

# Moderating effects of demographic factors on foreign television cartoon programs exposure and children's social behavior in Kenya

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**Abstract:** The aim of the study was to examine the moderating effects of demographic factors on foreign television cartoon programs exposure and their influence on Kenyan children social behavior. The study applied cross-sectional research design. The researcher targeted school going children aged 7-10 years and in lower primary (Std.2-4) enrolled in 5 identified private primary schools. Simple random sampling technique was used to select pupils who were issued with questionnaires and included in the final research sample. A total of 350 pupils participated in the research. Of particular interest was how age and gender moderate media effects on children behavior. The study revealed that age and gender of the child did mediate the effects television exposure on their social behavior. Gender influenced the cartoon content children preferred to watch as well as the cartoon characters that the children chose to identify with while age mainly influenced cartoon viewership habits with older children spending less time watching cartoons compared to younger children.

**Index Terms-** Television Cartoons, Demographic Factors, Children, Social Behavior, Media effects

## 1.0 Introduction

Television cartoons are a popular entertainment for children across the globe. Research shows that a child starts watching television cartoons from as early as six months and that by two years; children are ardent viewers (Sudha, 2011). Sudha attributes this cartoons popularity among children due to their fast paced nature characterized by high speed light flashes, rapid color variations and movements which captivates the child. Children are spending considerable amounts of time watching television cartoons; according to (Hassan & Daniyal, 2013) children's physical activities in this day and age have been restricted to excessive television watching more so cartoon watching. This cartoon watching has to some extent affected children's attitudes and behavior such as their fashion and food preferences, language acquisition and interaction patterns. Some studies of media effects suggest that a variety of viewer characteristics, including but not limited to age, gender, socioeconomic status, intelligence levels, can mediate the effects of media especially television on social behavior. This study therefore narrowed on age and gender of Kenyan children and how they could mediate the effects of television on their social behavior.

One essential factor in the association between television viewing and social behavior may be the age of the child. (Wilson, 2008) acknowledges that children may not

necessarily be influenced by media in the same way and that age plays a crucial role with younger children being more vulnerable to media influence than older children. Of the same view is (Meyers, 2002) who states that young children are presumed to be at higher risk for being affected by what they see on the television than are older children due to differences in cognitive maturity where the later can be able to interpret what they watch better than younger children. According to (Strasburger, Wilson, & Jordan, 2009) empathy is a developmental skill as when exposed to a clip of a threatening stimulus or a characters fear in response to a threatening stimulus that was not shown directly; younger children were less physiologically aroused and less frightened by the characters fear than by the fear-provoking stimulus while older children responded emotionally to both clips shown.

A child's gender could also influence how television viewing ultimately affects their social behavior. (Calvert & Kotler, 2003) in their study found out that girls liked educational/informational based programs compared to the boys who liked entertainment themed programs; from these programs, Calvert and Kotler deduce that girls compared to boys learn socio-emotion lessons. Previous research by (Bandura, 2002) indicated that boys performed more aggressive acts than girls after viewing televised violence; (Tan, 1985) attributed this to cultural norms that permit more aggression from males than females and to the reason that boys are more likely to have been rewarded in the past for being aggressive while girls are more likely to have been punished.

Television cartoon viewing may have varying effects on children from diverse socio-economic groups. According to Hutson, Watkins and Kunkel as cited in (White, 1999) watching television is part and parcel in the lives of low income and minority families due to lack of alternative activities. Children from families of lower economic status as outlined in are more likely to act aggressively than children from higher income families regardless of television viewing. Similarly, Comstock and Paik as elaborated in (Kirkorian, Wartella, & Anderson, 2008) reiterate that, children from lower-income homes are likely to spend more time watching television and as a result score lower on measures of academic achievement compared to their equals from higher-income homes. Research study by (Robinson, 2001) also reveals that children from lower socio-economic homes spend more time watching television and at a higher risk of being classified as obese. (Ribner, Fitzpatrick, & Blair, 2017) further note that children from low income families were more likely to be

exposed to television for longer hours and as a result had lower school readiness particularly their math and executive function

### 1.1 Research Objective

The research study sought to examine the moderating effects of demographic factors on foreign television cartoon programs exposure and their influence on children’s social behavior in Kenya

### 1.2 Research Hypotheses

The research study sought to test the following hypotheses:

1. H<sub>01</sub>: There is no significant influence of gender on foreign programs comedic cartoon content preference
2. H<sub>02</sub>: There is no significant influence of gender on foreign programs violent cartoon content preference
3. H<sub>03</sub>: There is no significant influence of gender on foreign programs cartoon characters choice
4. H<sub>04</sub>: There is no significant influence of gender on foreign television cartoons viewership patterns
5. H<sub>05</sub>: There is no significant influence of age on foreign television cartoons viewership patterns

### 1.3 Research Methodology

The study applied cross-sectional research design. The study population was Kenyan children living and schooling in Murang’a County, Kiharu Constituency. The researcher applied purposive sampling where only private schools in Township Ward were considered for the study since this Ward has the highest electricity connectivity. The researcher targeted school going children aged 7-10 years and in lower primary (Std.2-4) enrolled in 5 identified private primary schools. Simple random sampling technique was used to select pupils who were issued with questionnaires and included in the final research sample. A total of 350 pupils participated in the research.

### 2.0 Moderating Effects of Gender on Cartoon Content and Children Social Behavior

From the descriptive statistics, it emerged that there was preference of various cartoon programs based on the children’s gender. It was imperative therefore to further test association of this observation if gender did influence choice of cartoon programs among children surveyed using a chi-square goodness of fit test. Specifically gender preference against comedic cartoon content and violent laced cartoon content was tested.

*H<sub>0</sub>: There is no significant influence of gender on comedic cartoon programs content preference*

#### Chi-Square Tests for Childs Gender and Comedic Cartoon Programs preference

	Value	df	Asymp. Sig. (2-sided)
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Pearson Chi-Square	5.111 <sup>a</sup>	4	.276
Likelihood Ratio	5.149	4	.272
Linear-by-Linear Association	1.995	1	.158
N of Valid Cases	350		

From the chi-square test of association results, gender had no influence on comedic content preference since P>0.05. According to (Vossen, Piotrowski, & Valkenburg, 2014) children in middle-hood stage regardless of their gender have higher preference to entertainment themed cartoon programs as opposed to educational themed ones and enjoy characters they can psychologically relate with such as those with an attractive sense of humor; which supports the chi-square findings that gender didn’t influence preference of comedic content.

*H<sub>0</sub>: There is no significant influence of gender on violent cartoon programs content preference*

#### Chi-Square Tests for Child Gender and Violent Cartoon Content Preference

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.749 <sup>a</sup>	2	.001
Likelihood Ratio	18.880	2	.001
Linear-by-Linear Association	18.674	1	.001
N of Valid Cases	350		

From the chi-square test of goodness fit results, gender had influence on violent content preference since P<0.05. This is in tandem with (Ergün, 2012) observation that male children prefer violent-oriented cartoons especially where the characters exhibit super powers.

#### Chi-Square Tests on Gender and Likelihood to Learn Verbal and Physical Aggression

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	83.770 <sup>a</sup>	4	.001
Likelihood Ratio	90.485	4	.001
Linear-by-Linear Association	76.359	1	.001
N of Valid Cases	350		

Having established that gender influenced preference of violent content, it was imperative to determine how this further influenced their behavior. The chi-square test revealed that gender did indeed influence the likelihood to learn physical

and verbal aggression. Previous research by (Bandura, 2002) indicates that boys are more likely to perform aggressive acts than girls after viewing televised violence.

**2.1 Moderating Effects of Gender on Cartoon Characters and Children Social Behavior**

*H<sub>0</sub>: There is no significant influence of gender on cartoon characters preference*

Findings from descriptive statistics revealed a tendency for children to identify with their favorite cartoon characters based on their gender. To further test this finding of children identifying with the cartoon characters based on their gender, a chi-square test of association was carried out. The children's gender was tested against four cartoon characters (two female lead cartoon characters and two male lead cartoon characters)

**Chi-Square Tests for Cartoon Characters preference and Child Gender**

Cartoon Characters		Value	df	Asymp. Sig. (2-sided)
Kion- Lion Guard	Pearson Chi-Square	29.920 <sup>a</sup>	4	.001
Spiderman	Pearson Chi-Square	78.841 <sup>a</sup>	4	.001
Doc Mc Stuffins	Pearson Chi-Square	15.220 <sup>a</sup>	4	.004
Sofia the First	Pearson Chi-Square	69.277 <sup>a</sup>	4	.001

From the chi-square findings, the null hypothesis that *there is no significant influence of gender on cartoon characters preference* was rejected since  $P < 0.05$ . It was true therefore, that gender did influence the cartoon characters the children chose to identify with. According to (Kirsh, 2005) previously done research studies have linked gender portrayals in children programming as important in the socialization process of children who are likely to manifest tendencies to imitate same gender characters than opposite gender characters.

**2.2 Moderating Effects of Gender on Cartoon Viewership Patterns and Children Social Behavior**

*H<sub>0</sub>: There is no significant influence of gender on cartoon viewership time patterns*

From the research, it was important to find out if there were any differences in television cartoons viewership patterns emanating from the child's gender. Did gender influence the time that a child watched television cartoons during weekdays, weekends and holidays? A chi-square test of association was used to determine if there was any significant difference.

**Chi-Square Tests for Cartoon Viewership and Child Gender**

Cartoon Viewership		Value	Df	Asymp. Sig. (2-sided)
Weekdays	Pearson Chi-Square	5.039 <sup>a</sup>	3	.169
Weekends	Pearson Chi-Square	2.922 <sup>a</sup>	3	.404
Holidays	Pearson Chi-Square	1.217 <sup>a</sup>	3	.749

From the chi-square findings, the null hypothesis that *there is no significant influence of gender on cartoon viewership patterns* was adopted since  $P > 0.05$ . The child's gender therefore didn't influence the time they spent watching cartoon programs. This research study was able to establish that watching television cartoons was a favorite pass time for majority of the children regardless their gender; according to (Roberts & Foehr, 2008) the time children dedicate to watch television exceeds other media they can access which is in line with the study research findings that regardless they were in school or at home for holidays children spent most of their time watching television cartoons.

**2.3 Moderating Effects of Age on Cartoon Viewership Patterns and Children Social Behavior**

*H<sub>0</sub>: There is no significant influence of age on cartoon viewership time patterns*

The research sought to find out if a child's age did influence the time they spent watching television cartoons, the study engaged children between 7 and 10 years and as such it was imperative to find out if this did influence the time spent on television cartoons by running a chi-square test of association.

**Chi-Square Test of Age and Time Spent Watching Cartoons**

Cartoon Time		Value	df	Asymp. Sig. (2-sided)
Weekdays	Pearson Chi-Square	10.689 <sup>a</sup>	3	.014
Weekends	Pearson Chi-Square	6.587 <sup>a</sup>	3	.086
Holidays	Pearson Chi-Square	2.085 <sup>a</sup>	3	.555

From the chi-square findings for child's age group and time spent watching cartoons on weekdays, the null hypothesis that *there's no significant influence of child's age on time spent viewing cartoons* was rejected since  $P < 0.05$ . A child's age therefore influenced the time spent watching cartoons during weekdays. On the weekends and school holidays however, the child's age didn't influence the time a child watched television cartoons since  $P > 0.05$  the null hypothesis *there is no significant influence of child's age on time spent viewing cartoons* was adopted. It is expected that older children have

more school assignments they expect to work on after school; according to (Torrecillas-Lacave, 2013) parents are mostly restrictive to school going children with homework during weekdays on television viewership which could explain the difference in age and time spent watching television cartoons during weekdays.

### Chi-Square Tests of Age and Preference to Watch Television Cartoons or Play Outdoors

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.600 <sup>a</sup>	2	.037
Likelihood Ratio	6.917	2	.031
Linear-by-Linear Association	3.173	1	.075
N of Valid Cases	350		

From the research findings, it emerged that age did to some extent influence preference to either watch television cartoons or play outdoors as  $P < 0.05$ . Majority of 7 and 8 year olds preferred to play outdoors while most 9 and 10 year olds indicated that they preferred to watch television cartoons. These findings reveal emerging physical inactivity tendencies as the children grow older.

### 3.0 Conclusions

From the study findings, gender and age of the child does influence their choice of cartoon content, cartoon characters and cartoon viewership tendencies. Though gender doesn't influence choice of comedic themed cartoons with both boys and girls highly preferring such cartoons, it does however influence choice of violent themed cartoons where boys are mainly inclined to watch such especially where the lead character exhibits super powers. Further the findings link increased likelihood of the boys to learn verbal and physical aggression by watching violent laced cartoon content. The research also established that gender did influence the cartoon characters that the children chose to identify with; girls gravitated towards female lead characters as did the boys to male lead characters. Age of the children mainly influenced their cartoon viewership habits with the older children spending less time watching television cartoons on weekdays. Age also did influence children physical activity levels with older children preferring to watch television cartoons other than play outdoors.

### 4.0 Recommendations

Parents, guardians and care givers need to monitor the content children watch especially that which is violent or abusive as it potentially has negative influence on them.

The time children watch television cartoons needs to be regulated and children need to be encouraged to engage more in physical activities such as outdoor playing.

### 5.0 Suggestions for Further Research

The link between socio-economic status and children television viewing patterns needs to be further researched

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