

Code of Silence: Evaluation Highlights

Key Findings from Research in Nigeria:
A Report to the Bill and Melinda Gates Foundation
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EXECUTIVE SUMMARY

An effort by Hollywood, Health & Society, Nollywood Workshops, and the Bill and Melinda Gates Foundation led to the development of *Code of Silence* (CoS), a mainstream Nollywood film tackling issues of rape and gender equality, which premiered in Nigeria in August 2015. This report outlines preliminary evaluation findings from research investigating the impact of the film on attitudes toward rape and gender equality.

Viewing CoS was associated with less supportive attitudes toward rape, stronger beliefs that men have a role to play in preventing rape, and greater likelihood of suggesting that a rape should be reported to the police.

The study utilized a post-test only design with a comparison group of individuals who did not view CoS. The target population was Nigerian men and women aged 18 or older who are fans of Nollywood movies, with an oversample from Lagos. Data were collected on Facebook using a third party App. The University of Southern California granted IRB exemption for the study.

The sample consisted of 2,551 Nigerians aged 18 or older. Of these, 511 (20%) reported having watched CoS at the time of the survey. Viewers of CoS were compared to non-viewers, controlling for demographic variables associated with exposure (age, education, marital status, and Nollywood fandom).

INTRODUCTION

Background

Code of Silence (CoS) is a Nigerian (“Nollywood”) feature film directed by Emem Isong. The film follows a young college student named Adanma who, while walking home from school alone one night is abducted and subsequently raped by a prominent local politician and one of his aides. Adanma is traumatized and initially keeps the rape a secret, but eventually her family learns what happened. Her extended family is divided with regard to how to proceed. Should they keep silent to avoid the shame her rape might bring upon the family? Should they accept hush money? Should they seek medical and psychological treatment for Adanma? Should they attempt to bring the rapist to justice through the legal system? Or should they take matters into their own hands?

The film exposes how some African families, due to social and cultural forces, are pressured to keep silent about rape so their daughter will be able to “marry well,” and how the broader society stigmatizes the victim rather than the perpetrators, thereby creating a “code of silence” around rape.

The cast of CoS includes some of the most acclaimed talent in all of Nollywood, including Desmond Elliot, Omoni Oboli, Ini Edo, Amechia Muonagor, Patience Ozokwor, and international star Makida Moka as Adanma. The film premiered in theaters across Nigeria in August 2015. The movie was subsequently released on Nigeria’s leading online platform, IROKOTV (475,000 unique views) as well as on VCD/DVD (500,000 copies sold, with an estimated impact of piracy doubling or tripling distribution). Estimated viewership is 4 million to date. CoS had its television premiere on Africa Magic in May 2016.

Development of Code of Silence

CoS was a production of Nollywood Workshops (NW), in partnership with Hollywood, Health & Society (HH&S), and funded by the Bill and Melinda Gates Foundation (BMGF). Under this grant, HH&S and NW together established the Gist program to provide information to TV and film writers on issues related to routine immunization, family planning

and maternal and child health. The grant also provided funds to support the development of an original Nollywood film devoted to one or more of the BMGF priority topics. To this end, Gist launched a Fellowship Program for Nigerian filmmakers, soliciting proposals from influential Nollywood directors who could meet the following criteria:

1. Release commercially with popular acclaim
2. Carry a relevant health storyline to target audiences
3. Be complemented by an online/social media engagement campaign
4. Feature influential Nollywood celebrities

Eight directors submitted proposals, and ultimately Emem Isong was selected to participate in the Fellowship program. Writing, production and post-production of CoS took place in Lagos, Nigeria between May and August 2015. NW's team partnered with Emem Isong to produce the movie, provided technical and creative support and advice, ensured health accuracy and maximized opportunities for social impact through health messaging.

Compared with the typical Nollywood production in which screenwriting is completed in one week, the production of CoS involved an extended writing process over the course of six weeks. The Gist program held three script conferences for the CoS writing team in which Nigerian doctors and health experts were present to offer field experience about rape and family planning, serve as consultants to the creative process, and also to ensure accuracy in the script. HH&S brought in two respected Hollywood writers (Sarah Watson of NBC's *Parenthood* and Jennifer Cecil of ABC's *Private Practice*) to serve as mentors over Skype and email. They offered script review with extensive feedback and provided valuable insights on how to deliver accurate health information without compromising the narrative. The Gist program also serviced additional inquiries from the CoS team throughout the writing process.

Marketing and Marketability

CoS was positioned in the Nigerian entertainment landscape as a high quality entertaining drama with a star studded cast. In Nigeria, a movie's successful release is largely based on recognition of the celebrity cast and the reputation of the movie producer. These two components influenced CoS's successful distribution.

CoS cast several major Nigerian celebrities including Desmond Elliot, Omoni Oboli, Makida Moka, Patience Ozokwor and Shawn Faqua. Each actor was selected based on the desired

target audience for the film. For example, Desmond Elliott has the ability to reach a broad fan base of men throughout all regions of Nigeria, making him a strong vehicle for messaging directed at young men. Omoni Oboli is the most popular actress among young urban women, serving as an aspirational character that can model progressive views. Patience Ozokwor has the broadest appeal among married people in rural areas, allowing representation of barriers to change. By utilizing an ensemble cast, CoS was able to incorporate multigenerational storylines aimed at shifting attitudes across a diverse target audience throughout Southern Nigeria. The appeal of these celebrities ensured that CoS was a popular release among its target audiences. CoS's "blockbuster" status allowed the movie to benefit from robust media coverage, ample promotion, and a star-studded movie premiere event which generated "buzz" throughout the region.

In addition, with Emem Isong as the movie producer, Code of Silence was able to secure premium distribution on all major channels including: Cinema release in Lagos, Online release on IrokoTV (the primary online distributor of Africa entertainment), VCD/DVD release throughout all of the regions of Southern Nigeria, and TV release on Africa Magic (the predominant TV broadcaster in West Africa). As a commercial success that was widely promoted and distributed, CoS was able to carry health and social messages in the form of entertainment, rather than advocacy.

Social Media Awareness Campaign

CoS social media accounts were created on Facebook, Twitter, YouTube and Instagram to drive engagement with the audience. Social media content was developed around CoS characters, storylines and quotes in the interest of creating a long-tail effect around the movie's key messages.

The CoS social media campaign had two distinct phases. The first phase was focused directly on movie promotion, directed at supporting the ticket sales, VCD/DVD sales and online viewership of CoS. Once the movie had secured popular acclaim, the second phase was launched. This phase cultivated deeper engagement around the sexual violence themes presented in the movie, while continuing movie promotion.

Throughout the social media campaigns, fans and followers received daily content including updates on the movie release, giveaways, star interviews, movie stills, video clips, celebrity photos and memes, and other content to encourage viewing, sharing and participation.

Several hashtags (#CodeOfSilence, #COSTheMovie, #StopTheSilence, #BreakTheSilence) were used to drive conversation and monitor engagement across these platforms. The majority of social media activity took place on CoS platforms, but was strategically amplified by Nollywood celebrities and other key Nigerian influencers on their own social media accounts. Daily insights generated from audience engagement were used to formulate and iterate the social media strategy, creating a real-time and conversational tone to the campaign.

Central to the promotional strategy around the film was the use of its star power to help drive online engagement. Nollywood stars such as Desmond Elliot, Ini Edo, and Shawn Faqua were central to social media content by featuring in images and videos, participating in conversation and engagement, and amplifying posts on their individual accounts. The film's stars have a cumulative audience of over 3 million followers, and by leveraging this audience we aimed to reach the collective audience faster and in more meaningful ways.

Of the major social media platforms utilized for movie promotion and engagement, Facebook served as the most viable platform for engagement of fans. As such, the Facebook component of our social media campaign created a foundation to promote our research tool and evaluation efforts.

Facebook Rationale

This report outlines preliminary evaluation findings from research investigating the short-term impact of the film on viewers' attitudes toward rape. Given the social media based campaign around the film, we chose to instead employ an innovative approach of recruiting participants and collecting data all within the confines of Facebook.

According to the World Bank, in 2014, Nigeria had 57.7 million Internet users (representing 38% of population). This number is projected to grow to 76.2 million by 2017. Nigeria is Facebook’s largest African market, with 16 million visitors monthly, and 7 million daily. According to Facebook’s own data, 97% of Nigerian users access Facebook via mobile devices. A survey by Geopoll and World Wide Worx found that 65% of Nigerians believe “Facebook is the Internet.” In fact, Facebook is often the only accessible app for Nigerian mobile users. This is because Facebook subsidizes mobile data plans, allowing Nigerians to access it at little or no cost, whereas standard browsing would typically incur data charges.

Based on this information, we developed our approach. By embedding the survey in Facebook such that participants can access it without ever leaving Facebook, we hoped to minimize the likelihood that they would incur browsing related data charges or other barriers to participation (e.g., slow browser loading). We used a third-party FB survey app called “Surveys for Pages” which allows users to add a survey to a tab on their page and subsequently post on their timeline or other timelines on Facebook. As far as we know, this is the first time this methodology has been used in Nigeria for health communication research.

METHODS

Design and Procedure

The study utilized a post-test only design with a comparison group of individuals who did not view CoS (but may have been exposed to the promotional campaign). The target population was Nigerian men and women aged 18 or older who are fans of Nollywood movies, with an oversample from Lagos.

Data were collected on Facebook between January 29 and March 9, 2016, using the third-party App “Surveys for Pages” (developed by Code Rubik, Inc.). The University of Southern California’s IRB reviewed the study and granted exempt status.

We used three targeted methods to drive participants to the Facebook survey:

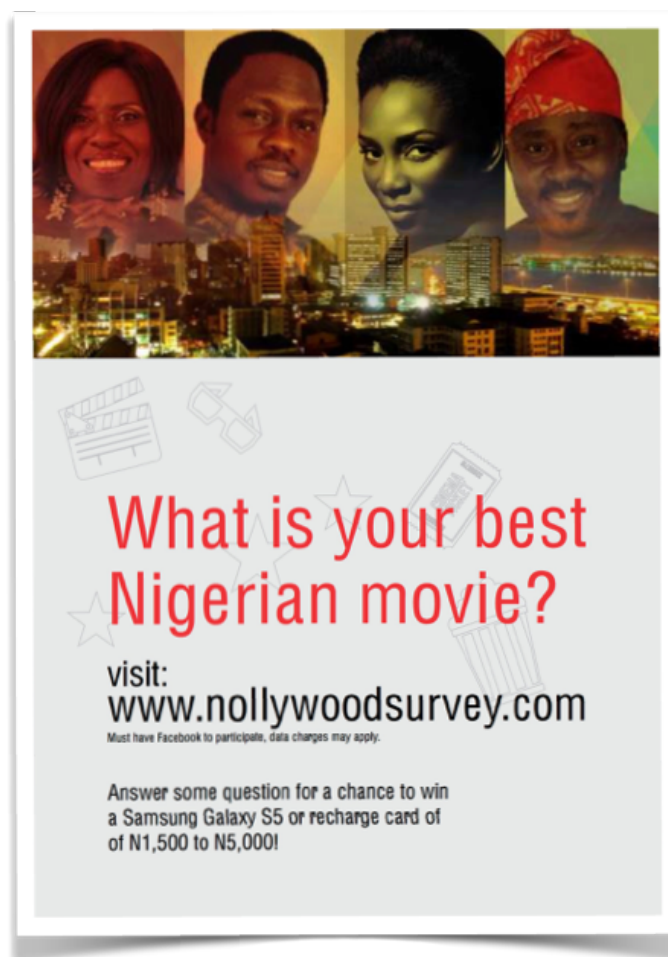
- Grassroots outreach
- Paid Facebook ads
- Celebrity promotion

Each of these methods is described in detail below.

Grassroots Outreach

Grassroots outreach efforts consisted of 15,000 promotional flyers written in the local Pidgin English dialect with a link to the survey (**Figure 1**), which the Nollywood Workshops/CoS street team distributed to passers-by in nine high-traffic locations around greater Lagos. These locations, shown on a map in **Figure 2**, represent relatively low socioeconomic status market centers, and were chosen in an effort to increase the diversity of the sample. The promotional events were advertised through the CoS Facebook page to maximize fan turnout.

Figure 1: 15,000 survey promotional flyers were distributed around greater Lagos.



The first round of distribution included 10,000 flyers dispensed between January 30 and February 5 in five locations: Shitta and Shitta bus stop (Surulere), Ajah Park (Ajah), Ojota bus stop (Ojota), Oshodi bus stop (Oshodi), and CMS bus stop and Marina (Lagos Island). Each flyer was distributed with a free copy of the film on VCD, valued at approximately 35 cents. The goal of this round of distribution was to simultaneously promote the film along with the

survey. Promoters were instructed not to mention anything about the survey; the flyers were tucked into the VCD packaging.

Figure 2: Map showing 9 locations where flyers and VCDs were distributed.



- | | | |
|--------------------------|-----------------------------|----------------------------------------------------------------|
| A Ojata Bus Stop | G Yaba | ● indicates areas where DVD and Fliers were distributed |
| B Oshodi Bus Stop | H Mushin | ● indicates areas where only Fliers were distributed |
| C Shitta Bus Stop | I Ojuelegba Bus Stop | |
| D Marina Street | J CMS Car Park | |
| E CMS Bus Stop | | |
| F Ajah | | |

The second round of distribution involved an additional 5,000 flyers dispensed alone (without the film) between February 20 and 23, in four locations: Mushin, Ojuelegba, Yaba, and CMS Park. In this case, promoters were trained to direct potential participants’ attention to the survey link and inform them of the survey incentives. There was no mention of the film.

Paid Facebook Ads

Six paid Facebook ads were posted on the CoS or NW pages between February 2 and March 4. These included two video ads and four static image ads. The advertising protocol was developed based on beta testing by NW, with the goal of attracting both CoS viewers and non-viewers, and obtaining an oversample from Nigeria’s capital city of Lagos.

Facebook’s advertising interface allows a number of different targeting options, including based on audience characteristics (e.g., location, gender, age), based on interests (e.g., Desmond Elliott), and based on Facebook behavior (e.g., mobile phone user, feature phone user).

In addition, Facebook offers two methods of allocating the budget over a period of time—**lifetime budgeting** and **daily budgeting**—each of which has advantages and disadvantages. Lifetime budgeting allows the advertiser to set a budget over the entire lifetime of the ad, and specify what time of day they want the ad to appear in users’ news feeds, thereby avoiding undesirable times. In this setting, Facebook automatically paces the ad to maximize performance, given the allotted budget. Alternately, daily budgeting gives the advertiser more control over how much to spend on each set of target criteria, and allows them to weight the budget toward specific targets. This method also grants the ability to capitalize on momentum by surging the budget manually. The down-sides of daily budgeting are that it requires manual updating of the ad (changing targeting, adding additional funds, etc.) and the advertiser will be paying for “dead” times of day, such as when users are likely to be asleep.

Given the tradeoffs of the different advertising methods, we used a combination of daily budgeting and lifetime budgeting. Each ad was promoted to specific combinations of user characteristics for specific periods of time, as shown in **Table 1**. Beginning February 21, we learned of an additional feature that allows ads to be optimized for clicks on a link, rather than the standard optimization for “post engagement” (e.g., likes, shares, comments). Implementing this feature on subsequent promotional efforts greatly increased the number of click-throughs from the ad (as measured by the Facebook advertising metric of “link clicks”), which is a prerequisite to completing the survey.

Table 1: Facebook Advertising Protocol

Ad Description	FB Page	Days Active	Audience Targeting	Spent	Link Clicks
Video ad 1: Slideshow of Nollywood stars	NW	7 (Feb 2-9)	Lagos, 18-55, mobile user	\$150 ^a	516
Static ad 1: Image of Nollywood stars	CoS	9 (Feb 5-14)	Day 1: Nigeria, 18-34, Fans of CoS; Days 2-4: Nigeria, 18-55; Days 5-6: Lagos, 18-55; Days 7-9: Lagos, 18-34, men only	\$500 ^a	3,846
Static ad 2: Image of Nollywood stars	NW	10 (Feb 15-25)	Day 1: Lagos, 18-34; Days 2-6: Lagos, 18-34, men only; Day 7: Lagos, 18-55, men only; Days 8-10: Lagos, 18-55	\$537 ^b	18,948 ^c
Video ad 2: Clips from CoS and Hidden Hunger	NW	2 (Feb 21-23)	Lagos, 18-55, mobile user	\$200 ^a	3,589 ^c
Desmond ad 1: Image of Nollywood stars	Desmond	3 (Feb 24-27)	Day 1: Fans of Desmond Elliot (\$0); Days 2-3: Nigeria, 18-55, fans of Desmond & friends of fans	\$113 ^b	2,848
Desmond ad 2: Image of Nollywood stars	Desmond	2 (Feb 29-Mar 2)	Nigeria, 18-55	\$100 ^a	4,978 ^c
All mobile: Image of Nollywood stars	CoS	1 (Mar 2-3)	Lagos, 18-55, mobile user	\$75 ^a	1,966 ^c
Feature phones: Image of Nollywood stars	CoS	1 (Mar 3-4)	Lagos, 18-55, feature phone user	\$75 ^a	1,260 ^c
TOTAL LINK CLICKS					37,951
STARTED SURVEY					3,445 (9.1%)
VALID RESPONSES					2,551 (6.7%)

^a Lifetime ad budgeting^b Daily ad budgeting^c Ad optimized for clicks to website

Celebrity Promotion

Two additional ads were posted on Nollywood celebrity Desmond Elliot’s official Facebook page. Elliot is one of Nigeria’s most popular and well-known actors, having starred in over 200 films. In CoS, he plays Chief Nwator, a politician who speaks out against rape and in support of gender equality. He is also an actual politician; in 2015 he was elected to the Lagos State House of Assembly. At the time of the survey, Elliot had more than 1.6 million Facebook followers, and he played a key role in the social media campaign around the film and its anti-rape messages (**Figure 3**).

We coordinated with Elliot’s social media team to post two survey ads on his Facebook page. Like the ads described previously, these were also paid ads (and are included in Table 1), but appeared in Facebook users’ news feeds as coming directly from Desmond Elliot (rather than CoS or NW).

Figure 3: Facebook promotion for the film’s associated anti-rape campaign, featuring Nollywood star Desmond Elliot.



All told, the eight Facebook ads (including the Desmond Elliot ads) resulted in nearly 38,000 link clicks (i.e., clicks on the post or the survey link itself). Of these, 3445 (9.1%) started the survey and 2551 (6.7%) were valid responses.¹

¹ The data do not allow us to determine which respondents were driven to the survey by Facebook ads vs. flyers. As a result, we cannot calculate a response rate for the flyers. Based on the timing of responses, we can

Measures

A brief (approximately 5 minute) online survey instrument was developed in English and pre-tested with focus groups prior to formal data collection.

First, participants were presented with a series of demographic questions:

- What country do you live in? (Nigeria, other)
- What is your gender? (man, woman)
- How old are you? (less than 25, 25-34, 35-44, 45-54, 55-64, 65 or older)
- What is the highest level of school you attended? (never attended school, primary, secondary, higher institution)
- What is your current marital status? (married or living together, divorced or separated, widowed, single)
- What region of Nigeria do you live in? (6 regions, other)

They were also asked to indicate which of six Nollywood stars they admire, in a multiple response (check all that apply) format, along with an open-ended “other” option. Each selected star was given one point (one point was given for any “other” response, regardless of how many stars were listed) and responses were summed to generate a measure of Nollywood fandom ranging from 0-7.

The primary dependent measures consisted of six items assessing attitudes toward rape and gender equality, rated on a four-point Likert scale (1 = strongly disagree; 4 = strongly agree):

- In a relationship or marriage, it is always the man’s decision when to have sex²
- It is ok for a man to have sex with a woman even if she says no³
- It is ok for a woman to carry condoms
- It is ok for a woman to speak openly about sex
- When a woman is raped, it is usually because of things she said or did⁴

conclude that the vast majority of responses were driven by the Facebook ads. However, these response rates are likely an overestimate, since they include flyer-driven responses.

² Adapted from: Oladepo, O., & Brieger, W.R. (2000). Sexual attitudes and behaviour of male secondary school students in rural and urban areas of Oyo State, Nigeria. *African Journal of Reproductive Health*, 4, 21-34. DOI: 10.2307/3583445

³ Ibid.

⁴ Adapted from the Rape Myth Acceptance Scale (Burt, 1980), used with South African population in: Kalichman, S.C., Simbayi, L.C., Kaufman, M. et al. (2005). Gender attitudes, sexual violence, and HIV/AIDS risks among men and women in Cape Town, South Africa. *The Journal of Sex Research*, 42, 299-305. DOI: 10.1080/0022449050952285

- There is nothing a man can do to prevent rape

All attitudinal items were scored individually.

An additional item asked: “If a woman is raped, what should she and her family/friends do?”

This was a multiple response (check all that apply) item with the following options:

- Take the victim to a hospital or clinic
- Get counseling for the victim
- Keep it a secret
- Report the rape to the police
- Physically harm the rapist
- Other

Finally, participants indicated whether or not they had seen the movie Code of Silence, and those who had were asked to identify the name of the rape victim (Adanma) from four possible options.

Exclusion Criteria

Participants were required to be at least 18 years of age. Those who did not select Nigeria⁵ (no response: N = 673; outside Nigeria: N = 24) were excluded from the analysis, along with viewers of CoS who did not correctly identify Adanma as the rape victim (N = 105), leaving a final sample of N = 2551.

⁵ Seventeen different write-in responses were counted as Nigeria, including the names of various cities and states in Nigeria, and “234” (the Nigeria calling code).

RESULTS

Sample Characteristics

Table 2 enumerates the characteristics of the sample, which included 511 viewers of CoS and 2040 non-viewers.

The sample was evenly split between men and women (49% male). Nearly half of respondents (47%) were between the ages of 25 and 34, with 39% under age 25 and just 14% aged 35 or older. More than half of respondents (51%) came from the South West region, which includes the capital city of Lagos. Approximately 15% came from each of the South East and South South regions, with the remaining 19% coming from the three northern regions. The majority (75%) of survey participants indicated they attended a higher educational institution (which could be interpreted either as a vocational training program or university). The remaining 25% indicated they have a secondary level education (only 0.1% of participants indicated less than a secondary education). Nearly four in five participants (78%) were never married, with 21% married or living together (1% indicated they were divorced, separated, or widowed). More than 95% selected at least one Nollywood star they admire, the most popular being Desmond Elliot (49%).

Relative to non-viewers, viewers were significantly younger, more educated, more likely to be single, more likely to be from the South West region, and fans of a greater number of Nollywood stars.

Table 2
Sample Characteristics

N	Viewers 511	Non-Viewers 2040	χ^2/t
Gender			0.17
Male	47.9%	49.1%	
Female	52.1%	50.9%	
Age			42.79***
18-24	49.9%	36.4%	
25-34	43.2%	48.0%	
35+	6.9%	15.6%	
Region			25.92***
North East	2.1%	4.9%	
North Central	7.2%	10.0%	
North West	3.8%	5.4%	
South East	12.7%	15.7%	
South South	13.9%	15.8%	
South West	60.3%	48.3%	
Education			7.64**
Higher Institution	80.0%	74.0%	
Secondary or less	20.0%	26.0%	
Marital Status			21.12***
Single	85.1%	75.6%	
Married or living together (includes divorced/ separated or widowed)	14.9%	24.5%	
Nollywood stars selected	2.03 (1.51)	1.62 (1.26)	5.61***

Note: Some percentages do not equal or exceed 100% due to rounding.

*** $p < .001$; ** $p < .01$

Data Analysis

Because four of the demographic variables (age, education, marital status, and region) plus Nollywood fandom were significantly associated with viewership, we controlled for these variables in all subsequent analyses.

For each of the six attitudinal items, we conducted ANCOVA with gender and CoS viewership as fixed factors and age, education, marital status, region, and Nollywood fandom as covariates.⁶ For each response option to the question of what a rape victim's friends and family should do, we conducted binary logistic regression, with the five control variables on the first step, gender and viewership on the second step, and the gender-viewership interaction term on the third step. Missing data were deleted listwise for each dependent variable, thus different analyses have somewhat different sample sizes.

⁶ Dummy variables were constructed to represent the categorical variables age, education, marital status, and region. Associations between these variables and outcomes can be interpreted as follows: age (less than 25 vs. 25 or older, 35 or older vs. less than 35); education (higher institution vs. secondary or less); marital status (single vs. all other categories); and region (South West vs. all other regions).

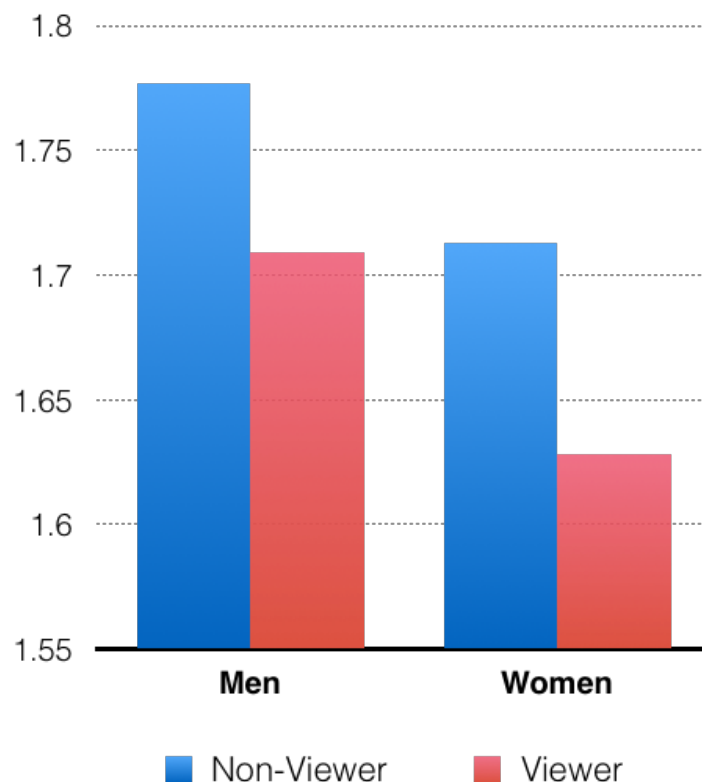
Key Findings

For each of the analyses reported below, the results indicate differences between men and women and between CoS viewers and non-viewers, controlling for any differences attributable to Nollywood fandom, age, education, marital status, and region.

“It is ok for a man to have sex with a woman, even if she says no”

As shown in **Figure 4**, viewers of CoS were less inclined to agree with this statement than non-viewers, and women reported lower agreement than men.⁷

Figure 4: Marginal mean⁸ agreement ratings (1-4), gender by viewership



⁷ Gender main effect: $F(1,2258) = 4.63, p = .031, \text{partial } \eta^2 = .002$; Viewership main effect: $F(1,2258) = 7.15, p = .022, \text{partial } \eta^2 = .002$.

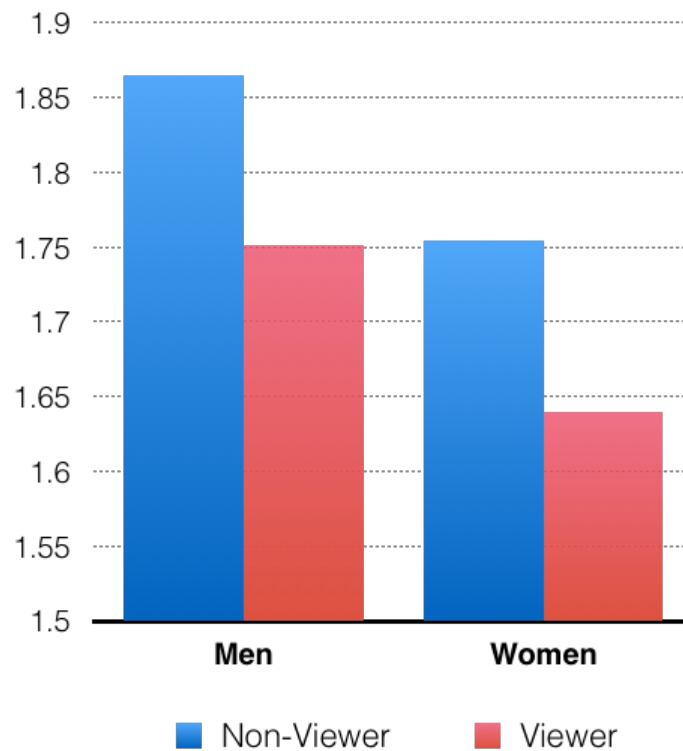
⁸ Marginal means are reported, adjusted for the contributions of the control variables.

In addition, agreement was lower among younger individuals (less than 25), those with post-secondary education, single individuals, and those from the South West region.

“There is nothing a man can do to prevent rape”

As shown in **Figure 5**, viewers agreed less strongly with this statement than non-viewers, and women once again had lower levels of agreement than men.⁹

Figure 5: Marginal mean agreement ratings (1-4), gender by viewership



In addition, agreement was lower among those with post-secondary education and those from the South West region.

⁹ Gender main effect: $F(1,2229) = 6.51, p = .011, \text{partial } \eta^2 = .003$; Viewership main effect: $F(1,2229) = 7.15, p = .008, \text{partial } \eta^2 = .003$.

“In a relationship or marriage, it is always the man’s decision when to have sex”

There was no significant difference between viewers and non-viewers, but women once again expressed stronger disagreement.¹⁰ As with the previous item, agreement was lower among those with post-secondary education and those from the South West region.

“It is ok for a woman to carry condoms”

Here, we found no differences between viewers and non-viewers, or between men and women. The only significant finding was that single respondents agreed more strongly.

“It is ok for a woman to speak openly about sex”

Again, there were no differences associated with viewership or gender. Consistent with the other attitudinal items, more educated individuals and those from the South West held more progressive attitudes (greater agreement). However, younger (less than 25) and single individuals expressed *lower* levels of agreement than their older and married counterparts.

“When a woman is raped, it is usually because of things she said or did”

There was no significant difference between viewers and non-viewers, but women more strongly disagreed with this statement than men.¹¹ As with the previous item, more progressive views (lower agreement) were associated with greater education and being from the South West region, but younger (less than 25) and single individuals expressed stronger agreement.

“If a woman is raped, what should she and her family/friends do?”

- **Keep it a secret:** Men were significantly more likely (9.1%) than women (5.8%) to say they would keep the rape a secret.¹² There were no differences between viewers and non-viewers of CoS on this item.

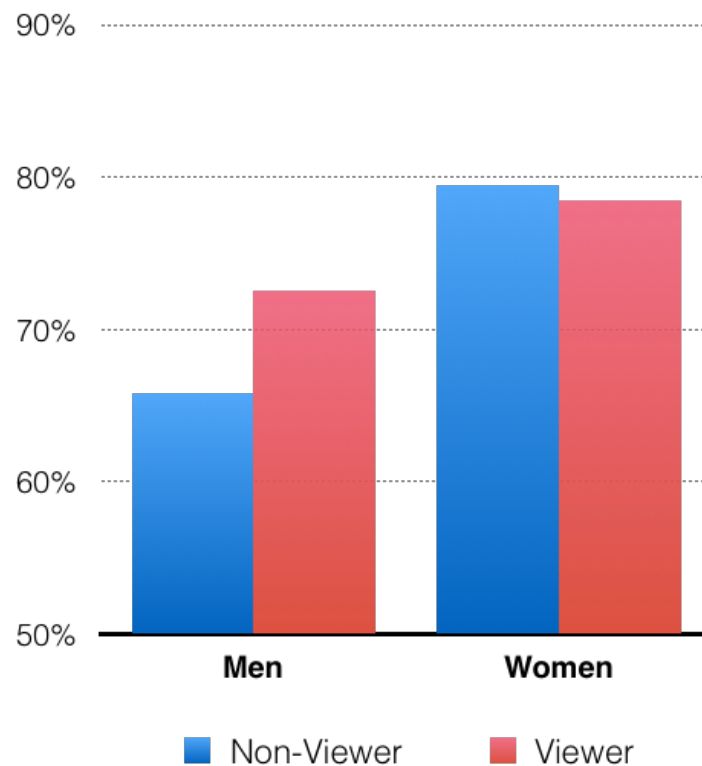
¹⁰ Gender main effect: $F(1,2258) = 21.37, p < .001, \text{partial } \eta^2 = .009.$

¹¹ Gender main effect: $F(1,2244) = 55.32, p < .001, \text{partial } \eta^2 = .024.$

¹² Wald $\chi^2(1) = 6.00, p = .014, \text{Exp}(B) = 0.63.$

- **Get counseling for the victim:** Women were significantly more likely (51.6%) than men (38.2%) to say they would get counseling for the victim.¹³ There were no differences between viewers and non-viewers of CoS on this item.
- **Report the rape to the police:** Viewers were significantly more likely (62.2%) than non-viewers (53.3%) to say they would report the rape to the police.¹⁴
- **Take the victim to a hospital or clinic:** As shown in **Figure 6**, women were significantly more likely (79.3%) than men (67.1%) to say they would take the victim to a hospital or clinic. There was also a marginally significant ($p = .06$) interaction between gender and viewership such that among men only, viewers were more likely (72.5%) than non-viewers (65.8%) to say they would take the victim to a hospital or clinic.¹⁵

Figure 6: Percentage yes to “Take the victim to a hospital or clinic,” gender by viewership



¹³ Wald $\chi^2(1) = 20.67, p < .001, \text{Exp}(B) = 1.60$.

¹⁴ Wald $\chi^2(1) = 7.31, p = .007, \text{Exp}(B) = 1.55$.

¹⁵ Gender main effect: Wald $\chi^2(1) = 32.56, p < .001, \text{Exp}(B) = 1.92$; Viewership simple effect (men only): $\chi^2(1) = 4.08, p = .043$.

DISCUSSION

The results of this study indicate viewing CoS was associated with less supportive attitudes toward rape (“It is ok for a man to have sex with a woman, even if she says no”) and the belief that men have a role to play in preventing rape. In addition, viewers were more likely than non-viewers to say that if a woman is raped, she (and her friends and family) should report the rape to the police. Among men only, viewers were slightly more likely to say that the victim should be taken to a hospital or clinic. These findings suggest viewing CoS is associated with changes in attributions of responsibility for rape, greater understanding how it can be prevented, and identification of appropriate courses of action (e.g., medical treatment, legal recourse).

In addition to the differences between viewers and non-viewers, in general women expressed more progressive views, along with younger, single, more educated individuals, and those from the South West region. There were some notable exceptions to this pattern, however. For the items “It is ok for a woman to speak openly about sex” and “When a woman is raped, it is usually because of things she said or did,” younger and single individuals held less progressive attitudes than their older and married counterparts. With regard to speaking openly about sex, these findings may suggest this behavior is more acceptable within the context of marriage than for unmarried women. In terms of perceptions of a rape victim’s responsibility for her victimization, older or married individuals (possibly with daughters of their own) may have more progressive attitudes regarding the empowerment of girls and women than their younger counterparts.

There are some limitations that should be taken into account when considering the results of this study. First, viewership of CoS was relatively low in this subsample (20%). It is unclear whether the film simply did not have the anticipated reach, whether the methodology was inadequate for reaching viewers of the film, or some combination. In any case, the sample sizes of viewers and non-viewers were highly unequal. Although we controlled for a variety of demographic variables associated with viewing CoS, without a true control group we cannot rule out the possibility of additional confounds. Thus, selection bias remains a threat to internal validity. Due to the limited English-literacy of the target audience, a decision was made to keep the survey extremely brief (no more than 5 minutes). As a result, the measures are limited to attitudinal outcomes related to rape and gender equality, and we are unable to draw conclusions about how the film may have affected knowledge or attitudes regarding family planning. Moreover, we used four-point Likert scales for all items to keep the instructions as simple as possible for participants. Finally, as a result of the

Facebook methodology, the resulting sample is strongly biased toward the young, single, and highly educated. As a result, the findings may not be generalizable to the Nigerian population at large.

Lessons Learned

Numerous insights were gained over the course of this project. First, we implemented the grassroots outreach with an assumption that cultural competence, especially with regard to how to relate to the operators of bus parks, will enable the team to gain sustainable access to the locations where flyers were distributed. The outreach team was designed and trained to appear as group of young people with interesting materials to share, rather than a group as outsiders or elites touting solutions to problems facing the community. The outreach team could relate both in Pidgin English and English. This approach was even more effective than initially anticipated in garnering interest in CoS.

With regard to promotion of the survey on Facebook, sponsored posts were instrumental. The Facebook Ad Manager tool allowed for targeted outreach and yielded sufficient participation at a minimal cost. Optimizing the posts for clicks was a highly effective way to boost engagement in a manner that promoted survey participation (clicking on the survey link, rather than standard the engagement metrics of likes and shares). Unfortunately, when we implemented click optimization, it became impossible to distinguish which survey respondents were being driven by the Facebook ads and which were being driven by the grassroots outreach. Based on an analysis of the period before click optimization was implemented, it appears that only a small fraction (less than 10%) of participants were driven to the survey by the flyers. Celebrity posts from Desmond Elliot were also a highly effective way to recruit participants, especially when boosted.

The third-party Facebook App we used for the study, Surveys for Pages, had some flaws and limitations. For example, it did not allow for any sort of skip or display logic. As a result, we had to repeat response options in subsequent questions (e.g., “I did not see Code of Silence”). Moreover, the data file was organized in such a way that responses to multiple-response (“check all that apply”) items were listed in a single column, which was not conducive to analysis. This required a work-around involving insertion of delimiters after each response option and some minor programming work to restructure the data file. Finally, technically the App allows the survey to be embedded in Facebook, allowing participants to access the survey without ever leaving Facebook and incurring browsing related data charges. However, we do not have data on how well this worked in practice

(e.g., what percentage of participants did encounter data charges or other browsing-related barriers), particularly on lower-end smartphones and feature phones. Facebook is considering developing their own survey App and has expressed interest in learning about what type of features would be most useful.

In future efforts, we would aim to invest even more cultural sensitivity into the development of survey questions. NW's Nigeria-based staff members reviewed the survey tool for ease of readability and language. In addition, focus groups conducted usability testing to identify technical problems related to mobile phones and browsing capabilities. However, focus groups on the content of the questions themselves would have been beneficial.

Conclusions

The results of this study examining the impact of CoS on attitudes toward rape are promising. We found significant differences between viewers and non-viewers of CoS on several attitudinal outcomes, including acceptance of rape, understanding of men's role in prevention, likelihood of reporting a rape to the police, and (among men), recommending the victim receive medical treatment. These differences were statistically significant despite the strong potential for ceiling effects, with relatively progressive attitudes toward rape and gender equality even among non-viewers. These findings suggest that although the intervention was brief, these key messages about rape were able to break through to viewers. In future research, more rigorous methodologies such as randomized controlled trials as well as quasi-experimental designs (e.g., longitudinal research, cohort studies, propensity score matching) would better enable outcomes to be more directly attributed to the film, and would further enhance our understanding of the impact of these types of interventions.

The high level of connectivity enabled by the increasing global prominence of Facebook and affordability of mobile phones has enabled us to study the impact of entertainment on populations with greater ease, especially in areas where international travel may be difficult due to conflict, unrest, or disease. To our knowledge, this is the first time a health communication study has been conducted in Nigeria entirely through Facebook. Results were mixed, but in collaboration with Facebook and other third-party survey App companies, we hope to refine the process to achieve greater understanding and insight. It is becoming more typical for entertainment content such as films and TV shows to cultivate a strong social media presence. Health communication practitioners and researchers can use this to their advantage to learn more about viewership patterns, better understand the

nature of their audience and study the impact of exposure to the content. As technologies such as mobile phones and Internet access become increasingly available and affordable in rural areas of developing countries, this type of research will become more affordable and feasible. This study has shown that online surveys conducted entirely through social media channels (in this case, Facebook) are a viable way to evaluate the impact of health communication programs.

CONTRIBUTING ORGANIZATIONS

Hollywood, Health & Society (HH&S)

Hollywood, Health & Society (HH&S) is a program of the Norman Lear Center at the University of Southern California's Annenberg School for Communication and Journalism. Established in 2001, HH&S provides entertainment industry professionals with accurate and up-to-date information for health and climate change storylines, through expert consultations and briefings, panel discussions and online tip sheets (www.hollywoodhealthandsociety.org). Funded by the Centers for Disease Control and Prevention, The Bill and Melinda Gates Foundation, and several other agencies and foundations, the program recognizes the profound impact that entertainment has on behavior. Between 2009 and 2014, HH&S' goal of improving the accuracy of health storylines on TV shows and films resulted in more than 700 aired storylines across 91 shows from 35 networks.

Under the Creative Alliance for Global Health & Sustainability, HH&S launched joint projects in the creative capitals of India and Nigeria to use the power of entertainment to improve the lives of millions of TV and film viewers. Creative Alliance centers—The Third Eye in India and Nollywood Workshops (Gist) in Nigeria—draw on the resources of HH&S, and both conduct a program of outreach in Bollywood, Nollywood and beyond to increase the accuracy and frequency of health and sustainability topics in television, film and new media.

HH&S was responsible for the design and oversight of the evaluation of *Code of Silence*, as well as data analysis and preparation of this report.

Nollywood Workshops

Nollywood Workshops (NW) is a 501(c)3 non-profit organization with offices in Lagos, Nigeria and Cambridge, Massachusetts. NW produces original content and media campaigns that entertain, educate, and inspire audiences throughout West Africa. With partners, collaborators and funders ranging from HH&S/Norman Lear Center at the University of Southern California, UNICEF, and the Cyber Law Clinic at Harvard Law School, NW's growing network includes global leaders in health, media and technology who share a commitment to social impact through entertainment. NW has extensive experience influencing health in Nigeria and West Africa. In addition to *Code of Silence*, NW has

produced several successful projects and campaigns including the internationally acclaimed multimedia campaign *Lens On Ebola*, and feature films *Hidden Hunger* and *Dan Birni*.

Nollywood Workshops partnered with leading Nigerian producer/director Emem Isong of Royal Arts Academy to write, produce and release the film *Code of Silence*. NW also produced and implemented the on-going *Code of Silence* social media campaign. NW collaborated with HH&S on background research, user-testing, strategy and survey design for the evaluation of *Code of Silence*, and was responsible for the promotion and implementation of the survey.