

Appendix 1. Factor Analysis of trust variables maximum likelihood extraction rotated Promax Kappa 4 showing the three factor solutions: scientific research, social actors and institutions and science and scientists. *Traditional healers show relative low correlations for Morocco and Tanzania and load on different factors.

	Chad	Morocco	D'Congo	Mali	Algeria	Gabon	Tanzania	Kenya	Ghana	Nigeria	Zambia	S' Africa	Africa 40
Trust in Scientific Research													
	Chad	Morocco	D'Congo	Mali	Algeria	Gabon	Tanzania	Kenya	Ghana	Nigeria	Zambia	S' Africa	Africa 40
Factor number	2	2	2	2	2	1	3	1	1	1	2	1	2
Sci. UNI. open, honest	0.40	0.47	0.66	0.43	0.70	0.57	0.32	0.52	0.70	0.74	0.64	0.56	0.60
Sci. UNI. benefit public	0.41		0.62	0.44	0.68	0.41		0.47	0.67	0.67	0.42	0.43	0.54
Sci. COM. open, honest	0.81	0.84	0.80	0.94	0.47	0.88	0.87	0.65	0.75	0.68	0.81	0.81	0.81
Sci. COM. benefit public	0.85	0.74	0.90	0.80	0.49	0.83	0.54	0.68	0.73	0.73	0.51	0.68	0.76
National government													
Journalists													
Traditional healers							0.17*						
People neighbourhood													
NGO, non-profit													
Doctors and nurses													
Science													
Sci. accurate info													
Scientists													
% variance explained	5.01	7.13	26.43	7.23	6.20	34.06	2.67	4.77	37.80	32.78	5.18	27.88	5.08
Trust in Social Actors and Institutions													
	Chad	Morocco	D'Congo	Mali	Algeria	Gabon	Tanzania	Kenya	Ghana	Nigeria	Zambia	S' Africa	Africa 40
Factor number	1	1	1	1	1	2	1	1	2	2	1	3	1
Sci. UNI. open, honest													
Sci. UNI. benefit public		0.40											
Sci. COM. open, honest													
Sci. COM. benefit public													
National government	0.69	0.69	0.77	0.69	0.58	0.72	0.51	0.61	0.61	0.71	0.68	0.57	0.74
Journalists	0.82	0.61	0.71	0.57	0.46	0.66	0.57	0.40	0.54	0.58	0.56	0.52	0.63
Traditional healers	0.42		0.51	0.44	0.39	0.43		0.14	0.45	0.56	0.40	0.25	0.23
People neighbourhood	0.58	0.39	0.50	0.60	0.64	0.43	0.49	0.42	0.38	0.51	0.44	0.35	0.52
NGO, non-profit	0.60	0.63	0.53	0.41	0.35	0.51	0.46	0.38	0.50	0.49	0.51	0.42	0.53

Doctors and nurses	0.64	0.42	0.79	0.77	0.59	0.25	0.53	0.64	0.53	0.45	0.53	0.31	0.66
Science													
Sci. accurate info													
Scientists	0.64	0.53	0.59	0.65	0.47	0.30	0.56	0.42	0.52	0.27	0.39		0.50
% variance explained	39.07	25.84	19.73	33.90	27.87	5.86	27.84	24.03	4.62	6.51	34.94	4.23	35.87
	Trust in Science and Scientists												
Factor number	3	3	3	3	3	3	2	3	3	3	3	2	3
Sci. UNI. open, honest				0.43			0.25						
Sci. UNI. benefit public				0.29		0.32	0.50				0.37		
Sci. COM. open, honest													
Sci. COM. benefit public										0.30			
National government													
Journalists													
Traditional healers		0.19*											
People neighbourhood													
NGO, non-profit													
Doctors and nurses						0.289							
Science	0.54	0.73	1.04	0.75	0.78	0.73	0.60	0.59	0.73	0.67	0.87	0.77	0.70
Sci. accurate info	0.91	0.72	0.46	0.78	0.67	0.85	0.82	0.84	0.63	0.64	0.68	0.77	0.79
Scientists					0.28	0.41				0.47	0.29	0.59	0.24
% variance explained	5.16	4.97	6.56	5.25	3.94	3.76	4.74	4.14	3.15	3.16	3.45	4.69	3.43
	Goodness of fit indices												
Cronbach Alpha	0.89	0.80	0.89	0.86	0.82	0.86	0.80	0.78	0.87	0.85	0.86	0.81	0.85
Factor analysis													
Variance explained	49.25	37.95	52.73	46.38	38.01	43.68	35.24	32.93	45.57	42.45	43.58	36.79	44.37
Goodness-of-fit Test													
Chi-Square	62.36	93.07	70.59	71.23	78.89	149.88	77.29	69.35	125.09	83.47	67.43	77.17	1257.45
Sig.	0.022	0.001	0.004	0.003	0.001	0.001	0.001	0.005	0.001	0.001	0.008	0.001	0.001
KMO Sampling Adequacy	0.92	0.81	0.91	0.89	0.87	0.89	0.89	0.86	0.92	0.90	0.91	0.86	0.92
Bartlett's Test of Sphericity	2420	992	2485	1850	1727	2651	1848	1692	3769	2744	2423	1503	91405
Sig P < 0.05	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Appendix 2.

MGCFA and Goodness of fit indices for 10 countries individually and the 40 countries in the data set

Fit measures for MGCFA include Chi square, Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR), the Akaike information criterion (AIC) and the Bayesian information criterion (BIC) can also be used to compare competing models and make a trade-off between model fit and model complexity. While the CFI ranges from 0-1, the TLI can exceed 1 but acceptable values should be in the 0.90 range, better if they are greater than 0.95. TLI attempts to correct for complexity of the model but is somewhat sensitive to a small sample size. The RMSEA and the SRMR decrease as fit improves, therefore the lower the value the better. The SRMR ranges from 0-1 and is generally agreed that a value less than 0.05 is a good fit and those around 0.8 are acceptable. RMSEA is insensitive to sample size, but sensitive to model complexity (Bialosiewicz, et al (2013).

Multi Group Confirmatory Factor Analysis									
		Chisq	Df	CFI	TLI	AIC	BIC	RMSEA	SRMR
Africa 40	fit.configural	2742.75	124	0.971	0.964	693076	693748	0.044	0.023
	fit.loadings	2757.90	134	0.971	0.967	693071	693663	0.042	0.023
	fit.intercepts	3071.09	144	0.968	0.965	693364	693876	0.043	0.025
	fit.means	3143.42	147	0.967	0.965	693431	693918	0.043	0.026
Chad	fit.configural	221.599	124	0.959	0.949	15920	16274	0.056	0.04
	fit.loadings	231.626	134	0.959	0.952	15910	16222	0.054	0.043
	fit.intercepts	246.04	144	0.957	0.954	15904	16174	0.053	0.045
	fit.means	249.118	147	0.957	0.955	15901	16159	0.053	0.046
Morocco	fit.configural	233.12	124	0.882	0.851	10685	11004	0.073	0.066
	fit.loadings	239.27	134	0.886	0.867	10671	10952	0.069	0.07
	fit.intercepts	275.94	144	0.857	0.845	10688	10931	0.074	0.076
	fit.means	297.48	147	0.837	0.827	10703	10935	0.079	0.089
DR Congo	fit.configural	172	124	0.98	0.975	16592	16942	0.04	0.038
	fit.loadings	182.7	134	0.98	0.977	16583	16891	0.039	0.044
	fit.intercepts	198.99	144	0.978	0.976	16579	16846	0.04	0.046
	fit.means	204.37	147	0.977	0.975	16579	16833	0.04	0.049
Mali	fit.configural	189.38	120	0.962	0.95	13594	13953	0.051	0.044
	fit.loadings	204.65	132	0.96	0.953	13585	13895	0.05	0.051
	fit.intercepts	216.29	142	0.959	0.955	13576	13846	0.049	0.052
	fit.means	229.73	145	0.953	0.95	13584	13841	0.052	0.064
Algeria	fit.configural	188.69	122	0.96	0.949	16873	17248	0.044	0.04
	fit.loadings	197.03	133	0.962	0.955	16860	17186	0.041	0.043
	fit.intercepts	218.51	143	0.955	0.951	16861	17144	0.043	0.046
	fit.means	228.39	146	0.951	0.948	16865	17135	0.044	0.048
Gabon	fit.configural	281.63	118	0.937	0.916	19589	19991	0.066	0.045
	fit.loadings	304.17	131	0.933	0.92	19586	19930	0.064	0.049
	fit.intercepts	330.54	141	0.927	0.919	19592	19891	0.065	0.051
	fit.means	354.51	144	0.918	0.912	19610	19896	0.067	0.063
Tanzania	fit.configural	194.43	122	0.961	0.95	17386	17771	0.043	0.039
	fit.loadings	200.98	133	0.963	0.957	17371	17707	0.04	0.042

	fit.intercepts	233.52	143	0.951	0.946	17383	17674	0.044	0.046
	fit.means	237.62	146	0.95	0.947	17381	17659	0.044	0.049
Kenya	fit.configural	168.69	102	0.959	0.947	20288	20646	0.042	0.039
	fit.loadings	183.06	111	0.956	0.948	20284	20601	0.042	0.045
	fit.intercepts	209.786	120	0.945	0.94	20293	20569	0.045	0.048
	fit.means	210.765	123	0.947	0.943	20288	20550	0.044	0.049
Ghana	fit.configural	280.453	124	0.958	0.947	20827	21222	0.056	0.038
	fit.loadings	285.869	134	0.959	0.953	20812	21160	0.053	0.042
	fit.intercepts	306.766	144	0.956	0.953	20813	21114	0.053	0.044
	fit.means	309.738	147	0.956	0.954	20810	21097	0.052	0.044
Nigeria	fit.configural	221.47	122	0.963	0.952	20099	20494	0.047	0.037
	fit.loadings	240.2	133	0.96	0.953	20096	20440	0.047	0.044
	fit.intercepts	255.36	143	0.958	0.954	20091	20389	0.046	0.045
	fit.means	272.2	146	0.953	0.95	20102	20386	0.049	0.056
Zambia	fit.configural	171.56	118	0.977	0.97	18562	18957	0.039	0.035
	fit.loadings	179.56	131	0.979	0.976	18544	18882	0.035	0.038
	fit.intercepts	195.33	141	0.977	0.975	18540	18834	0.036	0.04
	fit.means	202.1	144	0.975	0.973	18540	18822	0.037	0.045
South Africa	fit.configural	260.61	124	0.949	0.936	20134	20520	0.055	0.042
	fit.loadings	283.35	134	0.944	0.935	20137	20476	0.055	0.05
	fit.intercepts	297.18	144	0.943	0.938	20131	20424	0.054	0.051
	fit.means	314.43	147	0.937	0.934	20142	20422	0.056	0.061