Technical appendix

Strengthening accountability through media in Nigeria: final evaluation

June 2017
Research and Learning

Contents

Introduction

This technical appendix is intended to be read alongside the associated BBC Media Action report, *Strengthening accountability through media in Nigeria: final evaluation*. This is available from: http://dataportal.bbcmediaaction.org/site/assets/uploads/2017/06/Nigeria-Country-Report.pdf.

1. Survey sampling methodology

As outlined in the table below, BBC Media Action carried out four national surveys.

Table 1: Quantitative surveys conducted (2013-2016)

Survey	Data collection	Sample size	Criteria
Baseline	February 2013	n=3,214	Representative of six focal states, adults 15+
Midline	December 2014	n=4,240	Representative of six focal states, adults 15+
Endline	May 2016	n=4,200	Representative of six focal states, adults 15+

For each of these surveys, the sample was not nationally representative, but was instead representative of the population of six focal states: Abuja, Adamawa (replaced by Taraba for the midline due to security issues in Adamawa), Delta, Enugu, Kaduna and Lagos. The sample was stratified across the six focal states. Within these states a probability proportional to size multistage cluster sample was employed. At all stages, the selection of clusters was random and self-weighting. The sampling frame was constructed using the 2006 Nigeria census. Within enumeration areas, predefined random starting points were used to begin household selection. Random walk was applied with a fixed household interval. Within households, a Kish grid was used to select respondents.

Data collection was carried out using face-to-face interviews and recorded using either paper and pen, or computer-assisted personal interviewing (CAPI).

After data collection, the samples were compared to the latest census data and, where necessary to correct for any imbalances in region/state, gender, age and location (urban vs rural), nested weights applied.

2. Programme reach calculations

The total reach figures for Nigeria were based on a reach calculation that incorporated both hard and soft reach estimates.

Hard reach: a hard reach estimate was calculated for the areas covered by BBC Media Action's baseline, midline and endline surveys and by BBC World Service Audiences' North Nigeria survey (2015) – the latter also asked about the reach of BBC Media Action's programmes. This was done by multiplying the adult population by the percentage of respondents who reported listening to BBC Media Action's programmes in the past 12 months.

Soft reach: a soft reach estimate was also calculated in order to report a reach estimate for the states BBC Media Action did not survey. This was based upon additional survey data obtained from BBC World Service Audiences and BBC Media Action's message endline survey.

Table 2 indicates the data sources used for each state at the three reporting stages (baseline, midline and endline). Blue shading indicates hard reach and green shading indicates soft reach. A key underneath the table provides further detail about each of the data sources.

Table 2: Data sources for reach estimates

State	Reporting stage		
	Baseline (2013)	Midline (2014)	Endline (2016)
North central region			
Benue	✘	BBC WS 2012	BBC WS 2015
FCT Abuja	✔	✔	✔
Kogi	✘	BBC WS 2012	BBC WS 2012
Kwara	✘	BBC WS 2012	BBC WS 2015
Nasarawa	✘	BBC WS 2012	BBC WS 2012
Niger	✘	BBC WS 2012	BBC WS 2012
Plateau	✘	BBC WS 2012	BBC WS 2015
North east region			
Adamawa	✔	BBC WS 2012	✔
Bauchi	✘	BBC WS 2012	BBC WS 2015
Borno	✘	✘	✘
Gombe	✘	BBC WS 2012	BBC WS 2015
Taraba	✘	✔	BBC WS 2015
Yobe	✘	✘	✘
North west region			
Jigawa	✘	BBC WS 2012	BBC WS 2012
Kaduna	✔	✔	✔
Kano	BBC WS 2010	BBC WS 2012	BBC WS 2015
Katsina	BBC WS 2010	BBC WS 2012	BBC WS 2012
Kebbi	BBC WS 2010	BBC WS 2012	BBC WS 2012
Sokoto	BBC WS 2010	BBC WS 2012	BBC WS 2015
Zamfara	BBC WS 2010	BBC WS 2012	BBC WS 2015
South east region			
Abuja	BBC WS 2011	BBC WS 2011	BBC WS 2011

Anambra	BBC WS 2011	BBC WS 2011	BBC WS 2011
Ebonyi	✘	✘	✘
Enugu	✔	✔	✔
Imo	BBC WS 2011	BBC WS 2011	BBC WS 2011
South south region			
Akwa Ibom	Message 2012	✘	✘
Bayelsa	Message 2012	✘	✘
Cross River	BBC WS 2011	BBC WS 2011	BBC WS 2011
Delta	✔	✔	✔
Edo	BBC WS 2011	BBC WS 2011	BBC WS 2011
Rivers	BBC WS 2011	BBC WS 2011	BBC WS 2011
South west region			
Ekiti	✘	✘	✘
Lagos	✔	✔	✔
Ogun	BBC WS 2011	BBC WS 2011	BBC WS 2011
Ondo	BBC WS 2011	BBC WS 2011	BBC WS 2011
Osun	BBC WS 2011	BBC WS 2011	BBC WS 2011
Oyo	BBC WS 2011	BBC WS 2011	BBC WS 2011

Key

✔	Hard reach based on BBC Media Action survey data (baseline, midline or endline)
✘	No data available, so state excluded from the reach estimates
BBC WS 2010	Soft reach based on BBC World Service Audiences' North Nigeria survey data (2010)
BBC WS 2011	Soft reach based on BBC World Service Audiences' South Nigeria survey data (2011)
BBC WS 2012	Soft reach based on BBC World Service Audiences' North Nigeria survey data (2012)
BBC WS 2015	Hard reach based on BBC World Service Audiences' North Nigeria survey data (2015)
Message 2012	Soft reach for Story Story based on BBC Media Action's message endline survey data (2012). These states were not included in estimates for Talk Your Own, *Gatana Gatana Ku* (Telling a Story) and *Mutattauna* (Let's Discuss).

Soft reach calculations

To calculate the soft reach estimate for states not covered by the hard reach data, BBC Media Action:

1. Multiplied the state adult population by the percentage of respondents who reported (during the BBC WS 2010, 2011 and 2012 surveys) listening to the radio partner stations that broadcast BBC Media Action's programmes. This produced the **partner station reach**
2. Multiplied the **partner station reach** by the **audience conversion rate**[1] of the relevant region. This gave the soft reach estimate
3. Repeated the above two steps for each of BBC Media Action's programmes, and for all programmes combined

The 2013 soft reach estimates of Story Story in Akwa Ibom, Bauchi and Bayelsa were exceptions to this. They were based on rollover figures from BBC Media Action's message endline survey (2012).

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[1] The audience conversion rate is the percentage of the partner station's audience who also listened to Global Grant governance programming. This was calculated by extrapolating BBC Media Action's most recent survey data – baseline, midline or endline – for each of the focal states to the other states in their region (excluding any states not covered by BBC World Service Audiences' data).

In 2015, reach was also calculated for the public service announcements (PSAs) that were broadcast on TV and online. The process varied slightly from that used for the radio programmes: partner TV channel reach was calculated instead of partner radio station reach. Due to a lack of comparable data on YouTube and Facebook access across the different datasets being used, the midline survey data was used to calculate a percentage to add onto the reach figures to account for those who had only viewed the PSAs online. This was calculated for each of the six focal states and then applied to all other states in the same region.

3. Regression analysis

This technical appendix summarises the results of analysis BBC Media Action carried out on the Nigeria endline dataset (2016), which has a sample representative of the adult population (15+) of the six focal states surveyed.

BBC Media Action carried out regression analysis to test the association between exposure to its governance programmes and several governance outcomes (political knowledge, discussion, efficacy and participation), while controlling for some of the other key factors which may influence these outcomes.

Variables

The independent variable for regression analysis was exposure to BBC Media Action's governance programmes, with four categories:
1. Not exposed to any of BBC Media Action's programmes
2. Regularly exposed to its drama programmes (Story Story and/or *Gatana Gatana Ku*)
3. Regularly exposed to its factual discussion programmes (Talk Your Own and/or *Mutattauna*)
4. Regularly exposed to both formats (drama and factual)

Those who had been exposed, but not regularly, and those without access to media were set as missing.

The dependent variables were constructed as continuous variables due to the distribution of the outcome variables, and linear (OLS) regression was conducted.

In addition to being based on past research and the specific country context, the confounders used in the analysis were chosen because they were hypothesised to be key factors in influencing the outcome variables.

Significance testing

Before carrying out regression analysis, BBC Media Action conducted statistical tests in order to measure the strength and the direction of bivariate relationships, as well as to test their significance. More precisely, BBC Media Action analysed:
- The relationship between the main independent variable (exposure) and the construct variables defined as outcomes (political knowledge, discussion, internal efficacy and participation)
- The relationships among outcome variables
- The relationship between exposure and all the socio-demographic variables potentially associated with it (referred to as "confounders")
- The relationship between our outcome variables and confounders

BBC Media Action conducted different types of significance tests according to the nature of the variables considered. T-tests and Mann-Whitney U-tests were used to compare the differences between means, Pearson's R and Spearman's Rho tests were used to ascertain correlation, and Chi-squared tests were conducted to measure associations. All tests were conducted with significance at the $p = 0.05$ level.

Analysis

As mentioned above, BBC Media Action carried out linear (OLS) regression. Such a model allows researchers to work with a continuous dependent variable, derived through confirmatory factor analysis, and independent variables that have either continuous or categorical values. The regression

coefficient for the independent variable provides key information indicating the estimated change in the dependent variable associated with a one unit increase in the independent variable. The model seeks to summarise this association by fitting a straight line to predict the value of the dependent variable based on the observed values of the independent variables.

BBC Media Action's data satisfied the principle assumptions required for justifying the use of OLS: the relationships between the dependent and independent variables were linear and additive, and the error terms were normally distributed, constant, and were not correlated. With these assumptions met, a confidence interval for the regression line was calculated for each estimate and BBC Media Action was able to test whether the hypothesis of a zero slope – that is of no relationship between the two key variables of interest – existed in the true population.

Prior to analysis, BBC Media Action adopted the conventional standard of rejecting the null hypothesis at the 0.05 level. Given this, BBC Media Action expects that any estimated effects that are significantly associated with exposure to the programme of interest fall within the range reported in the confidence intervals 95% of the time.

Table 3: Overview of regression models

Analysis was carried out on the Nigeria endline dataset (2016).

Model	Model performance			Association with exposure to both drama and factual formats		
	Sample size	R square	Significance	Coefficient	95% confidence interval	Significance
Regression 1.1 Knowledge OLS model	3,788	0.242	<0.001	0.555	0.328-0.783	<0.001
Regression 2.1 Discussion OLS model	3,788	0.154	<0.001	0.790	0.547-1.034	<0.001
Regression 2.2 Discussion OLS model with interaction with interest in politics	3,788	0.159	<0.001	Exposure for very interested -2.004	-3.031 to -0.976	<0.001
Regression 2.3 Discussion OLS model with interaction with group activity	3,788	0.155	<0.001	Exposure for active member -0.411	-0.849 to 0.028	0.066
Regression 3.1 Efficacy OLS model	3,786	0.021	<0.001	0.103	-0.064 to 0.270	0.229
Regression 4.1 Participation OLS model	3,792	0.360	<0.001	0.285	0.113-0.457	0.001
Regression 4.2 Participation OLS model with interaction with group activity	3,792	0.362	<0.001	Exposure for active member -0.481	-0.791 to -0.171	0.002

Full model results

Note: 'Ref' indicates the reference category of each variable

Knowledge

Table 4: Regression 1.1 - Knowledge OLS model

Dependent variable: average knowledge of governance issues (0 to 10)

Predictor	Unstandardized coefficients		Standardized coefficient	Significance	95.0% confidence interval for B	
	Beta	Standard error	Beta		Lower bound	Upper bound
Not exposed to any programme	Ref	-	-	-	-	-
Regularly exposed to drama (only)	.056	.124	.007	.653	-.188	.299
Regularly exposed to factual (only)	.144	.140	.016	.304	-.131	.420
Regularly exposed to both formats	.555	.116	.089	.000	.328	.783
Interest in politics – not at all interested	Ref	-	-	-	-	-
Not very interested	1.379	.138	.220	.000	1.108	1.649
Somewhat interested	2.434	.137	.421	.000	2.165	2.703
Very interested	3.297	.143	.550	.000	3.018	3.577
Group membership – not an active member	Ref	-	-	-	-	-
Active member	.061	.087	.010	.479	-.108	.231
Female	Ref	-	-	-	-	-
Male	.484	.082	.089	.000	.324	.644
Age 15-24	Ref	-	-	-	-	-
Age 25-34	.220	.108	.033	.041	.009	.430
Age 35-44	.164	.121	.021	.177	-.074	.402
Age 45-54	.562	.134	.066	.000	.299	.824
Age 55-64	.522	.180	.045	.004	.169	.875
Age 65+	.609	.155	.064	.000	.306	.913
No schooling	Ref	-	-	-	-	-
Some primary/completed primary education	.106	.162	.015	.513	-.212	.424
Completed secondary education	.569	.160	.104	.000	.256	.882
Completed college/university	.747	.170	.120	.000	.414	1.079
Religion – non-Muslim	Ref	-	-	-	-	-
Muslim	.153	.113	.026	.177	-.069	.375
State - Lagos	Ref	-	-	-	-	-

Adamawa	.320	.227	.039	.159	-.125	.766
Delta	.415	.209	.055	.047	.006	.824
Enugu	.900	.236	.111	.000	.437	1.362
FCT Abuja	-.305	.211	-.047	.147	-.718	.107
Kaduna	1.011	.218	.172	.000	.582	1.439
Income - low	Ref	-	-	-	-	-
Medium	-.208	.111	-.036	.061	-.425	.010
High	.260	.145	.036	.073	-.024	.544
Ethnic group - other	Ref	-	-	-	-	-
Hausa	.238	.165	.030	.150	-.086	.562
Igbo	.130	.145	.021	.370	-.154	.414
Yoruba	-.080	.162	-.012	.621	-.399	.238
(Constant)	2.091	.289	-	.000	1.523	2.658

The model had an adjusted R square of 0.242. The F statistic was 45.840 (significance < 0.001).

Discussion

Table 5: Regression 2.1 - Discussion OLS model

Dependent variable: average discussion score (0 to 10)

Predictor	Unstandardized coefficients		Standardized coefficient	Significance	95.0% confidence interval for B	
	Beta	Standard error	Beta		Lower bound	Upper bound
Not exposed to any programme	Ref	-	-	-	-	-
Regularly exposed to drama (only)	.337	.133	.045	.011	.077	.598
Regularly exposed to factual (only)	.599	.150	.063	.000	.304	.894
Regularly exposed to both formats	.790	.124	.125	.000	.547	1.034
Interest in politics – not at all interested	Ref	-	-	-	-	-
Not very interested	.391	.147	.062	.008	.102	.681
Somewhat interested	1.142	.147	.195	.000	.854	1.430
Very interested	1.662	.153	.273	.000	1.363	1.961
Group membership – not an active member	Ref	-	-	-	-	-
Active member	.417	.093	.070	.000	.235	.599
Female	Ref	-	-	-	-	-
Male	.829	.087	.150	.000	.658	1.000
Age 15-24	Ref	-	-	-	-	-
Age 25-34	.266	.115	.039	.021	.040	.492
Age 35-44	.277	.130	.035	.033	.022	.532
Age 45-54	.388	.143	.045	.007	.107	.669
Age 55-64	.466	.193	.039	.016	.087	.845
Age 65+	.216	.166	.022	.194	-.110	.541
No schooling	Ref	-	-	-	-	-
Some primary/completed primary	.213	.174	.030	.219	-.127	.554
Completed secondary	.488	.171	.088	.004	.153	.824
Completed college/university	.615	.182	.098	.001	.258	.971
Religion – non-Muslim	Ref	-	-	-	-	-
Muslim	.245	.121	.042	.044	.007	.483
State - Lagos	Ref	-	-	-	-	-
Adamawa	-1.074	.243	-.128	.000	-1.551	-.597
Delta	-.796	.223	-.103	.000	-1.234	-.358
Enugu	-.366	.253	-.045	.148	-.861	.130
FCT Abuja	-.454	.225	-.069	.044	-.896	-.012

Kaduna	.486	.234	.082	.038	.028	.945
Income - low	Ref	-	-	-	-	-
Medium	.129	.119	.022	.276	-.103	.362
High	.336	.155	.045	.030	.032	.640
Ethnic group - other	Ref	-	-	-	-	-
Hausa	-.040	.177	-.005	.821	-.387	.307
Igbo	-.333	.155	-.052	.032	-.637	-.029
Yoruba	-.112	.174	-.017	.521	-.453	.229
(Constant)	3.173	.310	-	.000	2.565	3.780

The model had an adjusted R square of 0.154. The F statistic was 26.454 (significance < 0.001).

Table 6: Regression 2.2 - Discussion OLS model with interaction with interest in politics

Dependent variable: average discussion score (0 to 10)

Predictor	**Unstandardized coefficients**		**Standardized coefficient**	**Significance**	**95.0% confidence interval for B**	
	Beta	Standard error	Beta		Lower bound	Upper bound
Not exposed to any programme	Ref	-	-	-	-	-
Regularly exposed to drama (only)	2.303	.473	.305	.000	1.376	3.229
Regularly exposed to factual (only)	.850	.451	.090	.059	-.034	1.733
Regularly exposed to both formats	2.562	.493	.405	.000	1.596	3.529
Interest in politics – not at all interested	Ref	-	-	-	-	-
Not very interested in politics	.667	.173	.105	.000	.329	1.005
Somewhat interested in politics	1.445	.177	.247	.000	1.097	1.793
Very interested in politics	2.103	.186	.346	.000	1.738	2.468
Not very interested x exposure to drama	-1.942	.531	-.130	.000	-2.982	-.901
Not very interested x exposure to factual	-.282	.529	-.016	.594	-1.318	.755
Not very interested x exposure to both formats	-1.830	.540	-.135	.001	-2.890	-.771
Somewhat interested x exposure to drama	-2.100	.511	-.190	.000	-3.102	-1.099
Somewhat interested x exposure to factual	-.055	.515	-.004	.914	-1.066	.955
Somewhat interested x exposure to both	-1.912	.522	-.207	.000	-2.936	-.889

	B	Std. Error	Beta	Sig.	Lower	Upper
formats						
Very interested x exposure to drama	-2.375	.520	-.185	.000	-3.396	-1.355
Very interested x exposure to factual	-.702	.535	-.040	.190	-1.751	.347
Very interested x exposure to both formats	-2.004	.524	-.224	.000	-3.031	-.976
Group membership – not an active member	Ref	-	-	-	-	-
Active member	.438	.093	.074	.000	.256	.620
Female	Ref	-	-	-	-	-
Male	.831	.087	.151	.000	.660	1.003
Age 15-24	Ref	-	-	-	-	-
Age 25-34	.254	.115	.038	.027	.029	.480
Age 35-44	.265	.130	.034	.041	.011	.519
Age 45-54	.386	.143	.044	.007	.106	.667
Age 55-64	.465	.193	.039	.016	.086	.844
Age 65+	.201	.167	.021	.228	-.126	.528
Education – no schooling	Ref	-	-	-	-	-
Some primary/completed primary	.199	.174	.028	.251	-.141	.539
Completed secondary	.467	.171	.084	.006	.132	.801
Completed college/university	.587	.181	.093	.001	.231	.943
Religion – non-Muslim	Ref	-	-	-	-	-
Muslim	.258	.121	.044	.033	.021	.496
State - Lagos	Ref	-	-	-	-	-
Adamawa	-1.041	.244	-.124	.000	-1.518	-.563
Delta	-.827	.223	-.107	.000	-1.264	-.390
Enugu	-.437	.253	-.053	.084	-.932	.059
FCT Abuja	-.450	.225	-.069	.045	-.891	-.009
Kaduna	.468	.233	.079	.045	.010	.925
Income - low	Ref	-	-	-	-	-
Medium	.128	.118	.022	.278	-.104	.361
High	.340	.155	.046	.028	.037	.643
Ethnic group - other	Ref	-	-	-	-	-
Hausa	-.062	.177	-.008	.727	-.408	.285
Igbo	-.329	.155	-.052	.034	-.632	-.026
Yoruba	-.121	.174	-.018	.486	-.462	.220
(Constant)	2.940	.313		.000	2.326	3.553

The model had an adjusted R square of 0.159. The F statistic was 20.956 (significance < 0.001).

Table 7: Regression 2.3 - Discussion OLS model with interaction with group activity

Dependent variable: average discussion score (0 to 10)

Predictor	Unstandardized coefficients		Standardized coefficient	Significance	95.0% confidence interval for B	
	Beta	Standard error	Beta		Lower bound	Upper bound
Not exposed to any programme	Ref	-	-	-	-	-
Regularly exposed to drama (only)	.712	.223	.094	.001	.276	1.149
Regularly exposed to factual (only)	1.190	.281	.126	.000	.639	1.740
Regularly exposed to both formats	1.077	.204	.170	.000	.677	1.477
Interest in politics – not at all interested	Ref	-	-	-	-	-
Not very interested	.381	.147	.060	.010	.092	.670
Somewhat interested	1.119	.147	.191	.000	.831	1.407
Very interested	1.634	.153	.269	.000	1.334	1.933
Group membership – not an active member	Ref	-	-	-	-	-
Active member	.674	.127	.114	.000	.425	.923
Active member x exposure to drama	-.546	.259	-.062	.035	-1.053	-.039
Active member x exposure to factual	-.831	.329	-.076	.012	-1.475	-.186
Active member x exposure to both formats	-.411	.224	-.058	.066	-.849	.028
Female	Ref	-	-	-	-	-
Male	.841	.088	.152	.000	.669	1.012
Age 15-24	Ref	-	-	-	-	-
Age 25-34	.268	.115	.040	.020	.042	.494
Age 35-44	.269	.130	.034	.039	.014	.524
Age 45-54	.392	.143	.045	.006	.111	.673
Age 55-64	.456	.194	.038	.018	.077	.836
Age 65+	.197	.167	.020	.238	-.130	.523
Education – no schooling	Ref	-	-	-	-	-
Some primary/completed primary	.213	.174	.030	.221	-.128	.553
Completed secondary	.494	.171	.089	.004	.158	.829
Completed college/university	.630	.182	.100	.001	.274	.986
Religion – non-Muslim	Ref	-	-	-	-	-
Muslim	.251	.122	.043	.039	.012	.489

	B	Std. Error	Beta	Sig.	Lower	Upper
State - Lagos	Ref	-	-	-	-	-
Adamawa	-1.076	.243	-.129	.000	-1.553	-.599
Delta	-.799	.223	-.104	.000	-1.237	-.361
Enugu	-.361	.253	-.044	.154	-.857	.135
FCT Abuja	-.446	.225	-.068	.048	-.888	-.004
Kaduna	.497	.234	.084	.033	.040	.955
Income - low	Ref	-	-	-	-	-
Medium	.133	.119	.023	.262	-.100	.366
High	.350	.155	.047	.024	.047	.654
Ethnic group - other	Ref	-	-	-	-	-
Hausa	-.051	.177	-.006	.771	-.398	.295
Igbo	-.335	.155	-.053	.031	-.639	-.031
Yoruba	-.117	.174	-.017	.502	-.457	.224
(Constant)	3.003	.316	-	.000	2.383	3.623

The model had an adjusted R square of 0.155. The F statistic was 24.193 (significance < 0.001).

Efficacy

Table 8: Regression 3.1 – Efficacy OLS model

Dependent variable: average political efficacy score (0 to 10).

Predictor	Unstandardized coefficients		Standardized coefficient	Significance	95.0% confidence interval for B	
	Beta	Standard error	Beta		Lower bound	Upper bound
Not exposed to any programme	Ref	-	-	-	-	-
Regularly exposed to drama (only)	.314	.091	.065	.001	.136	.493
Regularly exposed to factual (only)	.317	.103	.053	.002	.114	.519
Regularly exposed to both formats	.103	.085	.025	.229	-.064	.270
Interest in politics – not at all interested	Ref	-	-	-	-	-
Not very interested	-.161	.101	-.040	.110	-.359	.037
Somewhat interested	-.212	.101	-.057	.035	-.409	-.015
Very interested	-.100	.105	-.026	.338	-.305	.105
Group membership – not an active member	Ref	-	-	-	-	-
Active member	.226	.064	.060	.000	.101	.351
Female	Ref	-	-	-	-	-
Male	.194	.060	.055	.001	.077	.312
Age 15-24	Ref	-	-	-	-	-
Age 25-34	.066	.079	.015	.407	-.089	.221
Age 35-44	.171	.089	.034	.055	-.004	.346
Age 45-54	.187	.098	.034	.058	-.006	.380
Age 55-64	.116	.132	.015	.380	-.143	.375
Age 65+	.059	.114	.010	.602	-.164	.282
Education – no schooling	Ref	-	-	-	-	-
Some primary/completed primary	-.109	.119	-.024	.358	-.343	.124
Completed secondary	-.075	.117	-.021	.522	-.305	.155
Completed college/university	-.069	.125	-.017	.580	-.313	.175
Religion – non-Muslim	Ref	-	-	-	-	-
Muslim	.084	.083	.022	.316	-.080	.247
State - Lagos	Ref	-	-	-	-	-
Adamawa	-.469	.167	-.088	.005	-.796	-.142
Delta	-.291	.153	-.059	.057	-.592	.009
Enugu	.092	.173	.018	.596	-.248	.432

FCT Abuja	-.074	.155	-.018	.632	-.377	.229
Kaduna	-.302	.160	-.080	.060	-.616	.012
Income - low	Ref	-	-	-	-	-
Medium	-.281	.081	-.075	.001	-.440	-.121
High	-.184	.106	-.039	.083	-.392	.024
Ethnic group - other	Ref	-	-	-	-	-
Hausa	-.107	.121	-.021	.376	-.345	.130
Igbo	-.185	.106	-.046	.083	-.393	.024
Yoruba	.046	.119	.011	.700	-.188	.280
(Constant)	3.295	.212	-	.000	2.878	3.711

The model had an adjusted R square of 0.021. The F statistic was 3.998 (significance < 0.001).

Participation

Table 9: Regression 4.1 – Participation OLS model

Dependent variable: average participation score (0 to 10)

Predictor	Unstandardized coefficients		Standardized coefficient	Significance	95.0% confidence interval for B	
	Beta	Standard error	Beta		Lower bound	Upper bound
Not exposed to any programme	Ref	-	-	-	-	-
Exposure to drama (only)	.030	.094	.005	.753	-.155	.214
Exposure to factual (only)	.140	.106	.018	.189	-.069	.348
Exposure to both formats	.285	.088	.055	.001	.113	.457
Interest in politics – not at all interested	Ref	-	-	-	-	-
Not very interested	.033	.104	.006	.750	-.171	.237
Somewhat interested	.570	.104	.120	.000	.367	.774
Very interested	1.170	.108	.236	.000	.958	1.381
Group membership – not an active member	Ref	-	-	-	-	-
Active member	.802	.066	.166	.000	.673	.930
Female	Ref	-	-	-	-	-
Male	.982	.062	.219	.000	.861	1.103
Age 15-24	Ref	-	-	-	-	-
Age 25-34	.344	.081	.062	.000	.184	.504
Age 35-44	.565	.092	.089	.000	.385	.746
Age 45-54	.832	.101	.118	.000	.633	1.031
Age 55-64	1.164	.137	.120	.000	.896	1.432
Age 65+	1.415	.117	.181	.000	1.185	1.645
Education – no schooling	Ref	-	-	-	-	-
Some primary/completed primary	.016	.123	.003	.895	-.224	.257
Completed secondary	.035	.121	.008	.770	-.202	.273
Completed college/university	.157	.128	.031	.221	-.095	.409
Religion – non-Muslim	Ref	-	-	-	-	-
Muslim	.013	.086	.003	.882	-.156	.181
State - Lagos	Ref	-	-	-	-	-
Adamawa	.578	.172	.085	.001	.240	.915
Delta	1.044	.158	.167	.000	.734	1.353
Enugu	1.578	.179	.237	.000	1.227	1.928

FCT Abuja	.957	.159	.180	.000	.644	1.269
Kaduna	-.545	.165	-.112	.001	-.869	-.221
Income - low	Ref	-	-	-	-	-
Medium	.238	.084	.050	.005	.073	.402
High	.326	.110	.054	.003	.111	.541
Ethnic group - other	Ref	-	-	-	-	-
Hausa	.001	.125	.000	.991	-.244	.247
Igbo	-.244	.110	-.047	.026	-.459	-.029
Yoruba	.077	.123	.014	.530	-.164	.318
(Constant)	.957	.219	-	.000	.527	1.386

The model had an adjusted R square of 0.360. The F statistic was 80.040 (significance < 0.001).

Table 10: Regression 4.2 – Participation OLS model with interaction with group activity

Dependent variable: average participation score (0 to 10)

Predictor	Unstandardized coefficients		Standardized coefficient	Significance	95.0% confidence interval for B	
	Beta	Standard error	Beta		Lower bound	Upper bound
Not exposed to any programme	Ref	-	-	-	-	-
Exposure to drama (only)	.425	.157	.069	.007	.116	.733
Exposure to factual (only)	.258	.198	.034	.193	-.130	.646
Exposure to both formats	.628	.144	.122	.000	.345	.911
Interest in politics – not at all interested	Ref	-	-	-	-	-
Not very interested	.035	.104	.007	.739	-.170	.239
Somewhat interested	.553	.104	.116	.000	.350	.757
Very interested	1.151	.108	.233	.000	.939	1.362
Group membership – not an active member	Ref	-	-	-	-	-
Active member	1.023	.090	.212	.000	.847	1.199
Active member x exposure to drama	-.571	.183	-.080	.002	-.930	-.213
Active member x exposure to factual	-.180	.232	-.020	.437	-.635	.274
Active member x exposure to both formats	-.481	.158	-.083	.002	-.791	-.171
Female	Ref	-	-	-	-	-
Male	.998	.062	.222	.000	.877	1.120
Age 15-24	Ref	-	-	-	-	-
Age 25-34	.345	.081	.063	.000	.185	.504
Age 35-44	.565	.092	.088	.000	.385	.745

Age 45-54	.844	.101	.119	.000	.645	1.043
Age 55-64	1.165	.137	.120	.000	.897	1.432
Age 65+	1.415	.118	.181	.000	1.184	1.646
Education – no schooling	Ref	-	-	-	-	-
Some primary/completed primary education	.029	.123	.005	.811	-.211	.270
Completed secondary education	.053	.121	.012	.660	-.184	.290
Completed college/university	.180	.128	.035	.161	-.072	.432
Religion – non-Muslim	Ref	-	-	-	-	-
Muslim	.017	.086	.003	.846	-.152	.185
State - Lagos	Ref	-	-	-	-	-
Adamawa	.565	.172	.083	.001	.228	.902
Delta	1.036	.158	.165	.000	.726	1.345
Enugu	1.556	.179	.234	.000	1.205	1.906
FCT Abuja	.964	.159	.181	.000	.652	1.276
Kaduna	-.538	.165	-.111	.001	-.861	-.214
Income - low	Ref	-	-	-	-	-
Medium	.245	.084	.051	.003	.081	.410
High	.339	.109	.056	.002	.124	.554
Ethnic group – other	Ref	-	-	-	-	-
Hausa	-.002	.125	.000	.985	-.247	.243
Igbo	-.237	.110	-.046	.031	-.452	-.022
Yoruba	.078	.123	.014	.525	-.163	.319
(Constant)	.785	.223	-	.000	.347	1.223

The model had an adjusted R square of 0.362. The F statistic was 72.770 (significance < 0.001).