


Mitigating Fraud in Incentivized Online Surveys: Lessons from Facebook Recruitment in Nigeria

Supplementary materials

Figure A1: Ad creative and text



How do you feel about inequalities in Nigeria?

Sign up now to take part in our survey. It consists of three rounds and selected participants will get 500 Naira worth of airtime after each round.

We are looking for adults (18+) residing in Nigeria to share their opinions. This project is approved by the KU Leuven Social and Societal Ethics Committee (reference G-2022-5238-R3(AMD)).

For more information on our research see: <https://soc.kuleuven.be/crpd>

Table A1: Details of Facebook ad campaigns

	No comp.	Strategy 1		Strategy 2
		₦250	₦640	₦500
Reach	750,084	1,360,792	2,347,435	3,663,664
Impressions	2,549,774	7,617,201	7,816,618	16,957,630
Clicks	19,283	59,048	75,564	192,878
Amount spent on ads (€)	1,095.77	3,211.38	3,160.71	4,398.13
Avg. cost per click (€)	0.06	0.05	0.04	0.02
Valid responses	34	698	2752	2333
Ad budget per valid response (€)	32.23	4.60	1.15	1.89
Compensation amount (NGN)	0.00	174,500.00	1,761,280.00	1,166,500.00
Compensation amount (€) ¹	0.00	414.30	4,181.66	2,399.60
Total cost per response (€)	32.23	5.19	2.67	2.91

Note: 1) the estimate for strategy 1 is based on the exchange rate of October 10th, 2022 (€1 = ₦421.19); the estimate for strategy 2 is based on the exchange rate of March 8th, 2023 (€1 = ₦486.12)

Table A2: Time (in Minutes) spent on survey: recruitment Strategy 1 vs recruitment Strategy 2

	Strategy 1		Strategy 2	
	Round 1	Round 2	Round 1	Round 2
<i>p25</i>	3:21	4:10	6:32	6:51
<i>Median</i>	5:09	6:35	9:14	9:58
<i>p75</i>	8:12	10:19	14:20	15:24

Figure A2: Suspicious response patterns on gender and state variables (Strategy 1)

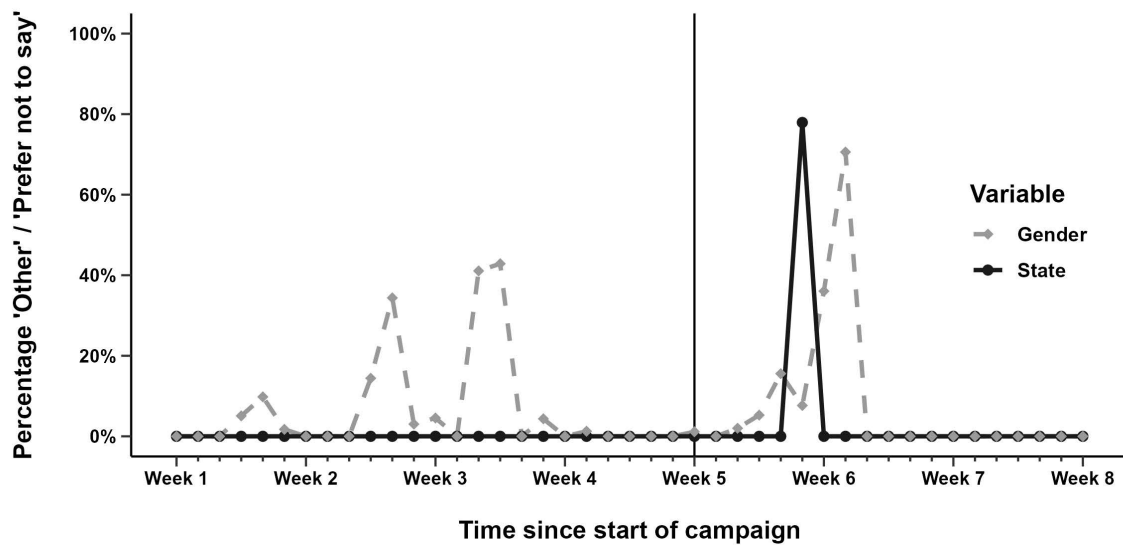


Table A3: Comparison of initial and revised strategies in terms of responses and duplicates

	Strategy 1			Strategy 2		
	Round 1	Round 2	Retention	Round 1	Round 2	Retention
Responses	3485	815	23.4%	2333	2171	93.1%
<i>Device duplicates</i>	736	23	-	54	35	-
<i>Phone number dupl.</i>	538	0	-	0	0	-

Table A4: Results of χ^2 tests comparing demographics of WhatsApp users with non-users

	WhatsApp Users		WhatsApp Non-users		χ^2 Test
Total	3042	82.1%	664	17.9%	
Gender					$\chi^2 (1) = 0.20; p=.66$
<i>Male</i>	1899	62.7%	421	36.7%	
<i>Female</i>	1131	37.3%	240	36.3%	
Age group					$\chi^2 (1) = 2.19; p=.14$
<i>Younger</i>	2339	77.3%	529	80.0%	
<i>Older</i>	687	22.7%	132	20.0%	
Geopolitical zone					$\chi^2 (5) = 6.44; p=.27$
<i>North-Central</i>	725	23.9%	142	21.4%	
<i>North-East</i>	339	11.2%	82	12.3%	
<i>North-West</i>	435	14.3%	98	14.8%	
<i>South-East</i>	236	7.8%	38	5.7%	
<i>South-South</i>	342	11.3%	82	12.3%	
<i>South-West</i>	958	31.6%	222	33.4%	