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Supplementary Information for

The Global Effectiveness of Fact-Checking: Evidence From Simultaneous Experiments in Argentina, Nigeria, South Africa, and the United Kingdom

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Misinformation	Correction	Survey Item	Misinformation agreement in control
Global Items			
We just had two years (2016-2018) of record-breaking Global Cooling.	While temperatures were lower in 2016 and 2018, there is no trend of global cooling	Lower temperatures over 2016-2018 prove we are in a period of global cooling	ARG: 23, NGA: 42, ZAF: 39, GBR 18
Gargling with salt water will prevent infection with the Coronavirus	This is false: gargling with saltwater does not eliminate Coronavirus	Gargling with saltwater kills the Coronavirus	ARG: 6, NGA: 29, ZAF: 22, GBR 7
Argentina			
Alberto Fernández: Last year, there were 3,262 killings	In 2018, 2,362 intentional homicides were registered	In 2018, over 3,200 people were murdered in Argentina	51
Mauricio Macri: We arrested 85,000 drug dealers, 67 criminals each day since we started our government	Most of these arrests by the are for possession of drugs for consumption.	Since becoming president, Macri's administration has arrested over 85,000 people for drug trafficking	41
Alberto Fernández: When Macri took over external debt was 35% GDP, now it's 100%	By mid 2019, Argentina's external debt had only risen to 40% of GDP	Under Maurico Macri, external debt has reached 100% of GDP	51
Mauricio Macri: During our government, debt grew 26% of GDP. During the Kirchner administration, it by grew 38% of GDP.	This confuses debt measured as %GDP, with its absolute value. As a percent of GDP, debt fell during Kirchner's mandates.	Debt as percentage of GDP rose more under Kirchner than under Macri	44
Miguel Pichetto: There are...nearly 4,000 shanty towns in Buenos Aires Province	Officials: there are less than 1,000. emergency neighborhoods in Buenos Aires	There are almost 4,000 shanty towns in Buenos Aires Province	68
United Kingdom			
Boris Johnson: We're investing over 14 billion in primary and secondary education between now and 2022/23	The amount conflates spending over multiple years, rather than the typical way to describe spending year by year	School spending is increasing by 14 billion between now and 2022/23	22
Louise Haigh: Since records began, violent and knife crime have never been as high as today.	Violent and knife crime is far lower in 2019 than it was in the 1990s	Violent crime and knife crime are higher than ever recorded	64
Sajid Javid: Homelessness reached its peak in '08 under Labor-now down by half	Since 2008, homelessness has risen by about 39%	Homelessness is down by almost a half since its peak in 2008, under Labour	10
Jonathan Ashworth: 200,000 nurses have quit the NHS since 2010	Tthere are more nurses in NHS today in 2019 than 2010	Since 2010, more than 200,000 nurses have quit the NHS	55
No vaccine has been tested to see if it causes cancer. Vaccines contain ingredients known to cause cancer	All UK vaccines undergo trials over years to check for side effects. No vaccine contains carcinogenic quantities of ingredients	Scientists have never studied whether vaccines cause cancer	12
South Africa			
Recently, hundreds of children have drowned in pit latrines in South Africa	Records show two five-year-old children have drowned in school latrines since 2014	In recent years, hundreds of children have drowned in pit latrines across South Africa	56
49% of men and 34.1% of women in South Africa smoke	These estimates were based on a small sample, on an English and Afrikaans survey	Around 40% of South African adults are smokers	70
R8 out of every R10 spent by government goes to civil servants' salaries	Salaries made up 35.2% of government spending in 2017/18	Around 80% of public spending in South Africa goes to civil servants salaries	44
A German man, Michael Duerr, owns 57.5% of the South African Reserve Bank	Duerr owns .5% of the Bank's outstanding shares	A German man owns more than half of the South African reserve bank	32
Bheki Cele:, South Africa is the only African country that releases crime statistics	Experts say many African countries compile and release crime statistics regularly	South Africa is the only African country which publishes official crime statistics	28
Nigeria			
Obadiah Mailafia: Youth unemployment in Nigeria is almost 70%	According to Government data, youth unemployment in Nigeria is 29.7%	Youth unemployment in Nigeria is almost 70%	86
Nigerian universities have not had more than female 15 vice-chancellors	Records show there have been more than 20 female vice-chancellors	Nigerian universities only had about 15 female vice chancellors	48
Ben Ayade: Cross River has the least total crime in the country"	20 other states hve lower crime than Cross River	Cross River State is the safest in Nigeria	32
About 70% of the Nigerian births are not registered	According to government data, 53.1%, of not the 70% reported	70% of Nigerian children are not registered at birth	65
Malaria kills around 300,000 Nigerians annually	According to the WHO, 81,640 Nigerians died from Malaria in 2017	Malaria kills 300,000 people in Nigeria every year	63

Table SI-1. Misinformation, correction, and survey outcomes, by country. For each outcome, respondents are asked if the outcome statement is both "true" and if they "agree" with the statement. The rightmost column reports the average of the truth and agreement items among those respondents who saw neither the misinformation nor the correction. Treatments have been edited for concision; complete text available below.

	Argentina					South Africa					United Kingdom					Nigeria		
# Corrections	WVS	Wave 1 <2	Wave 1 >=2	Wave 2 <2	Wave 2 >=2	WVS	Wave 1 <2	Wave 1 >=2	Wave 2 <2	Wave 2 >=2	WVS	Wave 1 <2	Wave 1 >=2	Wave 2 <2	Wave 2 >=2	WVS	Wave 1 <2	Wave 1 >=2
N		1,167	833	403	309		1,168	832	543	403		1,167	833	543	403	875	625	
Age																		
18-26	21	29	29	18	16	31	38	36	24	25	17	16	15	13	13	39	45	43
27-40	26	43	42	44	45	31	43	47	52	55	28	29	28	30	28	42	46	47
41-60	30	28	28	38	39	28	19	17	25	20	31	35	38	41	43	16	8	10
61+	23	0	0	0	0	10	0	0	0	0	24	21	19	16	17	4	1	0
Education																		
Secondary or less	49			21	17	36			37	36	56			21	24	72	52	48
Post secondary	45			37	36	58			34	31	24			16	18	22	5	5
Bachelor's or higher	6			41	47	6			29	33	20			63	58	6	43	48
Employment																		
Retired	21	1	0	1	0	11	0	0	1	0	22	15	14	12	14	1	0	1
Employed	68	73	78	80	86	43	50	52	66	67	67	66	65	67	64	71	65	65
Unemployed	3	15	12	12	7	34	25	25	20	20	7	16	18	18	19	7	11	14
Student	9	12	10	7	6	11	24	23	13	13	4	3	3	3	3	20	23	20
Gender																		
Female	52	48	49	54	50	52	56	55	64	61	52	51	52	49	51	49	46	46
Male	48	52	51	46	50	48	44	45	36	39	48	49	48	51	49	51	54	54
Ideology																		
Left	20	21	19	25	22	16	14	14	16	15	24	32	32	34	31	30	14	13
Moderate	43	26	26	28	28	39	29	30	30	31	55	29	29	30	32	30	20	19
Right	38	32	36	35	38	45	33	35	31	31	21	23	23	23	24	40	31	34
DK	0	22	19	12	12	0	24	20	23	23	0	16	16	13	13	0	35	33
Survey Dates																		
Start		24 Sep		16 Oct			24 Sep		16 Oct			24 Sep		16 Oct			28 Sep	
End		7 Oct		6 Nov			8 Oct		6 Nov			5 Oct		27 Oct			6 Oct	

Table SI-2. Survey composition, by number of corrections seen, wave, and country. Cell entries are counts in the first row, and then percentage composition in subsequent rows. WVS indicates the comparable survey data from the World Values Survey (the most recent year for applicable country.) Education data was collected only after measurement of outcomes in the second wave and is included here only for illustration purposes.

	Multi-Country		Nigeria					South Africa				
	Covid	Cooling	Crossriver	Malaria	Chancellor	BirthReg	YouthUE	CrimeStats	ResBank	CivServ	Latrines	Tobacco
Cond(Misinfo)	0.36***	0.07**	0.19***	0.06	0.34***	0.13*	0.04	0.24***	0.27***	-0.02	-0.02	0.06
	(0.04)	(0.03)	(0.07)	(0.07)	(0.06)	(0.07)	(0.06)	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)
Cond(Correction)	-0.16***	-0.54***	-0.17**	-0.62***	-0.16**	-0.46***	-0.39***	-0.36***	-0.65***	-0.56***	-0.71***	-0.39***
	(0.03)	(0.03)	(0.07)	(0.08)	(0.07)	(0.08)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Num.Obs.	7500	7500	1500	1500	1500	1500	1500	2000	2000	2000	2000	2000
R2	0.030	0.048	0.017	0.062	0.038	0.040	0.032	0.035	0.087	0.039	0.061	0.026

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table SI-3. Regression models for conditional difference for multi-country items, Nigeria, and South Africa. Dependent variable is 5 part measure of agreement with an inaccurate claim.

	Argentina					United Kingdom				
	Arrests	Debt	Killings	Debt	Shanty	Homeless	Cancer	Educ	Nurses	Knife
Cond(Misinfo)	-0.02	0.08	-0.25***	-0.22***	-0.04	0.19***	0.04	-0.00	-0.19***	0.20***
	(0.06)	(0.07)	(0.05)	(0.07)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Cond(Correction)	-0.63***	-0.33***	-0.83***	-0.94***	-1.30***	-0.19***	-0.26***	-0.40***	-0.72***	-0.80***
	(0.07)	(0.07)	(0.06)	(0.07)	(0.07)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Num.Obs.	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
R2	0.055	0.019	0.090	0.093	0.218	0.024	0.017	0.033	0.083	0.146

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table SI-4. Regression models for conditional difference for multi-country items, Nigeria, and South Africa. Dependent variable is 5 part measure of agreement with an inaccurate claim.

	Argentina					South Africa				
	Fernandez Debt	Fernandez Killings	Macri Arrests	Macri Debt	Pichetto Shanty	Cele Crimestats	Civserv	Latrines	Resbank	Tobacco
Cond(Misinfo)	-0.17	-0.25***	0.03	-0.08	-0.17*	0.26***	-0.06	0.11	0.40***	0.22***
	(0.11)	(0.09)	(0.11)	(0.12)	(0.10)	(0.10)	(0.10)	(0.09)	(0.09)	(0.08)
Cond(Correction)	-0.97***	-0.93***	-0.73***	-0.36***	-1.40***	-0.46***	-0.62***	-0.59***	-0.61***	-0.28***
	(0.11)	(0.11)	(0.11)	(0.12)	(0.11)	(0.10)	(0.10)	(0.11)	(0.10)	(0.09)
Num.Obs.	712	712	712	712	712	946	946	946	946	946
R2	0.102	0.113	0.078	0.014	0.224	0.052	0.046	0.054	0.099	0.032

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table SI-5. Wave 1 correction effects, Argentina and South Africa. Models are estimated only among subjects who completed both waves. Intercepts included in the models but omitted from these tables.

	United Kingdom					Multi-Country	
	Ashworth Nurses	Haigh Knife	Javid Homeless	Johnson Educ	Vaccine Cancer	Global Cooling	Saltwater Covid
Cond(Misinfo)	-0.21***	0.12	0.18**	-0.02	0.04	0.02	0.33***
	(0.07)	(0.07)	(0.08)	(0.07)	(0.08)	(0.06)	(0.06)
Cond(Correction)	-0.82***	-1.01***	-0.27***	-0.42***	-0.25***	-0.69***	-0.13***
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.05)	(0.05)
Num.Obs.	1004	1004	1004	1004	1004	2662	2662
R2	0.106	0.193	0.033	0.033	0.015	0.079	0.030

$* \ p < 0.1, \ ** \ p < 0.05, \ *** \ p < 0.01$

Table SI-6. Wave 1 correction effects, United Kingdom and Multi-country items. Models are estimated only among subjects who completed both waves. Intercepts included in the models but omitted from these tables.

	Argentina					South Africa				
	Fernandez Debt	Fernandez Killings	Macri Arrests	Macri Debt	Pichetto Shanty	Cele Crimestats	Civserv	Latrines	Resbank	Tobacco
Cond(Misinfo)	-0.16	0.00	-0.05	-0.18	-0.03	0.05	0.08	0.06	0.21**	0.18**
	(0.11)	(0.08)	(0.10)	(0.12)	(0.09)	(0.10)	(0.09)	(0.09)	(0.09)	(0.08)
Cond(Correction)	-0.27**	-0.27***	-0.24**	-0.20*	-0.60***	-0.30***	-0.16*	-0.41***	-0.33***	-0.07
	(0.11)	(0.09)	(0.11)	(0.12)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.09)
Num.Obs.	712	712	712	712	712	946	946	946	946	946
R2	0.009	0.018	0.007	0.005	0.062	0.015	0.007	0.030	0.033	0.010

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table SI-7. Wave 2 correction effects, Argentina and South Africa. Models are estimated only among subjects who completed both waves. Intercepts included in the models but omitted from these tables.

	United Kingdom				Multi Country		
	Ashworth Nurses	Haigh Knife	Javid Homeless	Johnson Educ	Vaccine Cancer	Global Cooling	Saltwater Covid
Cond(Misinfo)	-0.05	-0.11	-0.05	-0.07	-0.12	-0.00	0.16***
	(0.07)	(0.08)	(0.07)	(0.07)	(0.08)	(0.06)	(0.05)
Cond(Correction)	-0.48***	-0.56***	-0.15**	-0.16**	-0.19**	-0.24***	-0.07
	(0.08)	(0.08)	(0.07)	(0.07)	(0.08)	(0.06)	(0.05)
Num.Obs.	1004	1004	1004	1004	1004	2662	2662
R2	0.047	0.051	0.004	0.005	0.006	0.008	0.008

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table SI-8. Wave 2 correction effects, United Kingdom and Multi-Country. Models are estimated only among subjects who completed both waves. Intercepts included in the models but omitted from these tables.

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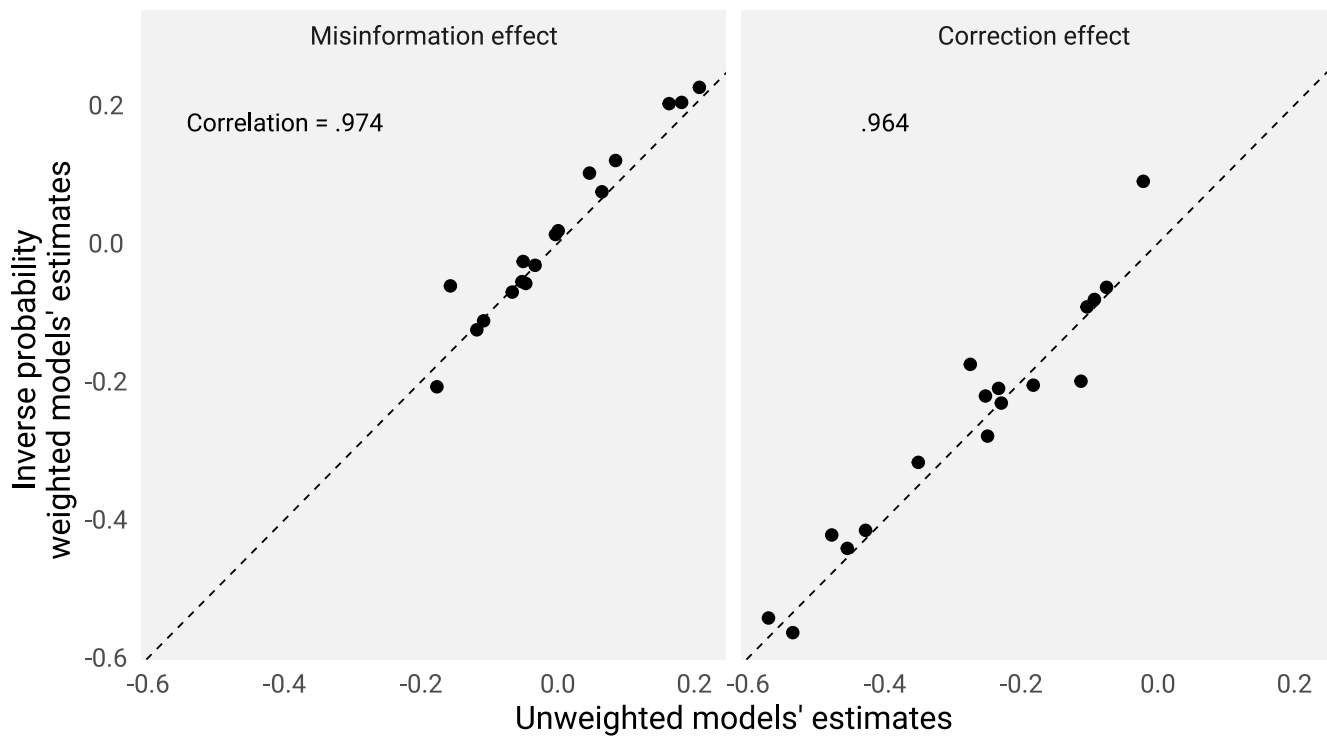
Fig. SI-1. Effect of weighting wave two correction and misinformation effects by the inverse of a subjects' wave 2 probability of participation (as recommended in (1)). Each effect is reported separately by issue and country, for the three countries where wave 2 responses were collected. These inverse probability weighted effects, depicted on the y-axis, are compared to the unweighted effects, depicted on the x-axis. The labels report the Pearson correlation coefficient between the unweighted and weighted estimates.

	Argentina	South Africa	United Kingdom
Intercept	-0.585	1.304	-0.367
	(0.649)	(1.143)	(0.255)
Experimental condition Count of corrections	-0.007	0.010	0.031
	(0.028)	(0.028)	(0.027)
Experimental condition Count of misinformation	-0.018	0.000	-0.007
	(0.029)	(0.028)	(0.027)
Age 27-40	0.655***	0.548***	0.352*
	(0.137)	(0.126)	(0.151)
41-60	1.171***	0.616***	0.572***
	(0.148)	(0.158)	(0.149)
Employment Employed	-0.092	-0.857	-0.056
	(0.626)	(1.128)	(0.174)
Unemployed	-0.570	-1.806	0.152
	(0.640)	(1.131)	(0.199)
Student	-0.292	-1.951+	0.039
	(0.652)	(1.136)	(0.320)
Ideology Moderate	-0.210	-0.212	0.151
	(0.139)	(0.155)	(0.117)
Right	-0.151	-0.296+	0.035
	(0.133)	(0.153)	(0.125)
Don't Know	-0.847***	-0.280+	-0.354*
	(0.165)	(0.162)	(0.143)
Male	-0.324**	-0.534***	0.111
	(0.099)	(0.100)	(0.095)
Num.Obs.	2000	2000	2000
AIC	2467.6	2533.6	2744.4
BIC	2534.8	2600.8	2828.5
Log.Lik.	-1221.794	-1254.808	-1357.219

Models predicting wave 2 participation by wave 1 demographics, and experimental condition, measured by a count of misinformation and corrections seen by each subject. Models are logit generalized models, with a dummy dependant variable where wave 2 participation equals 1.

$+ \text{ p} < 0.1, * \text{ p} < 0.05, ** \text{ p} < 0.01, *** \text{ p} < 0.001$
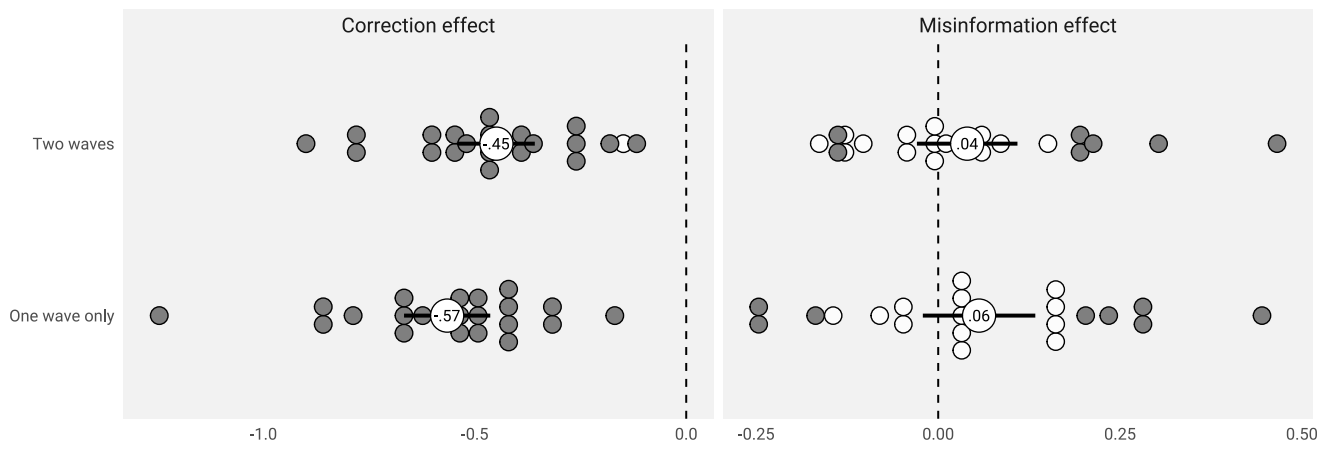
Fig. SI-2. Correction and misinformation effects in the first wave, with subjects separated by whether they completed both waves or only the first.

Formatting Differences. This study afforded us an opportunity to examine whether different fact-checking formats have different-sized correction effects. While fact-checking organizations often deploy text-based fact-checks of the kind we focus on here, they also routinely rely on other media, such as video or images, to correct misinformation. Prior research has investigated how changes in fact-checking format may be intertwined with effects (2) For three misinformation items in the present study, we randomly assigned participants to see either a standard text-based fact-check or a visual fact-check. The visual fact-checks can be glimpsed elsewhere in the appendix.

While two of three differences are statistically indistinguishable, one difference is detectable. Correction effects provoked by a visual correction of a false claim about the number of shanty towns in Buenos Aires were larger than correction effects generated by a text-based correction of the same issue. The models presented throughout this paper otherwise do not account for format differences between these corrections, consistent with our pre-analysis plan. These findings suggest that visual fact-checks can be more effective than text-based fact-checks. Figure SI-3 depicts effects across formats. Consistent with our pre-analysis plan, we do not account for the format differences in our estimates.
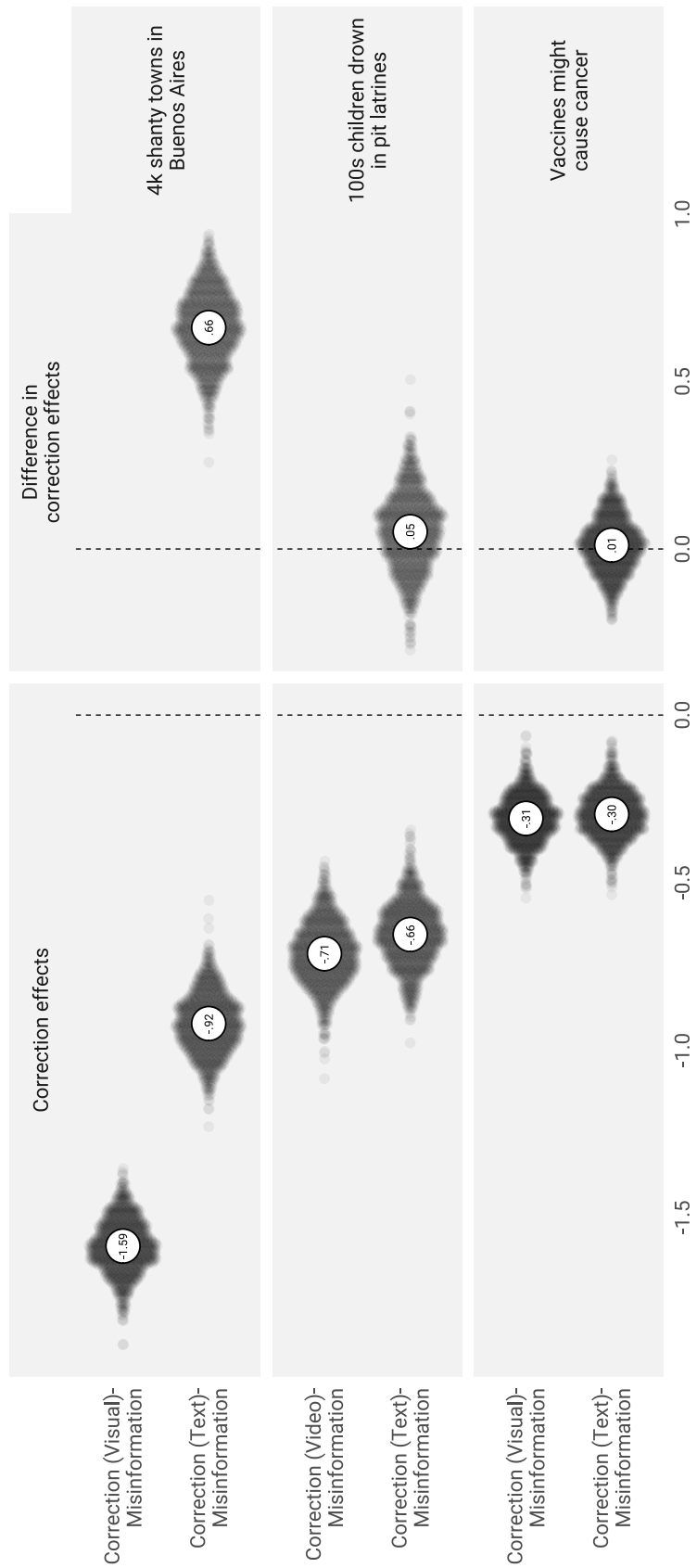
Fig. SI-3. Format differences in correction effects (Wave 1)

38 **Factorial Design.** Figure SI-4 depicts the design for each subject in each country. Subjects saw between 0-7 misinformation items and between 0-7 corresponding fact checks, while answering outcome questions about all 7 items.
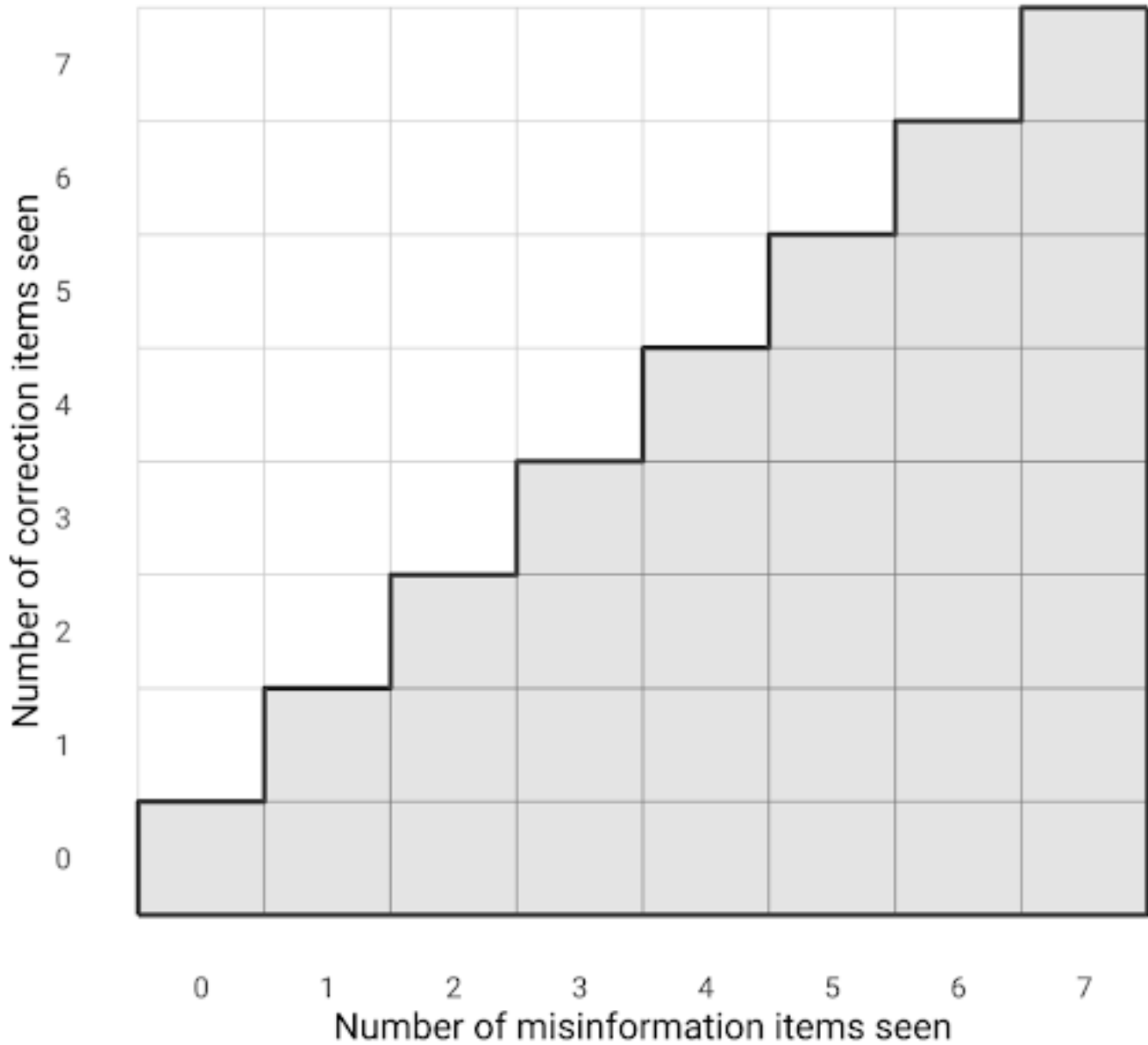
Fig. SI-4. Design of experiments

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40 **Ideology.** Figure SI-5 displays effects by ideology and country, overlaid with a meta-analytic estimate with random effects. The meta-analytic estimate was not pre-registered.
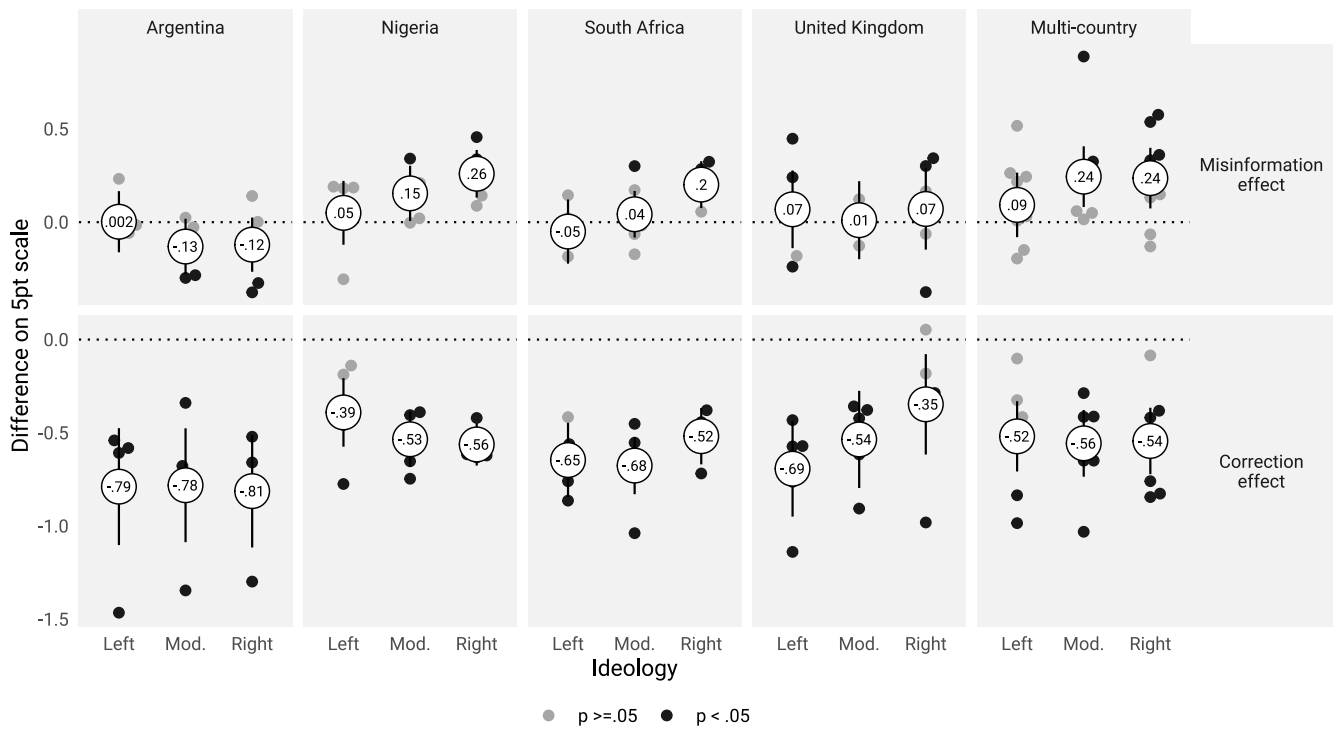
Fig. SI-5. Ideology meta-analysis

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Heterogeneity of treatment effects, by pretreatment demographic covariates.. Figure SI-6 displays wave 1 misinformation effects (in the left column) and correction effects (in the right) by pretreatment covariates (with covariates grouped in rows columns), overlaid with a meta-analytic estimate with random effects.
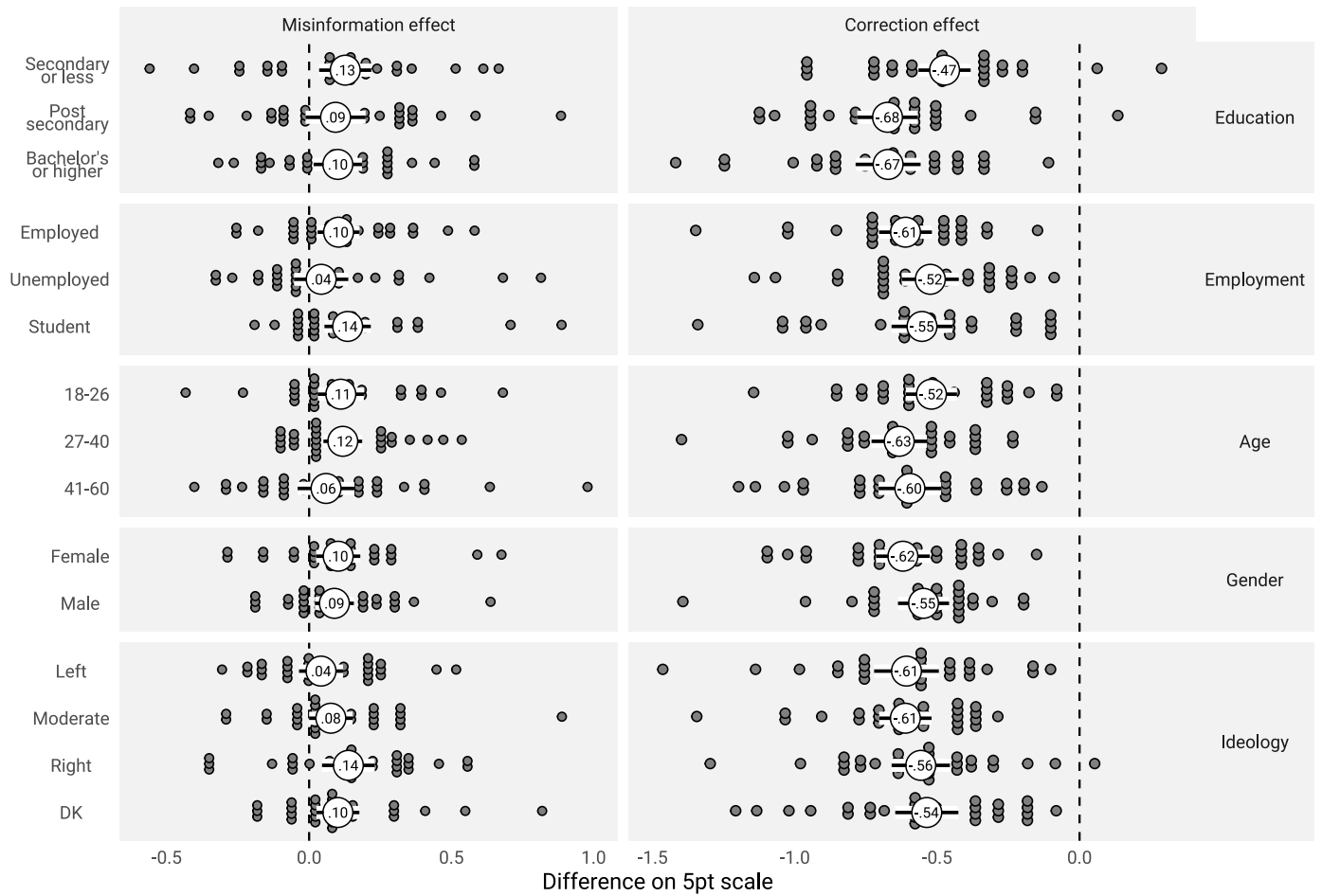
Fig. SI-6. Heterogeneity effects and meta-analysis. Individual effects, by issue and country, are depicted with solid dark points. The meta-analytic summaries of these effects are depicted with larger hollow points and their 95% confidence intervals are depicted with a solid linerange.

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Survey Text. As we relied on two different vendors, Ipsos and YouGov, the wording for some of their standard pre-treatment demographics varied. Here, we present all survey wordings as they appeared to subjects across vendors and countries.

Pre-Treatment Covariates

Age

As measured by Ipsos in the U.K., Argentina and South Africa:

What is your date of birth?
Drop-down menu from 1910 to 2015
Drop-down menu for 12 months

[As measured by YouGov in Nigeria:]

Numeric entry

Gender

[As measured by Ipsos in South Africa and Argentina:]

Male
Female

[As measured by Ipsos in the United Kingdom:]

-Male
-Female
-In another way
-Prefer not to answer

Gender

[As measured by YouGov in Nigeria:]

Male
Female

Education

[As measured by YouGov in Nigeria:]

-Primary
-Secondary
-University
-Higher non-university

Region

[As measured by YouGov in Nigeria:]

-Abia
-Adamawa
-Akwa Ibom
-Anambra
-Bauchi
-Bayelsa
-Benue
-Borno
-Cross River
-Delta
-Ebonyi
-Edo

105 -Ekiti
106 -Enugu
107 -Federal Capital Territory (FCT)
108 -Gombe
109 -Imo
110 -Jigawa
111 -Kaduna
112 -Kano
113 -Katsina
114 -Kebbi
115 -Kogi
116 -Kwara
117 -Lagos
118 -Nasarawa
119 -Niger
120 -Ogun
121 -Ondo
122 -Osun
123 -Oyo
124 -Plateau
125 -Rivers
126 -Sokoto
127 -Taraba
128 -Yobe
129 -Zamfara
130
131 Region
132
133 [As measured by Ipsos in United Kingdom:]
134
135 Where do you live?
136 -North East
137 -North West
138 -Yorkshire and The Humber
139 -West Midlands
140 -East Midlands
141 -East of England
142 -South West
143 -South East
144 -Greater London
145 -Wales
146 -Scotland
147 -Northern Ireland
148
149 [As measured by Ipsos in South Africa:]
150
151 Where do you live?
152 -Eastern Cape
153 -Free State
154 -Gauteng
155 -KwaZulu-Natal
156 -Limpopo
157 -Mpumalanga
158 -North West
159 -Northern Cape
160 -Western Cape
161
162 [As measured by Ipsos in Argentina:]
163
164 Where are you living?
165 -Buenos Aires

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166 -Centro
167 -Cuyo
168 -Noroeste
169 -Patagonia
170 -Nordeste
171
172 Employment
173
174 [As measured by Ipsos in Argentina, South Africa and Nigeria:]
175
176 -Employed full-time
177 -Employed part-time
178 -Self employed
179 -Unemployed but looking for a job
180 -Unemployed and not looking for a job/Long-term sick or disabled
181 -Full-time parent, homemaker
182 -Retired
183 -Student/Pupil
184
185 Employment
186
187 [As measured by YouGov in Nigeria:]
188
189 -Employed full-time
190 -Employed part-time
191 -Self employed
192 -Unemployed but looking for a job
193 -Unemployed and not looking for a job/Long-term sick or disabled
194 -Full-time parent, homemaker
195 -Retired
196 -Student/Pupil
197
198 Partisanship
199
200 [As measured by Ipsos in the United Kingdom:]
201
202 Which party, if any, are you most inclined to support?
203

204 - Democratic Unionist Party (DUP [ASK FOR RESPONDENTS IN NORTHERN IRELAND ONLY]

205 - Sinn Fein [ASK FOR RESPONDENTS IN NORTHERN IRELAND ONLY]

206 - Ulster Unionist Party (UUP) [ASK FOR RESPONDENTS IN NORTHERN IRELAND ONLY]

207 - SDLP [ASK FOR RESPONDENTS IN NORTHERN IRELAND ONLY]

208 - Alliance Party [ASK FOR RESPONDENTS IN NORTHERN IRELAND ONLY]

209 - Progressive Unionist Party (PUP) [ASK FOR RESPONDENTS IN NORTHERN IRELAND ONLY]

210 - Traditional Unionist Voice (TUV) [ASK FOR RESPONDENTS IN NORTHERN IRELAND ONLY]

211 - Labour [ASK FOR RESPONDENTS IN WALES/SCOTLAND/ENGLANDONLY]

212 - Liberal Democrats (Lib Dem) [ASK FOR RESPONDENTS IN WALES/SCOTLAND/ENGLAND ONLY]

213 - Brexit Party [ASK FOR RESPONDENTS IN WALES/SCOTLAND/ENGLAND ONLY]

214 - Plaid Cymru [ASK FOR RESPONDENTS IN WALES ONLY]

215 - Scottish National Party (SNP) [ASK FOR RESPONDENTS IN SCOTLAND ONLY]

216 - Scottish Socialists [ASK FOR RESPONDENTS IN SCOTLAND ONLY]

217 - Conservative

218 - Green Party

219 - UK Independence Party (UKIP)

220 - British National Party (BNP)

221 - Another political party / group

222 - Im not included to support a political party / group

223 - Dont know

224 - Prefer not to say

225 [As measured by Ipsos in South Africa:]

226
227 Which party, if any, are you most inclined to support?

228

229 - African Christian Democratic Party (ACDP)

230 - Al-Jama-ah (ALJAMA AH)

231 - African Independent Congress (AIC)

232 - African National Congress (ANC)

233 - African Transformation Movement (ATM)

234 - Congress of the People (COPE)

235 - Democratic Alliance (DA)

236 - Economic Freedom Fighters (EFF)

237 - Freedom Front Plus (FF +)

238 - Good Party (GOOD)

239 - Inkatha Freedom Party (IFP)

240 - National Freedom Party (NFP) Africanist Congress of Azania (PAC)

241 - United Democratic Movement (UDM) political party / group

242 - Im not included to support a political party / group

243 - Dont know

244 - Prefer not to say

245 [As measured by Ipsos in Argentina:]

246
247 Which party, if any, are you most inclined to support?

248

249 - Frente de Todos (Fernández - Fernández)

250 - Juntos por el Cambio (Macri - Pichetto)

251 - Frente de Izquierda (Del Caño - Del Plá)

252 - Frente NOS (Gómez Centurión - Hotton)

253 - Frente Unite (Espert - Rosales)

254 - Consenso Federal (Lavagna - Urtubey)

255 - Another political party / group

256 - Im not included to support a political party / group

Ethan Porter and Thomas J. Wood

- Dont know

- Prefer not to say

[As measured by YouGov in Nigeria:]

If there were a national election tomorrow, for which party on this list would you vote

- Peoples Democratic Party (PDP)

- All Progressives Congress (APC)

- Justice Party (JP)

- Peoples Mandate Party (PMP)

- National Conscience Party (NCP)

- Accord Party (AP)

- Other

- would cast a blank ballot

Which party appeals to you most - DK follow

- Peoples Democratic Party (PDP)

- All Progressives Congress (APC)

- Justice Party (JP)

- Peoples Mandate Party (PMP)

- National Conscience Party (NCP)

- Accord Party (AP)

- Other

- not asked

Ideology

[As measured by YouGov in Nigeria and Ipsos in Argentina, South Africa and Nigeria:]

In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?

[1-10 scale, with "left" above 1 and "right" above 10"]

-Dont know
-Prefer not to say

Outcomes
After exposure to all fake stories and/or corrections, factual accuracy effects were measured using two 1-5 scales. The scales were appended to short sentences conveying the essence of the tested misinformation. One of the scales was a 1-5 agree to disagree scale; the other was a 1-5 true to false scale. Specifically, the choices on the first scale were: [Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]. The choices on the second scale were: [True / Probably true / Not sure / Probably false / False].

Global Items

1. Global warming

To what extent do you agree or disagree with the following statement?

"The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling."

Spanish translation: "Las temperaturas más bajas entre 2016 y 2018 prueban que estamos en un período de enfriamiento global".

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.

[1-5, True to False]

2. Covid
To what extent do you agree or disagree with the following statement?

"Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.

Spanish translation: "Beber mucha agua y hacer gárgaras con agua tibia y sal o vinagre elimina el coronavirus".

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.

[1-5, True to False]

U.K. Items

1. School spending

To what extent do you agree or disagree with the following statement?

"School spending is increasing by č14 billion between now and 2022/23.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"School spending is increasing by č14 billion between now and 2022/23."

[1-5, True to False]

2. Violent crime

To what extent do you agree or disagree with the following statement?

"Violent crime and knife crime are higher than ever recorded.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Violent crime and knife crime are higher than ever recorded.

[1-5, True to False]

3. Homelessness

To what extent do you agree or disagree with the following statement?

"Homelessness reached its peak in 2008 under the last Labour government. Since then its down by almost a half.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?v
Homelessness reached its peak in 2008 under the last Labour government. Since then its down by almost a half.

[1-5, True to False]

4. Nurses and NHS

To what extent do you agree or disagree with the following statement?

"Since 2010, more than 200,000 nurses have resigned from their posts in the NHS.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Since 2010, more than 200,000 nurses have resigned from their posts in the NHS.

[1-5, True to False]

5. Vaccines and cancer

To what extent do you agree or disagree with the following statement?

"Scientists have never studied whether vaccines cause cancer.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Scientists have never studied whether vaccines cause cancer.

[1-5, True to False]

South Africa items

1. Latrines

To what extent do you agree or disagree with the following statement?

"In recent years, hundreds of children have drowned in pit latrines in schools across South Africa.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"In recent years, hundreds of children have drowned in pit latrines in schools across South Africa.

[1-5, True to False]

2. Tobacco

To what extent do you agree or disagree with the following statement?

"Around 40% of South African adults are smokers.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Around 40% of South African adults are smokers.

[1-5, True to False]

3. Civil servants
To what extent do you agree or disagree with the following statement?

"Around 80% of public spending in South Africa goes to civil servants salaries.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Around 80% of public spending in South Africa goes to civil servants salaries.

[1-5, True to False]

4. Central Reserve Bank

To what extent do you agree or disagree with the following statement?

"A German man owns more than half of the South African reserve bank.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"A German man owns more than half of the South African reserve bank.

[1-5, True to False]

5. Crime statistics
To what extent do you agree or disagree with the following statement?

"South Africa is the only African country which publishes official crime statistics.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"South Africa is the only African country which publishes official crime statistics.

[1-5, True to False]

Argentina items

1. Murder statistics

To what extent do you agree or disagree with the following statement?

"In 2018, over 3,200 people were murdered in Argentina.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"In 2018, over 3,200 people were murdered in Argentina.

[1-5, True to False]

2. Drug trafficking

To what extent do you agree or disagree with the following statement?

"Since becoming president, Macris administration has arrested over 85,000 people for drug trafficking.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Since becoming president, Macris administration has arrested over 85,000 people for drug trafficking.

[1-5, True to False]

3. Foreign debt

To what extent do you agree or disagree with the following statement?

"Under Mauricio Macri, foreign debt has reached 100% of Argentinas Gross Domestic Product (GDP).

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Under Mauricio Macri, foreign debt has reached 100% of Argentinas Gross Domestic Product (GDP).

[1-5, True to False]

4. Debt and GDP
To what extent do you agree or disagree with the following statement?

"Debt as percentage of GDP rose more under the Kirchner regime than under the Macri regime.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Debt as percentage of GDP rose more under the Kirchner regime than under the Macri regime.

[1-5, True to False]

5. Shanty towns

To what extent do you agree or disagree with the following statement?

"There are almost 4,000 shanty towns in Buenos Aires Province.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"There are almost 4,000 shanty towns in Buenos Aires Province.

[1-5, True to False]

Nigeria items

1. Youth unemployment

To what extent do you agree or disagree with the following statement?

"Youth unemployment in Nigeria is almost 70%.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Youth unemployment in Nigeria is almost 70%.

[1-5, True to False]

2. Female chancellors

To what extent do you agree or disagree with the following statement?

"Nigerian universities only had about 15 female vice chancellors in their history.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Nigerian universities only had about 15 female vice chancellors in their history.

[1-5, True to False]

3. Crime statistics

To what extent do you agree or disagree with the following statement?

"Cross River State is the safest in Nigeria.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"Cross River State is the safest in Nigeria.
-5, True to False

4. Birth registrations

To what extent do you agree or disagree with the following statement?

"70% of Nigerian children are not registered at birth.

[1-5, Strongly agree to strongly disagree]

Do you think the following statement is true or false?

"70% of Nigerian children are not registered at birth.
-5, True to False

5. Malaria
To what extent do you agree or disagree with the following statement?

"Malaria kills 300,000 people in Nigeria every year.

606 [1-5, Strongly agree to strongly disagree]

608 Do you think the following statement is true or false?

610 "Malaria kills 300,000 people in Nigeria every year.

612 [1-5, True to False]

614 In the United Kingdom, South Africa and Nigeria, the survey experiments were administered in English. The experiment in
615 Argentina was administered in Spanish. Here, we present English-language versions of all experiments. Spanish translation
616 was led by Ipsos and reviewed by the researchers' fact-checking partner organizations and are available upon request.

References

1. A Gerber, DP Green, *Field Experiments: Design, Analysis, and Interpretation*. (W.W. Norton), (2012).
2. S Lewandowsky, J Cook, ea Ecker, Ulrich, The debunking handbook 2020. (2020).

Pre-registration. To view the pre-registration, click here or go to the following url: https://osf.io/a3p49

Argentina

Wave one

After ideology question and any other preamble, state:

We would now like you to read and answer some additional questions.

1. *GLOBAL ITEM - Spanish-language version*

Misinformation

On February 3, 2019, a social media post claimed the following:

"We just had two years (2016-2018) of record-breaking Global Cooling."

Correction - SHOW TEXT BELOW:

No, we are not experiencing global warming

Una [publicación](#) que afirma que "tuvimos 2 años (2016-2018) de enfriamiento global récord" fue compartida más de 300 veces en Facebook.

Es incorrecto: si bien las temperaturas en 2017 y 2018 fueron más bajas que en 2016, las temperaturas globales ni han disminuido bruscamente, ni lo han hecho a niveles récord, y tampoco se está produciendo una tendencia de "enfriamiento global".

El término "enfriamiento global" generalmente se usa para [describir](#) un largo período de tiempo durante el cual la temperatura promedio de la tierra se enfría.

Pero los datos de la NASA muestran claramente que está sucediendo lo contrario. Estamos experimentando un calentamiento global: con el paso del tiempo el planeta se está calentando, y a un ritmo cada vez más rápido.

Toda la evidencia muestra que el planeta se está calentando

Es cierto que la temperatura promedio global de 2016 fue más alta que la de 2017 y 2018, pero esto no evidencia que se esté produciendo un "enfriamiento global".

Según los datos de la NASA linkeados en la publicación en Facebook, 2016 fue el año más caluroso registrado hasta el momento, seguido por 2017, mientras que 2018 está cuarto entre aquellos con mayores temperaturas. Un total de 18 de los 19 años más cálidos registrados han ocurrido desde 2001 en adelante, y en los últimos años la temperatura global promedio aumentó aproximadamente entre 0,8 y 1 grados Celsius, si se compara con la temperatura promedio entre 1951 y 1980.

Como resume Gavin Schmidt, director del Instituto Goddard de Estudios Espaciales: "2018 es una vez más un año extremadamente cálido, y sigue una tendencia de calentamiento global en el largo plazo".

El calentamiento global no significa que cada año sea más caluroso que el anterior. Más bien, significa que, en general, las temperaturas promedio están en aumento, incluso si pueden fluctuar un poco año tras año.

La caída de la temperatura en 2017 y 2018 no es "récord" como sugiere la publicación. Desde 1980, hubo otras ocho oportunidades con caídas interanuales más grandes en la temperatura global promedio, incluidos 2011 y 2008.

Judith Curry, climatóloga y ex presidenta de la Facultad de Ciencias de la Tierra y la Atmósfera del Instituto de Tecnología de Georgia, habló sobre las temperaturas ligeramente más bajas en 2017 y 2018, y dijo que "una tendencia de dos años no es para nada significativa para ver cómo está cambiando el clima".

El cambio climático siguió teniendo un gran impacto en el planeta durante 2018

Incluso si a nivel general solo fue el cuarto año más caluroso registrado en el planeta, 2018 sí fue el año más caluroso en muchas ciudades y países. El mapa interactivo de la BBC permite ver esto en su totalidad.

El aumento de las temperaturas también está relacionado con muchos eventos climáticos extremos de 2018. La Organización Meteorológica Mundial (OMM) señaló niveles "anormales" de olas de calor, incendios forestales y sequías en gran parte de Europa y los Estados Unidos ese año. También hubo inundaciones en Kerala (India) que afectaron a más de cinco millones de personas, y cientos de personas muertas por inundaciones en Japón. La OMM elaboró un mapa con todos los eventos climáticos extremos en 2018.

Outcomes

Do you agree or disagree with the following statement?

``Las temperaturas más bajas entre 2016 y 2018 prueban que estamos en un período de enfriamiento global.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Las temperaturas más bajas entre 2016 y 2018 prueban que estamos en un período de enfriamiento global.''

[True / Probably true / Not sure / Probably false / False]

Ethan Porter and Thomas J. Wood

2. GLOBAL ITEM
Spanish-language version

Misinformation

On March 15th, 2020, a social media post claimed the following:

Publicación en redes sociales: El Coronavirus antes de llegar a los pulmones permanece en la garganta durante cuatro días y en este momento la persona comienza a toser y a tener dolores de garganta. Si bebe mucha agua y hace gárgaras con agua tibia y sal o vinagre, elimina el virus. Difunda esta información porque puede salvar a alguien con esta información.

Correction - SHOW TEXT BELOW

Es falso que "hacer gárgaras con agua tibia y sal elimina el virus"

Circula una imagen en WhatsApp y un posteo en Facebook que aseguran que "hacer gárgaras con agua tibia y sal, elimina el virus", en referencia al Coronavirus.

Sin embargo, esa afirmación es falsa. La Organización Mundial de la Salud (OMS) declaró que no hay evidencias que enjuagarse la boca con solución salina "proporcione protección frente a esta enfermedad". Además, las primeras publicaciones con esta afirmación aparecieron en las redes sociales chinas en enero de 2020 y citan al científico Zhong Nanshan. Sin embargo, desde su equipo médico desmintieron que él haya asegurado esto.

El posteo en Facebook fue compartido más de 32 mil veces, recibió 1,3 mil reacciones y fue comentado 117 veces. Al [WhatsApp](#) la imagen llegó en varias oportunidades.

Por qué la imagen es falsa

La OMS ya había asegurado el último 24 de enero último al sitio [AFP Fact Check](#): "No hemos visto evidencia convincente de que enjuagarse la boca con agua salina diluida proporcione protección contra esta enfermedad".

La respuesta oficial del organismo sanitario internacional agrega que, "si bien nuestra comprensión de la enfermedad todavía está evolucionando, el mejor consejo que podemos dar a las personas en este momento es hacer cosas como lavarse las manos con frecuencia, practicar una buena higiene respiratoria (por ejemplo, toser o estornudar en un pañuelo o en el codo), evitar el contacto con personas enfermas y cocinar bien los alimentos. Esto ayudará a proteger a las personas de este nuevo Coronavirus, pero también de una variedad de otras enfermedades".

AFP informa que registró las primeras publicaciones con esta afirmación en las redes sociales chinas en enero de 2020 con el título "La brillante idea de Zhong Nanshan para prevenir la infección".

Zhong Nanshan es un científico de la Comisión Nacional de Salud de ese país, que ayudó a exponer la magnitud del brote del SARS en la década del 2000, al que le adjudicaban una falsa cita: "Sugiero que todos se enjuaguen la garganta con agua salina diluida antes de ir a hospitales u otras áreas públicas, y enjuague nuevamente al regresar a casa".

Ante tal difusión, el hospital afiliado de la Universidad Médica de Guangzhou, donde se encuentra el equipo médico de Nanshan, aseguró: "El equipo del académico Zhong en nuestro hospital rechaza oficialmente el rumor: la solución salina ayuda a limpiar la boca y la garganta, y es útil para curar la faringitis. Sin embargo, el nuevo Coronavirus invade el tracto respiratorio, que no se puede limpiar con enjuague bucal. En segundo lugar, ningún hallazgo actual ha sugerido que el agua salina pueda matar el nuevo Coronavirus".

Outcomes

Do you agree or disagree with the following statement?

``Beber mucha agua y hacer gárgaras con agua tibia y sal o vinagre elimina al virus.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Beber mucha agua y hacer gárgaras con agua tibia y sal o vinagre elimina al virus.''

[True / Probably true / Not sure / Probably false / False]

3. COUNTRY SPECIFIC ITEM
Misinformation

On October 2019, presidential candidate for the Frente de Todos, Alberto Fernández, said the following:
"Last year there were 3,262 killings."

Correction - SHOW THIS URL
https://chequeado.com/ultimas-noticias/fernandez-el-ano-pasado-hubo-3-262-personas-asesinadas/

TEXT IN URL - FOR REFERENCE, NOT TO INCLUDE:

Si tenés sólo unos segundos, leé estas líneas:
- En 2018 se registraron 2.362 homicidios dolosos, 900 menos que lo dicho por el candidato del Frente de Todos, que posiblemente invirtió los números 3 y 2.
- Desde 2015, en la gestión de Cambiemos los homicidios con intención se redujeron 19,6%.
- El año último fue el primero desde 2014 en que se registró una leve suba de la tasa de homicidios.

El candidato del Frente de Todos, Alberto Fernández, criticó durante el debate presidencial en la Universidad de Buenos Aires (UBA) la política de seguridad del gobierno de Mauricio Macri: "Me preocupa su optimismo, el año pasado hubo 3.262 personas asesinadas". ¿Es así?

Según datos oficiales del Ministerio de Seguridad de la Nación, en 2018 se registraron 2.258 "hechos" de homicidios dolosos, que se tradujeron en 2.362 víctimas de este tipo de delito. Es decir que fueron asesinadas 2.362 personas en 2.258 hechos (en algunos hubo más de una víctima). Esto da como resultado una diferencia de 900 homicidios dolosos respecto de lo que afirmó Fernández al responderle a Macri durante el bloque de Seguridad.

Esto resultó en una tasa de 5,3 homicidios dolosos cada 100 mil habitantes. Se trata del primer año de Gobierno de Macri en el que sube este tipo de delito y es el primer incremento desde 2014. En 2017 la tasa fue levemente inferior, 5,2, y se registraron 2.289 homicidios dolosos, 73 menos que en 2018.

Igualmente, el saldo sigue siendo favorable para la gestión de Cambiemos, que tiene como la ministra de Seguridad a Patricia Bullrich desde su llegada al poder. Los homicidios dolosos bajaron un 19,6% entre 2015 y 2018.

Según señala el último informe sobre homicidios de la Organización de las Naciones Unidas (ONU), la mayoría de los países de la región "experimentaron disminuciones en sus tasas de homicidios en el período 2010–2017, mientras que Brasil, Perú y Uruguay enfrentaron sustanciales incrementos de alrededor de un tercio cada uno". Sobre la Argentina, agrega que

"la mayoría las provincias vieron una disminución en sus tasas de homicidios entre 2008 y 2017, con la excepción de algunos provincias en el norte del país que vieron aumentos".

Outcomes

Do you agree or disagree with the following statement?

``In 2018, over 3,200 people were murdered in Argentina.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``In 2018, over 3,200 people were murdered in Argentina.''

[True / Probably true / Not sure / Probably false / False]

4. COUNTRY SPECIFIC ITEM.
Misinformation
In June 2019, then President for the Cambiemos coalition Mauricio Macri said the following:
"We arrested 85 thousand drug dealers, 67 criminals each day since we started our
government".

Correction - SHOW THIS URL
https://chequeado.com/ultimas-noticias/macri-ya-llevamos-mas-de-85-mil-detenidos-por-narcotrafico-67-delincuentes-detenidos-por-dia-desde-que-somos-gobierno/

TEXT IN URL - FOR REFERENCE, NOT TO INCLUDE:

Si tenés sólo unos segundos, leé estas líneas:
- La cantidad de personas detenidas en cárceles por delitos de narcotráfico es muy inferior a la mencionada por el Presidente.
- El dato señalado por Macri refiere a personas "aprehendidas" o demoradas en operativos de las fuerzas de seguridad.
- La mayoría de estas actuaciones de las fuerzas policiales son por tenencia de drogas para consumo, cuya penalización fue declarada inconstitucional por la Corte Suprema.

El presidente, Mauricio Macri, encabezó el acto por el Día de la Bandera en Rosario e hizo referencia a la lucha contra el narcotráfico llevada a cabo por su Gobierno. "Más de 85 mil detenidos por narcotráfico, 67 delincuentes detenidos por día desde que somos gobierno", sostuvo el mandatario. ¿Es así?

Los datos de detenidos utilizados más habitualmente son los del Sistema Nacional de Estadísticas de Ejecución de la Pena (SNEEP), que depende del Ministerio de Justicia de la Nación, pero su última actualización corresponde a diciembre de 2017.

De acuerdo con los datos de esta fuente, a fines de ese año había poco más de 85 mil detenidos en cárceles de todo el país por cualquier tipo de delito. De ese total, poco más de 12 mil estaban detenidos por alguna violación a la llamada "ley de estupefacientes". A fines de 2016, por otra parte, había 76 mil detenidos en todas las cárceles del país. A alrededor de 10.500 de ellos se les atribuía alguna violación a la llamada "ley de drogas".

Si bien desde el Ministerio de Seguridad de la Nación y la Jefatura de Gabinete no aclararon a Chequeado cuál era la fuente del dato mencionado por el Presidente, a principios de 2019 el Gobierno nacional difundió un informe elaborado por la Subsecretaría de Lucha contra el Narcotráfico de la Nación, con datos sobre operativos, incautaciones y detenciones. De acuerdo con este informe, entre el 10 de diciembre de 2015 y diciembre de 2018, las fuerzas de

seguridad detuvieron a 64 mil personas en 59 mil procedimientos vinculados con el narcotráfico.

Estas detenciones, sostiene el informe, vienen en aumento. Entre el 10 y el 31 de diciembre de 2015 fueron detenidas 797 personas; en 2016 fueron 13 mil personas; la cifra llegó a 18 mil en 2017 y, en 2018, ascendió a casi 32 mil detenciones en procedimientos vinculados con el narcotráfico.

Pero estos datos no se traducen en personas efectivamente detenidas en dependencias del Servicio Penitenciario Federal y servicios penitenciarios de las provincias. En las cárceles, los números son más bajos. De acuerdo a los especialistas, esta cifra no muestra cuántas personas son detenidas por la Justicia en causas de narcotráfico, sino cuántas personas son "aprehendidas" por las fuerzas de seguridad en operativos.

"Este indicador es el registro que hacen las fuerzas de seguridad de las personas aprehendidas en operativos que luego son puestas a disposición de la Justicia. El juez puede luego desestimar la imputación o disponer la libertad del detenido", señaló a Chequeado Diego Gorgal, especialista en Seguridad y docente de la materia Política de Seguridad y Justicia de la Universidad Torcuato Di Tella (UTDT).

Consumo personal, la mayoría de los casos

En la misma línea, Tobías Schleider, investigador del Instituto Latinoamericano de Seguridad y Democracia (ILSED) y consultor internacional en Seguridad Ciudadana, señaló: "Esas cifras no se condicen con ninguno de los registros oficiales. Parecen fruto de un error o de considerar en una misma categoría a las personas demoradas o aprehendidas por tenencia de drogas para consumo personal, que son irrelevantes a los efectos del abordaje de la narcocriminalidad". Gorgal coincidió en que la mayoría de estas personas son "aprehendidas" por las fuerzas de seguridad por el delito de tenencia de estupefacientes para consumo personal.

El fiscal federal Federico Delgado recopila periódicamente estadísticas de causas que llegan a su fiscalía cuando se encuentra de turno con las fuerzas de seguridad. En agosto de 2018 (último informe en el que están incluidos los casos de tenencia para consumo, ya que a partir de enero fueron transferidos a la Justicia de la Ciudad Autónoma de Buenos Aires), el 73% de las causas por violación a la ley de drogas que llegaron a su fiscalía por actuación de las fuerzas de seguridad fueron por tenencia para consumo personal.

La penalización de este delito fue declarada inconstitucional por la Corte Suprema de Justicia de la Nación hace 10 años, en el fallo "Arriola". Es por eso que estas causas no prosperan en la Justicia. "Este tipo de procesos culmina en el 100% de los casos con el archivo", concluye Delgado.

¿Es un indicador relevante?

Los especialistas, además, señalan la inconveniencia de destacar la cantidad de detenidos como impacto de lucha contra el narcotráfico. "Hay un error conceptual: la cantidad de personas detenidas no es un indicador de impacto, sino operacional. La variación en la cantidad de personas arrestadas no debe asociarse a la eficacia de la política sino a la suba o baja del delito", señaló Gorgal.

Schleider, por su parte, señaló: "Hablar de cantidad de droga decomisada o de cantidad de arrestados no dice nada respecto de si se está siendo efectivo o no. Si los mercados de drogas crecen, como viene sucediendo en la Argentina y lo mostró la última encuesta de consumo de 2017, habrá más droga ofertada y, entonces, más personas empleadas en su oferta, por lo que necesariamente habrá más personas detenidas".

Outcomes

Do you agree or disagree with the following statement?

``Since becoming president, Macri's administration has arrested over 85,000 people for drug trafficking.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

`Since becoming president, Macri's administration has arrested over 85,000 people for drug trafficking.''

[True / Probably true / Not sure / Probably false / False]

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5. COUNTRY SPECIFIC ITEM
Misinformation
In October 2019, then presidential candidate for the Frente de Todos, Alberto Fernández, said the following:
"When Macri took over the external debt represented 38% of the GDP, today it is 100%"

Correction - SHOW THIS URL:
https://chequeado.com/ultimas-noticias/cuando-macri-llego-al-gobierno-la-deuda-estaba-en-el-38-del-producto-hoy-es-el-100/

TEXT IN URL - FOR REFERENCE, NOT TO INCLUDE:

Si tenés sólo unos segundos, leé estas líneas:
- La deuda externa aumentó tanto en dólares como en porcentaje del PBI, pero lejos de los valores mencionados por Fernández.
- A mediados de 2019 llegó al 40% del Producto Bruto Interno (PBI), lejos del 100%.
- El candidato había dado los mismos porcentajes días atrás pero para referirse a la deuda total, no sólo a la deuda externa, pero tampoco son certeros.

Durante el debate de candidatos a Presidente de la Nación de la Universidad del Litoral, Alberto Fernández (Frente de Todos) criticó la gestión económica de Mauricio Macri (Juntos por el Cambio) y dijo: "Cuando llegó al gobierno la deuda externa era el 38% del producto, hoy es el 100%".

Según la medición de la deuda en relación al Producto Bruto Interno (PBI), cuya utilización recomiendan los especialistas, se puede observar que tanto la deuda total como la deuda externa aumentaron, pero no en la medida que señaló el candidato. La deuda total incluye las deudas que un país tiene con el exterior, la deuda externa, pero también la deuda con acreedores internos y con otros organismos públicos, entre otras.

En septiembre de 2015 la deuda externa era de casi el 11% del PBI, mientras que en junio de 2019, últimos datos oficiales del Ministerio de Hacienda de la Nación, fue de casi 40%. Es decir, aumentó, pero lo hizo en una magnitud distinta a los datos que dijo Fernández.

Semanas atrás, Fernández ya había dicho una frase similar sobre el aumento de 38% al 100%, pero refiriéndose a la deuda total. Como se explicó en esta nota, en septiembre de 2015, la deuda total era del 44% del PBI, un poco superior al 38% que señaló el ex jefe de Gabinete; y a mitad de 2019, el último dato oficial muestra una deuda del 81% del PBI.

Tanto el 40% del PBI de deuda externa como el 81% de deuda total actualmente serían mayores, ya que estos datos no tienen en cuenta la devaluación de agosto último, posterior a las PASO. Pero no hay porcentajes oficiales.

El problema para saber exactamente cuánto representa la deuda en relación al PBI hoy es que depende de la estimación que se haga del PBI. La consultora LCG, creada por Martín Lousteau y Gastón Rossi, estima una deuda total cercana al 85% con los datos de fines de agosto y proyecta una deuda aproximadamente del 93% para fin de año. El Instituto de Trabajo y Economía de la Fundación Germán Abdala (de ATE Capital) calcula con los datos de fines de agosto que la deuda pública total se ubica en torno al 96%. Elypsis, fundada por Eduardo Levy Yeyati, por su parte, estima una deuda total cercana al 92% a fin de año. Y la consultora Econviews, que dirige Miguel Kiguel -ex funcionario durante las presidencias de Carlos Menem

y Fernando De la Rúa-, estima que para fin de año la deuda total rondaría el 100%.

Outcomes

Do you agree or disagree with the following statement?

``Under Mauricio Macri, foreign debt has reached 100% of Argentina's Gross Domestic Product (GDP)."'

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Under Mauricio Macri, foreign debt has reached 100% of Argentina's Gross Domestic Product (GDP)."

[True / Probably true / Not sure / Probably false / False]

6. COUNTRY SPECIFIC ITEM

Misinformation

In October 2019, then President for the Cambiemos coalition, Mauricio Macri, said the following: "During our government, debt grew 26% of the GDP. During the Kirchner administration it grew 38% of GDP."

Correction - SHOW THIS URL:
https://chequeado.com/ultimas-noticias/macri-en-nuestro-gobierno-la-deuda-crecio-el-26-del-pbi-en-el-gobierno-kirchnerista-crecio-el-38-del-pbi/

TEXT IN URL - FOR REFERENCE, NOT TO INCLUDE:

Si tenés sólo unos segundos, leé estas líneas:

- El Presidente confundió el indicador de deuda en relación al Producto Bruto Interno (PBI) con el monto absoluto de la deuda en dólares.
- La deuda como porcentaje del PBI cayó durante los 12 años de mandatos kirchneristas. Y si se consideran los dos de Fernández de Kirchner, bajó 10 puntos.
- Durante la gestión de Cambiemos, la deuda sobre el PBI aumentó.

En el debate presidencial de la Universidad del Litoral, el candidato de Juntos por el Cambio, Mauricio Macri, dijo que la deuda pública creció en su gobierno, pero lo hizo en menor medida que en los mandatos kirchneristas. "En nuestro gobierno la deuda creció el 26% del PBI [Producto Bruto Interno], en el gobierno kirchnerista creció el 38% del PBI", sostuvo Macri.

Ante la consulta de Chequeado, desde Presidencia de la Nación respondieron que el Presidente se había basado en la variación de la deuda medida en dólares. "En diciembre de 2007 eran de 177 mil millones de dólares; en diciembre de 2015: 241 mil millones; y en agosto de 2019: 309 mil millones. Así, el aumento entre 2007-2015 fue del 38%; mientras que entre 2015-2019 del 26%", contestaron.

Sin embargo, si bien esos datos son correctos, Macri habló durante el debate de la deuda como porcentaje del PBI y no del monto absoluto de la deuda medida en dólares. Si se utiliza el ratio de deuda sobre PBI, que es el que recomiendan tomar los especialistas, lo que dijo es falso.

Como se puede consultar en la web oficial de la Secretaría de Finanzas de la Nación, la deuda pública trepó 28 puntos porcentuales entre el cierre de 2015 y el segundo trimestre de este año, al pasar de 53% a 81%.

Sin embargo, desde fines de junio último, el salto cambiario de agosto elevó el peso de estas obligaciones, como se explicó en esta nota. Por este motivo, la deuda cerrará el año en torno al

90% del producto, según proyecciones de la consultora Ecolatina, haciendo que los pasivos públicos crezcan alrededor 40 puntos porcentuales en la gestión del actual presidente.

Además, durante los 12 años de gobiernos kirchneristas, la deuda pública en relación al PBI no creció, sino que se redujo. Al mirar esta estadística se advierte que la deuda bruta de la administración central pasó de 167% del Producto en 2002 a 53% en 2015, incluyendo la deuda con los "holdouts", conocidos como "fondos buitre".

Así, durante el kirchnerismo la deuda cayó 114 puntos porcentuales. Esta reducción fue consecuencia de las dos reestructuraciones (realizadas en 2005 y 2010) y el crecimiento económico (cuando crece el PBI, la deuda pasa a representar menos del ingreso anual y lo contrario ocurre cuando hay caída de la economía).

Si en lugar de considerar los tres mandatos del kirchnerismo, sólo se toma en cuenta los últimos dos (cuando Fernández de Kirchner fue presidenta), el resultado no se modifica: entre 2007 y 2015, la deuda pública cayó 10% del PBI.

Outcomes

Do you agree or disagree with the following statement?

``Debt as percentage of GDP rose more under the Kirchner regime than under the Macri regime.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Debt as percentage of GDP rose more under the Kirchner regime than under the Macri regime.''

[True / Probably true / Not sure / Probably false / False]

7.

Misinformation

In October 2018, Then Senator for Río Negro Province, Miguel Ángel Pichetto, said the following:"¿Do you know how many shanty towns there are on the Buenos Aires Province? Near four thousand."

Correction - SPLIT GROUP - A - SHOW THIS URL:

https://chequeado.com/ultimas-noticias/pichetto-sabes-cuantas-villas-hay-en-el-cordon-de-la-provincia-de-buenos-aires-cerca-de-cuatro-mil/

TEXT IN URL, FOR REFERENCE, DO NOT INCLUDE:

El senador del Bloque Justicialista usó este dato para referirse a los extranjeros que viven en barrios populares. Sin embargo, la cantidad de villas en el Gran Buenos Aires no llega ni a una cuarta parte de lo mencionado por Pichetto.

El jefe de bancada de senadores del Bloque Justicialista Miguel Pichetto se refirió en una entrevista en Clarín a la situación del Conurbano bonaerense en medio del debate por posibles reformas a la ley migratoria. "¿Sabés cuántas villas hay en el cordón de la provincia de Buenos Aires? Cerca de cuatro mil", señaló el legislador. Pichetto utilizó esta cifra para referirse a los extranjeros de "extrema pobreza" que viven en estos barrios.

La afirmación es falsa. Según datos oficiales, la cantidad de barrios de emergencia en el Conurbano bonaerense no llega ni a una cuarta parte de lo mencionado por Pichetto. Si incluso se contabilizan todas las villas de la Provincia de Buenos Aires, el dato también es incorrecto.

A principios de 2018 el Ministerio de Desarrollo Social de la Nación publicó el Registro Nacional de Barrios Populares (Renabap), un relevamiento realizado entre agosto de 2016 y marzo de 2017 en todo el país. El estudio arrojó que en todo el país hay 4.228 barrios populares.

El relevamiento no habla de villas o asentamientos pero llama barrio populares a "al menos a ocho familias agrupadas o contiguas, donde más de la mitad de la población no cuenta con título de propiedad del suelo ni acceso regular a dos, o más, de los servicios básicos (red de agua corriente, red de energía eléctrica con medidor domiciliario y/o red cloacal)".

Según el Renabap, en toda la Provincia de Buenos Aires hay 1.656 barrios populares. Es el distrito del país con más villas. De ese total, 952 están ubicadas en el Conurbano bonaerense, es decir, en alguno de los 24 partidos del Gran Buenos Aires, según la clasificación del Indec. El partido con más villas es La Matanza, que a su vez es el más poblado. En ese municipio, según el relevamiento, hay 122 barrios de emergencia. En segundo lugar se ubica Moreno, con 80 barrios de emergencia, y sigue Florencio Varela, con 70.

La Provincia de Buenos Aires tiene su propio Registro Público Provincial de Villas y Asentamientos Precarios. El resultado es similar al del registro nacional. En los 24 partidos del GBA hay un total de 981 villas y asentamientos precarios. La Matanza, además de ser el municipio con más villas, es el que tiene más superficie cubierta por barrios de emergencia. Son 1800 hectáreas en total. Le siguen Quilmes (906 hectáreas) y Moreno (846).

El registro no cuenta con datos de cantidad de población, pero contabiliza a las familias. Según la Provincia, 328 mil familias viven en villas del Conurbano bonaerense.

En cuanto a la evolución en el tiempo, las villas vienen creciendo en el Conurbano bonaerense en las últimas décadas. "La población en villas y asentamientos está creciendo mucho más rápido que la población total de los 24 partidos del Conurbano. Para la totalidad del período 1981-2006 la población en villas y asentamientos creció en términos relativos 220% frente a un 35% de incremento poblacional en

los 24 partidos del Conurbano", señala un [informe](#) de la Universidad Nacional General Sarmiento (UNGS) publicado en 2009.

Una [encuesta](#) realizada por la organización Techo en América Latina reveló que a la hora de señalar los motivos del crecimiento de los asentamientos figuran como primeras opciones "la imposibilidad para comprar un terreno o alquilar una vivienda para el 60% de las personas, y la imposibilidad de encontrar un lugar dónde vivir, para el 50 por ciento".

Pichetto utilizó esta frase para señalar que estas villas "están llenas" de extranjeros "de pobreza extrema". Ante la consulta de Chequeado, desde el Renabap señalaron que no cuentan con datos oficiales sobre la nacionalidad de los habitantes de las villas y su condición social.

Sobre este tema, el informe de la UNGS señala que "se suele exagerar la presencia de extranjeros en los asentamientos informales, tal como se desprende de las afirmaciones de los funcionarios o los mismos pobladores. De hecho, existe un discurso que intenta 'culpabilizar' de la informalidad urbana a los inmigrantes de países limítrofes", y agrega: "En la Ciudad de Buenos Aires, la presencia de migrantes de los países limítrofes sin duda tiene mayor peso que en el GBA".

Visual correction - SPLIT GROUP B

Please look at the following image.

Miguel Ángel Pichetto:

¿Sabés cuántas villas hay en el cordón de la Provincia de Buenos Aires? Cerca de cuatro mil

uno.com.ar & chequeado.com

Outcomes

Do you agree or disagree with the following statement?

``There are almost 4,000 shanty towns in Buenos Aires Province.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``There are almost 4,000 shanty towns in Buenos Aires Province.''

[True / Probably true / Not sure / Probably false / False]

At the end, subjects should see any outcome questions they have not already responded to.

Wave two

Questions should be kept together by number (e.g., 1a should always be followed by 1b), but otherwise should be randomized.

1a. Do you agree or disagree with the following statement?

``Las temperaturas más bajas entre 2016 y 2018 prueban que estamos en un período de enfriamiento global.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

1b. Do you think the following statement is true or false?

``Las temperaturas más bajas entre 2016 y 2018 prueban que estamos en un período de enfriamiento global.''

[True / Probably true / Not sure / Probably false / False]

2a. Do you agree or disagree with the following statement?

``Beber mucha agua y hacer gárgaras con agua tibia y sal o vinagre elimina al virus.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

2b. Do you think the following statement is true or false?

``Beber mucha agua y hacer gárgaras con agua tibia y sal o vinagre elimina al virus.''

[True / Probably true / Not sure / Probably false / False]

3a. Do you agree or disagree with the following statement?

``Since becoming president, Macri's administration has arrested over 85,000 people for drug trafficking.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

3b. Do you think the following statement is true or false?

`Since becoming president, Macri's administration has arrested over 85,000 people for drug trafficking.''

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[True / Probably true / Not sure / Probably false / False]

4a. Do you agree or disagree with the following statement?

``Under Mauricio Macri, foreign debt has reached 100% of Argentina's Gross Domestic Product (GDP).''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

4b. Do you think the following statement is true or false?

``Under Mauricio Macri, foreign debt has reached 100% of Argentina's Gross Domestic Product (GDP).''

[True / Probably true / Not sure / Probably false / False]

5a. Do you agree or disagree with the following statement?

``Debt as percentage of GDP rose more under the Kirchner regime than under the Macri regime.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

5b. Do you think the following statement is true or false?

``Debt as percentage of GDP rose more under the Kirchner regime than under the Macri regime.''

[True / Probably true / Not sure / Probably false / False]

6a. Do you agree or disagree with the following statement?

``There are almost 4,000 shanty towns in Buenos Aires Province.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

6b. Do you think the following statement is true or false?

``There are almost 4,000 shanty towns in Buenos Aires Province.''

[True / Probably true / Not sure / Probably false / False]

Do you agree or disagree with the following statement?

7a. ``In 2018, over 3,200 people were murdered in Argentina.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

7b. Do you think the following statement is true or false?

``In 2018, over 3,200 people were murdered in Argentina.''

[True / Probably true / Not sure / Probably false / False]

United Kingdom

Wave one

After ideology question and any other preamble, state:

We would now like you to read and answer some additional questions.

1. GLOBAL ITEM

English-language version

Misinformation:

On February 3, 2019, a social media post claimed the following:

"We just had two years (2016-2018) of record-breaking Global Cooling."

Correction - SHOW TEXT BELOW:

No, we are not experiencing "global cooling"

This post—claiming that "we just had 2 years (2016-2018) of record-breaking Global Cooling"—has been shared over 300 times on Facebook.

It is incorrect—while temperatures in 2017 and 2018 were lower than 2016, global temperatures have not dropped sharply, nor at record breaking levels, and there is no "global cooling" trend occurring.

"Global cooling" is typically used to describe a long term period during which the earth's average temperature is cooling.

But data from NASA clearly shows that the opposite is happening. We are experiencing global warming: the planet is getting hotter over time, and at a faster and faster pace.

All the evidence shows that the planet is getting hotter

It's correct that the global average temperature was higher in 2016 than in 2017 or 2018, but this is not evidence that "global cooling" is occurring.

2016 was the hottest year on record, 2017 was the second-hottest, and 2018 was the fourth-hottest, according to the data from NASA that is linked in the Facebook post itself. 18 of the 19 warmest years on record have occurred since 2001, and the average global temperature has increased by about 0.8° to 1.0° Celsius in recent years, compared to the average temperature between 1951 and 1980.

As Gavin Schmidt, Director of the US-based Goddard Institute for Space Studies summarises: "2018 is yet again an extremely warm year on top of a long-term global warming trend".

Global warming does not mean that every year has to be hotter than the year before. Rather, it means that generally average temperatures are on the rise, even if they may fluctuate somewhat year-to-year.

The drop in temperature in 2017 and 2018 is not "record-breaking" as the post suggests. Since 1980, there have been eight separate years (including 2011 and 2008) that saw bigger drops in the average global temperature than the ones we saw in 2017 and 2018.

Judith Curry, a climatologist and former chair of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology has commented on the slightly lower temperatures in 2017 and 2018. She said: "A two-year trend is not meaningful in terms of understanding anything about how climate is changing."

Climate change continued to have a big impact on the planet in 2018

Even if it was only the fourth-hottest year on record across the planet as a whole, plenty of cities and countries did see their hottest-ever temperatures in 2018. This interactive map from the BBC allows you to see this in full.

Rising temperatures were also linked to plenty of other extreme weather events last year. The World Meteorological Organisation (WMO) points to "abnormal" levels of heatwaves, wildfire and drought in much of Europe and the USA in 2018. There were also floods in Kerala that affected over five million people, and hundreds of people killed by flooding in Japan. The WMO has produced a map charting all of the extreme weather events in 2018.

Outcomes

Do you agree or disagree with the following statement?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[True / Probably true / Not sure / Probably false / False]

2. GLOBAL ITEM

English-language version

Misinformation

On March 15th, 2020, a social media post claimed the following:

"The coronavirus stays in the throat for four days before it reaches the lungs, and this is the moment when a person starts coughing and experiencing a sore throat. If you drink a lot of water and gargle with warm water and salt or vinegar, you eliminate the virus. Share this information because you can save someone with this information".

Correction - SHOW TEXT BELOW

It's false that "gargling with warm water and salt eliminates the virus"

An image has circulated on WhatsApp and Facebook advising that "gargling with warm water and salt eliminates the virus," referring to the coronavirus.

However, this statement is false. The World Health Organization (WHO) stated there is no evidence that rinsing your mouth with saline "protects against this disease." Furthermore, the first posts with this claim appeared on Chinese social media in January 2020 and quote scientist Zhong Nanshan. However, his medical team denied that he claimed this.

The post on Facebook was shared more than 32,000 times, received 1,300 reactions and was commented on 117 times. The image also appeared on WhatsApp.

The WHO had already commented on January 24th to the site AFP Fact Check that: "We have seen no convincing evidence that rinsing one's mouth with diluted saline water will provide protection from this disease."

The official response from the international health agency adds that "while our understanding of the disease is still evolving, the best advice we can give people right now is to do things like wash their hands frequently, practice good respiratory hygiene (for example, to cough or sneeze into a tissue or elbow), avoid contact with sick people, and cook food thoroughly. This will help protect people from this new coronavirus, but also a range of other diseases. "

The first posts with this claim appeared on Chinese social media in January 2020 with the headline "Zhong Nanshan's brilliant idea to prevent the infection".

Zhong Nanshan is a scientist working for the Chinese National Health Commission, who helped expose the magnitude of the SARS outbreak in the 2000s. He was attributed to this false quote:

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"I suggest that everyone rinse their throats with saline water diluted before going to hospitals or other public areas, and rinse again upon returning home. "

In light of the spread of this quote, the affiliated hospital of Guangzhou Medical University, where Nanshan's medical team is located, said: "Zhong's academic team in our hospital officially rejects the rumour: saline solution helps to clean the mouth and throat and is useful in curing pharyngitis. However, the new coronavirus invades the respiratory tract, which cannot be cleaned with mouthwash. Second, no current finding has suggested that saline water may kill the new coronavirus".

Outcomes

Do you agree or disagree with the following statement?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.''

[True / Probably true / Not sure / Probably false / False]

3. COUNTRY LEVEL ITEM

Misinformation
In August 2019, the Twitter account of Prime Minister Boris Johnson published the following:

"We're levelling up schools across the country by investing over £14 billion in primary and secondary education between now and 2022/23."

Correction - SHOW THIS URL: https://fullfact.org/education/14bn-spent-education/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

Is £14 billion being spent on education?

Claim: The government is spending £14 billion on primary and secondary education between now and 2022/23.
Conclusion: The increase is £4.3 billion by 2022/23 once you account for inflation. The £14 billion figure is unhelpful as it is the figure you get if you add up all the extra money spent on education in each year to 2022/23 compared to 2019/20 and doesn't account for inflation.

Last week the government announced a new package of spending for primary and secondary schools in England, which it claimed would total over £14 billion between 2019/20 and 2022/23.

But Paul Johnson, Director of the Institute for Fiscal Studies (IFS), has described this figure as "somewhere between meaningless and misleading". The government's announcement set out that, compared to this year, spending would be £2.6 billion higher in 2020/21, £4.8 billion higher the year after, and £7.1 billion higher in 2022/23.

That all adds up to £14.5 billion, but, as we've said before when the government made similar claims about the NHS, adding up multiple years funding is an unhelpful way to look at the spending increase. A number of news outlets chose not to report the £14 billion figure for that reason.

As we've said before, adding several years of spending together is simply not the normal way politicians talk about spending increases. They most commonly refer to spending on a per-year basis, or talking about the difference between the first and final year of spending. It's not factually wrong—but it could be misleading.

Spending is planned to increase by £7.1 billion between now and 2022/23, but that also doesn't account for inflation (the change in how much things cost over time).

The £7 billion increase in spending by 2022/23 is actually £4.3 billion once inflation is accounted for, according to the IFS.

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The Institute for Fiscal Studies said: "Since 2009-10, school spending per pupil has fallen by 8% in real-terms in England.

"The new spending plans should be near enough sufficient to reverse these cuts by 2022-23."

Outcomes

Do you agree or disagree with the following statement?

``School spending is increasing by £14 billion between now and 2022/23. ''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

`School spending is increasing by £14 billion between now and 2022/23.''

[True / Probably true / Not sure / Probably false / False]

Ethan Porter and Thomas J. Wood

4.

Misinformation

In January 2019, Labour MP Louise Haigh, Shadow Policing & Crime Minister, said the following:

"Never since records began have violent crime and knife crime been as high as they are today. This crisis is a consequence of nine years of Government cuts to the police and youth services."

Correction - SHOW THIS URL: https://fullfact.org/crime/violent-crime-not-record-levels/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

Violent crime is not at record levels

Claim: Violent crime is at record levels.
Conclusion: Incorrect. Several reliable sources indicate that overall violent crime in England and Wales is far lower now than it was in the 1990s. Police figures show violent crimes at their highest recorded level, but these are unreliable.

Claim: Knife crime is at record levels.
Conclusion: Police and hospital figures show knife crimes at or near their highest recorded levels. Knife crime is almost certainly rising at the moment, but no source is strong enough for us to be certain that it's at record levels.

It's not correct that violent crime is at a record high. Several reliable sources indicate that violent crime is far lower now than it was in the 1990s in England and Wales.

Louise Haigh's claims are based on the number of violent crimes recorded by the police. It's true that police figures show the highest ever recorded levels of violent crime and knife crime specifically, but it's almost impossible to derive any trustworthy trend from this data, as police recording practices have changed significantly over time.

This isn't to say violent crime isn't rising—the evidence indicates some types of violent crime have begun to increase in recent years. But saying violence is at record levels is flatly contradicted by more reliable data.

Looking at knife crime specifically, police and hospital figures show knife crime to be at or near its highest recorded levels. Knife crime is almost certainly rising at the moment, but no source is strong enough for us to be certain that it's at record levels.

Violent crime is difficult to measure accurately

Violent crime covers a broad range of crimes—from minor assaults (such as pushing and shoving) to murder.

Nobody knows exactly how many violent crimes are happening. Crimes are, by their nature, difficult to spot and count properly. That's why we have several sources of information to help us. When it comes to measuring violent crime, three sources are most relevant:

- What the police record as a result of their activity
- A survey of households (the Crime Survey for England and Wales) to find out people's experiences as victims of crime, which can detect crimes the police aren't noticing as well as what they are
- Hospital admissions for victims of assault—these indirectly indicate the amount of violence that's serious enough to leave someone attending hospital

All three sources have their strengths and weaknesses. The police data is generally bad at telling us anything about trends over time. Not only do they not record all crime that actually happens (some crimes often go under-reported to the police), they've been subject to a lot of changes over the years in how the police count the data. The one thing it is more useful for is for crimes that happen very rarely and cause a high level of harm, like knife crimes or murder. But even in the case of knife crime, it's still very unreliable.

The Crime Survey is much better at telling us about trends, because it's always had a consistent methodology and can pick up crimes that go unreported to the police. But because it's a survey of households, it's less useful for picking up changes in crimes which don't happen very often, and doesn't tell us anything about crimes against businesses.

Hospital admissions are tangible examples of the impact of serious violent crimes, and are valuable to look at alongside police figures to compare the two. But it's only an indirect indicator—we don't know how many of the admissions are actually due to crimes, not least because recording accuracy can still vary, and they don't pick up lower-harm violence that doesn't leave people in hospital.

Violent crime in England and Wales is much lower today than in the 1990s

According to the Crime Survey for England and Wales, violent crime peaked in 1995 and has fallen by over two-thirds since then. In recent years, those falls have largely flattened out.

Nearly five in every 100 adults aged 16 and over were estimated to have been victims of violent crime in 1995. In 2016/17, fewer than two in 100 adults were.

Data from other sources backs up the Crime Survey

Figures from hospitals in England also show a falling trend since 2006/07. Back then, just under 46,000 admissions were recorded where the reason was believed to have been an assault (excluding sexual assault). By 2017/18, just over 28,000 such admissions were recorded. These figures only cover England, whereas the Crime Survey data also includes Wales.

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Hospital admissions for assault in England

Recorded hospital admission episodes for assault in England, not including sexual assault, financial years
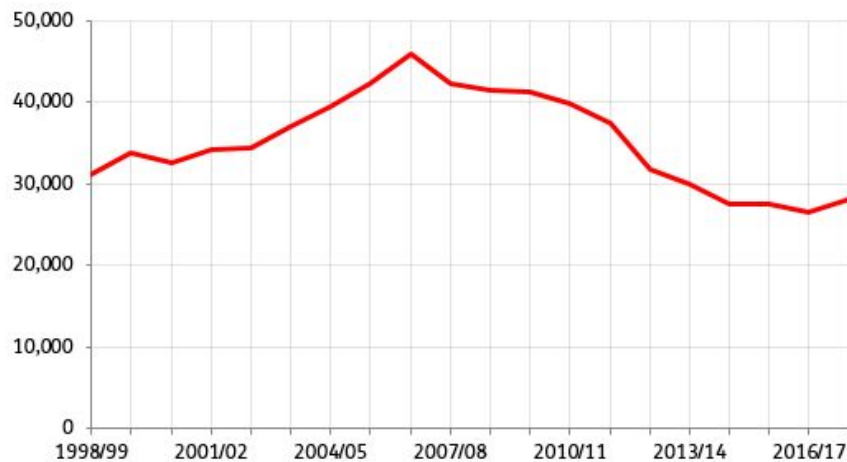
*Hospital admission statistics are not reliable indicators of crime levels in isolation

Source: NHS Digital, Hospital Episode Statistics for England. Admitted Patient Care statistics, 1998/99 to 2017/18

Full Fact

There's also been separate research from Cardiff University into attendances at accident and emergency units in England and Wales as a whole. This research also took the growing population into account and found a falling trend in attendances due to violence between 2002 and 2017.

While these figures aren't direct measures of crime trends, they do support the idea that violent crime today is less common than it used to be.

Both sources of figures are better indicators than police records. The Office for National Statistics (ONS) says that:

"For the population groups and offences it covers, the Crime Survey for England and Wales (CSEW) is the best source for assessing long-term trends in violent crime as the survey's methodology has remained consistent over time."

The police have never recorded more violent crimes

This statement sounds like it completely contradicts the previous one. But even though the police are recording more violent crimes than they ever have before, the weight of evidence

suggests that it's not because violent crime is getting more common—it's just that the police have got better at recording it.

In fact, violent crime is believed to be one of the types of crime most affected by changes in police recording practices, particularly lower harm offences. Inspection reports into police forces also suggest some offences, like sexual offences, are still being under-recorded by forces.

In the year ending September 2018, the police recorded over 1.5 million violent crimes (called "violence against the person"). Those figures don't include sexual offences—which are recorded separately—but sexual offences are also at their highest recorded levels.

The same is true if you take into account the rising population. In the mid-2000s, police records suggested the violent crime rate was about 16 incidents for every 1,000 people, compared to 26 per 1,000 in the year to September 2018.

Some kinds of violent crime are rising

Even though the police figures are generally unreliable, it's still likely that some kinds of violent crime are rising at the moment.

Louise Haigh also specifies knife crime: claiming that since records began knife crime has never been as high as it is today. This claim is on more solid ground. Police recorded knife crimes in England and Wales are at their highest level of around 40,000 a year—although comparable records only go back to 2010.

Again, however, the police force figures are known to have been affected by improvements to recording practices in recent years, so we don't have a certain picture of whether these are truly record levels.

Hospital admissions data also shows that admissions for assault by a sharp object are rising and at near-record levels.

The Crime Survey isn't as helpful here. Knife crime is a relatively rare offence, and offences like that are difficult to pick up reliably in a survey.

So we don't have enough evidence to say definitively whether knife crime is at record levels—but the claim is certainly backed up by stronger evidence than Ms Haigh's claims on violence in general.

Outcomes

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Do you agree or disagree with the following statement?

``Violent crime and knife crime are higher than ever recorded.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Violent crime and knife crime are higher than ever recorded.''

[True / Probably true / Not sure / Probably false / False]

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5.
Misinformation
In December 2019, Conservative MP Sajid Javid, then Chancellor of the Exchequer, said the following:
"Homelessness reached its peak in 2008 under the last Labour government. Since then it's down by almost a half".

Correction - SHOW URL: https://fullfact.org/election-2019/sajid-javid-homelessness/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE:

Sajid Javid claims 50% fall in homelessness under Conservatives—homelessness is up since 2010

Claim: Homelessness reached its peak in 2008 under the last Labour government. Since then it's down by almost a half.
Conclusion: We're not aware of any data showing this. Statutory homelessness in England fell between 2003 and 2009. It has risen around 39% since then.

On Sky News this morning, Chancellor Sajid Javid claimed that homelessness reached its peak in 2008 under Labour and since then is down by almost a half.

There are lots of different ways of measuring homelessness, and none of them give a full picture. But according to all the evidence we've seen, this is almost the exact opposite of what has happened.

We contacted the Conservative party to ask what evidence Mr Javid had for his claim. The Conservatives later told Channel 4 FactCheck that he had misremembered the statistic and meant to say that statutory homelessness peaked in 2003.
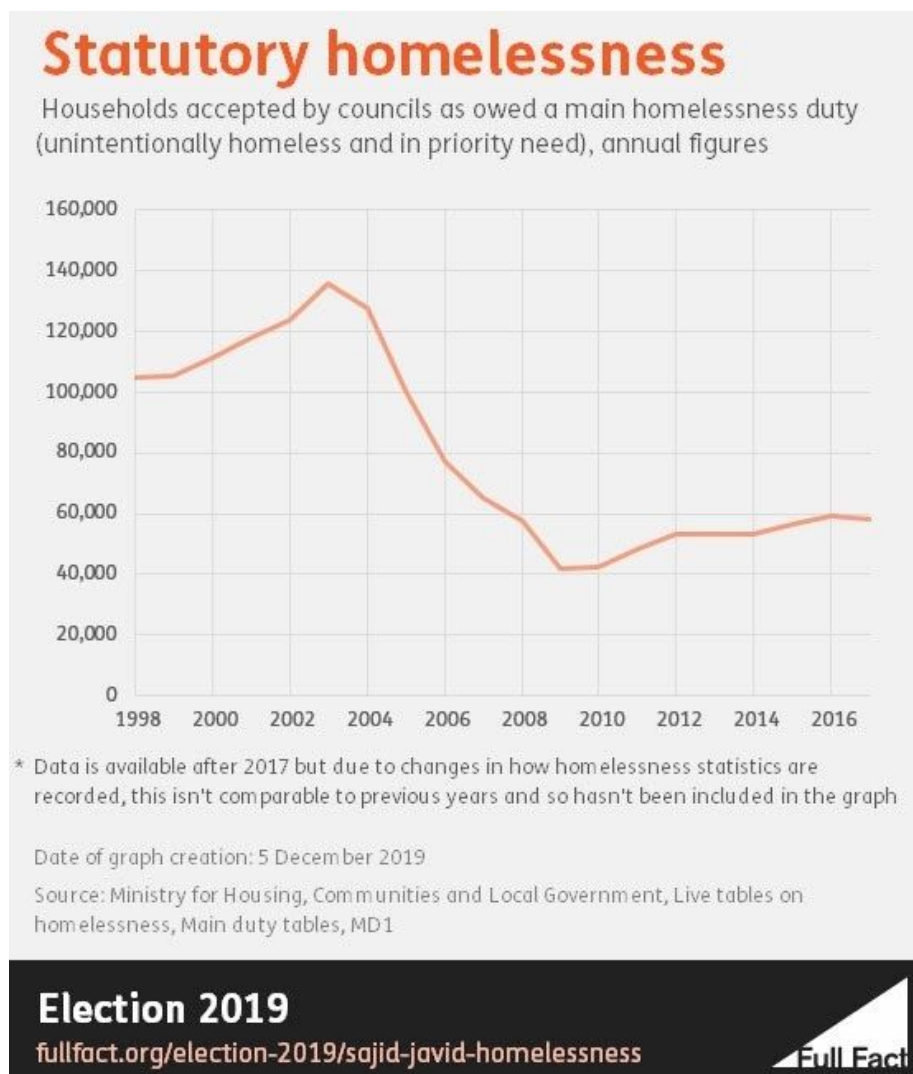
This is correct.

It also means Mr Javid was wrong in claiming credit for the Conservatives cutting the homelessness rate. The fall in the number of homeless households in England all happened before the Conservatives took office in 2010.

Statutory homelessness

One of the most commonly used measures of homelessness is something called "statutory homelessness".

English councils have a "main duty" to house people with a priority need. The number of these households fell from 2003 to a low of around 42,000 in 2009. By 2017 this had increased by 39% to almost 58,000.

Statutory homelessness

Households accepted by councils as owed a main homelessness duty (unintentionally homeless and in priority need), annual figures

* Data is available after 2017 but due to changes in how homelessness statistics are recorded, this isn't comparable to previous years and so hasn't been included in the graph

Date of graph creation: 5 December 2019

Source: Ministry for Housing, Communities and Local Government, Live tables on homelessness, Main duty tables, MD1

Election 2019

fullfact.org/election-2019/sajid-javid-homelessness

Full Fact

Newer data is available, but we can't compare the older figures to this because legislation in which came into force in 2018 put a new requirement on councils to prevent homelessness for everyone who is eligible for council support, not just people who count as having a priority need.

This means that last year the government introduced a new system for collecting homelessness statistics so the newer data isn't comparable with the older data.

Even if more recent data was comparable, it's worth pointing out that using this measure to describe the level of homelessness is by no means perfect.

The House of Commons Library writes: "Main duty acceptances have in the past been used as an indicator of the extent of homelessness, but it has long been accepted that this doesn't provide a full picture."

Other measures describing homelessness are up

There are other measures which similarly show that Mr Javid is wrong to say the government has cut homelessness by half.

The number of households in temporary accommodation in England increased by 65% between January to March 2010 and January to March 2019.

This is used alongside the statutory homelessness statistic detailed above as a proxy measure of the homelessness rate.

The number of rough sleepers has also increased since 2010, by around 165%.

None of these datasets are perfect, and there have been historic problems with undercounting which you can read more about here.

However, the broad indication is that homelessness has increased since 2010, not decreased.

Outcomes

Do you agree or disagree with the following statement?

``Homelessness is down by almost a half since its peak in 2008, under the Labour government.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Homelessness is down by almost a half since its peak in 2008, under the Labour government.''

[True / Probably true / Not sure / Probably false / False]

6.
Misinformation
In March 2018, Labour MP Jonathan Ashworth, Shadow Health and Social Care Secretary, said the following:

"200,000 nurses have quit the NHS since 2010."

Correction - SHOW URL: https://fullfact.org/health/have-200000-nurses-quit-nhs/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

Have 200,000 nurses quit the NHS?

Claim: Over 200,000 nurses have quit the NHS since 2010.
Conclusion: This figure covers all nurses and health visitors who have left the NHS in England in the last eight years, including those with an unknown reason for leaving as well as those who have retired or died in service. Overall the number of nurses working in the NHS is slightly higher than in 2010.

Research released by the Labour party this week and quoted by a number of media outlets claimed that over 200,000 nurses have quit the NHS since 2010.

That's correct for England, but this figure should also come with a health warning.

While the turnover of nurses has increased since 2010, not all of the 200,000 staff "quit" the NHS voluntarily. Some retired (as Labour outlined in their full press release, though did not make as clear in the online version), others were transferred, some were dismissed and others died in service.

This doesn't mean we have 200,000 fewer nurses and health visitors now than in 2010, as new staff have joined the NHS or been retrained as nurses in that time too.

In June 2018, there were around 2,700 more nurses and health visitors (full-time equivalent) working for the NHS than in June 2010 (a 1% increase).

Most nurses leaving the NHS resigned voluntarily

Over the eight years Labour looked at, just under 97,000 of the 200,000 nurses and health visitors had 'voluntary resignation' recorded as a reason for leaving—the single most common reason for leaving.

In the year to June 2011, 50% of nursing staff who had a reason for leaving recorded, voluntarily resigned. By the year ending June 2018, this had increased to 63%.

In total, around a third of voluntary resignations between June 2010 and 2018 did not have a specific reason for them recorded. Around a quarter were listed as being due to relocation and around one in five cited 'work life balance'. Just under one in ten resigned for reasons relating to promotion.

Looking at the increase in the number of nurses and health visitors resigning between the year ending June 2010 and 2018, the largest component of the increase were resignations due to relocation and 'work life balance'.

Reasons for leaving the NHS

Nurse leavers from NHS hospitals and community health services* in England, by reasons for leaving**, year ending June 2018
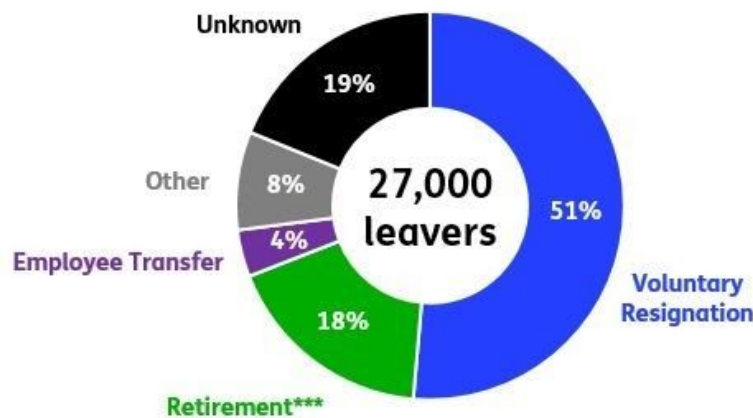
* Reason for leaving as a percentage of all leavers
** An element of double counting occurs within these figures as some staff had more than one reason for leaving recorded. There are around 50 more 'reasons for leaving' recorded than total nurses that left the NHS in this year.
*** This doesn't include those who haven taken voluntary early retirement or flexi-retirement.

Source: NHS Digital, Supplementary information, Leavers from the NHS by age and reason for leaving (Published January 2019)

The data counts each individual nurse leaving the NHS (or the headcount), rather than the using the full-time equivalent (FTE) measure commonly used. Rather than just counting every

individual person FTE factors in the number of hours they work, for example two nurses working part-time would be counted as one person working full-time hours.

More nurses and health visitors are leaving the NHS than joining it

Looking at slightly different data on the number of nurses and health visitors leaving the NHS in England (for years ending September rather than June) we can compare this to the number of nurses joining the NHS. These figures use the headcount measure too, rather than looking at the FTE numbers.

The data shows the number of leavers fluctuating, in some years keeping pace with the number of nurses joining and in some years exceeding it. The year ending September 2012 saw the largest difference, over 8,000 more nurses and health visitors left than joined the NHS.

The number of joiners was larger than the number of leavers in only three of the nine years measured.

NHS turnover

Total number* of nurses and health visitors leaving and joining NHS hospital and community health services in England, each year ending September
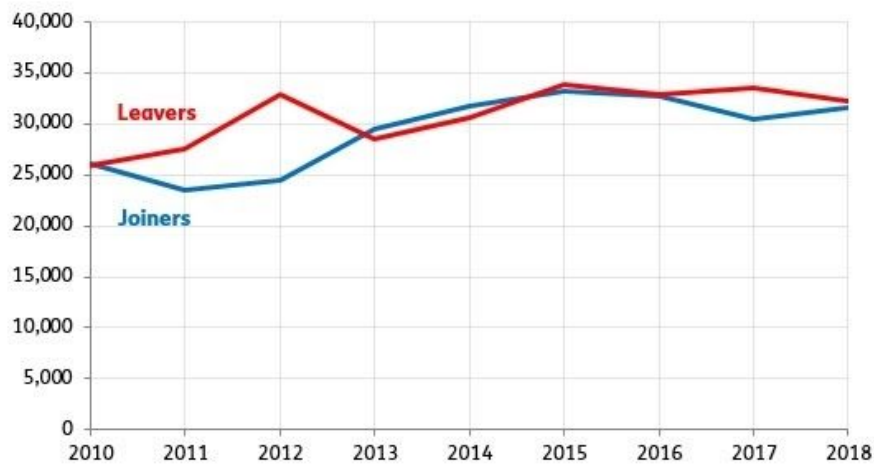
* figures are a headcount and leavers include those on maternity leave or on a career break

Source: NHS Digital, Supplementary information files, Joiners of and leavers from the NHS that were nurses and health visitors September 2009 to November 2018

Unlike those used by Labour, the figures on the number of leavers used here include staff on maternity leave or career breaks.

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But the number of nurses overall is still going up

Although more nurses are leaving the NHS in England than joining it, there are still slightly more nurses and health visitors working in the health service than eight years ago. NHS Digital, who produce figures on the NHS workforce in England, told us that this discrepancy was most likely because staff already inside the NHS were being reclassified or retrained as nurses and health visitors, so being counted in the total staff figures, but not in the joiners' figures.

Between June 2010 and June 2018 the total number of nurses and health visitors working in NHS hospitals and community health services in England increased by just over 200. Looking at the FTE figure, it increased over the same time period by around 2,700 (1%).

Nurses in the NHS

Total number of nurses and health visitors in NHS hospitals and community health services in England, monthly
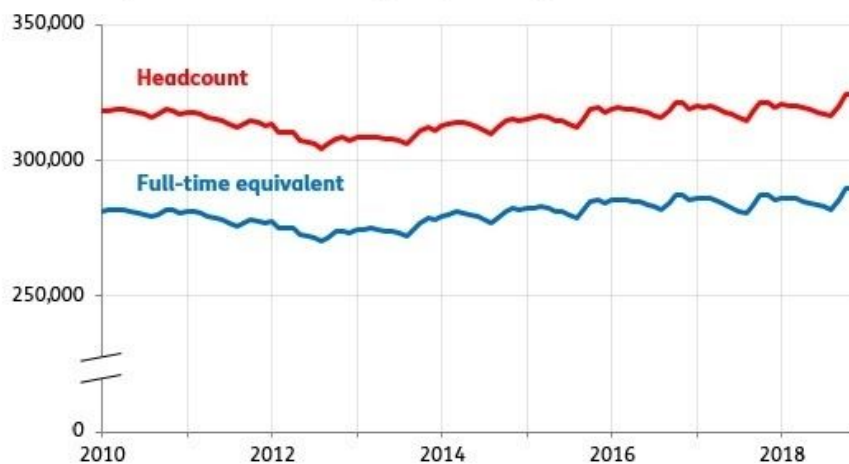
Source: NHS Digital, NHS Workforce Statistics – December 2018 (Including supplementary information on Mental Health workforce) Full Fact

Outcomes

Do you agree or disagree with the following statement?

``Since 2010, more than 200,000 nurses have resigned from their posts in the NHS.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Since 2010, more than 200,000 nurses have resigned from their posts in the NHS.''

[True / Probably true / Not sure / Probably false / False]

7.
Misinformation
In May 2019, a social media post claimed the following:
"No vaccine has been tested to see if it causes cancer. Yet vaccines contain ingredients known to cause cancer."

Correction - SPLIT GROUP A - SHOW URL: https://fullfact.org/online/vaccines-cancer-studies/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE:

There's no evidence that any current vaccines cause cancer

Claim: *No vaccine has been tested to see if it causes cancer.*
Conclusion: In the UK, all vaccines have to undergo a number of trials, usually over a period of years, to check if they cause any side effects.

Claim: Vaccines contain ingredients known to cause cancer.
Conclusion: No vaccines given in the UK contain enough of any chemical to be carcinogenic.

An image that has been shared on Facebook and Instagram claims that no vaccine has been tested to see if it causes cancer and that vaccines contain ingredients that cause cancer.

All vaccines have to undergo a series of trial phases, which last years, to check whether they cause any side effects. And no vaccines given in the UK contain enough of any chemical to be carcinogenic.

There have been studies looking into whether cancer is associated with being vaccinated. One study looked at whether vaccines (amongst other factors like, breastfeeding and certain medication) were associated with childhood leukaemia in Canada. (Looking at whether a disease is associated with something is about seeing if the two are likely to occur together, not

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whether one causes the other.) That study didn't find any association between common vaccines and leukaemia. [Other](#) [studies](#) have had [similar results](#) with vaccinations in general.

But the implication of this claim is that new vaccines aren't tested to see if they cause negative side effects like cancer. That's certainly not the case. In the UK, vaccines go through [a lot of testing](#) before they're approved. The Vaccine Knowledge Project at the University of Oxford says this is partly because vaccines are one of the few medical treatments given to healthy people, so there's a lower level of risk tolerated than treatments for say, cancer.

These [steps](#) include laboratory testing, where the vaccine is tested with cells and in living things (usually mice). Then there are three phases of trials in people, the first with a group of adults, the second with a few hundred people, and the third with a few thousand. These trials monitor for all types of side effects, both life-threatening and not. If all goes well, the government's [Medicines and Healthcare products Regulatory Agency](#) (or the European equivalent) reviews all of the data collected and decides whether the vaccine works and is safe.

This process takes years. It took almost [20 years](#) for the Meningitis B vaccine to go from first concept to being licensed.

Monitoring the vaccine's safety doesn't stop when the vaccine gets licensed for use. There is then a fourth phase of studying the vaccine which looks at its effect in the wider population, which is called "post-marketing surveillance".

It's important to remember that a percentage of the population will get cancer eventually, so a certain number of people in each trial group eventually getting cancer doesn't mean the vaccine caused it. If more than that baseline proportion develop cancer (and other factors, like whether they smoke, haven't been accounted for) that would be cause for concern.
So although when vaccines are first trialled, there aren't specific studies looking solely at whether they can cause cancer—there are multiple trials looking out for any negative side effects.

Vaccines in the UK don't contain any chemicals in levels high enough to cause cancer

It's sometimes claimed online that there are carcinogenic substances in vaccines.

As we've discussed [before](#), there are chemicals that do have the potential to cause cancer in some vaccines, but not in high enough levels to be carcinogenic.

Take formaldehyde for example, which at certain concentrations is probably [carcinogenic](#) but is also naturally present in the human body. It may be present in trace amounts in the [Hepatitis B vaccine](#), as it's used in production to kill the virus. But it's certainly not in high enough concentrations in the vaccine to be carcinogenic to humans. The Vaccine Knowledge Project [says](#) that the amount of natural formaldehyde in a two month-old's blood is around ten times greater than the amount found in any vaccine.

This claim may have stemmed from the fact that a proportion of doses of a polio vaccine used in the 1950s and 1960s were contaminated with a virus that is found in some human tumours and can cause cancer in rodents. But multiple studies have not found adequate evidence that having that vaccine increased someone's chance of getting cancer.

Visual correction - SPLIT GROUP B

Please look at the following image.

Outcomes

Do you agree or disagree with the following statement?

``Scientists have never studied whether vaccines cause cancer.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Scientists have never studied whether vaccines cause cancer.''

[True / Probably true / Not sure / Probably false / False]

Wave two

Questions should be kept together by number (e.g., 1a should always be followed by 1b), but otherwise should be randomized.

1a. Do you agree or disagree with the following statement?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

1b. Do you think the following statement is true or false?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[True / Probably true / Not sure / Probably false / False]

2a.Do you agree or disagree with the following statement?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

2b. Do you think the following statement is true or false?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.''

[True / Probably true / Not sure / Probably false / False]

3a. Do you agree or disagree with the following statement?

``School spending is increasing by £14 billion between now and 2022/23. ''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

3b. Do you think the following statement is true or false?

`School spending is increasing by £14 billion between now and 2022/23.''

[True / Probably true / Not sure / Probably false / False]

4a. Do you agree or disagree with the following statement?

``Violent crime and knife crime are higher than ever recorded.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

4b. Do you think the following statement is true or false?

``Violent crime and knife crime are higher than ever recorded.''

[True / Probably true / Not sure / Probably false / False]

5a. Do you agree or disagree with the following statement?

``Homelessness is down by almost a half since its peak in 2008, under the Labour government.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

5b. Do you think the following statement is true or false?

``Homelessness is down by almost a half since its peak in 2008, under the Labour government.''

[True / Probably true / Not sure / Probably false / False]

6a. Do you agree or disagree with the following statement?

``Since 2010, more than 200,000 nurses have resigned from their posts in the NHS.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

6b. Do you think the following statement is true or false?

``Since 2010, more than 200,000 nurses have resigned from their posts in the NHS.''

[True / Probably true / Not sure / Probably false / False]

7a. Do you agree or disagree with the following statement?

``Scientists have never studied whether vaccines cause cancer.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

7b. Do you think the following statement is true or false?

``Scientists have never studied whether vaccines cause cancer.''

[True / Probably true / Not sure / Probably false / False]

South Africa

Wave one

After ideology question and any other preamble, state:

We would now like you to read and answer some additional questions.

2. GLOBAL ITEM

English-language version

Misinformation:

On February 3, 2019, a social media post claimed the following:

"We just had two years (2016-2018) of record-breaking Global Cooling."

Correction - SHOW TEXT BELOW:

No, we are not experiencing "global cooling"

This post—claiming that "we just had 2 years (2016-2018) of record-breaking Global Cooling"—has been shared over 300 times on Facebook.

It is incorrect—while temperatures in 2017 and 2018 were lower than 2016, global temperatures have not dropped sharply, nor at record breaking levels, and there is no "global cooling" trend occurring.

"Global cooling" is typically used to describe a long term period during which the earth's average temperature is cooling.

But data from NASA clearly shows that the opposite is happening. We are experiencing global warming: the planet is getting hotter over time, and at a faster and faster pace.

All the evidence shows that the planet is getting hotter

Ethan Porter and Thomas J. Wood

It's correct that the global average temperature was higher in 2016 than in 2017 or 2018, but this is not evidence that "global cooling" is occurring.

2016 was the hottest year on record, 2017 was the second-hottest, and 2018 was the fourth-hottest, according to the data from NASA that is linked in the Facebook post itself. 18 of the 19 warmest years on record have occurred since 2001, and the average global temperature has increased by about 0.8° to 1.0° Celsius in recent years, compared to the average temperature between 1951 and 1980.

As Gavin Schmidt, Director of the US-based Goddard Institute for Space Studies summarises: "2018 is yet again an extremely warm year on top of a long-term global warming trend".

Global warming does not mean that every year has to be hotter than the year before. Rather, it means that generally average temperatures are on the rise, even if they may fluctuate somewhat year-to-year.

The drop in temperature in 2017 and 2018 is not "record-breaking" as the post suggests. Since 1980, there have been eight separate years (including 2011 and 2008) that saw bigger drops in the average global temperature than the ones we saw in 2017 and 2018.

Judith Curry, a climatologist and former chair of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology has commented on the slightly lower temperatures in 2017 and 2018. She said: "A two-year trend is not meaningful in terms of understanding anything about how climate is changing."

Climate change continued to have a big impact on the planet in 2018

Even if it was only the fourth-hottest year on record across the planet as a whole, plenty of cities and countries did see their hottest-ever temperatures in 2018. This interactive map from the BBC allows you to see this in full.

Rising temperatures were also linked to plenty of other extreme weather events last year. The World Meteorological Organisation (WMO) points to "abnormal" levels of heatwaves, wildfire and drought in much of Europe and the USA in 2018. There were also floods in Kerala that affected over five million people, and hundreds of people killed by flooding in Japan. The WMO has produced a map charting all of the extreme weather events in 2018.

Outcomes

Do you agree or disagree with the following statement?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[True / Probably true / Not sure / Probably false / False]

2. GLOBAL ITEM

English-language version

Misinformation

On March 15th, 2020, a social media post claimed the following:

"The coronavirus stays in the throat for four days before it reaches the lungs, and this is the moment when a person starts coughing and experiencing a sore throat. If you drink a lot of water and gargle with warm water and salt or vinegar, you eliminate the virus. Share this information because you can save someone with this information".

Correction - SHOW TEXT BELOW

It's false that "gargling with warm water and salt eliminates the virus"

An image has circulated on WhatsApp and Facebook advising that "gargling with warm water and salt eliminates the virus," referring to the coronavirus.

However, this statement is false. The World Health Organization (WHO) stated there is no evidence that rinsing your mouth with saline "protects against this disease." Furthermore, the first posts with this claim appeared on Chinese social media in January 2020 and quote scientist Zhong Nanshan. However, his medical team denied that he claimed this.

The post on Facebook was shared more than 32,000 times, received 1,300 reactions and was commented on 117 times. The image also appeared on WhatsApp.

The WHO had already commented on January 24th to the site AFP Fact Check that: "We have seen no convincing evidence that rinsing one's mouth with diluted saline water will provide protection from this disease."

The official response from the international health agency adds that "while our understanding of the disease is still evolving, the best advice we can give people right now is to do things like wash their hands frequently, practice good respiratory hygiene (for example, to cough or sneeze into a tissue or elbow), avoid contact with sick people, and cook food thoroughly. This will help protect people from this new coronavirus, but also a range of other diseases. "

The first posts with this claim appeared on Chinese social media in January 2020 with the headline "Zhong Nanshan's brilliant idea to prevent the infection".

Zhong Nanshan is a scientist working for the Chinese National Health Commission, who helped expose the magnitude of the SARS outbreak in the 2000s. He was attributed to this false quote:

"I suggest that everyone rinse their throats with saline water diluted before going to hospitals or other public areas, and rinse again upon returning home. "

In light of the spread of this quote, the affiliated hospital of Guangzhou Medical University, where Nanshan's medical team is located, said: "Zhong's academic team in our hospital officially rejects the rumour: saline solution helps to clean the mouth and throat and is useful in curing pharyngitis. However, the new coronavirus invades the respiratory tract, which cannot be cleaned with mouthwash. Second, no current finding has suggested that saline water may kill the new coronavirus".

Outcomes

Do you agree or disagree with the following statement?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.''

[True / Probably true / Not sure / Probably false / False]

3. COUNTRY SPECIFIC ITEM
Misinformation
In January 2018, Global Citizen, an organisation working to end extreme poverty, released the following statement: "Over the past few years, hundreds of children have drowned in pit latrines in South Africa".

Correction - SPLIT GROUP A - SHOW URL:
https://africacheck.org/reports/have-hundreds-of-kids-drowned-in-school-pit-latrines-in-south-africa/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

Thousands of people gathered in South Africa's Soweto township in December 2018 for the Global Citizen Festival, a celebration of the hundred years since Nelson Mandela's birth.

The festival was a project of Global Citizen, an organisation working to end extreme poverty. The event highlighted the important issues of sanitation and health.

In an article on its website, Global Citizen says that "over the past few years, hundreds of children have drowned in pit latrines" referring to schools. The claim was tweeted on 18 January 2019.

Tragic stories of young children falling into pit latrines and drowning in excrement have made headlines in South Africa. But do the horrifying deaths number in the hundreds?

No response from festival planners
Africa Check contacted Global Citizen to ask where they got their information and what period "the past few years" referred to. We are yet to receive a response. (Note: We will update this report if we do.)

We also asked the department of basic education for any official list of schoolchildren who have drowned in pit latrines. They have not yet provided it.

Two known deaths since 2013
"There are no known publicly available records of the exact number of children that have drowned in pit latrines over a specified period," Sibabalwe Gcilitshana, parliamentary officer and researcher with advocacy organisation Equal Education, told Africa Check.

But, Gcilitshana said, "the known and reported incidents of learners drowning in pit latrines is unlikely to amount to 100".

Civil society organisation Section 27 has done extensive research on sanitation in South Africa, focusing on Limpopo province.

Head of communications Ntsiki Mpulo told Africa Check that Section 27 knew of two deaths from drowning in pit latrines.

In January 2014, five-year-old Michael Komape drowned in a pit toilet at Mahlodumela Primary School in Limpopo. Five-year-old Lumka Mkhethwa drowned in a pit latrine at Luna Primary School in the Eastern Cape province in March 2018.

Three more children have died or been injured in unsafe school toilets, Section 27's records show.

Seven-year-old Lister Magongwa died in 2013 after the walls of a toilet collapsed on him at Mmushi Primary School in Limpopo.
Five-year-old Oratilwe Dilwane fell into a pit latrine in 2016 at Tlhotlheletsang Primary School in North West province. He swallowed excrement and was severely injured.
Six-year-old Siyamthanda Mtunu died in 2017 after the walls of a toilet collapsed on him at Dalasile Primary School in the Eastern Cape.

How many South African schools have pit latrines?

From May to July 2018, Section 27 conducted a survey of 86 schools in Limpopo. It found that 41 – nearly half the schools – had unlawful pit latrines.

Samantha Brener, Section 27's attorney, told Africa Check that pit latrines were unlawful in terms of the norms and standards for school infrastructure. In some cases ventilated improved pit toilets are allowed.

A national government audit of schools in May and June 2018 found that at 3,898 schools the only toilets available were pit latrines. Another 3,040 had "proper sanitation", but pit toilets were still on the premises.

Section 27 raised concerns about the accuracy of the number of schools with pit latrines in a 2018 letter to President Cyril Ramaphosa.

Conclusion: Available records show four have died in pit latrines at South African schools. Reports of children dying in South African school toilets have made horrifying headlines in recent years.

Global Citizen, an organisation working to end poverty, claimed "hundreds of children" had drowned in pit latrines "over the past few years".

Available records show two children, both 5, have drowned in pit latrines on school properties in recent years: Michael Komape in 2014, and Lumka Mkhethwa in 2018.

Two more children died when the walls of unsafe school toilets collapsed on them while one more was severely injured after falling into a pit latrine in 2016.

Accurate information is needed in efforts to make sure such tragedies never happen again.

Visual correction - SPLIT GROUP B

Please look at the following video.

To feature this video: https://www.facebook.com/AfricaCheck/videos/636609120214175/

Outcome
Do you agree or disagree with the following statement?

``In recent years, hundreds of children have drowned in pit latrines in schools across South Africa.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``In recent years, hundreds of children have drowned in pit latrines in schools across South Africa.''

[True / Probably true / Not sure / Probably false / False]

4.
Misinformation
In October 2018, Foundation for a Smoke-Free World released the following statement: "49% of men and 34.1% of women in South Africa smoke [tobacco]"

Correction - SHOW URL:
https://africacheck.org/reports/have-hundreds-of-kids-drowned-in-school-pit-latrines-in-south-africa/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

Does South Africa have a huge number of smokers?

A reader asked us to verify South Africa's share of smokers.

Data from a global smoking poll
The Foundation for a Smoke-Free World is a non-profit organisation. It is mainly funded by one of the biggest tobacco companies in the world, Philip Morris International, which also sells smoke-free nicotine products such as e-cigarettes and vaporisers.

The foundation's communication manager, Nicole Bradley, told Africa Check the statistics came from their State of Smoking 2018 global poll.

The survey asked more than 17,000 adults from 13 different countries about how often they smoked, their attempts to quit and whether they had ever heard of or used smoke-free products.

In South Africa, 1,000 people older than 18 were interviewed face-to-face from 29 November to 11 December 2017 in five unspecified regions.

The survey claimed to represent the entire adult population, but the interviews were done using questionnaires in English and Afrikaans only.

When they were asked if they smoked tobacco products like cigarettes, cigars, cigarillos or pipes, 44.8% of the men and 27.5% of the women said they smoked them regularly, Bradley told Africa Check. Another 4.1% of men and 6.5% of women said that they smoked them occasionally.

Issues with sampling and weighting of variables
This is much higher than previous estimates of smoking in South Africa. In a presentation about the poll results, the foundation itself displayed World Health Organization (WHO) figures for 2015.

These showed that 31.4% of men and 6.5% of women older than 15 in South Africa smoked tobacco products. (Note: This data was "age adjusted", meaning it can be compared between countries.)

"The most glaring problem with the State of Smoking poll is the small sample size in each country," Nicole Vellios, research officer at the Economics of Tobacco Control Project at the University of Cape Town, told Africa Check. "It is not possible to conduct a robust analysis at a national level on such a small sample."

Dr Evan Blecher, an economist at the University of Illinois at Chicago Health Policy Center, also thought the South African sample size was "too small to get a really accurate view of smoking. The reason for that… is that smoking prevalence differs widely by race, gender and location."

Making sure a survey represents all the country's population groups "is absolutely necessary for any sampling in South Africa given the large racial inequalities, which extends to smoking as it does with many other behaviours or economies in South Africa", Blecher said. "I don't think one can draw any inference on the population level smoking prevalence numbers without understanding how it was weighted by race."

He pointed out that black people, South Africa's largest population group, smoked the least. One "gold standard" survey, the 2013 South African National Health and Nutrition Examination Survey by the Human Sciences Research Council (HSRC), found that only 17.4% of black people older than 15 had ever smoked.

There were also wide differences between regions, Blecher said. For example, the HSRC study found that only 14.4% of people older than 15 surveyed in Limpopo province had ever smoked, compared to 38.5% in the Western Cape province.

"If you end up oversampling white, coloured or Indian people (because your sample is too heavily focused on urban areas, or English and Afrikaans speakers), your overall share of smokers will be higher," Blecher said.

Roughly 20% of South Africans are smokers
South Africa has "very good smoking prevalence estimates", Blecher said. He directed Africa Check to the National Income Dynamics Study. This is a project of the South African Labour and Development Research Unit at the University of Cape Town.

The fifth round of this panel survey was done in 2017, when about 24,000 adults in South Africa were surveyed. It found that 35.7% of men and 8.1% of women older than 18 smoked cigarettes, Vellios said. (Note: This was in line with the HSRC study, which found that 32.8% of men and 10.1% of women reported that they had ever smoked tobacco.)

Vellios said roughly one in five South African adults smoked, a trend that had stayed "pretty flat" over the past decade.

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Conclusion: Better studies show that in South Africa, about a third of men and 10% of women smoke tobacco

The Foundation for a Smoke-Free World said its global State of Smoking survey for 2018 had found that 49% of men and 34.1% of women in South Africa regularly or occasionally smoked tobacco.

The foundation's survey only asked 1,000 people in South Africa about their smoking habits, and only using questionnaires in English or Afrikaans. Experts said this sample was too small to represent all the people in South Africa when it comes to smoking.

More thorough surveys – by the University of Cape Town and the Human Sciences Research Council – found that about one in three men and one in 10 women in South Africa smoke cigarettes or had smoked tobacco before. Overall, roughly 20% of the country's people are smokers.

Outcomes
Do you agree or disagree with the following statement?

``Around 40% of South African adults are smokers.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Around 40% of South African adults are smokers.''

[True / Probably true / Not sure / Probably false / False]

5.
Misinformation
In October 2018, Times Live and the Citizen newspapers published the following: "R8 out of every R10 spent by government goes to salaries of civil servants.

Correction - SHOW URL:
https://africacheck.org/reports/do-south-africas-civil-servants-get-r8-out-of-every-r10-the-government-spends/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

South Africa's newly minted finance minister is set to deliver his first budget speech today. Ahead of the speech, Tito Mboweni commented on the cost of civil servant salaries while delivering the annual Kader Asmal Lecture in Cape Town.

News website Times Live reported that Mboweni "said the public sector wage bill has become a serious drain on the public purse, with R8 out of every R10 spen[t] by government going to salaries of civil servants".

The Citizen reported Mboweni as saying the breakdown reflected "the current situation".

But South African Federation of Trade Unions general secretary Zwelinzima Vavi described the share as "absolute nonsense".

Africa Check pulled out the budget to find out.

What did Mboweni say?
In his speech, Mboweni said: "Strategically speaking, if we're better organised we should be making sure that we do not have a situation where R8 out of every R10 goes to salaries and wages in the public sector. Because if R8 out of R10 goes to salaries in the public service, you are left with R2 for other services, to fix a hospital, a clinic."

Jabulani Sikhakhane, spokesperson for South Africa's national treasury, told Africa Check that Mboweni was describing a situation he wanted to avoid.

"Minister Mboweni was not stating as a fact that government spends R8 out of every R10 on salaries," Sikhakhane said. "His was an illustrative point, that if government spent R8 out of every R10 on employee remuneration, [it] would be left with R2 for all other services."

How much is spent on salaries?
South Africa's 2018 budget shows that money paid to employees made up 35.2% of the government's consolidated spending in 2017/18. This is R3.52 per R10.

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Sikhakhane told Africa Check this spending "includes expenditure by national and provincial governments, social security funds, selected public entities, as well as transfers and subsidies to municipalities, businesses and other entities".

He added that salaries as a share of spending would vary by government department. "In provincial education and health departments, for example, compensation of employees will absorb a significant proportion of the budget."

Salaries made up 46% of revenue in 2018
But when we look at employee compensation as a share of government revenue, the figure increases.

The South African government spends more than it collects, so it has to borrow money to make up the shortfall, Professor Jannie Rossouw told Africa Check. He is head of economics and business sciences at the University of the Witwatersrand and part of the Fiscal Cliff Study Group.

In a 2018 journal article, the group said it was concerned that South Africa was "headed for a fiscal cliff due to declining revenue and rising expenditure". The group calculated that compensation of employees accounted for 46% of government revenue in 2018, or R4.60 per R10.

Conclusion: State salaries make up R3.52 in each R10 of government spending and R4.60 in each R10 of government revenue
South Africa's national treasury said the finance minister was making an "illustrative point" when he said that "we should be making sure that we do not have a situation where R8 out of every R10 goes to salaries and wages in the public sector".

Times Live and the Citizen were therefore wrong to report that his statement reflected the current situation.

The latest budget data shows that employee compensation accounted for 35.2% – R3.52 in each R10 – of consolidated government expenditure in 2018. When it is considered as a share of government revenue (which excludes borrowed money) the share rises to 46%, or R4.60 in each R10.

Outcomes
Do you agree or disagree with the following statement?

``Around 80% of public spending in South Africa goes to civil servants' salaries."

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Around 80% of public spending in South Africa goes to civil servants' salaries."

[True / Probably true / Not sure / Probably false / False]

6.

Misinformation

In June of 2019, a social media post said the following: "A man named Michael Duerr lives in Germany but owns 57.5% of the South African Reserve Bank."

Correction - SHOW URL:
https://africacheck.org/reports/german-national-michael-duerr-owns-0-5-not-57-5-of-south-africas-reserve-bank/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE
In the game of South African politics, the reserve bank is often the ball. And it's clear who is on which side.

The ruling African National Congress is in favour of nationalising the bank, as is the opposition Economic Freedom Fighters party. But the Democratic Alliance, the largest opposition party, will have none of this and has taken a hardline position, calling it a "hostile takeover".

Nationalisation would make the government the bank's sole owner – but wouldn't give it control of the bank's monetary policy. Shareholding has no impact on the bank's constitutional mandate of nurturing long-term economic growth.

This debate is also hotly contested online. Here, without fail, a certain name pops up: Michael Duerr.

The story goes that the German national owns 57.5% of the Reserve Bank. But this bizarre tale is 100% false.

Statistics shared in Instagram post

A screenshot of the claim in an Instagram post is often shared online. It appears to have been originally posted by Mzwandile Masina, mayor of Ekurhuleni, a metropolitan municipality in Gauteng province.

"This is Michael Duerr. He lives in Germany but own [sic] 57.5% of South African Reserve Bank," it reads.

Neither Masina nor his spokesperson have responded to queries about where the information came from, or whether the post is genuine. The Instagram post seems to have been deleted.

A Google search traces one possible source of the claim to a 2010 article on business and finance news website Fin24.

"One of the more outspoken shareholders, German Michael Duerr, owns about 57.5% (100,000) of the total shares in the bank together with his family members. These shares are owned by people who do not live in South Africa," it reads.

The article has since been cited by other news outlets, including Algoa FM in 2017 and the South African in 2019. (Note: The statistic was removed from the Fin24 article after Africa Check contacted the publication to ask how it was calculated. The amended version can be seen here.)

Private shareholders since 1921
The Reserve Bank has been a public company with private shareholders since it started in 1921. The number of shares a shareholder can own has varied over the years but is currently capped at 10,000.

The bank is owned by more than 750 private shareholders who together hold 2 million shares. Most shareholders are individuals but some are companies, trusts, provident funds and unions.

Ordinary shareholders may vote during the bank's annual general meeting, as long as they have owned shares for at least six months and live in South Africa. But the rules are different for "associate"

shareholders. Individual shareholders are considered to be associates when they are close relatives, such as spouses, siblings, parents or children

Amendments to the reserve bank act in 2010 limited associates' voting rights to ensure no group of shareholders could try to control the bank's affairs by voting together, said Prof Jannie Rossouw, head of the school of economics and business sciences at Wits University.

Associate shareholders were given 40 days to declare how many shares they had. They could keep a maximum of 10,000 shares each but their voting rights were curtailed. At a ratio of one vote for every 200 shares, an associate shareholder is now restricted to 50 votes, regardless of the number of shares held by their family.

If associate shareholders did not declare that other shareholders were their close relatives, the amendments allowed the bank to approach a court for an order to force the group of associates to reduce their combined shareholding to 10,000.

Family members held 90,000 shares in 2014
Enter Michael Duerr, an ex-banker and investment consultant who began buying reserve bank shares in 2006. He has had a tumultuous relationship with the institution ever since.

A 114-page PDF, uploaded by the bank, documents this relationship over the years. It features accusations of mismanagement and bizarre details of a heated exchange between former bank governor Tito Mboweni and Duerr during an annual general meeting – to which Duerr is reported to have arrived barefoot.

In March 2014, the bank asked Duerr to dispose of family shares exceeding 10,000 by March 2015. Or he could submit evidence to prove he was not related to any other shareholders. At this stage, the bank believed that in addition to his own shares Duerr was an associate of eight other shareholders: his parents, two brothers, wife, two daughters and his son.

The bank claimed that Duerr and his family held at least 90,000 shares – or 4.5% – of the bank's 2 million shares in 2014.

Duerr's curt response to the bank's letter came in July 2014. In it, Duerr criticises Mboweni for his "lack of qualification for the position". He added that the bank was "at all times" aware of the Duerr family's shareholding and so a declaration was not necessary.

Because the Duerrs refused to make the necessary declarations, the bank approached the Pretoria high court with an application to direct the family members to "dispose of those Reserve Bank shares which they hold in aggregate with their associates, in excess of 10,000". The application was granted in 2016.

So how many shares does Duerr own today?

Duerr owns 0.5% of the Reserve Bank
The bank told Africa Check that Duerr "currently holds 10,000 shares, the maximum legally allowed". This is 0.5% of the bank's 2 million shares. The figure is shown in the bank's 30 June 2019 shareholder index.

What about the rest of his family? This is more complicated to determine.

Duerr told Africa Check that he and his "family and friends have control [of] at least 12% of the shares, never the quoted 57%". He declined, however, to provide a breakdown of this percentage with shareholder names.

No other people with the surname Duerr are currently listed on the shareholder index. And the Reserve Bank is not currently aware of any other associates connected to Duerr. Identifying associates other than close family members is difficult.

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"It is usually reasonably easy to determine who qualifies as an associate of an existing shareholder if one is dealing with close family members," Ziyanda Mtshali, media coordinator at the bank, told Africa Check.

"If he formally discloses that he has other associates, then the SARB will be obliged to again regularise Duerr's 10,000 shareholding and reduce it accordingly. Currently the SARB does not have such reliable information."

Conclusion: German national Michael Duerr owns 0.5% of the South African Reserve Bank
The claim that Michael Duerr, a German national, is a majority shareholder of the South African Reserve Bank has been doing the rounds for years. A widely shared screenshot of an Instagram post – which appears to have been posted by Ekurhuleni mayor Mzwandile Masina – claims that Duerr owns 57.5% of the bank.

The bank is currently owned by more than 750 private shareholders who together hold 2 million shares. The most recent shareholder index shows that Michael Duerr owns 10,000 shares – the maximum a person is legally allowed to own. This is 0.5% of the bank's shares.

We therefore rate the claim as incorrect.

Outcomes

Do you agree or disagree with the following statement?

``A German man owns more than half of the South African reserve bank."

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``A German man owns more than half of the South African reserve bank."

[True / Probably true / Not sure / Probably false / False]

7.
Misinformation
In October 2019, Bheki Cele, South African Minister of Police, said the following: "South Africa is the only country in Africa that releases crime statistics".

Correction - SHOW URL
https://africacheck.org/reports/no-minister-cele-sa-not-only-country-in-africa-giving-out-crime-stats/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

While releasing South Africa's annual crime statistics, police minister Bheki Cele said that his department had "dropped the ball" when it came to crime. The statistics, released on 12 September 2019, revealed that 21,022 people were murdered from April 2018 to March 2019.

But South Africa was leading the continent in one way, the minister told those in attendance at the parliamentary committee briefing.

"I am not sure because [it's] a story that I am told," said Cele. "South Africa in Africa is the only one that gives crime stats."

In a video of the briefing, Cele said it would "make comparisons [with other African countries] difficult then if it's only us giving stats".

Was the minister reliably informed?

No response from minister's spokesperson
Africa Check contacted Cele's spokesperson to ask who the minister heard the claim from. We had not received a response at the time of publishing this report.

However, before he made the claim Cele mentioned "honourable Terblanche".

Ockert Terblanche, a member of parliament for the Democratic Alliance, told Africa Check that Cele was responding to a different statement he had made: "I said that as a best case scenario, crime stats internationally normally only reflect [approximately] 60% of committed crime. [Cele] then said South Africa is the only country in Africa reporting crime stats."

Other African countries release stats
Experts disagreed with the minister's assertion.

"South Africa is certainly not the only country that issues regular crime statistics in Africa," said Michael Jandl, a research officer at the United Nations Office on Drugs and Crime (UNODC).

According to Jandl, more than half of all African countries provided crime data to the UNODC for at least one year between 2003 and 2017. "Some, like Kenya, can provide complete time series on robberies for these years."

The UNODC directed Africa Check to a number of African statistical agencies with crime and criminal justice data, including Uganda, Tanzania, Cameroon, Algeria, Morocco and Botswana. Kenya's most recent online crime statistics are from 2018, while Nigeria's are from 2017.

Anine Kriegler, a researcher with the Centre of Criminology at the University of Cape Town, confirmed that "it is not correct to say that no other [African] countries release crime stats".

She said, however, that South Africa's statistics were of a high quality, calling them "the best, most extensive, most regular, detailed crime statistics released in Africa".

Data quality and coverage differs
"While many [African] countries do have administrative data on crime and justice, the quality of the data is often challenging and requires further efforts for improvements," said Jandl. "Moreover, very few countries have actually carried out crime victimisation surveys like South Africa."

Data coverage for African crime statistics also differs, depending on the crime in question. While 37 African countries have provided the UN agency with data on murder, just 27 provided data on robbery, said Jandl.

Johan Burger, an analyst at South Africa's Institute for Security Studies, told Africa Check that there were a number of problems with crime statistics in many African countries.

"If there are releases, then [they are] periodic, selective, and not a full crime release, annually on a fixed date, in the way that the South African police service does," said Burger.

"Perhaps that's what the minister meant when he made that statement."

Conclusion: South African crime stats most detailed, but not only ones released in Africa
During a parliamentary portfolio briefing on crime statistics in South Africa, the minister of police Bheki Cele claimed South Africa is the only country in Africa that releases crime statistics.

According to the United Nations Office on Drugs and Crime, this is incorrect. A number of African countries release crime statistics, of varying quality.

But a number of experts told Africa Check that South Africa's crime statistics are the most detailed and regularly published in Africa. In this regard, South Africa is a leader on the continent.

The minister would have been on surer footing had he highlighted this.

Outcomes

Do you agree or disagree with the following statement?

``South Africa is the only African country which publishes official crime statistics.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``South Africa is the only African country which publishes official crime statistics.''

[True / Probably true / Not sure / Probably false / False]

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Wave two

Questions should be kept together by number (e.g., 1a should always be followed by 1b), but otherwise should be randomized.

1a. Do you agree or disagree with the following statement?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

1b. Do you think the following statement is true or false?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[True / Probably true / Not sure / Probably false / False]

2a. Do you agree or disagree with the following statement?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

2b. Do you think the following statement is true or false?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.''

[True / Probably true / Not sure / Probably false / False]

3a. Do you agree or disagree with the following statement?

``In recent years, hundreds of children have drowned in pit latrines in schools across South Africa.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

3b. Do you think the following statement is true or false?

``In recent years, hundreds of children have drowned in pit latrines in schools across South Africa.''

[True / Probably true / Not sure / Probably false / False]

4a. Do you agree or disagree with the following statement?

``Around 40% of South African adults are smokers.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

4b. Do you think the following statement is true or false?

``Around 40% of South African adults are smokers.''

[True / Probably true / Not sure / Probably false / False]

5a. Do you agree or disagree with the following statement?

``Around 80% of public spending in South Africa goes to civil servants' salaries.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

5b. Do you think the following statement is true or false?

``Around 80% of public spending in South Africa goes to civil servants' salaries.''

[True / Probably true / Not sure / Probably false / False]

6a. Do you agree or disagree with the following statement?

``A German man owns more than half of the South African reserve bank.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

6b. Do you think the following statement is true or false?

``A German man owns more than half of the South African reserve bank.''

[True / Probably true / Not sure / Probably false / False]

7a. Do you agree or disagree with the following statement?

``South Africa is the only African country which publishes official crime statistics.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

7b. Do you think the following statement is true or false?

``South Africa is the only African country which publishes official crime statistics.''

[True / Probably true / Not sure / Probably false / False]

Nigeria

After ideology question and any other preamble, state:

We would now like you to read and answer some additional questions.

1. GLOBAL ITEM

 English-language version

Misinformation:

On February 3, 2019, a social media post claimed the following:

"We just had two years (2016-2018) of record-breaking Global Cooling."

Correction - SHOW TEXT BELOW:

No, we are not experiencing "global cooling"

This post—claiming that "we just had 2 years (2016-2018) of record-breaking Global Cooling"—has been shared over 300 times on Facebook.

It is incorrect—while temperatures in 2017 and 2018 were lower than 2016, global temperatures have not dropped sharply, nor at record breaking levels, and there is no "global cooling" trend occurring.

"Global cooling" is typically used to describe a long term period during which the earth's average temperature is cooling.

But data from NASA clearly shows that the opposite is happening. We are experiencing global warming: the planet is getting hotter over time, and at a faster and faster pace.

All the evidence shows that the planet is getting hotter

It's correct that the global average temperature was higher in 2016 than in 2017 or 2018, but this is not evidence that "global cooling" is occurring.

2016 was the hottest year on record, 2017 was the second-hottest, and 2018 was the fourth-hottest, according to the data from NASA that is linked in the Facebook post itself. 18 of the 19 warmest years on record have occurred since 2001, and the average global temperature has increased by about 0.8° to 1.0° Celsius in recent years, compared to the average temperature between 1951 and 1980.

As Gavin Schmidt, Director of the US-based Goddard Institute for Space Studies summarises: "2018 is yet again an extremely warm year on top of a long-term global warming trend".

Global warming does not mean that every year has to be hotter than the year before. Rather, it means that generally average temperatures are on the rise, even if they may fluctuate somewhat year-to-year.

The drop in temperature in 2017 and 2018 is not "record-breaking" as the post suggests. Since 1980, there have been eight separate years (including 2011 and 2008) that saw bigger drops in the average global temperature than the ones we saw in 2017 and 2018.

Judith Curry, a climatologist and former chair of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology has commented on the slightly lower temperatures in 2017 and 2018. She said: "A two-year trend is not meaningful in terms of understanding anything about how climate is changing."

Climate change continued to have a big impact on the planet in 2018

Even if it was only the fourth-hottest year on record across the planet as a whole, plenty of cities and countries did see their hottest-ever temperatures in 2018. This interactive map from the BBC allows you to see this in full.

Rising temperatures were also linked to plenty of other extreme weather events last year. The World Meteorological Organisation (WMO) points to "abnormal" levels of heatwaves, wildfire and drought in much of Europe and the USA in 2018. There were also floods in Kerala that affected over five million people, and hundreds of people killed by flooding in Japan. The WMO has produced a map charting all of the extreme weather events in 2018.

Outcomes

Do you agree or disagree with the following statement?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``The cooler temperatures from 2016 through 2018 proved that we are now in a period of global cooling.''

[True / Probably true / Not sure / Probably false / False]

2. GLOBAL ITEM

English-language version

Misinformation

On March 15th, 2020, a social media post claimed the following:

"The coronavirus stays in the throat for four days before it reaches the lungs, and this is the moment when a person starts coughing and experiencing a sore throat. If you drink a lot of water and gargle with warm water and salt or vinegar, you eliminate the virus. Share this information because you can save someone with this information".

Correction - SHOW TEXT BELOW

It's false that "gargling with warm water and salt eliminates the virus"

An image has circulated on WhatsApp and Facebook advising that "gargling with warm water and salt eliminates the virus," referring to the coronavirus.

However, this statement is false. The World Health Organization (WHO) stated there is no evidence that rinsing your mouth with saline "protects against this disease." Furthermore, the first posts with this claim appeared on Chinese social media in January 2020 and quote scientist Zhong Nanshan. However, his medical team denied that he claimed this.

The post on Facebook was shared more than 32,000 times, received 1,300 reactions and was commented on 117 times. The image also appeared on WhatsApp.

The WHO had already commented on January 24th to the site AFP Fact Check that: "We have

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seen no convincing evidence that rinsing one's mouth with diluted saline water will provide protection from this disease."

The official response from the international health agency adds that "while our understanding of the disease is still evolving, the best advice we can give people right now is to do things like wash their hands frequently, practice good respiratory hygiene (for example, to cough or sneeze into a tissue or elbow), avoid contact with sick people, and cook food thoroughly. This will help protect people from this new coronavirus, but also a range of other diseases. "

The first posts with this claim appeared on Chinese social media in January 2020 with the headline "Zhong Nanshan's brilliant idea to prevent the infection".

Zhong Nanshan is a scientist working for the Chinese National Health Commission, who helped expose the magnitude of the SARS outbreak in the 2000s. He was attributed to this false quote: "I suggest that everyone rinse their throats with saline water diluted before going to hospitals or other public areas, and rinse again upon returning home. "

In light of the spread of this quote, the affiliated hospital of Guangzhou Medical University, where Nanshan's medical team is located, said: "Zhong's academic team in our hospital officially rejects the rumour: saline solution helps to clean the mouth and throat and is useful in curing pharyngitis. However, the new coronavirus invades the respiratory tract, which cannot be cleaned with mouthwash. Second, no current finding has suggested that saline water may kill the new coronavirus".

Outcomes

Do you agree or disagree with the following statement?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.'''

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Drinking a lot of water and gargling with warm water and salt or vinegar, eliminates the coronavirus.''

[True / Probably true / Not sure / Probably false / False]

3. COUNTRY SPECIFIC ITEM
Misinformation
In January 2020, Dr. Obadiah Mailafia, former deputy governor of Nigeria's central bank, said the following: "Youth unemployment in Nigeria is almost 70%."

Correction - show URL
https://africacheck.org/reports/is-youth-unemployment-in-nigeria-almost-getting-to-70/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE:

As calendars flipped over to 2020, Nigerian president Muhammadu Buhari outlined his agenda for the country in a "letter from the president".

Responding to the letter, Dr Obadiah Mailafia, a former deputy governor of the country's central bank, said it lacked direction, including on how to tackle youth unemployment.

"Most" young people in Nigeria are wandering the streets without jobs, Mailafia reportedly said. "Youth unemployment is almost getting to 70%," he said.

Is unemployment as high as Mailafia claimed?

'I didn't say it's up to 70% … it's rising towards 70%'
Mailafia, who was the presidential candidate for the African Democratic Congress in Nigeria's 2019 elections, told Africa Check that though he had said "unemployment", he meant both unemployment and underemployment.

 "I leave you to judge if a university graduate who is riding an 'Okada' [commercial motorcycle], for instance, can be said to be employed. As far as I'm concerned, that person is not employed because he is not working based on his level of education."

"Remember, I didn't say it's up to 70%, I said it is rising towards 70%," he said.

Latest employment estimates from 2018
The most recent national data on Nigeria's employment is a labour report published by the National Bureau of Statistics in December 2018. We were directed to this report by Dr Baba Madu, the head of the national accounts division at the bureau.

The report covered October 2017 to September 2018. The next set of employment statistics are being prepared and will be published "soon", Madu said.

Who qualifies as unemployed or underemployed?
The National Bureau of Statistics defines an unemployed person as one who does not have work or only works for less than 20 hours a week. For you to count as being unemployed, you must have previously been in the labour force. This means you are between 15 and 64 years of age, are willing and able to work and have actively looked for work in the "reference period" or the week preceding the survey.

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(Note: In 2014, Nigeria changed how it calculates unemployment, from those working fewer than 40 hours a week – the threshold for "full-time" – to those working less than 20 hours a week. Those working between 20 and 39 hours a week are considered underemployed.)

The unemployment rate is given as the "proportion of those in the labour force … who were actively looking for work but could not find work for at least 20 hours a week during the reference period".

Underemployment is defined as working for an average of at least 20 hours a week, but fewer than full-time (40) hours.

Someone who is employed full-time but in "an activity that underutilised your skills, time and educational qualifications", is also classified as being underemployed.

What does the latest official data say?
The 2018 report found that the number of unemployed rose from 15.9 million in the third quarter of 2017, to 20.9 million in the third quarter of 2018. Those who were underemployed increased from 18 million to 18.2 million in this period.

This made the most recent unemployment rate 23.1%, a rise from 18.8% in the third quarter of 2017. When both employment and underemployment were considered, the rate had risen from 40% to 43.3%.

Mailafia's claim inaccurate
How many young people are unemployed? Nigeria's data agency defines "youth" as those aged between 15 and 35. For the period when the most recent data is available, the youth unemployment rate rose from 25.5% in the third quarter of 2017 to 29.7%. This is less than Mailafia's claim of 70%.

If we are generous and include the most recent underemployment rate of 25.7%, the number is 55.4%, which is still significantly lower than Mailafia's estimate. We therefore rate the claim incorrect.

Nigeria's unemployment 'worrisome' say economists
But the number of young people who are out of work in Nigeria is still a concern. Prof Philip Alege, who teaches economics at Covenant University in Ota, southwestern Nigeria, told Africa Check: "Nigeria's youth unemployment and underemployment figures are worrisome, and they are worsening."

Alege said there were a number of reasons why so many young people were out of work. These included the education system not teaching the right skills, and advances in technology leading to the loss of certain types of jobs.

"The fourth industrial revolution is here and it's affecting how we live and work. But Nigeria is not ready. The school curriculum has also not been reviewed to equip students with the skills they need to work in this age."

"Because of this, young people educated in Nigeria would increasingly have difficulty finding jobs. Attempts made at creating jobs are not enough," he said.

Prof Temidayo Akinbobola, who teaches economics at Obafemi Awolowo University in Ile-Ife, in the southwest of the country, said government regulations and taxes made the country seem unfriendly to investors.

"Though it is not proper to approximate 55.4% to 70%, having more than half of a country's youth population unemployed or underemployed is a bad indicator. If things don't change drastically, unemployment and underemployment figures would be headed for 70%," Akinbobola said.

Conclusion: Youth unemployment in Nigeria worrying, but not near 70%
While criticising a letter from the president, a former deputy governor of Nigeria's central bank highlighted what he said were dire unemployment figures for young people in the country.

Almost seven in ten young people were unemployed, Dr Obadiah Mailafia told a national publication. He told Africa Check he included the underemployed in this statistic.

The most recent official data on youth unemployment in Nigeria shows that 29.7% of youth were unemployed, and a further 25.7% underemployed. This comes to 55.4%, well short of Mailafia's figure.

Experts we spoke to said the official figure was still worrying , and could rise.

Outcomes

Do you agree or disagree with the following statement?

``Youth unemployment in Nigeria is almost 70%."

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Youth unemployment in Nigeria is almost 70%."

[True / Probably true / Not sure / Probably false / False]

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4.
Misinformation
In November 2019, The Guardian newspaper published the following: "In their history, Nigerian universities have not had more than female 15 vice-chancellors."

Correction - SHOW URL
https://africacheck.org/reports/more-than-15-female-vice-chancellors-have-led-nigerian-universities-but-higher-education-still-a-mans-world/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE
The recent appointment of Prof Lilian Salami as the vice-chancellor of the University of Benin in Edo state was widely praised.

Salami becomes the institution's 10th head – and only its second female one. Its vice-chancellor from 1985 to 1991, Prof Grace Alele-Williams, was Nigeria's first female vice-chancellor.

In a November 2019 story, headlined "In search of female vice chancellors in Nigerian varsities", national daily the Guardian criticised the lack of women in top positions at universities.

Since the start of university education in Nigeria, the newspaper said, "the system cannot boast of producing up to 15 substantive female vice-chancellors, either from the public, faith-based or private institutions".

Nigeria's oldest university, the University of Ibadan, was founded in 1948. Have 15 or fewer

women been vice-chancellors since?

'Number will be very small'
The journalist who wrote the article told Africa Check they came to the number using online research and help from academics.

They found 11 past and present female vice-chancellors, but as there could be more, the article had gone with "not up to 15". The article itself listed nine serving and former vice chancellors.

Oluwayemisi Obilade is professor of adult education and women studies at the Obafemi Awolowo University. She pointed Africa Check to the National Universities Commission (NUC) as a potential source of data to check the claim.

But she warned: "Whatever the number of female vice-chancellors you find will be very small compared to the number of male vice-chancellors."

Only 11 of 170 vice-chancellors are female
The NUC is the state agency that develops university education. Its Nigerian University System Statistical Digest 2018, published in April 2019, shows the country had 170 universities at the end of 2018.

The federal government managed 43, 48 were run by state governments, and 79 were privately owned. The report said only 17% of the principal officers at these universities are female. The principal offices were given as pro-chancellor, vice-chancellor, registrar, bursar and librarian.

The digest identified 11 female vice-chancellors, and two acting ones. (Note: For the full list, click here.)

At least 20 female vice-chancellors
But from university websites, media reports and academic meetings, Africa Check found at least seven more women who have been vice-chancellors of Nigerian universities. One is Prof Ekanem Braide who served at both Cross River University of Technology, Calabar and the Federal University, Lafia. Another is Prof Charity Angya, the vice-chancellor of Benue State University from 2010 to 2015.

You can find some more former female university heads on our list. Our search, which considered the names in the Guardian article, shows that over 20 women have been vice-chancellors in Nigeria – more than the minimum of 15 claimed by the newspaper.

'Marriage and motherhood'
Prof Lai Olurode specialises in political sociology, development and gender studies at the University of Lagos. He told Africa Check he was surprised that there have even been that many female vice-chancellors in the history of university education in Nigeria.

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He said the barriers women faced in society were "formidable". And it wasn't just a Nigerian problem, he said.

"It is difficult for women to rise to positions of authority in the Nigerian university system due to stereotypes and prejudices." Olurode said he believed "marriage and motherhood" were "considered more important goals for the woman than advancement in career".

'University environment subordinates women'
Obafemi Awolowo University's Obilade, who has done much research on gender inequality in Nigerian higher education, said the deep-rooted patriarchy in universities made it difficult for women to become principal officers. She spoke of her own experience.

"Having been a vice-chancellor, I can tell you that there are very few women in leadership in Nigerian universities. The sociocultural environment subordinates women," she told Africa Check.

This was in both subtle and obvious ways, such as pregnancy being used against women or some roles being considered "too tough" for a woman.

The obstacles continued in professional development, Obilade said. "Mentoring is key in academia, but a female lecturer is less likely to get mentoring because a man mentoring a woman is often frowned at. The female lecturer in Nigeria is gender disadvantaged in many ways."

Both Olurode and Obilade said things were changing, but slowly.

Conclusion: There have been more than 15 female vice-chancellors of Nigerian universities, but women still face barriers to top positions
In an article on the low number of female leaders at universities, Nigeria's Guardian newspaper said there had not been more than 15 female vice chancellors in the country's higher education history.

Available data and research shows there have been more than 20. The paper's claim is inaccurate.

But experts said the obstacles women faced at universities were considerable – although this was changing slowly.

Outcomes
Do you agree or disagree with the following statement?

``Nigerian universities only had about 15 female vice chancellors in their history."

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Nigerian universities only had about 15 female vice chancellors in their history.''

[True / Probably true / Not sure / Probably false / False]

5.
Misinformation
In June 2019, Ben Ayade, Cross River governor, said the following: "Cross River has the least total crime in the country."

Correction - SHOW URL:
https://africacheck.org/reports/is-nigerias-cross-river-state-among-the-safest-as-governor-claimed/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

Cross River state governor Ben Ayade has been outlining his priorities for his second term in office, with security top among them.

Despite the state being in Nigeria's oil-rich Niger Delta region, which at times grapples with insecurity, Ayade said that the numbers showed it was one of the safest.

The state's residents were "committed to peace and security as evident in the statistics which project the state to represent 1.1% of total crime in Nigeria and the least in terms of crime in the country," Ayade said.

The governor spoke when he hosted federal police chief Musa Kimo in June 2019. But a month later Ayade bemoaned the state's security challenges.

"This once peaceful, beautiful state suddenly became a safe haven for militants and kidnappers," he reportedly said in July 2019.

We beamed a searchlight on the governor's two claims.

Claim:
"Crimes in Cross River state represent 1.1% of the total crime in Nigeria"

Verdict: incorrect

Nakanya Iyadim, information officer in the state's communication's ministry, confirmed to Africa Check that the governor did make the claims.

However the governor's office did not respond to our queries about the source of the statistics.

The best source to check this claim is the public order, safety and crime statistics compiled by the National Bureau of Statistics (NBS), Dr Isiaka Olarewaju, director of household statistics at the bureau, told Africa Check.

But he said the NBS data "is as reported". There could be unreported crimes, Olarewaju added. Under-reporting is often an issue.

Dr Ona Ekhomu is president of the Association of Industrial Security and Safety Operators of Nigeria. He told Africa Check that one reason for this is the fear of victimisation by the police.

"The way Nigeria police operates, most times there is little or no care for the victim of crime. It's not very easy to report crime in Nigeria and many incidents go unreported," Ekhomu said.

Other reasons include the perception that the authorities will not help, or because of the nature of the crime, such as sexual assault.

The statistics office aggregates data on incidences of crime reported to the police in each of Nigeria's 36 states and the Federal Capital Territory, the area around the capital Abuja. It has three categories for this:

-Offences against people, such as murder, manslaughter, infanticide and rape.
-Offences against properties, such as stealing, receiving stolen goods, obtaining property by false pretence, robbery and burglary.
-Offences against lawful authority, such as the failure to pay your taxes.

The numbers tell a different story
The most recent report on crime statistics was released in June 2018 and covers 2017.

It shows that 134,663 cases were reported to the police in Nigeria in 2017. Of these, 2,163 were reported in Cross River state working out to 1.61% of all reported cases, not 1.1% as the governor claimed.

Were Ayade's claim correct, then 1,481 cases of crime would have been reported in Cross River.

The data from the National Bureau of Statistics show Lagos state had the highest number of reported cases of crime, at 50,975 or 37.9% of the total.

Kebbi state, in the north west, had the lowest share of total cases reported, with 0.15% of the total.

Cross River state had 2,163 reported cases, at least 20 other states had fewer reported cases.

The governor was thus also incorrect with this claim.

The location of the state in the Niger Delta is a red flag, Wale Obydeen, the editor-in-chief of Security Monitor Nigeria, told Africa Check.

"Cross River cannot be the most peaceful state. Niger Delta we know is a volatile region and of course we should expect violence," he said. This is due to oil exploration in the region, and crimes particular to this such as the kidnapping of expatriates.

Put crime numbers in context
But context is important when comparing crime in different areas. As explained in our guide to understanding crime statistics, comparing absolute crime numbers across regions without factoring in their populations skews comparisons.

Instead, one could work out the reported cases per 100,000 people. When the category of crimes against persons is considered, Cross River's ratio is 25 reported cases per 100,000 people, placing it eighth out of the country's states. The state had a population of 3.9 million people in 2016.

But working this out for all categories is more difficult, Dr Ona Ekhomu, the president of the Association of Industrial Security and Safety Operators of Nigeria, said. As such crime should be considered "in their silos", he said.

"It is not good to lump them together. For instance a community that has a lot of crime against property but little crime against person will be considered safer than another that has more of crime against persons," said Ekhomu.

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To make it more complicated, Nigeria's population figures are strongly disputed, with a national census last held in 2006. The latest population estimates by states are from 2016 and should be used with caution.

Population characteristics should also be considered, Ekhomu said. For example some Nigerian states are more populated but have less crime than neighbouring ones with fewer people.

Outcomes
Do you agree or disagree with the following statement?

``Cross River State is the safest in Nigeria."

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Cross River State is the safest in Nigeria."

[True / Probably true / Not sure / Probably false / False]

6.
Misinformation

In August 2018, the Vanguard newspaper published the following statement: "About 70% of the children born annually in Nigeria are not registered at birth."

Correction - SPLIT GROUP A - SHOW URL
https://africacheck.org/reports/incorrect-that-70-of-nigerian-children-arent-registered/

TEXT IN URL, FOR REFERENCE NOT TO INCLUDE
When Nigeria's uncertain population figures are discussed, a startling statistic is frequently mentioned – that seven in ten of the country's children aren't registered.

In August 2019, Nigerian newspaper New Telegraph claimed that "about 70% of the children born annually in Nigeria are not registered at birth". It attributed the statistic to the UN Children's Fund (Unicef).

In December 2018, an even more notable source – an official of the National Population Commission – reportedly said as much at a workshop in the north-eastern state of Bauchi.

But is this striking statistic correct?

Data doesn't support claim
Africa Check sent the New Telegraph reporter a LinkedIn message asking for the exact source of the statistic, but he did not respond. Neither did the newspaper editor to a call and a WhatsApp message.

Unicef communications officer Geoffrey Njoku told Africa Check the statistic is outdated.

"According to the 2016/7 Multiple Indicator Cluster Survey, the percentage of children under 5 years whose births are registered is 46.8%."

Unicef collaborated with Nigeria's National Bureau of Statistics to conduct the survey. Carried out from September 2016 to January 2017, it targeted a representative sample of 37,440 households across the country, of which 33,901 responded.

Caregivers were asked whether their child had a birth certificate. If they had, the surveyor asked to see the certificate. If they didn't, the caregiver was asked whether the child had been registered with Nigeria's civil authorities.

The surveyors were shown the birth certificates of close to a quarter of the children (23%). The birth certificate of another 20.2% – whose caregivers reported that the child had one – weren't seen by the survey workers. Some 3.7% of the children didn't have a birth certificate, though they were reported as registered. This left 53.1% of children unregistered, not 70% as often claimed.

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* Asked why this figure differed from the 46.8% in the report summary, Unicef's Njoku said he thinks "it is statistically insignificant".

Low registration rate due to various challenges
Njoku said Nigeria's birth registration rate is low because "people don't see it as important [and also because of] the tedious task of registration [and] the unofficial fees charged by the registration clerks."

Dr Bola Lukman Solanke, from the demography and social statistics department at Obafemi Awolowo University in Osun state, told Africa Check the unavailability of registration points in all public health facilities in the country is another problem.

"A high number of births are recorded with traditional birth attendants who do not have the mandate to register births and so a lot of births that take place with them are unregistered," he said. "Birth registration is part of civil registration and there are consequences for not registering births, which when enforced will push registration figures up."

Registration has increased from 23.3% in 2007 to 41.5% in 2011, according to previous rounds of the Multiple Indicator Cluster Survey. Under the Sustainable Development Goals, Nigeria has committed to registering every child's birth by 2030.

Conclusion: Latest data shows claim is incorrect
While journalists and officials frequently claim that seven out of ten children are not registered in Nigeria, this figure is outdated.

The country's 2016/7 Multiple Indicator Cluster Survey estimated that 53.1% of Nigerian children are unregistered.

Visual correction - SPLIT GROUP B

Please look at the following video.

To feature this video: https://www.facebook.com/AfricaCheck/videos/470777390271925/

Outcomes
Do you agree or disagree with the following statement?

``70% of Nigerian children are not registered at birth."

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

`70% of Nigerian children are not registered at birth."

[True / Probably true / Not sure / Probably false / False]

7.

Misinformation

In August 2019, the WellaHealth insurance service released the following statement: **"Malaria kills an average of 300,000 people yearly in Nigeria."**

Correction - SHOW URL

https://africacheck.org/reports/no-malaria-doesnt-kill-300000-people-in-nigeria-a-year-as-insurance-seller-claimed/

TEXT IN URL, FOR REFERENCE, NOT TO INCLUDE

Malaria kills "an average of 300,000 people yearly" in Nigeria, a health tech start-up tweeted in August 2019, prompting both interest and disbelief from users. The tweet attracted more than 2,300 reactions.

WellaHealth says it works with health insurers to make malaria care affordable. Subscribers to its services can get treatment for N450 a month (about US$1.20).

Nigeria is Africa's most populous country. But does it lose this many people to malaria?

'Our data is from the WHO'

A WellaHealth executive, Olanrewaju Akintobi, attributed the figure to the World Health Organization.

"We don't just cook up data. The figure you are referring to came from WHO," Akintobi told Africa Check.

WellaHealth founder Dr Ikpeme Neto told us the figure was from a 2011 factsheet "from the US

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Department of State that quotes figures from the WHO". The factsheet however did not specifically attribute this number to the UN agency.

Neto said that while malaria deaths in Nigeria had fallen recently, they may have been undercounted. He sent us an August 2019 paper published in Scientific Reports, an open-access journal.

The paper concluded that the burden of malaria in sub-Saharan Africa was "considerably underestimated" when anaemia was not considered. We have contacted the researchers for more details.

Neto also sent an article by US news organisation CNN that said malaria cases had risen in more than 13 countries, including Nigeria. He said WellaHealth believed "the higher number is closer to the reality on the ground".

The CNN report was based on the WHO's 2018 World Malaria Report, the most recent.

Nigeria's share of deaths much lower
The WHO report estimates that there were 435,000 malaria deaths globally in 2017, a decrease from 451,000 deaths in 2016.

If there were 300,000 malaria deaths in Nigeria, this would have been 69% of the global toll.

But the report puts Nigeria's share of global malaria deaths in 2017 at 19%, or 81,640 deaths. Deaths could have been as low as 64,400 or as high as 98,800. This estimate is the lowest since 2010.

Nigeria did see an increase in malaria cases – those confirmed by a diagnostic test – from 52.4 million in 2016 to 53.7 million in 2017.

But it was "definitely incorrect" to say malaria killed 300,000 people in Nigeria a year, Dr Audu Mohammed, who coordinates the country's National Malaria Elimination Programme, told Africa Check.

"Maybe the figure came from WHO reports of more than 10 years ago when Nigeria recorded a lot more deaths from malaria," he said.

"The primary data used for Nigeria in WHO's malaria reports come from us. And I can tell you that annual estimates for malaria deaths in the country have not been that high in recent years."

Two national malaria surveys, in 2010 and 2015, showed that cases and deaths were falling, Mohammed said. The next survey, due in 2020, would "give us a clearer picture".

What of the anaemia question?

Malaria-related deaths from anaemia complications were considered when estimating Nigeria's toll, Prof Olugbenga Mokuolu, the malaria technical director at the National Malaria Elimination Programme, told Africa Check.

"People that die of malaria don't just die, they usually die due to complications. We count malaria-related deaths resulting from all complications, including anaemia, which is the highest on our list of such complications," he said.

"Besides, our Health Management Information System and the statistical model used by WHO takes care of all forms of under-reporting or poor quality data." Mokuolu is also a professor of paediatrics at the University of Ilorin and a consultant for the WHO.

(Note: For more on the challenges of collecting data on malaria in Nigeria and how they are addressed, read our 2018 fact-check of a claim by a major insecticide brand.)

Conclusion: 81,640, not 300,000 lives, lost to malaria in Nigeria each year
To highlight the burden of malaria in Nigeria, a tech start-up said the disease killed an average of 300,000 people in the country a year.

The company said the number was from the World Health Organization. But the WHO's most recent report estimates a much lower toll – 81,640 deaths in 2017.

But there is still work to be done to combat the mosquito-borne disease, as the rising number of malaria cases in the country shows.

Outcomes
Do you agree or disagree with the following statement?

``Malaria kills 300,000 people in Nigeria every year."

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree]

Do you think the following statement is true or false?

``Malaria kills 300,000 people in Nigeria every year."

[True / Probably true / Not sure / Probably false / False]