

GLOBE Leadership and Societal Perspectives

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Explore the GLOBE

STATS 140XP · Fall 2021

GLOBE
Leadership
and Societal
Perspectives

**Explore the
GLOBE**

Introducing
the Data

Analysis

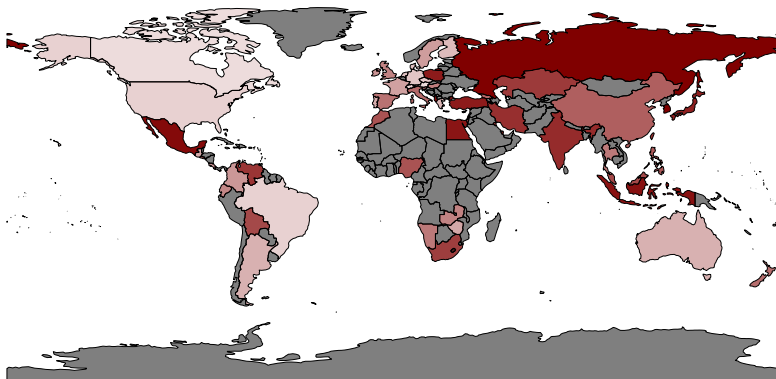
Conclusions

Introducing the Data

- GLOBE (Global Leadership & Organizational Behavior Effectiveness)
 - Goal: Identify the relationships between various leadership and societal characteristics
 - Over 17,000 middle managers, 62 cultures
 - Leadership survey from 1 (negative) to 7 (positive)
 - Societal survey not necessarily coded the same as leadership
 - Did not end up affecting our analysis
 - Only cared about relationships between variables
 - Societal coded the same way for a given characteristic
- Outside source: ISO Codes from Wikipedia
 - Uniform identifiers for countries for visualization purposes

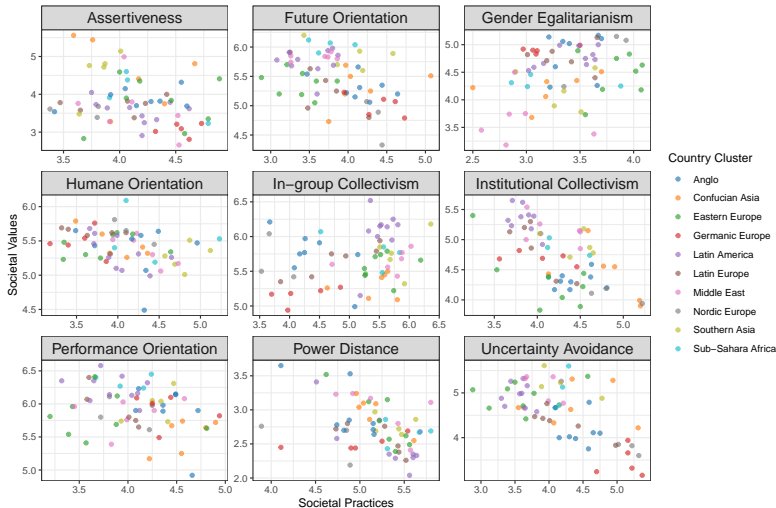
Exploratory Data Analysis

Autocratic Levels by Country



Exploratory Data Analysis

Values vs. Practices by Cultural Dimension and Country Cluster



Note: Countries with missing country clusters were excluded.

- ① Which characteristics or traits do countries tend to group together when determining “good” leadership values?
 - Which countries have similar perceptions of these leadership values?
- ② Do societal practices and societal values align?
 - If they do not, which practices and values deviate most significantly?

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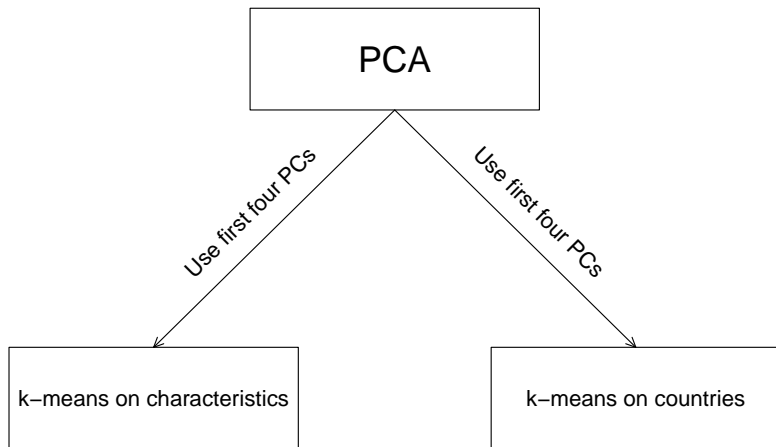
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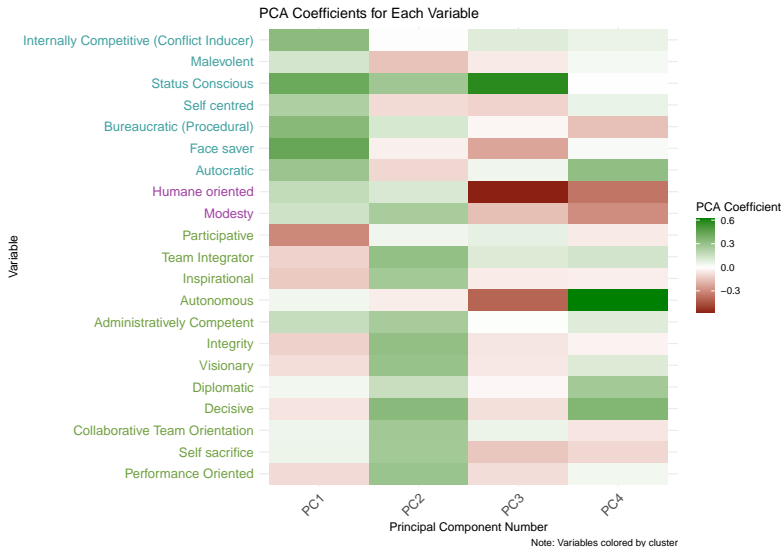
Leadership Clusters: Methodology

- ① Remove second-order factor analysis variables (difficult for interpretation)
- ② Perform PCA on the remaining numeric variables
- ③ Perform *k*-means clustering on the first four principal components for both characteristics and countries
 - Choose first four PCs because they explain around 80% of the variation

Methodology for Leadership Analysis



Leadership Clusters: Characteristics

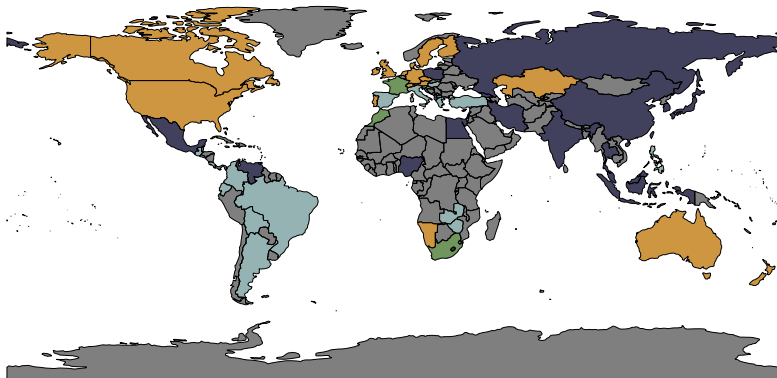


Leadership Clusters: Characteristics

- ① Internally competitive, malevolent, status conscious, self-centred, bureaucratic, face saver, autocratic
 - Negative characteristics
- ② Humane-oriented, modesty
 - Distinctly different group of two
- ③ Participative, team integrator, inspirational, autonomous, administratively competent, integrity, visionary, diplomatic, decisive, collaborative team orientation, self-sacrifice, performance-oriented
 - Positive characteristics

Leadership Clusters: Countries

K-Means Clustering ($k = 4$) on the First Four Principal Components

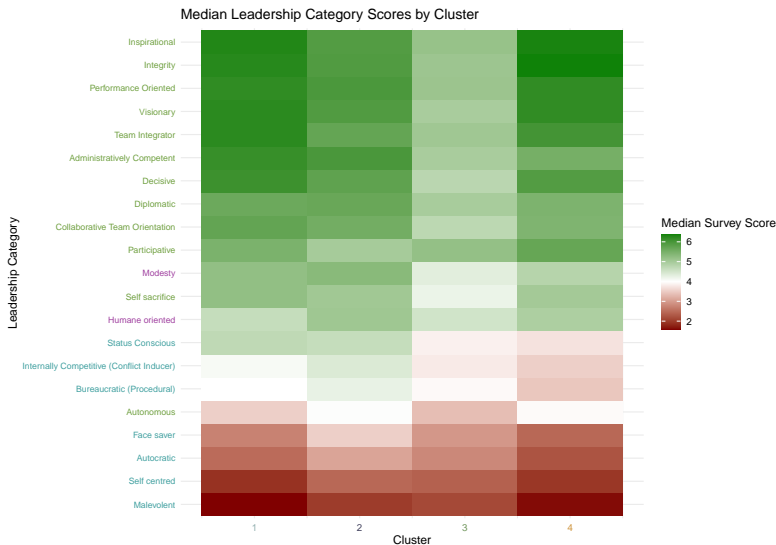


Note: East, West Germany in the same cluster. South Africa colored by Black sample (rather than the White sample)

Leadership Clusters: Countries

- **Light Blue:** Latin America, Mediterranean
- **Dark Blue:** Asia
- **Green:** No specific regionality
- **Gold:** Western and Northern Europe, Anglo

Leadership Clusters



Societal Values vs. Practices: Methodology

For each cultural dimension:

- Simple linear regression model: $y = \beta_0 + \beta_1 x$
- t -test: $H_0 : \beta_1 = 0$ versus $H_1 : \beta_1 \neq 0$
- Bonferroni Correction
 - Change significance threshold from $\alpha = 0.05$ to $\alpha = \frac{0.05}{9} \approx 0.0056$

Societal Values vs. Practices: Findings

Table 1: Results of Simple Linear Regression by Cultural Dimension

Cultural Dimension	Coefficient Value	p-value
Uncertainty Avoidance	-0.6199	0.0000
Institutional Collectivism	-0.5251	0.0000
Power Distance	-0.4991	0.0006
Future Orientation	-0.4725	0.0009
Humane Orientation	-0.5944	0.0116
Gender Egalitarianism	0.2437	0.0124
Performance Orientation	-0.3459	0.0268
Assertiveness	-0.1507	0.0414
In-group Collectivism	0.4393	0.0991

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- Characteristics clustered largely on negative or positive connotations
 - Exceptions: Humane oriented, modesty
- Countries clustered heavily on geographic region
 - Exceptions: Green cluster

Societal Values vs. Practices

- Practices do not align
 - Correlations often negative
- Consider how this might affect policy implementation

- Investigate how other indices (e.g., freedom index, happiness index, government approval ratings) explain groupings for leadership values
- Potential causes behind inverse relationship between societal values and practices
 - Are people valuing certain things *because* they aren't present in the society?
- Expand the survey to more countries to see if regional trends/clusters remain

- Only 62 cultures observed
- Some countries split
 - Germany: East vs. West (possibly related to Berlin Wall)
 - South Africa: White vs. Black (possibly related to Apartheid)
- Data appears to be from 15+ years ago
 - Potentially outdated information
 - May consider a resurvey
- Unsure of how second-order factor analysis performed
- No “official” codebook—just found the survey questions