

Factors Underlying the Development of Aggression Among School-Age Children in Ongata Rongai Subcounty, Kenya

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Abstract

Aggression among school-age children is a significant concern due to its impact on their developmental, academic, and social well-being. Various factors have been identified as potential contributors to aggression in this demographic study. The study aimed to investigate the factors underlying the development of aggression among school-age children in Ongata Rongai, Kajiado County, Kenya. The study targeted a population of 1,907 (1,040 girls and 867 boys) pupils from two schools, with a sample size of 156 (Experimental=77; Control=79) respondents. The sampling techniques employed included purposive, stratified, and simple random sampling. The study utilized a quasi-experimental design and employed self-administered sociodemographic questionnaires (SDQ) and standardized self-report Reactive-Proactive questionnaires (RPQ) as data collection instruments. Quantitative data analysis included descriptive statistics and inferential statistical analysis. Pearson correlation test assessed for the validity of the RPQ tool in measuring aggression constructs ($r=0.793$) while Cronbach's Alpha was applied to test internal consistency of the RPQ where reliability coefficient of $\alpha=0.821$ was realised. Statistical analysis was conducted using SPSS version 27. The study found that a significant proportion of respondents reported exposure to factors such as neighbourhood violence, fights, bullying, and being beaten or threatened by teachers. However, aspects such as hearing verbal abuse ($p=0.001$), watching violent TV programs ($p=0.036$), lying to obtain favours ($p=0.014$), and stealing ($p=0.014$) were identified as significant risk factors associated with the development of aggression among school-age children. These statistics highlight the potential negative impact of being exposed to violence and aggressive behaviour. The study concluded that addressing these identified risk factors, such as exposure to violent media and negative social environments, is crucial in mitigating aggression among school-age children. It recommends proactive interventions, including Problem-Solving Skills Training and promoting positive parenting practices, to address these risk factors effectively.

Key words: Aggression risk factors, School-age children and aggression, aggression intervention programs

Introduction and Background

Aggression is among the major externalizing behaviours during childhood and is described as that act, when one child harms another child's physical or psychological safety; including behaviours such as bullying, being physically offensive, threatening, and mocking others (Lansford et al., 2014; Hsieh & Yen (2017). Studies on aggression have shown diverse consequences of aggressive behaviour as impairing the psychological, social and the wellbeing of the children involved. As such, Babcock et al. (2014) concluded that there is need to increase diagnosis, management, and prevention of aggressive behavior in children. During childhood, this behaviour causes problems, for both the perpetrator and the victim and, as stated by Wang et al. (2019) more often than not, aggression leads to rejection and isolation of the aggressor. Similarly, it brings about psychosocial difficulties for the victims at school, at home and in the community.

The profound consequence of aggression necessitates an understanding of the origin of such behavior in school-age children. Huesmann (2018) argued that aggressive behavior may result from a set of situational factors emanating from a child's personal outlook on life. Therefore, by understanding social cognition such as those concerning the world around them, as well as the child's beliefs, may influence what the child understands as appropriate behavior. The acquisition of the social beliefs and thoughts about aggression is mainly through observational learning, whose proponent is Bandura (1973). Therefore, school-age children who continually experience aggression and violence may acquire thoughts and beliefs that sanction aggression, a behavior that can progress into even adulthood.

The development of aggressive behaviour is associated with exposure to distressing life events (Hockenberry et al., 2014). In order to cope with these stressors, some children adopt negative coping mechanisms which may be either internalized or externalized. In their argument, Crombach and Elbert (2014) described acquisition of aggressive tendencies as an inductive process dependant on undergoing experiences during childhood.

Environmental factors are the major contributors to the development of aggression among school-age children. Children learn by observing and imitating the behavior of those around them, particularly significant others such as adults, and peers (Labella & Masten, 2018). If children are

consistently exposed to aggressive models, such as parents, siblings, or peers who engage in aggressive behavior, they may internalize and replicate these behaviors themselves. The family environment plays a crucial role in shaping a child's behavior, thus parents who use harsh and inconsistent discipline are more likely to have children who exhibit aggressive behaviour (Lansford et al., 2016).

Children who grow up in homes with high levels of conflict, inconsistent or harsh discipline, or inadequate parental supervision are prone to developing aggressive behavior. Wahdan et al. (2014) found that very high risk of aggression was nearly 4 times higher among respondents who lived in families with violence at home. Additionally, witnessing aggressive behavior or experiencing physical or emotional abuse within the family can increase the likelihood of aggression in children (Maguire-Jack et al., 2022). Similarly, parents who are less responsive to their children's emotional needs are more likely to have children who exhibit aggressive behaviour (Posner & Rothbart, 2018). Heizomi et al. (2021) observed a statistically significant and direct relationship between conflict between parents and aggression in the children ($p < 0.05$).

In Uganda's Luwero District, Devries et al. (2017) found that children who witnessed and lived through violence had more than four times the likelihood of experiencing increased levels of psychological problems. Above all, they had between six to eight times the likelihood of adopting the use of violence and aggression to resolve problems.

A Kenyan study done by Skinner et al. (2014) on child rearing in violent environments and child externalizing behaviour problems, found a positive association between childrearing in violence and exposure of these children to political violence. The two associated phenomena lead to increase in children's externalizing psychological problems or behaviour including, aggression. Community violence exposure does result in heightened risk for engaging in and being a victim of interpersonal violence and aggression. A US study by Low and Espelage (2014) examined 1,232 students whose ages ranged from 10 to 15 years and confirmed a robust relation between community violence, maladaptive behaviours and deviancy. Reports indicated that impulsivity escalated the impact of community violence exposure on perpetration through increased levels of deviancy (90% CI [.05, .13], $p < 0.01$).

Farrell et al. (2020) examined bidirectional relations between physical aggression, witnessing violence in the community and victimization among adolescents in urban schools in Southeastern US states. The study involving 2,568 participants found that changes in physical aggression were significantly predicted by witnessing violence (β s = 0.11 to 0.12). As stated by Kuhn et al. (2015), children who were brought up in neighbourhoods that were threatening or violent, viewed aggressive behaviour as acceptable, logical and a means of protecting themselves and responding to an environment that is hostile.

In Kenya, Wakoli (2020) examined the relationship between students, neighbourhood and aggressive behaviour in secondary schools. The study revealed that the school climate significantly predicted the aggressive behaviour of learners ($F(1,306) = 128.942, p < 0.05$). The conclusion of the study was that the community environment made significant contribution to the aggressive behaviour of the learners. A study in Kenya among nine countries including the United States, Italy, China, Jordan, Sweden, Colombia, Thailand, and the Philippines, Skinner et al. (2014) examined the negative impact of neighbourhood danger as it permeates different dimensions of childhood. Although Italy and Kenya exhibited the highest means of aggression, the study revealed that the relationship between perceived neighbourhood danger and aggression was non-significant in four of the countries: Thailand ($p = 0.378$), Colombia ($p = 0.230$), China ($p = 0.714$) and Kenya ($p = 0.435$).

Children who experience rejection, bullying, or social exclusion from their peers may develop aggressive behaviors as a way to cope or establish dominance. Alternatively, associating with peers who engage in aggressive behavior can also encourage the adoption of aggressive tendencies (Fleckman et al., 2022). Those who have aggressive peers are more likely to engage in aggressive behaviour themselves (Dodge et al., 2014). Exposure to violence, either as a victim or a witness, has also been linked to increased aggressive behaviour in children.

Karmaliani et al. (2017) singled out the psychological impact of witnessing violence and hostility in the family, which was seen in the association between seeing or hearing their father fighting other men and aggression directed at their mothers (girls, $p < 0.001$; boys, $p = 0.046$). Kuhn et al. (2015) described children who were brought up in neighbourhoods that were threatening or violent, as growing to view aggressive behaviour as a logical and acceptable means of protecting

themselves and responding to an environment that was hostile. Other environmental factors that have been linked to aggression include poverty, neighbourhood violence, and school bullying (Boulton & Smith, 2014; Obando et al., 2023).

Media influence is based on social learning theory during which children can acquire undesirable behaviors through observational learning. Media portrayals of violence can desensitize children to aggressive acts and normalize aggressive behaviour as a means of problem-solving. Exposure to violent media, such as violent movies, video games, or TV shows, has been linked to an increase in aggressive behavior in some children (Varghese, 2022). Findings by Nazari et al. (2019) indicated that most of the aggressive students preferred fast-paced TV programs (84.69%), while most of the students in low aggression (64.48%) and moderate aggression level (61.64%), were interested in slow-paced, less violent TV programs.

In their study, Wei et al. (2022) noted that the direct effect of violent video game exposure on externalizing problems including aggression, was significantly lower at the senior high school level ($p = 0.217$) than at the elementary school level ($p < 0.001$) and junior high school ($p < 0.001$). Similarly, Sehgal and Nayak (2021) concluded that children exposed to violence, aggression, and images of physical abuse on TV showed significantly high aggression. There is correlation between aggression scores and exposure to violence on TV for more than 2 hours per day ($p < 0.001$).

In a Kenyan study on the impact of television viewing on students' unrest in secondary schools, Kamaku et al. (2019) concluded that there was a significant relationship and effect between TV programs watched and students' unrest in secondary schools in Kiambu County. The study reported that content which was most outstanding was that of violent nature, inciting gender of students (boys $p < 0.001$; girls $p < 0.001$) to participate in acts of unrest in schools. The study also showed that whether rated PG or not, most programs running in Kenya's mainstream TV stations had violent content.

Similar findings were reported by Aloka et al. (2018) who investigated the influence of electronic media on behaviour problems among Secondary School Students in Makueni County, Kenya. With a sample size of 300 students and 20 teachers, Aloka et al. (2018) reported that a high percentage

of the students (n=188; 62.7%) agreed that violence was influenced by exposure to electronic media. In addition, another 177(59%) agreed that the unrest in schools, especially strikes, were influenced by exposure to electronic media.

Each child has unique characteristics and traits that can influence the development of aggression. For instance, children with low self-esteem, poor anger management skills, difficulties in social interactions or moral disengagement may be more prone to displaying aggressive behaviors (Joseph et al.,2022). Moral disengagement in which children struggle with impulse control, is the core cognitive variable that fuel their rule breaking behaviour such as stealing and taking others' possession without permission. In their phenomenological study, Burt et al. (2016) found that 56.1% of the boys and 33.2% of the girls with rule breaking behaviour, steal within and outside their home. Baker and Liu (2021) on moral reasoning and moral behavior, in which it was concluded that higher levels of aggression did not correspond with use of conventional reasoning strategies ($p>0.05$).

On examination of moral disengagement mechanisms and its relationship with aggression and bullying among school children, Gómez et al. (2021) found significant positive correlations between aggression, moral disengagement, and bullying behaviour. Moral disengagement explained 34% of the variance in physical aggression and 14% variance in verbal aggression. For boys, neither direct or indirect bullying was significantly correlated with mechanisms of moral disengagement and in contrast, in girls, all the mechanisms of moral disengagement were significantly correlated with both direct and indirect bullying.

In Kenyan a study done in 2023 (Barasa et al., 2023) examined deviant behaviour among a sample of 384 students, in public secondary schools within Bungoma County, in Western Kenya. The study found that there were large number of cases of deviant behaviours among students; the highest of which was stealing (95.6%) while drug and substance use (64.8%). Additionally, the major factors behind students' unrest and burning of schools was found to be peer pressure (83.3%) and drug and substance use (53.6%). In the same county, Nabiswa et al. (2016) studied a sample of 50 respondents from eight schools and analysed to find out the student deviant behaviour that was most prevalent. On rating the prevalence of deviant behaviour among the students, theft was ranked as number one, with a weighted score of severity at 21%.

The development of aggression in school-age children is a complex and multifaceted phenomenon. While several factors can contribute to its development, it is likely that the interaction of multiple factors is necessary for aggression to develop (Adesanya et al.,2022). Preventing or reducing aggressive behaviour in school-age children requires a multifaceted approach that addresses all the factors that contribute to the development of aggression. Understanding the factors underlying the development of aggression among school-age children is essential in designing effective interventions to reduce or prevent aggressive behaviour. While the above factors discussed are generally applicable to children worldwide, it is essential to recognize that the specific context may have unique characteristics that may influence the development of aggression among children.

Methodology

This study utilised a quasi-experimental design aimed at examining factors underlying the development of aggression among school-age children in selected schools in Ongata Rongai subcounty, Kajiado County, Kenya. Purposive sampling was used to select Ongata Rongai which is a good representation of the other seven (7) administrative divisions in Kajiado County. Ongata Rongai has six (6) public primary schools. The first school, Nakeel, was selected through simple random sampling out the six (6) schools, while the second school was purposively selected, basing the selection on the one that was farthest. Simple random sampling was utilised on the two schools to select the experimental and control groups. Both schools are from the informal settlements of Ongata Rongai subcounty, Kajiado County, which are the catchment areas for pupils attending the two schools.

The target population was ,907 (,040 girls and 867 boys) from thirty-one streams of grades four to seven of the two schools. However, using simple random sampling, two streams from each class were selected from both schools. Therefore, fifteen (15) streams from the four classes were selected. The study focused on 10 to12-year-old (school-age) children, majority of who are found in grades four (4) to seven (7) in the Kenyan primary school system (MoEST ,2014). The sample size (n=156) for the study was obtained using the Chan (2003) formula and comprised 77 respondents from experimental, and 79 from control sites. Respondents were selected using stratified random sampling based on age, gender, grade and aggression levels to ensure inclusivity

of respondents from the four classes (Grades 4, 5, 6 & 7) and to allow for equal gender representation.

Data was collected using a self-report Sociodemographic questionnaire and standardized self-report Reactive-Proactive questionnaires (RPQ) assessment tool with acceptable reliability ($\alpha=0.821$) and validity ($r=0.793$), which was ascertained using the Cronbach Alpha and Pearson correlation coefficient analysis, respectively. These assessed whether each of the items inquiring on the forms of aggression were correlated with aggression. All the items were valid for assessment of aggression since they had a positive statistically significant relationship ($p=0.001$). Data was analysed using the Statistical package for Social Sciences (version 27) utilizing descriptive statistics and to identify risk factors of aggression in both schools.

Results

The study sought to examine various factors underlying the development of aggression among school-age children in Ongata Rongai. Tables 1 and 2 show the risk factors that were associated with aggression among the respondents.

Table 1: Risk Factors of Aggression among the Respondents

Variable	Levels	Exp. n=77	Control n=79	Total n=156	X ²	Sig.
Witness parents fight	No	27 (35.1%)	35(44.3%)	62(39.7%)	1.390	0.238
	Yes	50 (64.9%)	44(55.7%)	94(60.3%)		
Hearing verbal abuse	No	14(18.18%)	34(43.0%)	48(30.8%)	11.31	0.001*
	Yes	63(81.8%)	45(57.0%)	108(69.2%)		
Parent Alcohol intake	No	64(83.1%)	64(81.0%)	128(82.0%)	0.117	0.732
	Yes	13(16.9%)	15(19.0%)	28(18.0%)		
Parent Drug use	No	62(80.5%)	67(84.8%)	129(82.7%)	0.502	0.479
	Yes	15(19.5%)	12(15.2%)	27(17.3%)		
Neighbourhood violence	No	10(13.0%)	6(7.6%)	16(10.3%)	1.232	0.267
	Yes	67(87.0%)	73(92.4%)	140(89.7%)		
Physically Punished	No	28(36.4%)	28(35.4%)	56(25.9%)	1.033	0.597
	Yes	49(63.6%)	51(64.6)	100(64.1%)		

In the experimental group, 50 (64.9%) of respondents had witnessed their parents fight each other compared to 44(55.7%) in the control group. However, witnessing parental fights was not a risk factor for development of aggression among the respondents statistically ($p=0.238$). Hearing verbal abuses, being verbally abused and name-calling between parents was found to be statistically significant in influencing the respondents' aggression ($p=0.001$). In the experimental group, 63(81.8%) respondents had heard their parents abusing each other and had been abused compared to 45(57.0%) in the control group. Few respondents had parents who consumed alcohol with more 15(19%) being in the control group compared to 13(16.9%) in the experimental group. However, parental alcohol intake had no influence on respondent's aggression ($p=0.732$). Likewise, drug use by parents did not impact on respondents' aggression ($p=0.479$) majority of who were in the experimental group (80.05%) compared to 67 (84.8%) in the control group. However, this was not statistically significant ($p= 0.479$). It was also noted that witnessing violence in the neighbourhood had no bearing on development of aggression among these respondents ($p=0.267$) with a slightly larger number of 73 (92.4%) in the control group and 67 (87.0%) in the experimental group.

Table 2: Risk Factors of Aggression among the Respondents

Variable	Levels	Exp. n=77	Control n=79	Total n=156	X ²	Sig.
Witnessing bullying	No	12(15.6%)	13(16.5%)	25(16.0%)	0.022	0.882
	Yes	65(84.4%)	66(83.5%)	131(84.0%)		
Violent TV programs	No	12(15.6%)	19(24.1%)	31(19.9%)	2.294	0.036*
	Yes	65(84.4%)	60(75.9%)	125(80.1%)		
Beaten/threatened by teachers	No	8(10.4%)	16(20.25%)	24(15.4%)	3.795	0.185
	Yes	69(89.6%)	63(79.7%)	132(84.6%)		
Lying to obtain favours	No	12(15.6%)	28(35.4%)	40(25.6%)	8.065	0.005*
	Yes	65(84.4%)	51(64.6%)	116(74.4%)		
Stealing	No	11(14.3%)	19(24.1%)	30(19.2%)	2.514	0.014*
	Yes	66(85.7%)	60(75.9%)	124(79.5%)		

Being punished physically by their parents for wrongdoing did not in any way influence the development of aggression ($p=0.597$) with 49 (63.6%) in the experimental group and 51(64.6%) in the control group.

Experimental group had 69 (89.6%) who regularly witnessed school fights while control group had 65(82.3%) However, witnessing school fights did not increase aggression in respondents ($p=0.188$). Witnessing bullying at school was not a pointer to the respondents' aggression as there was no statistical significance ($p=0.882$) but 84.4% for experimental group and 83.5% in the control group had witnessed this vice. Watching violent TV programs was found to fuel respondent's aggressive behaviour ($p=0.036$) with the experimental group having 65 (84.4%) respondents while the control group had 60 (75.9%).

Most respondents at 69 (89.6%) in the experimental group had experienced verbal or physical abuse by their teachers while in the control group they were 63 (79.7%), which was not determinative of respondents' aggression ($p=0.185$). Lying to obtain favours was highly statistically significant ($p=0.005$) and an indicator that there was a correlation between lying to obtain favours and aggressive behaviour among the respondents. More of respondents in experimental group (84.4%) had lied compared to 51(64.6%) in the control group. The respondents' urge to take someone's possession without permission was a positive pointer to aggressive behaviour ($p=0.014$) with 66 (85.7%) being in the experimental group and 60 (75.9%) in the control group.

Discussion

The findings of this study reveal a significant relationship between exposure to violence in various forms and aggressive behaviour among school-age children. Risk factors that had statistically significant differences were hearing verbal abuse ($p=0.001$), watching violent TV programs ($p=0.036$), lying to obtain favours ($p=0.014$), and stealing ($p=0.014$). These statistics highlight the potential negative impact of being exposed to violence or aggressive behaviour.

Hearing parents verbally abuse each other, and their children was a major factor that contributed to aggressive behaviour in school-age children. Based on Salimi et al. (2019) argument, Social Learning Theory illustrates how aggressive behaviour is developed when a person learns aggression through observational learning and reinforcement ($p=0.01$).

In the current study therefore, hearing and then learning abusive words from their parents, may have occurred in the school-age children as they interacted with these significant individuals within their social environment. Furthermore, children learn from observing those around them despite being reminded to “do as you are told and not as I do” by the grown-ups. In circumstances that are described by Orue et al. (2011), with time, the children integrate this aggression as their way of life and particularly if the said behaviours generated some rewards such as being considered “tough” by their peers.

Similar to our study finding on association between verbally abusive family and aggressive behaviour, was Galal et al. (2019), who found out the proportion of victims and perpetrators higher among respondents who had experienced humiliating words ($p=0.001$). The researchers found a significantly high percent of victims among those exposed to verbal abuse ($p<0.001$) by their family members. In many cultures, verbal aggression such as name calling, shouting, berating constantly, scolding and so on, is discounted and even disregarded. This form of abuse is marginalised because it is seen as “disciplining” or “correcting” the partner or the child since, according to many homes, only beating or caning are understood as abuse. Certainly, there are those who assume that these are “just words” which cannot hurt them and reason that after all, “sticks and stones may break my bones, but words can never hurt me.”

Congruence with the current study finding is reported by Wahdan et al. (2014), who found that very high risk of aggression was nearly 4 times higher among respondents who lived in families with violence at home. The emotional abuse of the children who hear the constant haranguing and shouting at home increases their level of anxiety, stress and irritability, which may make them prone to aggressive outbursts. On the other hand, in a bid to deal with the emotionally distressing situation, these children develop coping mechanisms, many of which may be maladaptive. Rosser-Limiñana et al (2020) note that these children struggle with social interaction with peers, where frustrations, feelings of inadequacy and low self-esteem, are expressed as aggression.

Furthermore, due to their inability to express themselves adequately and lacking in problem-solving skills, the children may develop impulsive and aggressive reactions to situations which challenge them while at school. Our study report is also supported in Heizomi et al. (2021) study, which found out a significant and direct relationship between conflict between parents and aggression in their children ($p<0.05$). As children listen to and are exposed to the name-calling,

shouting and belittling as a way of solving problems during conflicts, they mimic similar aggressive behaviour and adopt it to express their difficulties and frustration with their peers.

While witnessing parental physical fights did not show a statistically significant difference in aggression levels in the current study, some have shown a link between witnessing parental conflict and aggression in children. Kopystynska et al, (2022) examined the association between witnessing interparental conflict and child outcomes, including aggression. The study suggests that witnessing parental conflict, even without direct physical violence, can contribute to increased aggression in children.

Although the specific findings in the mentioned studies may not align with the results of the current study findings, it is important to note that individual study results can vary due to factors such as sample characteristics, methodology, and cultural context. The existing body of research suggests that witnessing parental conflict, particularly when accompanied by other factors such as child distress and negative parenting, can contribute to increased aggression in children.

The association between parental alcohol intake and aggression in school-going children has been a topic of research interest. Several studies (Finan et al. 2015; Capaldi et al. 2017) have examined this relationship and have provided insights into the potential impact of parental alcohol consumption on children's aggression. With regards to the current study, parental alcohol intake was not a risk factor for aggression among the respondents ($p=0.732$). The study contradicts findings by Finan et al. 2015 who reported that parental alcohol use disorder (AUD) was associated with higher levels of aggressive behaviour in children. The Finan et al. 2015 study suggested that the disruption caused by parental alcohol problems, such as impaired parenting practices, inconsistent discipline, and conflict within the family, can contribute to aggressive behaviour in children.

While these study reports were in contrast with the current findings, it is important to note that the relationship between parental alcohol intake and aggression in children can be complex and may be influenced by various factors. For example, children may have protective and resilience factors such as their personality and temperament, control over oneself, developed self-esteem, ability to have hope and such similar traits (Sawant, 2020). Additionally, it is crucial to consider that not all

children of parents who consume alcohol will exhibit aggressive behaviour. Protective factors and resilience factors can mitigate the potential negative effects of parental alcohol intake on children's aggression (Park & Schepp, 2015). Therefore, although research suggests that parental alcohol intake may be a risk factor for increased aggression in school-going children, other factors need to be taken into account when examining this association.

The current study found out an association between media violence exposure and aggression in school-age children. Notably, media influence is based on social learning theory in which individuals can acquire undesirable behaviors through observational learning, in which individuals receive unwanted behaviors by observing or imitating others' undesirable behaviors. The current study finding is similar to Stamatis and Chatzinikola (2022) which revealed that absence from creative extracurricular activities, watching violent child TV series or playing violent video games, long exposure to the internet to be part of the factors associated with aggression in school going children. Other studies that share comparable findings to this current report include Sehgal and Nayak (2021); Nazari et al., (2019); Wei et al., (2022); Kamaku et al., (2019) and Aloka et al., (2018). Similarity in findings was also noted with Varghese (2022), that media's portrayals of violence can desensitize children to aggressive acts, normalizing aggressive behaviour as a means of problem-solving. In his observation, exposure to violent media, such as violent movies, video games, or TV shows, are linked to an increase in aggressive behavior in some children.

Plausible explanation to our findings is that, with the rise in digital technology, parents continue to abdicate their care-giving roles to the television and the telephone handset. Currently, some parents rely heavily on the screens to occupy their children even when they are with them in the room or at home. This includes those who pacify or make up for their inability to spend time with their children by giving them mobile phone sets to watch what pleases them. What is alarming is that the viewing period or content is unsupervised and not monitored even when the parents are with their children in the same room.

With exposure to some TV content which may be violent and not age appropriate, including cartoons, the children's value systems, behaviour and beliefs are molded and influenced by the screen figures. Often, they want to emulate the screen characters they admire especially if they appear to be heroes or heroines. Children have unlimited access to television sets and mobile

phones, which are now available in every home, and this puts them at significant risk of exposure to violence on the screens. Following the adage that “monkey see, monkey do,” children may become less sensitive to the suffering of others, lose their compassion and are likely to adopt the aggressive ways seen on the screens as they identify with the “tough” and “strong” perpetrators.

Other risk factors for aggression identified by this current study were lying to obtain favours and stealing, both of which have been attributed to moral disengagement. These study findings are reflected in Barasa et al. (2023) study which reported that stealing (95.6%) was a major deviant behaviour among students who engaged in school unrest and burning of schools. An earlier study finding by Nabiswa et al. (2016) noted that, theft was ranked the highest on the list of prevalence of deviant behaviour among secondary school students. Although the population of the two studies are secondary school students and therefore older than those of the current study, the concept of moral reasoning and moral behaviour applies. When an individual is well-grounded in their moral standing, issues such as negative peer pressure will not sway their actions. This is noted in Burt et al. (2016) phenomenological study and Baker and Liu (2021) studies, which concluded that those higher levels of aggression did not correspond with use of conventional reasoning strategies ($p>0.05$).

Conversely, when a child acts out or starts lying and stealing, often, it is because they have emotional challenges. Lying and stealing, although inappropriate, are common behaviour among school-age children. However, if these persist, then these are children who are considered as having underlying problems such as conduct disorders. From the age of 6 years, school-age children know that lying is wrong, therefore, when a child is noted to be stealing, it is usually a red flag for poor self-esteem or peer pressure. According to Baker and Liu (2021), the idea of moral disengagement does account for the difference between a child's moral reasoning and his/her moral behaviour. The child involved in theft is usually crying out for attention, help from the adults around him or even validation and positive feedback from people close to them.

Our study finding that there was no significant relationship between aggression and community violence is contradicted by other findings (Low & Espelage, 2014; Farrell et al., 2020; Kuhn et al., 2015; Wakoli, 2020). However, Skinner et al. (2014) in their Kenyan study among nine other countries including the United States, Italy, China, Jordan, Sweden, Colombia, Thailand, and the

Philippines, revealed that the relation between aggression and perceived neighbourhood danger was non-significant in four of the countries but were statistically significant in five countries. Probable explanation for this difference in findings from our study results is, the variation in study approaches including research designs, others used mixed methods, and some had older or much younger respondents.

In Kenya, community violence is on the rise especially in urban areas because of rising high cost of living, coupled with joblessness, particularly in the informal settlements. As noted by Teresia (2022), “the residents are fearful of crime happening in their vicinity”. Furthermore, children who are brought up in neighbourhoods that are threatening or violent, such as the informal settlements in the urban areas, have had to adopt aggressive behaviour as an acceptable and logical means for protecting themselves and responding to an environment that is more hostile every day.

Being physically punished by their parents for wrongdoing (64,1%) and being beaten by teachers did not in any way influence development of aggression in the current study. The findings of the study are reflected by Morris and Gibson (2011) who reported that their results were “contradictory to past research that suggests the use of corporal punishment on children will lead to future misbehaviour”. The Morris and Gibson (2011) study concluded that corporal punishment was marginally or not at all related to children’s aggression and delinquency. Hecker et al. (2014) in a cross-sectional study of Tanzanian primary school aged children, assessed the association between corporal punishment and externalizing problems. The results revealed that corporal punishment by caregivers or by parents was positively related to children's externalizing problems.

The report by Hecker et al. (2014) study is not surprising because corporal punishment is physical abuse, which has negative effects on children’s emotional and psychological well-being. This form of abuse also violates the children’s fundamental human rights. It is surprising that nearly twenty-five (25) years after corporal punishment was banned (2001) in Kenyan schools, 84.6% respondents admitted that they had been beaten by teachers at school. However, corporal punishment may also be associated with cultural practices of some communities; therefore, there are sections of the society that support and promote the use of the cane in schools and in the homes. This current study indicated how urgent it is to address exposure to violence, whether it occurs in the family, media or in the community, in order to lessen its negative consequences on children's

aggressive behavior. Furthermore, the significance of perceived parental support emphasizes how crucial it is to cultivate positive parent-child interactions to mitigate the negative effects of exposure to violence on aggression. The findings support established theories suggesting a link between violence exposure and aggressive behaviour. However, Garthe et al., (2015) challenges the sole emphasis on violence exposure, suggesting the need to incorporate factors such as perceived parental support into theoretical frameworks to better understand and address aggression.

Conclusion

This study sought to identify the risk factors underlying the development of aggression among school-age children in Ongata Rongai, Kajiado County, Kenya. Risk factors identified as significantly underlying aggression included verbal abuse by significant people, watching violent TV programs, lying to obtain favours, and stealing. The first two are environmental factors that played a role in the development of aggression and were the most important contributors to the development of aggression among school-age children. Stealing and lying were individual factors, that contributed to aggression in the children. Risk factors such as exposure to neighbourhood violence, witnessing bullying, and being beaten or threatened by teachers scored highly but were not significant.

The development of aggression in school-age children is a complex and multifaceted process. While each of these factors can contribute to the development of aggressive behaviour, it is likely that the interaction of multiple factors is necessary for aggression to develop (Adesanya et al.,2022). The findings have significant implications for the distinctive functions of reactive and proactive aggression and the need to develop different interventions for male and female schoolchildren.

It is therefore recommended that schools and parents take a proactive approach to addressing the risk factors associated with aggression among children. This can be done through the implementation of school-based programs that address problem solving, as well as through the promotion of positive parenting practices that discourage violent behaviour and encourage healthy

communication. Additionally, limiting exposure to violent media can be an effective way to reduce aggressive behaviour among young people.

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