

The Culture of Agriculture: A Q-Methodological Study of the Perspectives of American Agriculture held by Students at Oklahoma State University

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Background of the Study

Defining Culture

 "Transmitted and created content and patterns of values, ideas, and other symbolic-meaningful systems as factors in the shaping of human behavior and the artifacts produced through behavior" (Krober & Parsons, 1958, p. 583).



Background of the Study

The Relevance of Culture

- Value alignment or dissonance between people affect their perceptions and actions (González, 2002; Museus & Quaye, 2009).
- Agriculture is a culture of its own, with values unique to itself (Meischen & Trexler, 2003).



Purpose of the Study

The purpose of this study was to identify the subjective opinions held by students at Oklahoma State University on the culture of American agriculture.



Research Questions

- 1. What are the subjective opinions held by students concerning American agriculture at Oklahoma State University?
- 2. How do Hofstede's Six Dimensions of National Culture describe the subjective opinions of American agriculture?



Hofstede's Six Dimensions of National Culture

- Mental Models separate one group from another
- Measured the intensity and direction of values from 40 different countries.
- Four original dimensions were found (Hofstede, 1980)
- Two more added from research findings since the original publication of Culture's Consequences (1980).



Power Distance

 Concerned with how a culture deals with human inequality in wealth, social hierarchies, and prestige.

Uncertainty Avoidance

 How a culture deals with the uncertainty of the future. Ex: Religion, Law, Technology

(Hofstede, 1980, 2001)



Individualism vs. Collectivism

 How people live together, in nuclear families, or large extended families with in and out groups.

Masculinity vs. Femininity

 The level of importance placed on social gender roles, competition, family balance and their division.

(Hofstede, 1980, 2001)



Long-Term vs. Short-Term Orientation

 The importance placed on events that will happen in the future, and those in the past or present.

Indulgence vs. Restraint

 A cultures propensity to support gratification, or the implementation of strict social norms to control it.

(Bond, 1987; Hofstede, 1980, 2001, Minkov, 2007)



Hofstede's Dimensions and American Agriculture

- Agriculture is a culture, with a set of values unique to itself.
- Dimensions provide a guide to the mental programming of a group and the values that drive them.
- Provides a way to gauge the intensity and direction of the subjective opinions of the culture of American agriculture



Methodology

P-Set

- 29 individuals.
- Purposive snowball sample for maximum diversity of subjective opinions (Watts & Stenner, 2012).
- 23 Females and 6 Males.
- 16 White, 6 African American, 4 American Indian, and 3 Hispanic.
- 12 students inside of the College of Agricultural Sciences and Natural Resources (CASNR), 17 students outside of CASNR.



Methodology

The Concourse

- Developed in a hybrid process.
 - Literature in Agricultural Education on perceptions of agriculture.
 - Interviews with students at Oklahoma State University.
- 87 statements.
- 42 statements sampled for the Q set.

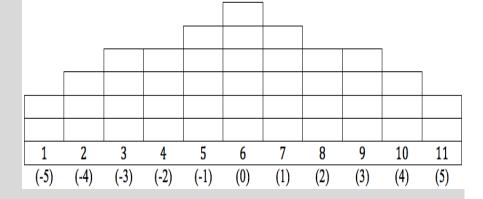
(Watts & Stenner, 2012)



Methodology

Condition of Instruction for the Q-Sort: "In my opinion, American agriculture is..."

- Forced choice distribution applied to the sort board.
 - Pragmatic
 - Convenient
- Styled from 1 (Most Unlike Me) to 11 (Most Like Me) instead of -5 to +5 on the sort board in order to prevent negative connotations on the statements sorted.
- Platykurtic distribution established to get more discriminated selections in the item ranking process.





Findings: Research Question 1

What are the subjective opinions held by students concerning American agriculture at Oklahoma State University?



3 Perceptions of American Agriculture

Three factors arrays.

- 1. Progressive Agriculture (14 Defining Sorters)
- 2. Conservative Industrial Agriculture (6 Defining Sorters)
- 3. Traditional Agriculture (4 Defining Sorters)

Consensus Statement

- "A profession that requires hard work." (F1, +5; F2, +5; F3, +5)

Progressive Agriculture

CASNR	Ethnicity	Gender	Yrs. In Ag	AGED/FFA	Loading I	Loading 2	Loading 3
In CASNR	White	Female	3 Years	Yes	0.7448	0.2071	0.1715
In CASNR	White	Male	8 Years	Yes	0.7192	0.2071	0.1727
In CASNR	Hispanic	Female	None	No	0.6655	0.4393	-0.0494
In CASNR	White	Female	4 Years	Yes	0.7689	-0.0708	0.3819
In CASNR	Af. American	Female	None	Yes	0.6514	0.1791	0.1115
In CASNR	Hispanic	Male	2.5 Years	No	0.6790	0.4362	-0.1856
In CASNR	White	Female	6 Years	Yes	0.8384	0.0772	0.2481
Non CASNR	White	Male	None	No	0.4836	-0.3877	-0.3480
Non CASNR	White	Female	None	Yes	0.4811	0.2725	0.3693
In CASNR	Am. Indian	Female	None	No	0.5105	0.2222	-0.1052
Non CASNR	White	Female	None	No	0.6427	0.3398	0.2869
Non CASNR	Af. American	Female	None	No	0.7989	-0.0253	0.0636
In CASNR	White	Female	None	Yes	0.7468	-0.0464	0.3706
In CASNR	White	Female	16	Yes	0.8277	0.1313	0.1691

Progressive Agriculture: Theme One

Innovation

Statement No.	Statement	Array Position
35	Innovative and creative.	+5
13	At the cutting edge of harvesting technology.	+4
10	Accepting of Genetically Modified Organisms.	+3
8	Based on more tradition than science.	-3
21	Not a career path for intellectuals.	-5

[&]quot;The most highly educated people I know are rural farmers. It's a business. You have to know what you're doing. Not everyone can do it." –Post Sort Interview

Progressive Agriculture: Theme Two

Progressive Gender Roles

Statement No.	Statement	Array Position
22	A male dominated field.	-1
24	Old school about gender roles.	-2
26	Hard to be respected in as a woman.	-2

[&]quot;20 years ago (statements 22 and 26) would be over there (+5), but now there are role models and movies." –Field Notes

Progressive Agriculture: Theme Three

Family

Statement No.	Statement	Array Position
1	A way to connect to my family.	+2
18	Full of really close knit families looking out for each other.	+2
25	A terrible career path if you want to balance your work and your family life.	-5

[&]quot;Most ag is a family run business." –Post Sort interview

[&]quot;I can see why people say that (it is hard to balance work and family life in agriculture), but it's a family run business."- Post Sort Interview

Conservative Industrial Agriculture

CASNR	Ethnicity	Gender	Yrs. In Ag	AGED/FFA	Loading I	Loading 2	Loading 3
Non CASNR	Af. American	Male	None	No	0.2024	0.5728	-0.0589
Non CASNR	Am. Indian	Female	None	No	0.2150	0.4518	0.3721
Non CASNR	Af. American	Female	None	No	0.1425	0.7125	0.2022
Non CASNR	Af. American	Male	None	No	0.3336	0.6076	0.3036
Non CASNR	White	Female	None	No	0.2390	0.6042	0.4329
Non CASNR	Af. American	Male	None	No	-0.3690	0.4799	-0.1754

Conservative Industrial Agriculture: Theme One

Social Conservative

Statement No.	Statement	Array Position
2	Full of political conservatives.	+5
41	Against Pro-LGBTQ Legislation.	+2
37	Supportive of modern rights movements like Black Lives Matter.	-5

[&]quot;People in ag are definitely not for Black Lives Matter. They're more conservative. Agriculture is predominantly in the south, which tends to be more racist." –Post Sort interview

[&]quot;You think of ag, and you think of the south. It doesn't make you think of a radical political liberal movement."- Post Sort Interview

Conservative Industrial Agriculture: Theme Two

Masculine

Statement No.	Statement	Array Position
22	A male dominated field.	+4
7	Full of good ol' boys.	+4

Conservative Industrial Agriculture: Theme Three

<u>Intellectual</u>

Statement No.	Statement	Array Position
21	Not a career path for intellectuals.	-4
8	Based on more tradition than science.	-4
35	Innovative and creative.	+2
13	At the cutting edge of harvesting technology.	+2

Traditional Agriculture

CASNR	Ethnicity	Gender	Yrs. In Ag	AGED/FFA	Loading I	Loading 2	Loading 3
In CASNR	White	Female	4 Years	Yes	0.3393	-0.1606	0.7650
Non CASNR	White	Female	None	No	-0.0846	0.1664	0.6255
Non CASNR	White	Female	3 Years	No	0.3005	0.4400	0.5238
Non CASNR	White	Female	None	No	0.0274	0.0659	0.6253

Traditional Agriculture: Theme One

Family-Owned

Statement No.	Statement	Array Position
18	Full of really close-knit families looking out for each other.	+3
15	Stronger when farmers and ranchers stick together.	+3
1	A way to connect with my family.	+3
4	Controlled by giant corporations.	-4

[&]quot;Giant corporations don't necessarily control everything because family is important in agriculture."-Post Sort Interview

Traditional Agriculture: Theme Two

Patriarchal

Statement No.	Statement	Array Position
22	A male dominated field.	+4
24	Old school about gender roles.	+4
26	Hard to be respected in as a woman.	+1

Traditional Agriculture: Theme Three

<u>Set in its Ways</u>

Statement No.	Statement	Array Position
16	Better for people wanting to work with their hands.	+3
8	Based more on tradition than science.	+2
35	Innovative and creative.	-2
10	Accepting of Genetically Modified Organisms.	-3

[&]quot;Stereotypical of the old hick cowboy, but those stereotypes exist for a reason." –Post Sort Interview

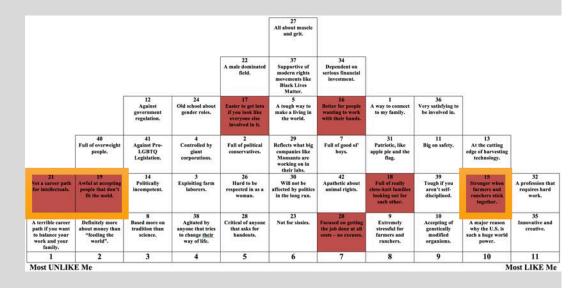
Findings: Research Question 2

How do Hofstede's Six Dimensions of National Culture describe each subjective opinion of American agriculture?



Individualist and Collectivist

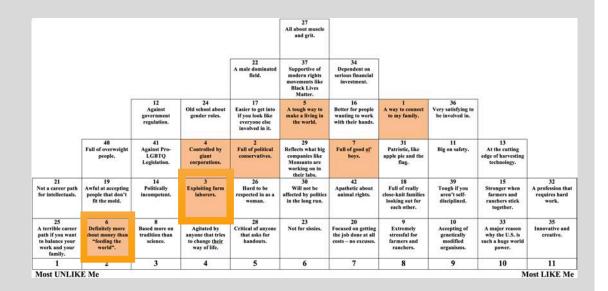
- (+4) Stronger when farmers and ranchers stick together
- (-4) Awful at accepting people that don't fit the mold
- (-5) Not a career path for intellectuals





Low Power Distance

- (-2) Exploiting farm laborers.
- (-4) Definitely more about money than "feeding the world".

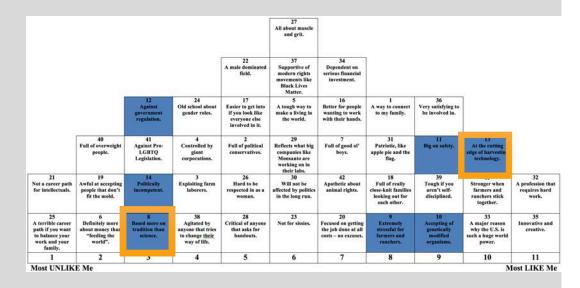




Low Uncertainty Avoidance

(+4) At the cutting edge of harvesting technology.

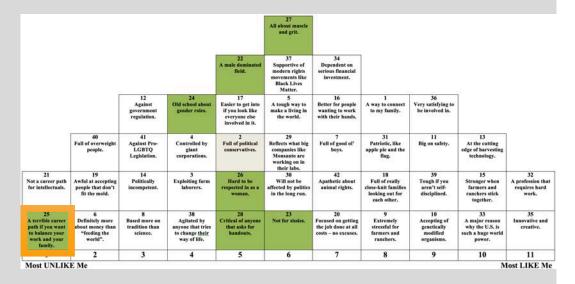
(-3) Based on more tradition than science.





Feminine

(-5) A terrible career path if you want to balance your work and your family life.



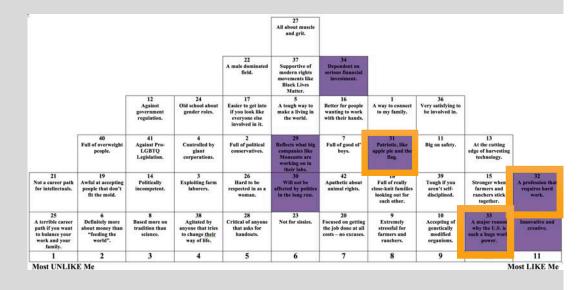


Short-Term Orientation

(+5) A profession that requires hard work.

(+4) A major reason why the U.S. is such a huge world power.

(+2) Patriotic, like apple pie and the flag.

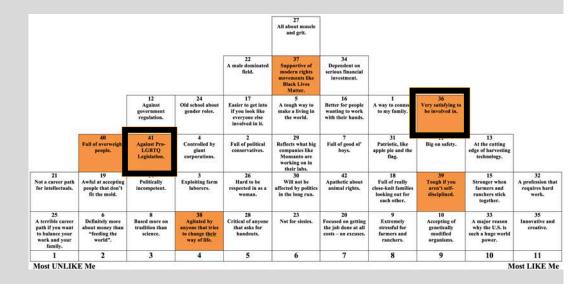




Indulgent

(+3) Very satisfying to be involved in.

(-3) Against Pro-LGBTQ Legislation.



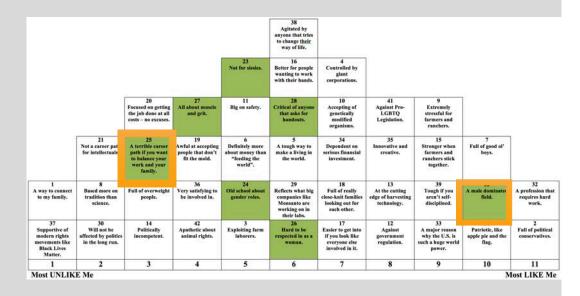


Conservative Industrial Agriculture and Hofstede

Masculine and Feminine

(+4) A male dominated field.

(-3) A terrible career path if you want to balance your work and your family life.



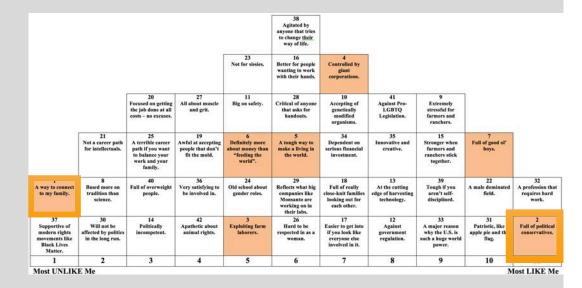


Conservative Industrial Agriculture and Hofstede

<u>High Power Distance</u>

(+5) Full of political conservatives.

(-5) A way to connect to my family.



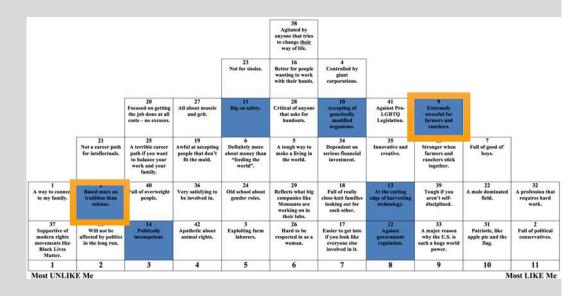


Conservative Industrial Agriculture and Hofstede

Low Uncertainty Avoidance

(+3) Extremely stressful for farmers and ranchers.

(-4) Based more on tradition than science.

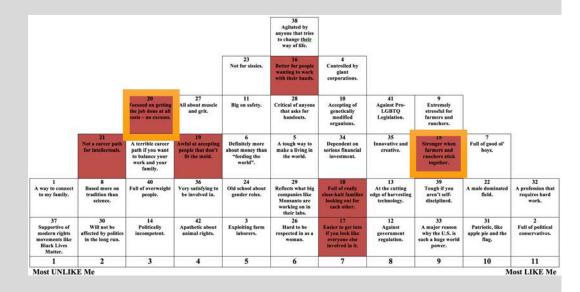




Conservative Industrial Agriculture and Hofstede

Collectivist

- (+3) Stronger when farmers and ranchers stick together
- (-3) Focused on getting the job done at all costs no excuses.





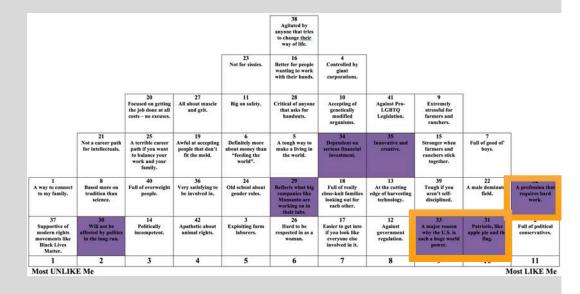
Conservative Industrial Agriculture and Hofstede

Short-Term Orientation

(+5) A profession that requires hard work.

(+4) Patriotic, like apple pie and the flag.

(+3) A major reason why the U.S. is such a huge world power.





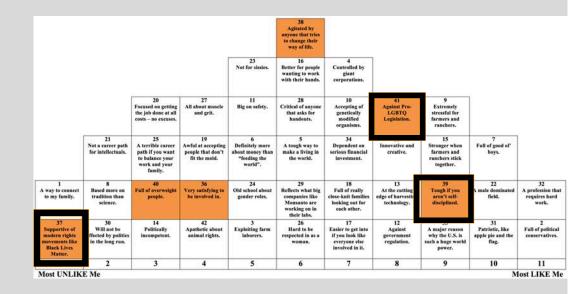
Conservative Industrial Agriculture and Hofstede

Restrictive

(+3) Tough if you aren't self disciplined.

(+2) Against Pro-LGBTQ Legislation

(-5) Supportive of modern rights movements like Black Lives Matter.

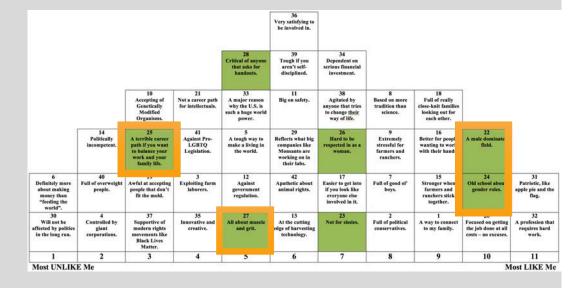




Masculine

(+4) Old school about gender roles.

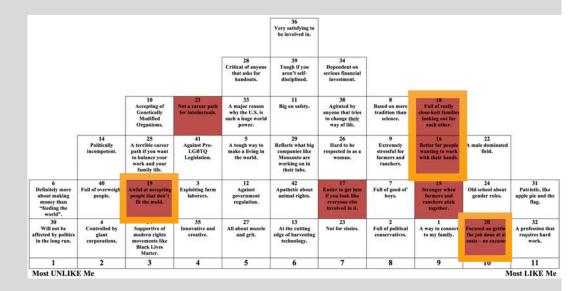
- (+4) A male dominated field.
- (-3) A terrible career path if you want to balance your work and your family life.





Individualist and Collectivist

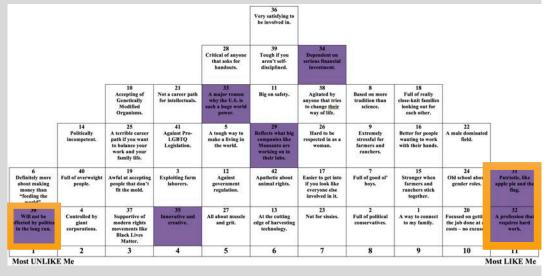
- (+4) Focused on getting the job done at all costs no excuses.
- (+3) Full of close-knit families looking out for each other
- (+3) Better for people wanting to work with their hands
- (-3) Awful at accepting people that don't fit the mold.





<u>Short and Long-Term Orientation</u>

- (+5) Patriotic, like apple pie and the flag.
- (+5) A profession that requires hard work.
- (-5) Will not be affected by politics in the long run.





Low Power Distance

(+3) A way to connect to my family

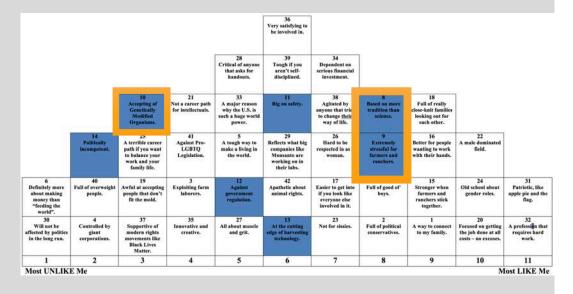
(-5) Definitely more about money than "feeding the world".

and the second of the second		Black Lives Matter.			**************************************					
Will not be ffected by politics in the long run.	Controlled by giant corporations.	Supportive of modern rights movements like	Innovative and creative.	All about muscle and grit.	At the cutting edge of harvesting technology.	Not for sissies.	Full of political conservatives.	A way to connect to my family.	Focused on getting the job done at all costs – no excuses.	A profession tha requires hard work.
world".	4	37	35	27	13	23	2		20	32
O Definitely more about making money than "feeding the	40 full of overweight people.	19 Awful at accepting people that don't fit the mold.	3 Exploiting farm laborers.	12 Against government regulation.	42 Apathetic about animal rights.	17 Easier to get into if you look like everyone else involved in it.	7 Full of good of boys.	15 Stronger when farmers and ranchers stick together.	24 Old school about gender roles,	31 Patriotic, like apple pie and th flag.
	14 Politically incompetent.	A terrible career path if you want to balance your work and your family life.	41 Against Pro- LGBTQ Legislation.	A tough way to make a living in the world.	29 Reflects what big companies like Monsanto are working on in their labs.	26 Hard to be respected in as a woman.	9 Extremely stressful for farmers and ranchers.	16 Better for people wanting to work with their hands.	A male dominated field.	
		Accepting of Genetically Modified Organisms.	21 Not a career path for intellectuals.	A major reason why the U.S. is such a huge world power.	11 Big on safety.	38 Agitated by anyone that tries to change their way of life.	8 Based on more tradition than science.	18 Full of really close-knit families looking out for each other.		
				28 Critical of anyone that asks for handouts.	39 Tough if you aren't self- disciplined.	34 Dependent on serious financial investment.				
					36 Very satisfying to be involved in.					



<u>High Uncertainty Avoidance</u>

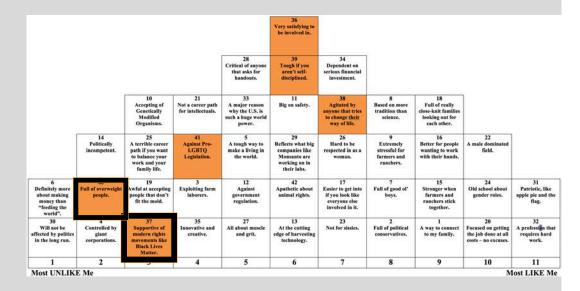
- (+2) Based on more tradition than science.
- (+2) Extremely stressful for farmers and ranchers.
- (-3) Accepting of Genetically Modified Organisms.





Restrictive

- (-3) Supportive of modern rights movements like Black Lives Matter.
- (-4) Full of overweight people.





Recommendations for Practice

- Agricultural literacy should be priority to promote the broad range of available opportunities for all in American agriculture.
- Specific topics that should be addressed by the profession:
 - Versatile career opportunities
 - Representation through Role Models, and Peer Groups.
 - Ethnic
 - Female
 - LGBTQ



Recommendations for Research

- What are the cultural values of the students themselves?
- What are the sources of cultural dissonance between ethnic minorities and American agriculture?
- What are the subjective opinions held by students at Oklahoma State University about the College of Agricultural Sciences and Natural Resources (CASNR) itself?
- How would multiple conditions of instruction affect the factor arrays concerning the subjective opinions of American agriculture?



Questions/Discussion