

#### **AUTHOR:**

Bankole Falade<sup>1</sup> iD



#### AFFILIATION:

<sup>1</sup>Department of Psychological and Behavioural Sciences, London School of Economics and Political Science, London, United Kingdom

Current address: South African Research Chair in Science Communication, Centre for Research on Evaluation, Science and Technology (CREST), Stellenbosch University, Stellenbosch, South Africa

#### **CORRESPONDENCE TO:**

Bankole Falade

#### FMAII .

bankolefalade@gmail.com

#### DATES:

Received: 23 Apr. 2017 Revised: 15 Nov. 2017 Accepted: 07 Dec. 2017 Published: 30 May 2018

#### **KEYWORDS:**

cross-cultural studies; cultural metrics: Nigeria: Zimbabwe: Ghana; factor analysis

#### **HOW TO CITE:**

Falade B. Cultural differences and confidence in institutions: Comparing Africa and the USA. S Afr J Sci. 2018;114(5/6), Art. #2017-0135, 8 pages. http://dx.doi.org/10.17159/ sajs.2018/20170135

#### **ARTICLE INCLUDES:**

- Supplementary material
- × Data set

#### **FUNDING:**

None

© 2018. The Author(s). Published under a Creative Commons Attribution Licence.

# **Cultural differences and confidence in institutions: Comparing Africa and the USA**

A comparison was undertaken of confidence in 17 institutions in Ghana, Nigeria, Zimbabwe and the USA using data from the World Values Survey to find shared valuations and distinguishing characteristics as markers of cultural categories. Frequencies and rankings were examined and exploratory factor analysis was used to find plausible meanings of groups of institutions. The findings show that, although African respondents score institutions higher than their US counterparts, the rankings vary. With frequencies, the meaning is manifest. The analysis shows that 10 institutions load similarly on one latent variable and their combinations with the others indicate culture-specific characteristics. The latent variables were named 'not-for-profit', 'for-profit', 'political', 'watchdog or fourth estate' and 'social order' and they show Ghana is closer to the USA than to Nigeria, which is closer to Zimbabwe. The 'not-for-profit' variable is more important in the USA and Ghana and 'political' is more important in Nigeria and Zimbabwe. Institutional-specific loadings show that whereas the police and courts are grouped as 'political' in Nigeria, in other countries they belong to 'social order'; and while universities are perceived as 'for-profit' in Africa, they are 'not-for-profit' in the USA. Comparing frequencies and rankings or dividing along the lines of individualistic versus collective or private and public sectors, masks the dynamic distribution of the systems of meaning in the local cultures; the latent variables approach therefore offers a more conceptually sound categorisation informed by shared and distinguishing institutions.

Nigerians, as at the time of the survey, were yet to perceive the principles of separation of powers between political institutions, the judiciary and the police - an essential feature of a good democracy and a characteristic of other countries in the study. Zimbabweans and Nigerians perceive their public institutions in generally the same way with the domination of the political establishments while Ghanaians are closer to the USA in terms of the values they attach to their establishments with the most important group being the charities. The universities in Africa, as well as the civil service in Nigeria, are associated with business/ profit centres with the Nigerian labour movement also seen as political. The army also remains relevant as a part of the fourth estate in Ghana and Nigeria.

#### **Background**

African countries have in one generation been under colonial, democratic, minority and military regimes and some have fought civil wars.<sup>1,2</sup> The political, social, economic and cultural experiences of individual African countries has thus varied. While many were under colonial rule, others were governed by minority governments. During colonisation, all institutions were controlled by foreign governments. Under military dictatorships, separation of powers, freedom of speech and political association were limited or suspended by decrees. Under minority rule, rights of the black majority were severely curtailed. The experience of the African public with its institutions has thus varied across the countries and this study is about finding the underlying common sources of influence and distinguishing characteristics in comparison with those of a long-established democracy - the USA.

In many African countries, military establishment has been the unofficial opposition party, and at times alternated with the civilian government3 or provided internal stability4; the July 2013 coup in Egypt5 shows that military establishments are still politically active in Africa. Independence of the judiciary and police from regime influence is in doubt under military rule, as human rights and pro-democracy activists and journalists are detained, jailed or killed<sup>6-8</sup>, and under civilian rule, as the outcome of national elections are contested<sup>9,10</sup>.

Southern African countries were free of military rule but were under white minority governments until 1980 in Zimbabwe and 1994 in South Africa. During minority rule, freedom of speech and political association were curtailed; several public institutions and places were segregated and access to political power, education and wealth was limited for blacks. 11,12 There was, however, a 15-year guerrilla warfare with nationalist forces that engaged the white minority government in Zimbabwe<sup>13</sup> and the anti-apartheid resistance movement in South Africa had a military wing, the Umkhonto we Sizwe<sup>14</sup>.

# Case studies: Ghana, Nigeria, Zimbabwe and the USA

The African countries Ghana, Nigeria and Zimbabwe were compared against the USA. Between independence from Britain in 1960 and 1999, when Nigeria's last military rule ended, soldiers held administrative and legislative powers for 29 out of 39 years and in the period of democratic governance, the ruling party was not defeated at federal elections until 2015. From 1966 to 1992, there was a series of military governments in Ghana but since its return to democratic government in 1992, power has changed hands at the central government consistently between one political party and another. Zimbabwe has been free of military intervention in politics since independence in 1980 but it has been governed by only one political party and president. By contrast, the USA has had a much longer history of democratic governance and transfer of power among political parties with the military confined to its constitutional role.

The Hofstede<sup>15</sup> score (https://www.geert-hofstede.com/countries.html) of individualism shows that Ghana with a score of 15 is more collectivist than Nigeria with a score of 30. The more individualistic USA has a score of 91 and no record exists for Zimbabwe. In addition to being collectivist, religion, which is inherently cultural in nature and shapes peoples' psychologies in complex ways,<sup>16,17</sup> is also important in African cultures compared with their Western counterparts.

All three African countries are struggling with weak economies and — like other countries on the continent — corruption, which undermines confidence in institutions. <sup>18</sup> In 2011, of 183 countries measured on the corruption perception index of 0 (highly corrupt) to 10 (very clean), Ghana ranked 69th with an index of 3.9; Nigeria ranked 143rd with 2.4; Zimbabwe 152nd with 2.2; and the USA ranked 24th with an index of 7.1. <sup>19</sup> On the economic front, per capita income — an indicator of personal wealth — was comparatively low for the African countries. Per capita income in 2011 for Nigeria was USD2514, Ghana USD1590, Zimbabwe USD769 and the USA USD49 800. <sup>20</sup> Inflation figures, indicators of macro-economic stability, <sup>21,22</sup> in 2011 (the year under review) were 10.8% for Nigeria, 8.7% for Ghana, 3.2% for Zimbabwe and 3.1% for the USA. Zimbabwe, at the peak of an economic crisis in 2007, had an inflation rate of 24 411%. <sup>23</sup>

The experience of African publics and public perception of the roles of their institutions in society are thus very likely to be different across the continent and from their counterparts in the West. How these differences may act as markers of culture was explored in this study by comparing Ghana, Nigeria and Zimbabwe with the USA. For this research, the African countries are categorised as within culture while comparing with the USA is across cultures. The 17 institutions considered are churches, armed forces, the press, television, labour unions, police, courts, central government, political parties, parliament, civil service, universities, major companies, banks, environmental organisations, women's organisations and charitable or humanitarian organisations. The study uses data from Wave 6 of the World Values Survey (www.worldvaluessurvey.org).

#### Culture, trust and confidence in institutions

#### Culture and institutions

Confidence in institutions is an indicator of the underlying feelings of the public about its polity<sup>24</sup> and is partly determined by subjective well-being, political attitudes, values<sup>25</sup>, the state of the economy, employment, etc.<sup>26</sup> Subjective well-being, ideas, attitudes, values and beliefs are non-material components of culture and the levels of confidence in institutions and patterns of interrelations among them, it is argued here, establishes categorisations which distinguish one culture from the other.

Culture consists of shared elements that provide the standards for perceiving, believing, evaluating, communicating and acting among those who share a language, a historical period and a geographical location.<sup>27,28</sup> It is an embodiment of shared values and categorisations.<sup>29</sup> Noting the distinction and possible conflict between 'inner' and 'outer' models of culture, Mascolo<sup>30</sup> proposes that culture be defined as a dynamic distribution of systems of meanings, practices and artefacts – an approach which underscores the multiplicity and location of meanings in culture.

Also, collectivism and individualism are polythetic constructs whose attributes define cultures. Tollectivism is maximal when a society is low in complexity and tight and individualism is greatest in societies that are loose and complex. Collectivism is high in African societies noted for strong family and in-group bonds, strong adherence to norms and multilingualism compared with their Western counterparts which are more individualistic and often monolingual. Gorodnichenko and Roland argue that countries with collectivist cultures are more likely to experience autocratic breakdowns and transitions from autocracy to autocracy.

Cultural mapping is important to identify shared elements and distinguish characteristics with a view to understanding how meaning systems are distributed<sup>27,28,30</sup> and to know the mechanisms that are implied when certain values are endorsed and others are 'frowned upon'<sup>33</sup>. The evolving

patterns will enhance our understanding of the underlying feelings of the public<sup>24</sup> about these institutions, in the countries of interest and others,

#### Familiarity, confidence and trust

Familiarity, confidence and trust are different modes of asserting expectations but they use self-reference in different ways. Familiarity draws the distinction between familiar and unfamiliar fields and aligns with the familiar while confidence emerges in situations characterised by contingency and danger, which makes it meaningful to reflect on pre-adaptive and protective measures. Trust, however, depends not on inherent danger but on risk which emerges only as a component of decision and action. Trust and confidence refer to expectations which may lapse into disappointments; a relation of confidence may turn to one of trust and, conversely, trust can revert to mere confidence, but it is not a simple zero-sum game.<sup>34</sup>

Luhmann<sup>34</sup> argues that a distinction between confidence and trust is not obsolete, although they belong to the same family of self-assurances and seem to depend on each other and are, at the same time, capable of replacing each other to a certain extent. For Luhmann, in the case of confidence, attribution for disappointment is external while for trust, it is internal. Also, lack of confidence will lead to alienation while lack of trust reduces the range of possibilities for rational action but the withdrawal of trust is not an immediate and necessary result of a lack of confidence. Leaning on Luhmann, Siegrist and colleagues<sup>35</sup> propose that confidence is based on high levels of familiarity and can be had in just about anything while trust is important when familiarity is low and is directed at persons.

#### Trust and confidence in institutions

Authors use the terms faith, confidence and trust in institutions interchangeably. <sup>26,36,37</sup> Some pollsters and researchers use the terms to measure public feelings scaled as trust, confidence or faith in leaders, government and other institutions. Other researchers use them for different variables and at different levels. Twenge et al. <sup>37</sup> use trust at the individual level and confidence at the institutional level. Cook and Gronke<sup>36</sup> separated trust as that in government and confidence as that in institutions while Tyler<sup>36</sup> used public trust and confidence together in research on legal authorities. Hager and Hedberg<sup>39</sup> argue that institutional trust and sector confidence are different from each other but nested within a generalised social trust in unknown others. Again, is the distinction important, in particular, for research?

Lipset and Schneider<sup>26</sup> suggest that while the terms may be varied in individual polls, all the results address the same issue: public mood, feelings or morale about its institutions. Also, Siegrist et al.<sup>35</sup> argue that while the distinction between trust and confidence is a key element of certain theories of cooperation, the dual mode approach has had little impact on empirical studies. However, Newton<sup>40</sup> cites Finland in 1990 where social trust remained high despite the collapse of confidence in parliament and other public institutions and Japan where low and declining levels of trust in government are accompanied by high and increasing levels of social capital. Newton's observation finds support in Luhmann's argument that a social evolution which achieves increasingly complex societies may in fact generate systems which require more confidence as a prerequisite for participation and more trust in partners as a condition for the best utilisation of chances and opportunities.

Here, there is agreement with Lipset and Schneider<sup>26</sup>, but it is noted that for research purposes, a distinction is necessary, as argued by Luhmann<sup>34</sup> and extended by Siegrist et al.<sup>35</sup> The findings of Newton<sup>40</sup> are noted, that is, that cultural differences may make the distinction more important in some countries than in others as in Japan and Finland compared with Lipset and Schneider's<sup>26</sup> research focused on the USA. For analytical purposes, particularly in cross-cultural studies in which researchers are looking for differences and similarities, a separation of both terms is argued for here: trust for persons and confidence in institutions. As Luhmann<sup>34</sup> argues, confidence is best for systems and trust for partners, indicating, for example, that you can have confidence in the judiciary but you need trust for the individual judges. This study, however, relies on confidence in institutions data from the World Values Survey Wave 6.

The study is constrained by unavailability of data to compare responses to both types of question wordings (trust and confidence).

#### Confidence in institutions: State of research

Confidence measures have been used to monitor public perception of institutions following specific issues and events; to track changes on the longitudinal and to compare single items across countries. Price and Romantan<sup>41</sup> and Lipset and Schneider<sup>26</sup> have shown that changing confidence and its direction in one institution does not guarantee commensurate changes in another. Hoffman<sup>42</sup> and Twenge et al.<sup>37</sup> also found that there may be demographic influences. However, Cooke and Gronke<sup>38</sup> argue that noticeable declines in confidence may be the result of a public sceptical of many forms of power and may not necessarily be bad news.

Clausen et al.<sup>18</sup> found a statistically significant negative correlation between corruption and confidence in public institutions. Steen<sup>43</sup> compared levels of confidence in institutions across the Baltic States with France and Norway. Borowski<sup>44</sup> compared frequencies among the post-communist countries Lithuania, Poland, Russia, Ukraine, Czech and Buryat Republics, while Listhaug<sup>25</sup> examined the underlying factors influencing confidence in institutions in Norway.

## Research objectives

Here frequencies (see Steen<sup>43</sup> and Borowski<sup>44</sup>) are compared and the underlying common sources of influence and distinguishing characteristics (see Listhaug<sup>25</sup> and Gregg and Banks<sup>45</sup>) are examined, specifically, in the context of unstable democracies, military influence in politics, religious beliefs, weak economies and comparably lower incomes. The following questions are asked:

- How do the levels of confidence that African publics have in their institutions vary among the countries and compare to those of the USA?
- What are the underlying common sources of influence that characterise the perception of institutions by Africans and how do they compare with those of the USA?

#### **Data and methods**

The data for this research were obtained from the World Values Survey Wave 6 which consisted of 17 questions, V108 to V124, listed earlier, and which are common to all countries in comparison. The question was:

Please look at this card and tell me, for each item, how much confidence you have in them. Is it 'A great deal' (4), 'Quite a lot' (3) 'Not very much' (2) or 'None at all' (1).

Confidence levels were derived from the sum of 'A great deal' (4) and 'Quite a lot' (3). The sample size subject to variable ratio for Zimbabwe was 1500/17=88 to 1; Ghana 1552/17=91 to 1; Nigeria 1759/17=103 to 1 and the USA 2232/17=131 to 1. Additional World Values Survey data for Nigeria in 2000 (Wave 4), Zimbabwe 2001 (Wave 4) and Ghana 2006 (Wave 5) were also used to monitor frequency changes within countries.

Frequencies were compared, but this comparison alone is considered insufficient because of issues relating to the local meaning of constructs being influenced by culture and contextual differences. A6-48 Therefore sets of variables for shared and distinguishing characteristics were also compared. Wagner et al. A6 argue for the use of a 'cultural metric' – a set of items or variables that are inter-related and that mutually specify each other's local meaning in a culture or language group. Wagner and colleagues argue that only an interaction found in one culture that is replicated in another allows the conclusion that the effect is shared.

Cognitive and social psychology studies indicate that individuals and groups rely on several sources of meaning embedded in common sense. These multiple sources can be directly measured or observed as 'manifest' variables. The variable 'religiosity', for example, can be measured directly with the question 'how religious are you?' and the answer options on a scale of say 0 to 6. Here we expect the respondent

to aggregate all the meaning sources in a single response. The same religiosity can be measured by asking several questions that address different sources of meaning for the concept, such as 'how many times do you attend religious services?', 'how many times do you pray in a day?', 'how strongly do you believe in heaven?', all also measured on a scale of 0 to 6. We can then apply a data reduction technique such as factor analysis which groups variables by similarities into sense-making groups (factors or dimensions) called 'latent' (or unobserved) variables. The result of the reduction may indicate one underlying sense-making group (unidimensional) or several groups (multidimensional). Latent variables, factors and dimensions are used interchangeably in this paper. The additional advantage of latent variables is that they make up for the inconsistencies that may be in the single-variable self-assessment.

Exploratory factor analysis was used to categorise the variables (see Appendix 1 in the supplementary material). The assumption of factor analysis is that several manifest variables depend on the same latent variable and this dependence induces a correlation (relationship) between them, denoting the existence of a common source of influence. <sup>47,49,50</sup> The aim of the factor analysis, as with cultural metrics, is to determine if the observed variables can be grouped into sets, thereby establishing the 'semantic scaffolding' that a local notion maintains with a set of other terms.

The Factor Analysis function on the SPSS package was used for the analyses and the Promax oblique rotation was chosen over its orthogonal counterpart as there are significant correlations among the items. The extraction method was Maximum Likelihood as findings can be generalised to the larger population.<sup>51</sup>

## **Findings**

#### Comparing frequencies

**Question 1:** How do the levels of confidence that African publics have in their institutions vary among the countries and compare to those of the USA?

Confidence levels were generally higher in African countries than in the USA, with the exception of the army and the police, but the rankings do vary (Table 1). Confidence levels are spread between 83% and 11% in the USA; 86% and 34% in Zimbabwe; 89% and 39% in Ghana and between 92% and 28% in Nigeria. This spread may be an indication that the countries have different approaches to scale use or that the US respondents are more sceptical<sup>38</sup> than their African counterparts. The highest level of confidence in the USA is in the army while in African countries, it is in the churches.

The university is the only institution that occupies one of the first four positions across all the countries. Confidence levels in the courts are quite close (55% to 57%), except for Nigeria at 46%; the rankings also vary, with US respondents ranking courts higher than the other countries. While confidence in the police is the second highest in the USA, it is the lowest in Nigeria and third to last in Ghana. Confidence in political parties occupies the bottom of the table in the USA, Zimbabwe and Ghana, but the levels are again different, and is second to last in Nigeria. Confidence in central government occupies the same position in the USA, Ghana and Zimbabwe, but is at a lower place in Nigeria. Confidence in parliament in Zimbabwe and Nigeria occupy the same position, fourth to last, and the same position in the USA and Ghana, at second to last.

In conclusion for Question 1, there are varying levels of confidence across cultures and ranking offers additional comparative statistics for single items. The higher levels of confidence in African countries do not manifestly reflect their poorer economic indices and status as emerging democracies.

Table 2 shows that confidence in churches has remained very high across the three African states, despite falling slightly in Nigeria and Ghana. Confidence in the army has also increased across all three African countries but with a higher 17-point rise in Nigeria. The last military intervention in Nigeria ended in 1999 – 1 year before the first survey in 2000; there were 12 years of uninterrupted civilian rule by the next wave in 2011. Confidence in parliament has risen marginally in Zimbabwe but dropped in Nigeria, with an even steeper drop in Ghana.

**Table 1:** Confidence levels ranking (%): 'A great deal' and 'Quite a lot'

USA		Zimbabwe	Ghana		Nigeria		
Army	83	Churches	86	Churches	89	Churches	92
Police	70	Universities	81	Universities	85	Banks	71
Universities	62	Charities	74	Banks	79	Television	71
Charities	62	Major companies	72	Army	79	Universities	70
Churches	59	Banks	70	Charities	76	Major companies	66
Courts	55	Environmental organisations	66	Major companies	75	Army	63
Women's organisations	51	Women's organisations	64	Women's organisations	72	Charities	62
Environmental organisations	48	Army	57	Television	72	The press	62
Civil service	46	Courts	56	Environmental organisations	69	Civil service	59
Banks	39	Civil service	53	Civil service	67	Women's organisations	57
Major companies	33	Police	52	The press	59	Environmental organisations	56
Central government	32	Central government	47	Central government	59	Unions	47
Unions	24	Television	46	Unions	58	Courts	46
Television	23	Parliament	45	Courts	57	Parliament	39
The press	22	Unions	44	Police	55	Central government	36
Parliament	19	The press	35	Parliament	54	Political parties	31
Political parties	11	Political parties	34	Political parties	39	Police	28

The percentage of 'Don't know' responses is nil for churches in Nigeria in 2000 and Ghana in 2007 and is low (1%) in Zimbabwe in 2001. It is 1–3% for the police across the countries. These figures may indicate high levels of familiarity<sup>34,35</sup> with the institutions and much less ambivalence in the population about their roles. For other institutions, 'Don't know' is comparatively high in Zimbabwe in 2001. The figure for unions is surprising, given their involvement in politics.<sup>52</sup> The year 2001 was a period of political and economic uncertainty in Zimbabwe as inflation had hit 76% and was climbing – reaching 24 400% in 2007 from 17% in 1990 when the Lancaster constitution expired and anxieties were high over land redistribution.<sup>23,53</sup> It is plausible, given the ongoing crisis, that the public in Zimbabwe was reluctant to express an opinion about these institutions.

#### Structural analysis and cultural metrics

**Question 2:** What are the underlying common sources of influence that characterise the perception of institutions by Africans and how do they compare with those of the USA?

Cronbach's alpha<sup>54</sup>, a measure of internal consistency, for all 17 variables for the four countries was 0.9, which indicates high scale reliability. The Pearson's correlation table also showed significant positive correlations (association) among all items in the Ghanaian data at 0.01 level of significance and the highest was between police and courts at 0.617, while the lowest was between the unions and the churches at 0.121. All variables were significantly positively correlated at the 0.01 level for the Nigerian data, except between parliament and churches which was significant at 0.05, and the highest correlation of 0.627 was between parliament and the central government while the lowest (0.057) was between parliament and churches. All variables were significantly positively correlated for the Zimbabwean data at a 0.01 level, except environmental organisations which did not show any significance with churches (0.034) and the highest correlation of 0.663, as for the Ghanaian data, was between the police and the courts. With the US data, labour unions were not significantly correlated with churches (0.024) and environmental organisations were also not correlated significantly with churches (-0.024) and armed forces (0.026). All other variables showed significant correlations at the 0.01 level with the highest between parliament and political parties at 0.687. These results are given in the supplementary material.

A hypothetical theoretical analysis will split the 17 institutions into collectivist and individualistic countries. Another approach, informed by functions, will split them into private and public sector. Both assumptions presuppose a two-factor solution. Several solutions were considered based on the statistical outputs (scree plots), the meaningfulness of the factors and the research question. A five-factor solution was found to be most appropriate for comparison and labelled as follows: 'not-for-profit or charities'; 'political'; 'social order'; 'watchdog or fourth estate' and 'for-profit' or 'business'. The Nigerian data, however, fit best with a fourfactor solution as a fifth displays only one variable which is negligible because it does not have a substantive interpretation.50 The factors reveal the underlying order and the names are a concept operationalised by the factor. The factor labels thus comprise a set of concepts with high generalising power for cross-national studies.<sup>45</sup> The proportion of each factor shows its relative weight or importance in the analysis when compared with the others. The rank ordering of each variable also shows its relative importance within each meaning unit.

The figures for 'communalities', the extent to which a variable associates with others, are very low for churches in Nigeria (0.163), Ghana (0.11) and Zimbabwe (0.06), and were thus excluded. The low communalities for churches is an indication that they are quite unique and have little underlying characteristics in common with other institutions. For the USA, a communality of 0.25 for churches is also low; however, it was included in the analysis because the factor loadings were above the threshold of 0.3. Most of the other communalities<sup>55</sup> were above 0.40 across countries and where they dipped slightly below, the influence of the large sample sizes, the loadings on the pattern matrix and the essence of the variable's inclusion in cross-cultural comparisons were considered.

**Table 2:** Changing levels of confidence in African countries (%)

	Nig	Nigeria		Zimbabwe		ana	Nigeria	Zimbabwe	Ghana
	2000	2011	2001	2011	2007	2011	DKa 2000	DKa 2001	DKa 2007
Churches	95	92	82	86	90	89	0	1	0
Army	46	63	55	57	76	79	2	11	1
The press	63	62	49	35	54	59	2	11	4
Television	71	71	52	46	69	72	1	11	2
Unions	63	47	46	44	46	58	3	26	9
Police	34	28	63	52	54	55	1	3	1
Courts		46		56	62	57			1
Central government	46	36	48	47	71	59	4	7	1
Political parties	43	31	24	34		39	3	18	
Parliament	43	39	43	45	63	54	5	14	2
Civil service	69	59	53	53	59	67	3	10	4
Universities		70		81		85			
Major companies	68	66	67	72	55	75	3	12	6
Banks		71		70		79			
Environmental organisations	58	56	45	66	59	69	4	35	6
Women's organisations	50	57	46	64	64	72	7	22	5
Charities		62		74	64	76			6
N	2022	1759	1002	1500	1534	1552	2022	1002	1534

a'Don't know' response

All the statistical outputs indicate the method was appropriate. The determinant was 0.001 for the USA and Nigeria, 0.003 for Ghana and 0.002 for Zimbabwe. For all countries, the Kaiser–Meyer–Olkin Measure of Sampling Adequacy was 0.9; Bartlett's Test of Sphericity was highly significant (p<0.001) and the goodness-of-fit test was also highly significant (p<0.001). Cronbach's alpha was also computed separately for items relating to the different factors. Minimum loading for interpretation was set at 0.3.  $^{51.57}$ 

The results show 10 variables with shared positions in a factor across countries – the similarities – but the positions vary. The variables are environmental NGOs, women's organisations, charities, parliament, parties, central government, television, the press, major companies and banks. There were differences in the positioning of the other seven factors denoting the unique combinations of each culture.

With the US data, the first dimension (factor) with a proportion of 34% (also referred to as explained variance) is dominant, hence most important on and comprises environmental organisations with the highest loading of 0.85 followed by women's organisations, charities, universities, labour unions and civil service (Table 3). The factor was named 'not-for-profit' based on the composition of the institutions and the loadings profile. Unions, however, has a cross loading on the watchdog.

The first dimension is also the most important in Ghana (35%) but with fewer institutions: women's organisations, charities and environmental organisations. The shared profile of the dominant dimension indicates similarity between the Ghanaian and US data.

The variables with shared values in the 'not-for-profit' factor for all four countries are the charities, women's organisations and environmental NGOs.

 Table 3:
 The not-for-profit cultural metric

The field profit outday motion							
	USA	Zimbabwe	Nigeria	Ghana			
Factor	1	2	4	1			
Environmental NGOs	0.85	0.70	0.56	0.67			
Women's organisations	0.82	0.74	0.91	0.82			
Charities	0.70	0.63	0.66	0.80			
Universities	0.58						
Labour unions	0.34*						
Civil service	0.31						
% variance	34	10	3	35			
Cronbach's alpha	0.8	0.7	0.8	0.8			

<sup>\*</sup>Cross loading

Dimension one for Nigeria (Table 4) is also the most important at 37% and is populated by political institutions. Central government has the highest loading of 0.87 followed by parliament and political parties. It also features the police, courts and labour unions — an association that signifies an underlying feeling of an autocratic system. It provides plausible evidence of Nigeria being more autocratic than Ghana which, despite being more collective, has been credited with the emergence of good autocrats. 32 It also

indicates that the separation of powers between the judiciary, the police and the executive branch remains in doubt in Nigeria. 9,10 The labour unions are also known to be divided between those who support the ruling elite and those against and may account for the cross loading with watchdog.

**Table 4:** The political cultural metric

	USA	Zimbabwe	Nigeria	Ghana
Factor	2	1	1	2
Labour unions			0.33*	
Civil service		0.39		0.38
Parliament	0.98	0.94	0.82	0.95
Political parties	0.76	0.70	0.75	0.60
Central government	0.71	0.48*	0.87	0.38*
Police			0.57	
Courts			0.53	
% variance	8	34	37	7
Cronbach's alpha	0.8	0.8	0.8	0.8

<sup>\*</sup>Cross loading

Dimension one, at 34%, is also the most important for Zimbabwe (Table 4) and is populated, as for Nigeria, by the parliament, political parties and central government, indicating strong similarity between both countries. For Zimbabwe, however, the police and courts load on the social order metric and labour unions on watchdog. Comparing Ghana and Zimbabwe, civil service loads on the political metric and central government has a cross loading with the social order category for both countries.

The rank ordering within the dimension also shows that parliament is above the parties and central government in all countries except Nigeria, where the central government is highest.

Table 5: Watchdog cultural metric

	USA	Zimbabwe	Nigeria	Ghana
Factor	4	3	3	3
Labour unions	0.33*	0.34	0.31*	
Armed forces			0.50	0.32
Television	0.85	0.77	0.66	0.80
The press	0.75	0.84	0.85	0.79
% variance	4	4	4	4
Cronbach's alpha	0.7	0.7	0.7	0.7

<sup>\*</sup>Cross loading

The press and television comprise the watchdog across countries but labour unions also load here in the USA, Nigeria (cross loadings) and Zimbabwe. The armed forces in Nigeria and Ghana also belong to this group. This is not unexpected in Nigeria and Ghana given the long period of military rule as the public may still see the soldiers as a check on the

politicians. Zimbabwe had no experience of military rule as at the time of data collection in 2011. The threat of military intervention, however, remains high in African countries following the recent coup in Egypt<sup>5</sup> and the November 2017 putsch in Zimbabwe.

**Table 6:** For-profit/business cultural metric

	USA	Zimbabwe	Nigeria	Ghana
Factor	5	4	2	4
Universities		0.74	0.79	0.68
Civil service			0.47	
Major companies	0.73	0.79	0.79	0.71
Banks	0.68	0.54	0.72	0.72
Churches	0.30*			
% variance	4	3	9	3
Cronbach's alpha	0.6	0.7	0.8	0.8

<sup>\*</sup>Cross loading

The for-profit category features major companies and banks across all countries. In addition, and as a mark of different cultures, universities in Ghana, Nigeria and Zimbabwe also load strongly on this factor. The loading of universities on this metric is a major surprise as universities are traditionally for teaching and research and not profit centres. The civil service in Nigeria also loads on this factor, which may be explained by the relatively high level of corruption among public sector workers. Also, interesting for this group, is the loading of churches in the USA, although it is not very high at 0.30. Churches in the USA also load with the same level (0.30) on the social category.

**Table 7:** The social order cultural metric

	SN	Zimbabwe	Ghana
Factor	3	5	5
Central government		0.45*	0.32*
Police	0.92	0.75	0.86
Courts	0.61	0.84	0.74
Armed forces	0.54	0.38	
Churches	0.30*		
% variance	6	3	3
Cronbach's alpha	0.7	0.8	0.8

<sup>\*</sup>Cross loading

The social order category also has cross loadings of central government for Zimbabwe and Ghana. The police and courts are common among three countries: the USA, Ghana and Zimbabwe. The armed forces in the USA and Zimbabwe also belong to this group in contrast with Nigeria and Ghana where they belong to the watchdog group. There are no variables for Nigeria in this category; the police and courts are on the political factor.

In conclusion for Question 2, there are five cultural metrics: not-for-profit, political, social order, watchdog and for-profit. The analyses have also shown that the underlying influences of the levels of confidence in institutions makes Ghana closer to the USA and Nigeria closer to Zimbabwe. It can also be deduced that the lack of separation of courts and police from democratic institutions in Nigeria is an indication of a continuing autocratic system and the low communalities for churches shows they are not seen by the public as an institution in the same manner in which other institutions are viewed.

#### **Limitations and further research**

The high levels of 'Don't know' in the responses for Zimbabwe need to be further interrogated to ascertain if it is a persistent situation or if the economic crisis at the time of data collection was responsible for such high levels of ambivalence.

More qualitative research through interviews and multi-country focus groups is needed to illuminate the composition of the cultural metrics across the countries. Why, for example, do Nigerians see the parliament, the political parties, the central government, police and courts as the same? Is this an indication that Nigeria is more autocratic than other African countries? Why is Ghana closer to a Western democracy, the USA, than other African countries in the sample?

#### **Conclusions**

Comparing frequencies has shown that poorer economic indices and relatively unstable democracies have not translated into comparatively lower confidence in African institutions as levels are higher than those observed in the USA. Frequencies range between 83% and 11% in the USA; 86% and 34% in Zimbabwe; 89% and 39% in Ghana and 92% and 28% in Nigeria. These percentages may, however, indicate different approaches to scale use or that US respondents are more sceptical<sup>38</sup> than Africans.

The rankings show that different institutions occupy different positions in the hierarchy and those with almost the same position have different levels of confidence. The army occupies the highest position in the USA and churches occupy the highest position in Africa. The university is always in the first four positions across all countries. Confidence in central government occupies the same position in the USA, Ghana and Zimbabwe, but is lower in Nigeria.

The underlying common sources of influence show that the 17 institutions can be grouped into five latent categories: 'not-for-profit'; 'political'; 'social order'; 'watchdog' and 'for-profit or business'. The positioning of the variables on the factors show the shared elements and differences which distinguish the cultures and confirms the power of the method for cross-national studies. It can be inferred that charities, women's organisations and environmental NGOs are more important and, by extension, more central to the public in the USA and Ghana, and less so in Nigeria and Zimbabwe. The political order is also more important to the public in Nigeria and Zimbabwe. This finding is crucial and adds empirical evidence to the effects of relative democratic stability in the USA and Ghana compared with Nigeria and Zimbabwe. Ghana is a surprise given that, like Nigeria and Zimbabwe, it is a young democracy with a recent history of colonial and military rule.

This study has shown that comparing frequencies and rankings, or dividing along the lines of individualistic versus collective or private and public sector, masks the dynamic distribution of the systems of meaning in the local cultures and the latent variables approach offers a more conceptually sound categorisation informed by shared and distinguishing institutions. The findings show that such measures can be used as reliable markers of culture for cross-national studies and in longitudinal studies to monitor changing perspectives.

#### Acknowledgements

Assistance for writing and publication was received from the MACAS-project (Mapping the Cultural Authority of Science) (www.macas-project.com) Economic and Social Research Council (ESRC), UK grant ES/

K005820/1, through the Department of Psychological and Behavioural Sciences (DPBS), London School of Economics and Political Science.

#### References

- Elbadawi E, Sambanis N. Why are there so many civil wars in Africa? Understanding and preventing violent conflict. J Afr Econ. 2000;9(3):244–269. https://doi.org/10.1093/jae/9.3.244
- Gutteridge W. Undoing military coups in Africa. Third World Q. 1985;7(1):78– 89. http://dx.doi.org/10.1080/01436598508419825
- Johnson TH, Slater RO, McGowan P. Explaining African military coups d'etat, 1960-1982. Am Polit Sci Rev. 1983;78(03):622–640. http://dx.doi. org/10.2307/1961833
- Cook SA. Ruling but not governing: The military and political development in Egypt, Algeria, and Turkey. Baltimore, MD: Johns Hopkins University Press; 2007
- Kirkpatrick DD. Army ousts Egypt's president; Morsi is taken into military custody. New York Times. 2013 July 3. Available from: http://www.nytimes. com/2013/07/04/world/middleeast/egypt.html? r=0
- Olukoshi A, Mustapha AR, Soyinka W, Mnthali F. A tribute to Ken Saro-Wiwa. Rev Afr Polit Econ. 1995;22(66):471–480. http://dx.doi. org/10.1080/03056249508704152
- French HW. Nigeria executes critic of regime; nations protest. New York Times. 1995 November 11. Available from: http://www.nytimes. com/1995/11/11/world/nigeria-executes-critic-of-regime-nations-protest. html?pagewanted=all
- Reuters. Parcel bomb kills Nigerian journalist accused of plotting. New York Times. 1986 October 20. Available from: http://www.nytimes. com/1986/10/20/world/parcel-bomb-kills-nigerian-journalist-accused-of-plotting.html
- Idowu W. Corruption, the police and the challenges of a free and fair election in Nigeria. JSDA. 2010;12(7):1–12.
- Oko O. Seeking justice in transitional societies: An analysis of the problems and failures of the judiciary in Nigeria. Brook J Int'l L. 2005;31(1):9–82.
- 11. Kallaway P. Apartheid and education: The education of black South Africans. Johannesburg: Ravan Press; 1984.
- Wolpe H. Capitalism and cheap labour-power in South Africa: From segregation to apartheid. Econ Soc. 1972;1(4):425–456. http://dx.doi. org/10.1080/03085147200000023
- Martin D, Johnson P, Mugabe R. The struggle for Zimbabwe: The Chimurenga war. London: Faber & Faber; 1981.
- 14. Ellis S. The ANC in exile. Afr Affairs. 1991;90(360):439-447.
- Hofstede G. Culture's consequences: Comparing values, behaviors, institutions and organizations across nations. 2nd ed. Thousand Oaks, CA: Sage; 2001.
- Cohen AB, Wu MS, Miller J. Religion and culture: Individualism and collectivism in the East and West. J Cross-Cult Psychol. 2016;47(9):1236– 1249. https://doi.org/10.1177/0022022116667895
- Cohen AB. Religion's profound influences on psychology morality, intergroup relations, self-construal, and enculturation. Curr Dir Psychol Sci. 2015;24(1):77–82. https://doi.org/10.1177/0963721414553265
- Clausen B, Kraay A, Nyiri Z. Corruption and confidence in public institutions: Evidence from a global survey. The World Bank Econ Rev. 2011;25(2):212–249. http://dx.doi.org/10.1596/1813-9450-5157
- Transparency International. Corruption Perception Index for year 2011. Berlin: Transparency International; 2011. Available from: https://www.transparency.org/cpi2011/results
- World Bank. GDP per capita (current US\$). World Bank national accounts data, and OECD National Accounts data files. Washington DC: World Bank; 2016. Available from: http://data.worldbank.org/indicator/NY.GDP.PCAP. CD?end=2012&start=1960
- Clarida R, Gali J, Gertler M. Monetary policy rules and macroeconomic stability: Evidence and some theory. Q J Econ. 2000;115(1):147–180. https://doi.org/10.1162/003355300554692

- Svensson LE. Inflation forecast targeting: Implementing and monitoring inflation targets. Eur Econ Rev. 1997;41(6):1111–1146. https://doi. org/10.1016/S0014-2921(96)00055-4
- World Bank. Inflation, consumer prices (annual %). International Monetary Fund, International Financial Statistics and data files. Washington DC: World Bank; 2016. Available from: http://data.worldbank.org/indicator/FP.CPI.TOTL. ZG?end=2012&start=1960
- Newton K, Norris P. Confidence in public institutions: Faith, culture or performance? In: Pharr SJ, Putnam RD, editors. Disaffected democracies: What's troubling the trilateral countries. Princeton, NJ: Princeton University Press; 1999. p. 52–73.
- Listhaug O. Confidence in institutions: Findings from the Norwegian Values Study. Acta Sociol. 1984;27(2):111–122. https://doi. org/10.1177/000169938402700202
- Lipset SM, Schneider W. The confidence gap: business, labour and government in the public mind (Rev ed.). Baltimore, MD: Johns Hopkins University Press;1987.
- Triandis HC. The psychological measurement of cultural syndromes.
   Am Psychol. 1996;31(4):407–415. http://dx.doi.org/10.1037/0003-066X.51.4.407
- 28. Shweder R, LeVine RA. Culture theory. Essays on mind, self, and emotion. Cambridge, UK: Cambridge University Press; 1984.
- Gartstein MA, Carranza JA, González-Salinas C, Ato E, Galián MD, Erickson NL, et al. Cross-cultural comparisons of infant fear: A multi-method study in Spain and the United States. J Cross-Cult Psychol. 2016;47(9):1178–1193. https://doi.org/10.1177/0022022116663851
- 30. Mascolo MF. The coactive construction of selves in cultures. New Dir Child Adolesc Dev. 2004;2004(104):79–90. http://dx.doi.org/10.1002/cd.105
- Triandis HC. Individualism and collectivism. Boulder, CO: Westview Press; 1995.
- Gorodnichenko Y, Roland G. Culture, institutions and democratization. NBER Working Paper no. 21117. JEL no. H1,P48,Z1. Cambridge, MA: National Bureau of Economic Research; 2015. http://dx.doi.org/10.3386/w21117
- De Raad B, Morales-Vives F, Barelds DP, Van Oudenhoven JP, Renner W, Timmerman ME. Values in a cross-cultural triangle: A comparison of value taxonomies in the Netherlands, Austria, and Spain. J Cross-Cult Psychol. 2016;47(8):1053–1075. https://doi.org/10.1177/0022022116659698
- Luhmann N. Familiarity, confidence and trust: Problems and alternatives. In Gambetta D, editor. Trust: Making and breaking of cooperative relations. Oxford: Blackwell; 1998. p. 94–107.
- 35. Siegrist M, Gutscher H, Earle TC. Perception of risk: The influence of general trust, and general confidence. J Risk Res. 2005;8(2):145–156.
- Tyler TR. Public trust and confidence in legal authorities: What do majority and minority group members want from the law and legal institutions. Behav Sci Law. 2001;19(2):215–235. http://dx.doi.org/10.1002/bsl.438
- Twenge JM, Campbell WK, Carter NT. Declines in trust in others and confidence in institutions among American adults and late adolescents 1972–2012. Psychol Sci. 2014;25(10):1914–1923. http://dx.doi. org/10.1177/0956797614545133
- 38. Cook TE, Gronke P. The sceptical American: Revisiting the meanings of trust in government and confidence in institutions. J Polit. 2005;67(3):784–803. http://dx.doi.org/10.1111/j.1468-2508.2005.00339.x

- Hager MA, Hedberg EC. Institutional trust, sector confidence, and charitable giving. J Nonprofit Public Sec Mark. 2016;28(2):164–184. http://dx.doi.org/ 10.1080/10495142.2015.1011508
- Newton K. Trust, social capital, civil society, and democracy. Int Polit Sci Rev. 2001;22(2):201–214. https://doi.org/10.1177/0192512101222004
- Price V, Romantan A. Confidence in institutions before, during, and after 'Indecision 2000'. J Polit. 2004;66(3):939–956. https://doi.org/10.1111/ j.1468-2508.2004.00284.x
- Hoffman JP. Confidence in religious institutions and secularization: Trends and implications. Rev Rel Res. 1998;39(4):321–343. https://doi. org/10.2307/3512442
- Steen A. Confidence in institutions in post-communist societies: The case of the Baltic States. Scand Polit Stud. 1996;19(3):205–225. https://doi. org/10.1111/j.1467-9477.1996.tb00391.x
- Borowski A. Confidence in social institutions in the post-communist countries. ILSHS. 2014;25:7–17. https://doi.org/10.18052/www.scipress. com/ILSHS.25.7
- Gregg PM, Banks AS. Dimensions of political systems: Factor analysis of a cross-polity survey. Am Polit Sci Rev. 1965;59(3):602–614. https://doi. org/10.2307/1953171
- Wagner W, Hansen K, Kronberger N. Quantitative and qualitative research across cultures and languages: Cultural metrics and their application. Integr Psychol Behav. 2014;48(4):418–434. https://doi.org/10.1007/s12124-014-9269-z
- Treier S, Jackman S. Democracy as a latent variable. Am J Polit Sci. 2008;52(1):201–217. https://doi.org/10.1111/j.1540-5907.2007.00308.x
- Pardo R, Calvo F. Attitudes towards science among the European public: A methodological analysis. Public Underst Sci. 2002;11(2):155–195. https:// doi.org/10.1088/0963-6625/11/2/305
- Bartholomew DJ, Steele F, Galbraith J, Moustaki I. Analysis of multivariate social science data. Boca Raton, FL: CRC Press; 2008.
- Marks G, Steenbergen MR. European integration and political conflict. Cambridge, UK: Cambridge University Press; 2004. http://dx.doi.org/10.1017/ CB09780511492013
- 51. Fields A. Discovering statistics using SPSS. 2nd ed. London: Sage; 2005.
- Raftopoulos B. The labour movement and the emergence of opposition politics in Zimbabwe. Labour Cap Soc. 2000;33(2):256–286.
- Moyo S. The political economy of land acquisition and redistribution in Zimbabwe, 1990-1999. J S Afr Stud. 2000;26(1):5–28. http://dx.doi. org/10.1080/030570700108351
- Cronbach LJ. Coefficient alpha and the internal structure of tests, Psychometrika. 1951;16(3):297–334. http://dx.doi.org/10.1007/ BF02310555
- Velicer WF, Fava JL. Effects of variable and subject sampling on factor pattern recovery. Psychol Methods. 1998;3(2):231–251. http://dx.doi. org/10.1037//1082-989X.3.2.231
- Cortina JM. What is coefficient alpha? An examination of theory and application. J Appl Psychol. 1993;78(1):98–104. http://dx.doi. org/10.1037/0021-9010.78.1.98
- Tabachnick BG, Fidell LS. Using multivariate statistics. Boston, MA: Allyn and Bacon; 2001.

