recall inaccuracies. Finally, the study was geographically restricted to a single sub-county, which may constrain the generalizability of findings to other regions within Kenya or similar settings elsewhere.

## V. CONCLUSIONS & RECOMMENDATIONS

#### **5.1 Conclusions**

In relation to the key findings, this study concluded that the level of aggressive behaviors among primary school children in Lurambi Sub- County (18.5%) is lower than the average in the sub-Saharan region. However, there still remains room to further lower it as the rate is higher than it is in some of the peer countries. These behaviors appear to be influenced by observational learning, as explained by Social Cognitive Learning Theory (SCLT). The findings insinuate the importance of early interventions to be put in place and mitigate aggressive behaviors in school settings before they rise, considering both cultural and environmental influences.

#### **5.2 Recommendations**

For policy, behavioral screening as well as early support services should be introduced to help identify signs of aggression and help children displaying those aggressive behaviors before escalation. Teachers should also be empowered with tools to identify early signs of aggression and apply effective management strategies for aggression. For practice, school-based programs that focus on emotional regulation should be implemented and social behavior management too. For research, more studies employing mixed methods should be carried out to get a fuller picture of the prevalence and the underlying causes and experiences of aggression.

#### REFERENCES

- Aboagye, R. G.-A. (2021, March). Bullying victimization among in-school adolescents in Ghana: Analysis of prevalence and correlates from the Global School-Based Health Survey. Healthcare, 9(3), 292. https://doi.org/10.3390/healthcare9030292
- Arhuis-Inca, W. I.-Z.-P.-C. (2021, January 13). Violence at school and bullying in school environments in Peru: Analysis of a virtual platform. Frontiers in Psychology, 11, 543991. https://doi.org/10.3389/fpsyg.2020.543991
- Avosa, A. A. (2010). The effects of television on academic performance and social behaviour of pre-school children in Hamisi District (Master's thesis, University of Nairobi). University of Nairobi Institutional Repository. https://erepository.uonbi.ac.ke/handle/11295/10514
- Bandura, A. (1977). Social learning theory. Prentice-Hall.
- Buliva, J. K. (2019). Influence of authoritarian parenting style on forms of delinquent behaviour among secondary school students in Butere Sub-County, Kenya. Journal of Education and Practice, 10(19), 1-9. https://doi.org/10.7176/JEP/10-19-01
- Catherine, B., & Catherine, B. (2016). Digital uses, victimization and online aggression: A comparative study between primary school and lower secondary school students in France. European Journal on Criminal Policy and Research, 22, 285–300. https://doi.org/10.1007/s10610-015-9293-7
- (2016). Understanding school violence. U.S. Centers for Disease Control and Prevention. CDC. https://stacks.cdc.gov/view/cdc/43376
- CDC. (2021). Exposure to violence and associated health-risk behaviors among high school students—Youth Risk Behavior Survey. Morbidity *Mortality* Weekly and Report: Supplements, 70(5),https://doi.org/10.15585/mmwr.su7005a4
- Craig, W. M. (2000, February). Observations of bullying in the playground and in the classroom. School Psychology International, 21(1), 22–36.
- Derman, M. (2017). Early childhood education teachers' strategies use in order to prevent aggressive behaviors in classes: The case of Turkey. Universal Journal of Educational Research, 5(7), 1127–1136.
- Hanan, E. S. (2007). Prevalence and risk factors of violence among elementary school children in Cairo. Journal of the Egyptian Public Health Association, 82(1-2), 127-146. https://doi.org/10.21608/jephsa.2007
- Hudley, C. (2008). A look at children's aggression. Yale University Press. https://doi.org/10.12987/9780300151756-
- International, C. H. (2024). Ending violence against children: Positioning child helplines at the heart of response, referral, protection and prevention. Child Helpline International. <a href="https://childhelplineinternational.org/violence-">https://childhelplineinternational.org/violence-</a> positioning-child-helplines/



- Jouriles, E. G. (2009). Experiences of psychological and physical aggression in adolescent romantic relationships: Links to psychological distress. *Child Abuse & Neglect*, *33*(7), 451–460. <a href="https://doi.org/10.1016/j.chiabu.2008.11.005">https://doi.org/10.1016/j.chiabu.2008.11.005</a>
- Koo, T. K. (2016). A guideline of selecting and reporting intraclass correlation coefficients for reliability research. *Journal of Chiropractic Medicine*, 15(2), 155–163. https://doi.org/10.1016/j.jcm.2016.02.012
- Kothari, C. R. (2004). Research methodology: Methods and techniques (2nd ed.). New Age International Publishers.
- Kumar, M. K. (2023). Study of aggression and its factors among school going adolescents of Delhi, India. *Journal of Family Medicine and Primary Care*, 45–50.
- Lee, K. H., & B., R. (2007). Age differences in the prevalence of physical aggression among 5–11-year-old Canadian boys and girls. *Canadian Journal of Psychiatry*, 33(1), 26–37. <a href="https://doi.org/10.1002/ab.20164">https://doi.org/10.1002/ab.20164</a>
- Liang, H. F. (2007). Bullying, violence, and risk behavior in South African school students. *Child Abuse & Neglect*, 31(2), 161–171. <a href="https://doi.org/10.1016/j.chiabu.2006.08.007">https://doi.org/10.1016/j.chiabu.2006.08.007</a>
- Magai, D. N. (2018). Emotional and behavioral problems in children and adolescents in Central Kenya. *Child Psychiatry & Human Development*, 49(4), 659–671. https://doi.org/10.1007/s10578-018-0783-y
- Mascheroni, G., & Ólafsson, K. (2014). Net children go mobile: Final report. https://netchildrengomobile.eu/reports
- Matzopoulos, R. B. (2008). The impact of violence on health in low- to middle-income countries. *International Journal of Injury Control and Safety Promotion*, 15(4), 177–187. <a href="https://doi.org/10.1080/17457300802396487">https://doi.org/10.1080/17457300802396487</a>
- Ndetei, D., Ongecha-Owuor, F., & Khasakhala, L. (2007). Bullying in public secondary schools in Nairobi, Kenya. *Journal of Child and Adolescent Mental Health*, 19(1), 45–55. <a href="https://doi.org/10.2989/17280580709486634">https://doi.org/10.2989/17280580709486634</a>
- Nguyen, K. H. (2021). Disclosure of sexual violence among girls and young women aged 13 to 24 years: Results from the Violence Against Children Surveys in Nigeria and Malawi. *Journal of Interpersonal Violence*, 36(3–4), 3–4. https://doi.org/10.xxxx/0886260518757225
- Pells, K., & Morrow, V. (2017). Ending violence in childhood: Global report 2017. Know Violence in Childhood.
- Planty, M., & Truman, J. (2019). School crime costs victims more than \$600 million every year. RTI International. https://www.rti.org/news/report-school-crime-costs-victims-more-600-million
- Poipoi, M. A. (2011). Perceived home factors contributing to violent behaviour among public secondary school students in Western Province, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(1), 30–40.
- Sidhu, A. K. (2019). Aggression among adolescents: A cross-sectional study. *Adesh University Journal of Medical Sciences & Research*, 1(1), 21–26.
- Sourander, A., Brunstein Klomek, A., Ikonen, M., Lindroos, J., Luntamo, T., Koskelainen, M., ... & Helenius, H. (2010). Psychosocial risk factors associated with cyberbullying among adolescents: A population-based study. *Archives of General Psychiatry*, 67(7), 720–728. <a href="https://doi.org/10.1001/archgenpsychiatry.2010.79">https://doi.org/10.1001/archgenpsychiatry.2010.79</a>
- Ttofi, M. M., & Farrington, D. P. (2011). The predictive efficiency of school bullying versus later offending: A systematic/meta-analytic review of longitudinal studies. *Criminal Behaviour and Mental Health*, 21(2), 80–89. <a href="https://doi.org/10.1002/cbm.808">https://doi.org/10.1002/cbm.808</a>
- UNESCO. (2017). *School violence and bullying: Global status report.* Paris, France: United Nations Educational Scientific and Cultural Organization. https://unesdoc.unesco.org/ark:/48223/pf0000246970
- UNESCO. (2018). New SDG 4 data on bullying: When children are the target of violence at school. <a href="https://uis.unesco.org/en/news/new-sdg-4-data-bullying">https://uis.unesco.org/en/news/new-sdg-4-data-bullying</a>
- UNICEF. (2021). *UNICEF child protection strategy* 2021–2030. <a href="https://www.readkong.com/page/unicef-child-protection-strategy-2021-2030-1743710">https://www.readkong.com/page/unicef-child-protection-strategy-2021-2030-1743710</a>
- Vakili, V., & Abbasi, S. (2015, November). Aggression: Is that an issue for worrying? *Iranian Journal of Public Health*, 44, 1561–1562.
- Vision 2030. (n.d.). Child protection programmes. Kenya Vision 2030. <a href="https://vision2030.go.ke/project/child-protection-programmes">https://vision2030.go.ke/project/child-protection-programmes</a>
- Wahl, K., & Metzner, F. (2011). Parental influences on the prevalence and development of child aggressiveness. *Journal of Child and Family Studies*, 21(2), 344–355. <a href="https://doi.org/10.1007/s10826-011-9484-x">https://doi.org/10.1007/s10826-011-9484-x</a>
- Walumoli, M. N. (2016). Influence of emotional modelling on aggressive behaviour among pre-school children in Kenva.
- Weltens, I. B., Bak, M., Verhagen, S. J. W., Veling, W., & van Os, J. (2021). Aggression on the psychiatric ward: Prevalence and risk factors. *PLOS ONE*, *16*(10), e0258346. <a href="https://doi.org/10.1371/journal.pone.0258346">https://doi.org/10.1371/journal.pone.0258346</a>
- WHO. (2002). *World report on violence and health*. Geneva: World Health Organization. https://www.who.int/violence\_injury\_prevention/violence/world\_report/en/
- WHO. (2020). *Global status report on preventing violence against children 2020.* World Health Organization. <a href="https://www.who.int/publications/i/item/9789240004191">https://www.who.int/publications/i/item/9789240004191</a>