

Cultural Dimensions Theory

NSD IDEA Council
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What is culture?

“Culture constitutes the unwritten rules of the social game.”

“Culture is the software of our minds.”

– Geert Hofstede

“The relationship between people and culture is like the relationship between fundamental particles and the complex emergent properties of many-body nuclear physics.”

– Augusto Macchiavelli, at an NSD staff meeting in 2021



<https://www.ornl.gov/staff-profile/augusto-o-macchiavelli>

Acknowledgements

- Marco Salathe, who asked for resources for thinking about cross-cultural issues in the workplace
- Belinda Bandstra, M.D., M.A. for slides and other resources

[1] <https://geerthofstede.com>

- Cultural dimensions theory [2]
 - Developed by social psychologist Geert Hofstede (1928-2020)
 - Based on factor analysis of survey data
 - First evidence found in survey of IBM employees worldwide in the 1970s
 - Typically applied to national cultures, but also to describe organizations and families
 - Individuals can greatly vary from the mean

- Provides a descriptive framework for our cultural contexts
 - A language to improve cross-cultural communication
 - Like Myers-Briggs or other personality typologies, but for groups and not individuals
 - Dimensions are descriptive and not value judgments



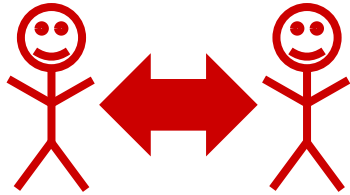
Geert Hofstede [1]

[1] <https://geerthofstede.com>

[2] https://en.wikipedia.org/wiki/Hofstede's_cultural_dimensions_theory

Dimension 1 of 4: Power Distance

“[T]he extent to which the less powerful members of organizations and institutions... accept and expect that power is distributed unequally.” [3]



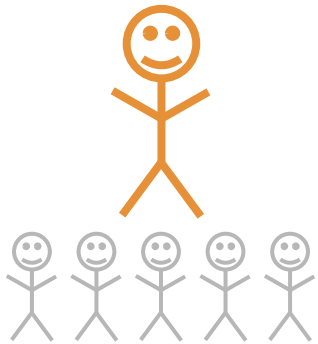
Small power distance	Large power distance
Use of power should be legitimate and is subject to criteria of good and evil	Power is a basic fact of society antedating good or evil: its legitimacy is irrelevant
Hierarchy means inequality of roles, established for convenience	Hierarchy means existential inequality
Subordinates expect to be consulted	Subordinates expect to be told what to do



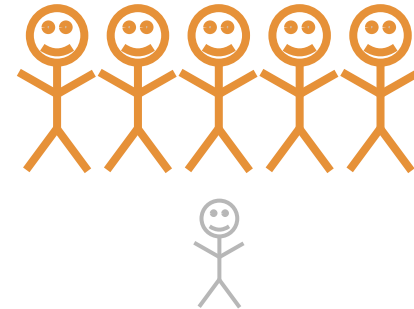
[3] [Hofstede, G. \(2011\). *Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, Unit 2.*](#)

Dimension 2 of 4: Individualism vs. Collectivism

“[T]he degree to which people in a society are integrated into groups. On the individualist side... the ties between individuals are loose: everyone is expected to look after him/herself and his/her immediate family. On the collectivist side we find cultures in which people... are integrated into strong, cohesive in-groups...” [3]



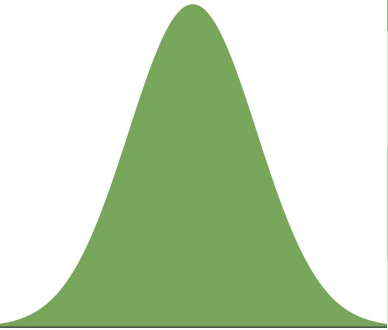
Individualism	Collectivism
"I"-consciousness	"We"-consciousness
Right of privacy	Stress on belonging
Speaking one's mind is healthy	Harmony should always be maintained



[3] [Hofstede, G. \(2011\). *Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, Unit 2.*](#)

Dimension 3 of 4: Uncertainty Avoidance

“[T]olerance for ambiguity. It indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations.” [3]



Weak uncertainty avoidance

Tolerance of deviant persons and ideas: what is different is curious

Comfortable with ambiguity and chaos

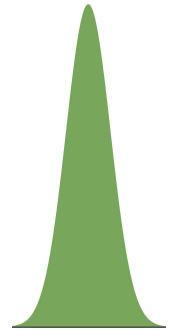
Dislike of rules - written or unwritten

Strong uncertainty avoidance

Intolerance of deviant persons and ideas: what is different is dangerous

Need for clarity and structure

Emotional need for rules – even if not obeyed



Dimension 4 of 4: Task Orientation vs Person Orientation*

“[T]he extent to which people prefer achievement, heroism, assertiveness, and material rewards for success vs cooperation, modesty, caring for the weak and quality of life.” [4]



Task orientation

People should be assertive and ambitious

Admiration for the strong

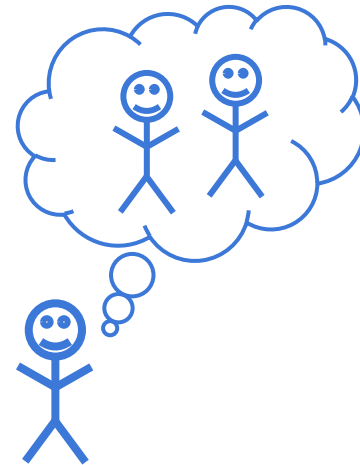
Work prevails over family

Person orientation

People should be modest and caring

Sympathy for the weak

Balance between family and work



[4] B. Bandstra, “Introduction to Supervising across Culture,” Stanford Psychiatry Faculty Development Seminar, 2021.

* This dimension was formerly called “masculinity vs. femininity”, but now is referred to by a number of alternative names

Conflict caused by differences in Power Distance

- Low-PD supervisor talks to high-PD supervisee. Supervisee takes everything supervisor says as an “order” but supervisor thinks they are brainstorming together.
- High-PD supervisor talks to low-PD supervisee. Supervisor intends to be giving supervisee clear “orders” but supervisee thinks they are brainstorming together.

Conflict caused by differences in Individualism/Collectivism

- A high-Individualism group leader calls an all-hands meeting to discuss a new group policy. They ask for honest feedback but don't receive any. A high-Collectivism employee has a problem with the policy but feels like they would cause unnecessary drama within the group if they brought it up in front of everyone, and so they stay silent.

Cultural dimensions:

(1) Power Distance

- Acceptance of hierarchy

(2) Individualism / Collectivism

- Belonging to a group

(3) Uncertainty Avoidance

- Tolerance for ambiguity

(4) Task/Person Orientation

- Achievement vs cooperation

Conflict caused by differences in Uncertainty Avoidance

- Two people are chairing a panel discussion at an upcoming conference. The high-UA one would like to generate a list of specific questions that will be discussed by the panel so that it is predictable. The low-UA one would rather to improvise the discussion questions based on how the discussion goes so that it is organic.

Conflict caused by Task/Person Orientation

- Two scientists are mentoring a student on a project, but the student is not making adequate progress. In their next meeting, the high-TO scientist wants to present an “ultimatum” of tasks the student must accomplish or they will have to find new funding. The high-PO one wants to spend the meeting “checking in” with the student instead.

Cultural dimensions:

- (1) **Power Distance**
 - **Acceptance of hierarchy**
- (2) **Individualism / Collectivism**
 - **Belonging to a group**
- (3) **Uncertainty Avoidance**
 - **Tolerance for ambiguity**
- (4) **Task/Person Orientation**
 - **Achievement vs cooperation**

K-12 STEM Outreach Opportunities

- Be a presenter for the Reverse Science Fair
- Assist with hands-on STEM activities for Bay Area 6th graders
- Facilitate a hands-on STEM workshop for bilingual Science en Acción (SeA) STEM camp 2025
- Become a Mentor for High School Summer Interns - Summer 2025
- Visit the K-12 Outreach and Education homepage to sign up for the newsletter and read more about the programs!
 - <https://k12education.lbl.gov/home>

Community Service Opportunities

- Volunteers needed for Lab Booth at Oakland's 2025 Black Joy Parade Celebration
- Volunteer with the Food Bank of Contra Costa and Solano (FBCCS), the UC Berkeley food pantry, or the Alameda County Community Food Bank
- Volunteer with Meals on Wheels
- Become a tech volunteer for Ashby Village
- Get involved with Homies Empowerment
- Become a STEM Ambassador for Lawrence Hall of Science

Sign up to volunteer for these opportunities and more at
<https://service.lbl.gov/need/>

NSD IDEA Council resources

- [URM Job Posting funding](#)
- [Luminary Cards](#)
- IDEA SPOT Award Program
- [LeanIn cards “50 ways to fight bias”](#)

Lab-wide resources

- [Idea.lbl.gov](#)
- [Employee Resource Groups](#)
- [Physical Sciences Workplace Life Committee](#)

Consider joining the Council!

- All-volunteer effort
- Looking for people from all roles and areas of NSD

Share your ideas for topics or other feedback:

NSD-IDEA-Council@lbl.gov

- The African American ERG has planned several events to celebrate Black History Month this year, all of which are published on the “Community Events” calendar. Stay tuned for any additional additions and announcements from the AAERG!
- Events
 - **Black History Month (BHM) Recognition and Banner Photo**
 - **Tuesday, February 4 · 10:00 – 10:30am**
 - AAERG Members Meeting
 - Friday, February 7 · 10:00 – 11:00am
 - Black Joy Parade
 - Sunday, February 23 · 12:30 – 7:00pm
 - Black History Month Speaker Series
 - Weekly on Wednesday, Feb 6th until Mar 1, 2025
 - Some speakers TBA, but Faith Dukes, PhD., Director of K-12 STEM Education Program and Kiki Williams, J.D., Director of the Office for the Prevention of Harassment and Discrimination, are confirmed as two speakers.