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To cite this article: Ann Neville Miller, Evangeline Nalugya, Charles Gabolya, Sarah Lagot, Richard Mulwany, Joseph Kiva, Grace Nabaasaka & Monica Chibita (2016) The association between Ugandan adolescents' viewing of specific television genres and sex-related normative beliefs and behaviours, *Communicatio*, 42:2, 221-237, DOI: [10.1080/02500167.2016.1187187](https://doi.org/10.1080/02500167.2016.1187187)

To link to this article: <http://dx.doi.org/10.1080/02500167.2016.1187187>



Published online: 13 Jun 2016.



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THE ASSOCIATION BETWEEN UGANDAN ADOLESCENTS' VIEWING OF SPECIFIC TELEVISION GENRES AND SEX-RELATED NORMATIVE BELIEFS AND BEHAVIOURS

Ann Neville Miller

Nicholson School of Communication
University of Central Florida, Orlando, USA
ann.miller@ucf.edu

Evangeline Nalugya, Charles Gabolya, Sarah Lagot, Richard Mulwanya, Joseph Kiva, Grace Nabaasaka and Monica Chibita

Mass Communication Department
Uganda Christian University, Mukono, Uganda
ekinyingi@ucu.ac.ug; charlesgabolya@gmail.com;
lalazsarahodwong@gmail.com; mulwanya@yahoo.com;
jkiva27@gmail.com; royce.khan@yahoo.com; mbchibita@gmail.com

ABSTRACT

Growing evidence in Western nations indicates that exposure to high levels of sexual media content influences adolescents' sexual attitudes and behaviours in those countries. Although media in many sub-Saharan markets contain increasingly higher levels of sexual content, little research has investigated the

UNISA 
university
of south africa

 Routledge
Taylor & Francis Group

Communicatio
Volume 42 | Number 2 | 2016
pp. 221–237

DOI: 10.1080/02500167.2016.1187187
Print ISSN 0250-0167 | Online 1753-5379
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effects of that content on adolescents' HIV-related risk and protective behaviours. This project used cultivation theory to examine Ugandan adolescents' media use, and to test the relationship between their exposure to specific television genres and their sex-related normative beliefs and behaviours. Three hundred and sixty secondary school students from four purposively sampled schools filled out a questionnaire about their television viewing, their beliefs about the prevalence of sexual intercourse among their peers, and their own sexual behaviours. Preliminary evidence of relationships between watching comedy and cartoon programming, and high estimates of the proportion of adolescents who engage in sexual intercourse, were observed. Watching comedy programming and non-African programming was associated with the higher likelihood to have ever had sexual intercourse.

Keywords: adolescent sexual behaviours; media effects; sexual attitudes; sexual television content; television genres

INTRODUCTION

Youths have been identified as a core risk group in the AIDS epidemic in sub-Saharan Africa (SSA) (UNAIDS 2012). In response, many HIV prevention efforts have employed mass media campaigns and edutainment programming to encourage abstinence, the delay of sexual debut and condom use (Muraya, Miller and Mjomba 2011; Population Services International [PSI] 2006). Scholarly literature is nearly silent, however, about the effects of sexual content on entertainment programming, even as the amount of that content expands dramatically in some SSA media markets (Gatsiounis 2011; Wabwego 2012). Mounting evidence from other contexts indicates that entertainment media influence adolescents' sexual formation and behaviour (Brown, L'Engle and Pardun et al. 2006; Chandra, Martino and Collins et al. 2008; Collins, Elliott and Berry et al. 2004). An investigation into these issues is needed in SSA, where rapid cultural shifts and a changing media environment could potentially heighten the status of media as a risk factor in adolescents' lives. This study, therefore, explored what television programming Ugandan youths consume, and how their viewing of those programmes is associated with specific sexual attitudes and behaviours.

SEXUAL MEDIA CONTENT AND ADOLESCENT SEXUAL BEHAVIOUR

In 2011, 23.5 million people in SSA were reportedly living with HIV/AIDS, with youth identified as a core risk group for infection (UNAIDS 2012). The Uganda National HIV Prevention Strategy (Uganda AIDS Commission 2011) has recommended delaying sexual debut, single sexual partnerships, and condom use

among young people in order to reduce the incidence of HIV. Multimedia campaigns and entertainment education programming have been used to disseminate these messages, such as the Straight Talk Foundation's (2014) impactful print and radio campaigns. However, little research and no interventions we are aware of have addressed the effects of increasingly sexual media content on Ugandan and other SSA youth. In fact, in the sub-Saharan context little is known regarding patterns of youth entertainment media usage; levels and types of sexual content in popular media programming; and the association between media exposure and sexual beliefs, attitudes and behaviours among adolescents.

Sexual content, as defined in Kunkel, Eyal and Finnerty's (2005) seminal content analysis, includes portrayals or references to touching, kissing, fondling and sexual intercourse, as well as sexual talk and innuendo. References to sexual risks and responsibilities, though much rarer in entertainment media, are also considered to be sexual content. Recent relaxations of government restrictions on the overall media environment in Uganda have led, by some accounts, to an upsurge in this sexual fare, both in locally produced programming and that which comes from overseas markets. The change has been so noticeable that the popular press (Gatsiounis 2011; Wabwego 2012) has begun to express concern. A nationwide survey of public perceptions of media revealed a broad-based uneasiness about disregard for Ugandan cultural values in television programming. Participants stated that television had negative effects on children and youth, and expressed apprehension about the subject matter of movies played in local 'film halls' (Chibita and Kibombo 2014). Much sexual media content is imported from the United States (US), where studies indicate that the portrayal of sexual talk and behaviour in the media has steadily increased over the past few years (Kunkel et al. 2005). A recent content analysis (Eyal and Finnerty 2009) of entertainment television programming in the US indicates a mean of 4.5 scenes with sexual talk and two scenes with sexual behaviour per hour. One in nine scenes portraying sexual content contains a depiction of sexual intercourse. Only one in 17 contains any reference to sexual risks or responsibilities. No content analyses are available about the extent or type of sexual content in locally or regionally produced television programming in Uganda. However, a recent assessment of locally produced Kenyan programming (much of which is imported into Uganda via regional stations like NTV) found that levels of sexual behaviour in some cases were nearly as high as that of American programming (Ngula, Miller and Mberia 2016). Ugandan media are likely to reflect higher numbers of sexual scripts, as the nation moves to a fully digital media platform.

Mounting evidence indicates that entertainment media influence adolescents' sexual formation and behaviour in Western nations (Brown, Halpen and L'Engle 2005; L'Engle, Brown and Kenneavy 2006; O'Hara, Gibbons and Li et al. 2013; Pardun, L'Engle and Brown 2005; Parkes, Wight and Hunt et al. 2013), including early sexual initiation and teenage pregnancy up to two years later (Brown et al.

2006; Chandra et al. 2008; Collins et al. 2004). Although there are many influences on adolescents' sexual behaviour, the scant research on this issue in the sub-Saharan context suggests that the media may also play a role in adolescent sexual behaviour in the region. Onyeonoro and colleagues (2011) found that among female adolescents in southeastern Nigeria, media and peers were the main source of sexual information, and their influence was associated with earlier sexual debut. Likewise, a multilevel analysis of the *Demographic and Health Survey* data of 20 African nations found that, contrary to the predictions of the researchers, greater media exposure in general was associated with higher numbers of sexual partners (Uchudi, Mogadi and Mostazir 2012). The single dichotomous measure of media use in that survey did not enable an analysis of the mechanisms behind this negative association.

CULTIVATION THEORY AND GENRE

Cultivation theory explains the association of media with beliefs and attitudes, by representing the media as centralised storytellers in society (Gerbner 1969). As such, they disseminate sex-laden scripts that 'provide young people with an unrestrained form of sex education, facilitating adolescents' sexual socialization processes and reinforcing adolescents' understanding of normative sexual behaviours' (Pinkleton and Austin 2008, 462). Scripts suggest to viewers what events should or should not be happening, how people should behave in response to what is or is not happening, and what the outcomes of particular courses of action might be (Wright 2009). Over time, exposure to media sexual scripts can alter youths' mental models to align more closely with the mass-mediated script of reality than with reality itself. This may lower youths' inhibitions about the performance of sexual behaviours, it may also make certain attitudes and cues more accessible in their memory and will thus be more likely to influence behaviour (Morgan and Shanahan 2010). Heavy exposure to media may even override the influence of family and social institutions (Pinkleton and Austin 2008).

It is important, therefore, to gain a general understanding of Ugandan youths' media environment. Our first research question addressed that topic.

RQ₁: What are the television programmes Ugandans youths enjoy the most?

The portrayal of premarital sex as normative in television programmes which is popular with US adolescents, appears to be fairly constant across a range of programming. However, certain aspects of sexual content vary across genres, and may have differential effects on sexual attitudes and behaviours (Gottfried, Valla and Bleakley et al. 2013). Genres are 'conventions regarding the content of TV series – formulas that prescribe the format, themes, premises, characterizations' in the entertainment vehicle (Bielby and Bielby 1994, 1292). Although the sexual content in certain genres may vary from programme to programme – reality shows like

Flip or Flop and *Iron Chef* include little sex, for example, whereas shows like *Real Housewives* and *The Bachelor* contain a great deal of it – in general, the range of possible scripts and stories in a given genre is limited (McQuail 1997). This means adolescents who self-select to view certain types of programming will most likely be repeatedly exposed to similar sexual scripts (Wright 2009). In sum, as Gottfried and colleagues (2011, 75) state: ‘Not all sexual content in the media is “created equal”.’

For instance, cultivation-based studies have shown that participants with high levels of television talk show viewing tended to overestimate the frequency of deviant behaviours, such as the number of sexually active male and female youth, and the proportion of teenage pregnancies (Davis and Mares 1998). Soap opera viewers have been shown to make significantly higher estimates of the number of pregnancies and cases of sexually transmitted infections in society, as well as the number of women who have had abortions (Buerkel-Rothfuss and Mayes 1981). Depending on viewing motive, they may also overestimate the number of marriages that end in divorce (Carveth and Alexander 1985), more than non-soap opera viewers. In line with cultivation theory, therefore, we assessed the effects of different genres on participants’ beliefs about the sexual behaviour of their peers, that is, their perceived collective norms.

RQ₂: How will adolescents’ level of exposure to different TV entertainment genres be related to beliefs about the sexual behaviour of their peers?

The way people perceive the behaviour of other group members, in turn, influences their own behaviour. This concept is at the centre of social norms research (see Lapinski and Rimal 2005, for a summary). Perkins (2002, 164) summarises the relationship as follows: ‘... norms can be powerful agents of control as “choices” of behavior are framed by these norms and as the course of behavior most commonly taken is typically in accordance with normative directives of “reference groups” that are most important to the individual.’ Thus, when people perceive certain behaviours to be more common among their social group than is actually the case, their belief may lead to an increase in those behaviours (Real and Rimal 2007). The mass media have been labeled a sort of ‘super peer’ for adolescents as regards sexual behaviour (Brown et al. 2005). When various television genres purvey norms about sexual behaviour, adolescents who view these programmes may, in response, become more sexually active. Some research in Western contexts provides support for this argument. Comparing the effects of comedy, drama, cartoons and reality television programming, Gottfried et al. (2013) found that adolescents’ exposure to sexual content in television comedies was positively associated with perceived normative pressure to have sex, positive attitudes toward sexual debut, and engaging in sex one year later. Exposure to sexual content in dramas was negatively associated with perceived normative pressure to have sex. Exposure to cartoons and reality programmes had no association with sexual attitudes and behaviour. Because no

published literature appeared to address these issues in east Africa, we posed a third research question.

RQ₃: How will adolescents' level of exposure to different television entertainment genres be related to adolescents' sexual behaviours?

In addition to classic genres recognised in media scholarship, it is also possible that different messages are conveyed by programming that originates in different countries. A content analysis of locally produced Ugandan programming and programming from nations other than the US is not available. However, Ugandan media have, until recently, been quite conservative compared to US media, and qualitative data from the larger study (Miller et al. n.d.) indicates that the sexual messages which youths learned from international media were of a different character from those purveyed by local Ugandan programmes broadcast on network television. Therefore, we advanced two hypotheses:

H_{1a}: The higher the amount of non-local programming adolescents watch, the more likely they will be to have ever had sex.

H_{2a}: The higher the amount of non-local programming adolescents watch, the more sexual partners they will have had.

METHOD

Sample

Prior to data collection, a research permit was obtained from the Uganda National Council for Science and Technology, and approval was obtained from the institutional review board of the University of Central Florida in the US.

Data collection took place in four purposively selected high schools in Mukono, Uganda. Mukono, a district adjacent to the capital city of Kampala, is characterised by a mixed peri-urban and rural environment. Thus, the district provides an opportunity to gather data from youths hailing from diverse backgrounds. A purposive sample of four high schools was drawn to maximise variation among students: a lower socio-economic status (SES) private mixed boarding and day school (113 participants); a high SES private religious boarding school (64 participants); a mid-range SES private boarding school (82 participants) and a public mixed boarding and day school (101 participants). All schools were mixed gender, which is the most common configuration in the district. Two hundred and sixty-one students indicated they were boarders, 79 were day scholars, and the remainder did not indicate their residential status.

Permission was obtained from school principals and class teachers to administer questionnaires in the sampled schools. The school administrators gave instructions

to prefects to select the required numbers of students from each class. They were requested to locate first, second and third-year students for a target age of 14–16, but a few students in higher grades also ended up being called in. Among the participants, 189 were female and 167 were male; four students did not indicate their gender. One hundred and thirty-eight were in the first year of high school, 91 in the second, 95 in the third, four in the fourth and 25 in their fifth year. The mean age for the sample was 14.81 ($SD = 1.58$). As regards religious affiliation, 318 were Christian, 37 were Muslim, one was Jewish and two indicated 'other'. Most Christians (72.1%) indicated that they were born again.

Procedure

After participants had been identified, the school administrators directed them to a room where they were seated in preparation for survey administration. Members of the research team introduced the respondents to the purpose of the research and sought assent from those under 18 (consent from those over 18) to proceed, after which data collection commenced. Questionnaires were formulated in English, the language of education in Uganda, and self-administered. Prior focus group research had confirmed that students preferred to have questionnaires in English, rather than local vernacular languages. Two to four researchers were on standby to respond to queries from respondents as they filled out the questionnaires. The questionnaires, which contained additional items beyond those addressing the current study, took about 45 minutes to complete – including time spent answering students' questions. The researchers collected the questionnaires, and if they noticed missing data they asked participants to complete the relevant items. At the end of the process, the researchers thanked the study participants and left an address and phone number in case they had further questions.

Measures

Covariates. Data were gathered from participants about demographic and relational variables shown to operate as covariates in the relationship between exposure to sexual television content and sexual behaviours in previous research (Stephenson, Simon and Finnerton 2014; see Wright 2011 for a summary of covariates in Western contexts). These variables were gender; age; class level in school; family structure (live with both biological parents/mother/father/other relative or individual); religious affiliation; strength of relationship with mother; strength of relationship with father; highest level of education of parents; whether the majority of the student's friends were young, same aged or older; and whether the student was currently in a romantic relationship. Among these variables, those with statistically significant correlations to dependent variables in this sample were entered as covariates in the analysis.

Favourite television programmes and level of exposure to television genres. Participants were asked to write out their three favourite television programmes and what station each aired on. They were asked to respond on a separate scale from 0 to 4 (0 = never, 1 = rarely, 2 = sometimes, 3 = often, 4 = very often) regarding how often they watched each programme during the school term and during the holidays. A total of 944 responses were recorded, which included 205 different programmes. Six members of the research team met and discussed the genre of each separate programme listed, before assigning the programmes to certain genres, by consensus. Twelve separate genres were identified by the research team. The top six (excepting music programming, which was judged to encompass too wide a range of content) were used in analyses: dramas, comedies, soaps, gospel programming, reality programmes and cartoons/kids' programmes. (It should be noted that following Gottfried et al. [2013], the category of cartoons included all animated programmes. The content of some cartoons, such as *The Simpsons* and *South Park* is geared more toward adults than children, and includes sexual content as per Kunkel et al's [2005] definition.) Specific programme titles with which the research team was not familiar were searched on the Internet and assigned a genre based on descriptions found. Genres for 19 programmes could not be determined, because students seemed not to have known the exact titles of the programmes and/or the programmes could not be located online. Many students simply wrote down which genres they liked, instead of specific programmes, most commonly 'soaps' and 'movies'. These were coded (where possible) into genres, although the genres could not be determined for 'movies'. The level of exposure to each genre was calculated by multiplying the frequency with the genre as watched during holidays and school terms, and summing the results for each participant.

Level of exposure to local and international programming. Programmes identified by name were also coded for the nation in which they were produced. Locally produced programming broadcast on television networks was coded as local. Programming originating outside of Uganda was coded as international. The level of exposure to international programming was calculated by multiplying the frequency with which programming was watched during holidays and school terms, and summing the results for each participant.

Normative beliefs. Participants were presented with two items that asked them to select how many boys (out of ten) they estimated would have sex before they turned 18. They were asked the same question about the proportion of girls who would have sex before they turned 18.

Sexual behaviour. A single item asked whether participants had ever had sexual intercourse. They responded by indicating 'yes' or 'no'. Participants were then

asked: 'If you have had sexual intercourse, how many different people have you had sex with?' They checked boxes for 1, 2, 3, 4, 5 or 6 or more.

Pilot testing

The questionnaire was initially pilot tested with 15 students at a high school where final questionnaire data were not collected. Several problems with students' understanding became evident, especially with regard to the normative belief items. Over half of pilot study participants answered that '0' boys and '0' girls would have sex by the time they were 18. Although the research team members could conceive that very few students might believe that to be the case, it seemed unlikely that large numbers would think so. This suspicion was confirmed by the presence of several questionnaires in which the participants initially indicated '0', but changed their answers to much larger numbers like '6' or '7', presumably after explanation by the researchers cleared up the meaning. Questionnaires were revised and distributed at another high school, where some problems were still evident. The questionnaires were revised and distributed at a third high school, before the final version of these items was deemed adequate.

RESULTS

The first research question sought to identify the most popular media content among Ugandan youth. A total of 199 unique television programmes were identified (i.e., at least one mention as a top three favourite). Of the 199, 79.9 per cent (159) of the programmes were identified by three or fewer individuals. For the top 30 programmes, see Table 1. Out of 607 identifiable mentions of top three programmes, the largest number (56.67%) were produced in Uganda, with US programmes being the second most frequently mentioned (16.80%), followed by Indian (15.32%), Latin American (6.59%), Filipino (4.28%) and European (3.79%). The programme genre most frequently identified was telenovelas/soaps (21.58%), followed by music (17.99%), reality programmes (13.91%), gospel (6.12%), comedy (5.88%) and drama (5.04%). News and analysis programmes received 11.07 per cent of total mentions, and sports programming, 5.16 per cent. The remaining programmes mentioned were documentaries, educational programmes, game shows and talk shows.

Participants estimated that 46 per cent ($SD = 3.57$) of girls and 45 per cent ($SD = 3.41$) of boys would have sex by the time they were 18. A total of 15.7 per cent of participants reported having had sex. Among those who had had sex, the average number of sexual partners reported was 2.44 ($SD = 1.58$).

Table 1: Television programming mentioned by at least five people

	Program Title	* % of Participants	Origin	Distributor	Genre
1	<i>Strange Love</i>	13.89	India	Urban TV	Soap
2	Agataliiko Nfuufuu	8.11	Uganda	Bukedde	News
3	<i>Bade Acche</i>	7.50	India	Bukedde	Soap
4	<i>Be Careful With my Heart</i>	6.67	Philippines	Bukedde	Soap
5	Scoop on Scoop	5.00	Uganda	Urban	News/Gossip
6	Laze Wish	4.72	Uganda	Urban	Music
7	Lunch Time Request	4.44	Uganda	NTV	Music
8	Skizzy	3.61	Uganda	Urban	News/Gossip
8	Miracle Moments	3.61	Uganda	Channel 44	Gospel
10	Be my Date	3.33	Uganda	NTV	Reality
11	The Beat	3.33	Kenya	NTV	Music
12	Full Doz	3.06	Uganda	Bukedde	Music
13	Abanoonya	2.50	Uganda	Bukedde	Reality
14	<i>Made for Each Other</i>	2.50	India	NTV	Soap
15	Teen City	2.50	Uganda	Urban TV	Reality
16	<i>Without You</i>	2.22	U.S.	Urban TV	Soap
17	<i>Daniella</i>	2.22	Latin Am.	Bukedde	Soap
18	<i>Kabata</i>	1.94	Uganda	Bukedde	Comedy
19	SpongeBob SquarePants	1.67	U.S.	Nickelodeon	Cartoon
20	<i>Saat Phere</i>	1.67	India	Bukedde	Soap
21	Katandiika butandisi	1.67	Uganda	Bukedde	Talk/Other
22	<i>Fearless Heart</i>	1.67	Latin Am.	Telemundo	Soap
23	Ninja Warrior	1.67	U.S.	NTV	Reality
24	<i>Big Deal</i>	1.39	Uganda	NBS	Comedy
25	<i>Cats Cradle</i>	1.39	Latin Am.	NTV	Soap
26	<i>Deception</i>	1.39	U.S.	NTV	Drama
27	Expozod	1.39	Uganda	NTV	Music
28	<i>Sam and Cat</i>	1.39	U.S.	Nickelodeon	Comedy

	Program Title	* % of Participants	Origin	Distributor	Genre
29	Teen Club	1.39	Uganda	WBS	Reality
30	WWE Smack Down	1.39	U.S.	WWE Network	Action

*Percentage of participants identifying the program as a favourite

Level of exposure to television entertainment genres

RQ₂ asked what relationships exist between level of exposure to each of the television entertainment genres, and normative beliefs about peers' sexual behaviour. RQ₃ asked how adolescents' level of exposure to different television genres would be related to adolescents' ever having had sex, and the number of sexual partners. H₁ posited that the higher the amount of international programming adolescents watched, the more likely they would be to have had sex and the higher the number of sexual partners they would have had. To address these issues bivariate correlations were first run between independent variables and sex-related normative beliefs and behaviours – see Table 2.

Table 2: Bivariate correlations between independent and dependent variables

	2	3	4	5	6	7	8	9	10	11	12
1. Proportion of boys having sex by 18	.70***	.22***	.40**	.09	.03	-.04	-.04	.01	.13*	.07	.01
2. Proportion of girls having sex by 18		.15**	.27	.17**	.03	-.08	-.11*	.01	.11*	.04	-.06
3. Ever had sex			.25	.01	.08	-.08	-.04	-.10	.05	.10	-.07
4. Number of sexual partners				-.02	-.08	-.12	.15	-.09	-.06	.06	.20
5. Cartoon programming total					-.01	-.06	-.10	-.02	-.12*	-.11*	.06
6. Comedy programming total						-.04	-.08	-.06	.06	.11*	.22***
7. Drama programming total							-.03	-.03	-.09	.11*	.16**
8. Soaps total								-.04	-.14**	.32***	.76***
9. Gospel programming total									-.04	.11*	-.11*
10. Reality programming total										.26***	-.14*
11. Total TV viewing											.35***
12. International programming total											

* $p < .05$, ** $p < .01$, *** $p < .001$

Separate regression analyses were then run for each dependent variable. Demographic and social variables from previous literature that correlated in this sample at $p < .05$ for each dependent variable were entered in the first block: age, gender, year in school (class), and whether the participant was currently in a romantic relationship. Exposure levels for the six television entertainment genres, plus total television exposure and total international programme viewing were entered in the second block – see Table 3.

Table 3: Results of regression analyses

Predictor variables	Proportion of boys having sex by 18		Proportion of girls having sex by 18		Number of sexual partners		Ever had sex	
	SE B	β	SE B	b	b	b	SE	Wald
Step 1								
Age	.16	-.08	.17	-.11	.17	-.18	.15	2.21
Male	.37	.09	.39	.19***	.53	<.01	.41	17.12***
Class	.22	.42***	.23	.43***	.24	.23	.19	.89
In a relationship	.41	.08	.43	.05	.45	.15	.35	19.38***
	R2= .14***		R2= .13***		R2= -.02		Cox & Snell R2= .16***	
Step 2								
Age	.17	-.10	.17	-.14	.19	-.18	.16	2.49
Male	.42	.08	.43	.18**	.70	-.15	.49	14.00**
Class	.23	.43***	.23	.46***	.26	.19	.21	.73
In a relationship	.41	.08	.43	.06	.53	.12	.38	18.97***
Cartoon viewing	.08	.12*	.09	.22***	.14	-.02	.08	<.01
Comedy viewing	.10	.03	.10	.05	.13	-.09	.09	5.06*
Drama viewing	.09	-.04	.10	.02	.26	-.24	.17	1.46
Soaps viewing	.07	-.01	.07	.09	.11	-.45	.07	3.31
Gospel viewing	.09	-.03	.09	-.01	.17	-.26	.23	3.53
Reality viewing	.06	.12*	.06	.13*	.07	-.27	.06	.05
Total TV viewing	.04	-.04	.04	-.09	.06	.14	.04	2.57
International prog. viewing	.06	.03	.06	-.10	.08	.37	.06	4.35*
	Δ R2= .01		Δ R2= .03		Δ R2= .00		Δ R2= .06**	
	R2= .15***		R2= .17***		R2= -.03		Cox & Snell R2= .21***	

Note: Standardised beta weights and adjusted R^2 are reported ($N=360$)

* $p < .05$, ** $p < .01$, *** $p < .001$

In answer to RQ₂, high levels of cartoon and reality programme viewing were associated with higher estimates of the proportion of both boys and girls who had sex by the time they were 18. With respect to RQ₃, no relationships were found with the number of sexual partners and any independent variable. However, participants who reported high levels of comedy viewing were more likely to report that they had had sex. Finally, regarding H₁, heavy viewing of international programming was also associated with a greater likelihood of having had sexual intercourse. Therefore, H₁ was partially supported.

DISCUSSION

Numerous studies have examined the relationship between multimedia health campaigns and adolescent sexual behaviour in SSA. However, scholarly literature is almost silent about the effects of the multiple hours SSA youth spend immersed in sexually themed entertainment programming. Based on cultivation theory, this study investigated the association between Ugandan youths' exposure to six television genres, as well as total television exposure, with adolescents' selected sex-related normative beliefs, whether they have ever had sex, and the number of sexual partners.

With hundreds of unique television programmes identified as favourites among the 360 students surveyed, it is evident that the media environment in which these youths encounter sexual content is fragmented, akin to the prevailing situation in Western nations. Although television programming of American origin accounts for as much as 60 per cent of televised offerings in Uganda, over half of participants' favourite television programming was locally produced. Despite American programming having been extensively analysed for sexual messaging, this finding thus indicates that little is known about the sexual messages in much of the content Ugandan youths view on a daily basis.

Exposure to cartoons and reality programming had a statistically significant relationship with normative beliefs about sex: the more exposure to cartoons participants reported, the higher they estimated the proportion to be, of girls and boys who have sex by the time they are 18. It is possible that the association with reality programming was, in part, due to the fact that much of such locally produced shows – as mentioned by participants – consisted of dating programmes. The association with cartoons is more difficult to explain. The genre of cartoons was coded following Gottfried et al. (2013) and included all animated programmes listed, some of which were more adult- than child-themed. Thus, it may be that cartoons convey similar sexual scripts as comedy programming in the US, in that the negative effects of sexual jokes or behaviour are rarely portrayed, and any consequences are treated as minimally influential in characters' lives (*ibid.*). In that case, adolescents may have been more open to 'back door' persuasion, through what may be considered an innocuous television genre by both themselves and their parents. However,

because analyses have not been conducted on all of the programmes mentioned by participants, it is impossible to be certain that this explanation is correct.

Although the strongest predictors of ever having had sex were demographic and social – being male and currently in a relationship – two television-related variables did add predictive power to the model. Watching high levels of comedy programming and international programming were both positively associated with ever having had sex. The former finds echoes in Gottfried et al's (2013) results which indicate that among American adolescents, exposure to sexual content in televised comedies was positively associated with positive attitudes toward sexual debut, and engaging in sex one year later. Regarding international programming, with only 55 per cent of the population of even semi-urban areas like Mukono having watched television (Chibita and Kibombo 2014), exposure to the medium may necessarily involve interaction with a radically non-traditional worldview. The numbers of our participants who reported watching television were higher than that, but some of those students were likely able to access television only at friends' homes or in film halls. The difference that viewing large amounts of Western programming could make for such teens may be more pronounced than among mass media-savvy Western teens.

One aspect of our descriptive statistics is also worth noting. Our participants greatly overestimated the proportion of Ugandan girls who have sex by the time they are 18. According to the 2011 *Uganda Demographic and Health Survey* (Uganda Bureau of Statistics and ICF International 2012), accurate figures are 33.6 per cent of unmarried girls and 44.4 per cent of unmarried boys. Our sample's estimate of 45 per cent of girls overestimates prevalence of early sexual debut by 11.4 per cent. That is, in these youths' eyes girls were one third again as likely to initiate sex by the time they turn 18, than they are in reality.

Several limitations of this study should be noted. Because data are self-reported, they are subject to weaknesses in participant memory and a range of biases. For example, it is possible that those students with higher exposure to international media with high levels of sexual content are more comfortable reporting their own sexual behaviour. The study was also limited by the difficulties with the descriptive norm items. An additional limitation was the use of genre as a proxy for measuring exposure to actual sexual content. As noted by the Annenberg Media Research Group (2008), the technique of using media genre as a proxy for exposure to sexual media content, although frequently used, tends to produce lower effect sizes than assessment of sexual content levels of specific programmes. Ideally, future research in the sub-Saharan context should incorporate content analyses of local programming in this regard. At the same time, given that the use of genre produces lower effect sizes, the fact that several statistically significant associations emerged in this study becomes even more noteworthy. Finally, like all purposively sampled self-report studies, the results of this research cannot be generalised to all Ugandan youth.

In conclusion, the findings in this study support the need for an investigation into the role of exposure to sexual television programming in the sexual socialisation of Ugandan youth. Although effect sizes were small, media exposure predicted normative beliefs about the sexual experience of peers and whether participants themselves had ever had sex, even after controlling for social and demographic factors. As an initial exploration of this issue in the Ugandan context, this study does not address important issues like factors related to the context in which adolescents take in television programming, or how students make meaning out of sexual television content that contradicts cultural values. These and other issues should be the subject of future investigation, and may hold the potential for informing media-related interventions for youths or youth influences.

ACKNOWLEDGEMENT

This research was funded by the Fulbright US Scholar Program.

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