

Measuring Subtle Bias: Ambivalent Stereotypes

Susan T. Fiske

Psychology & Public Affairs

Princeton University

THE FISKE LAB

People making sense of people:
Intergroup relations, social cognition, and social neuroscience





Subtle Stereotype Content: Beyond Valence



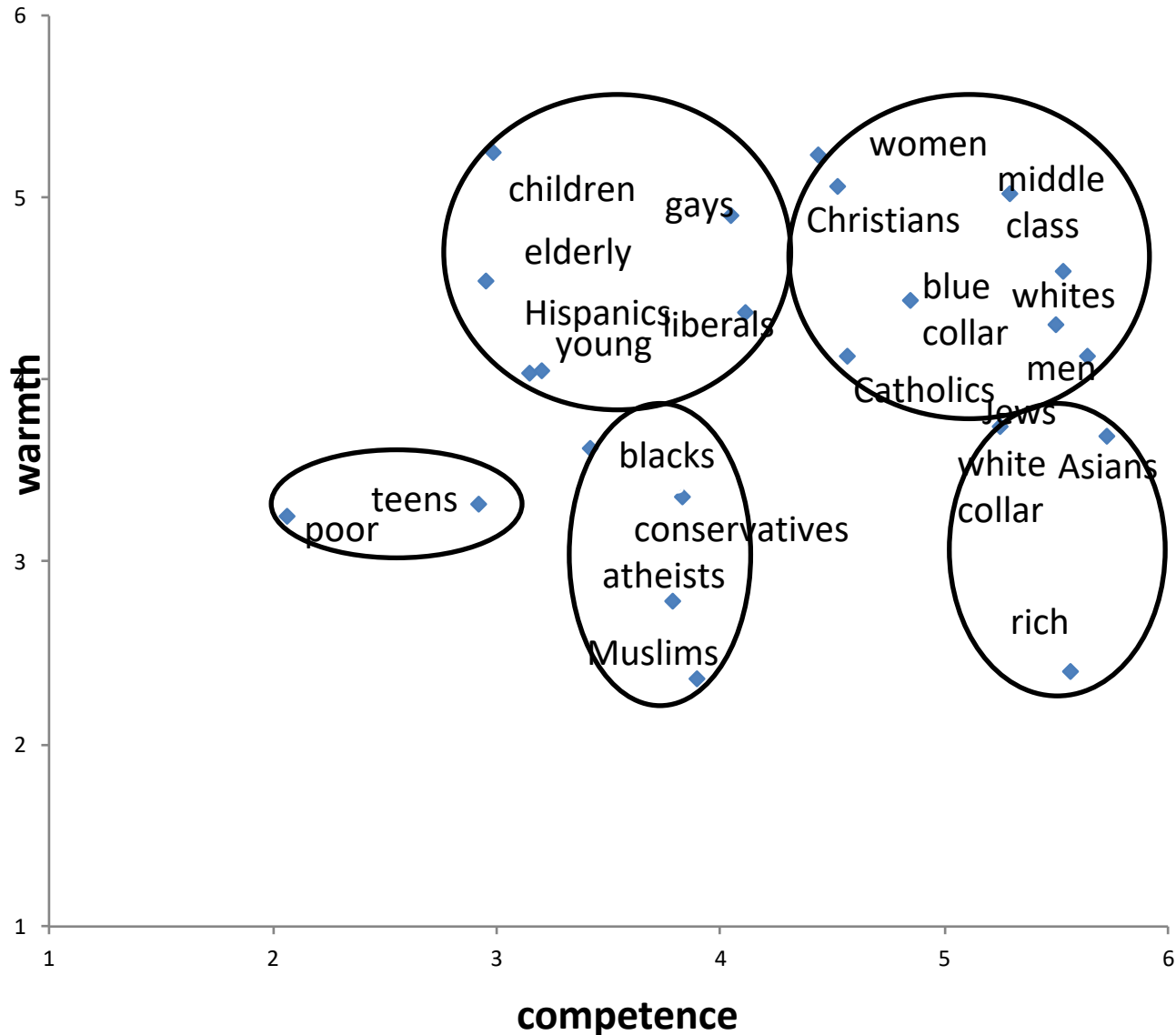
- Friend or foe? = Warm intent
- Able or unable? = Competent to enact intent
- Warmth x competence space

Multiple Methods

- Surveys' correlational data
- Experiments, online & lab
- Cross-national patterns re inequality (conflict)
- (Neural signatures)
- Spontaneous natural language

U.S. Data: Online Sample

(Kervyn, Fiske, & Yzerbyt, *Soc Psych*, 2015)



Stereotype Content

Correlational Methods

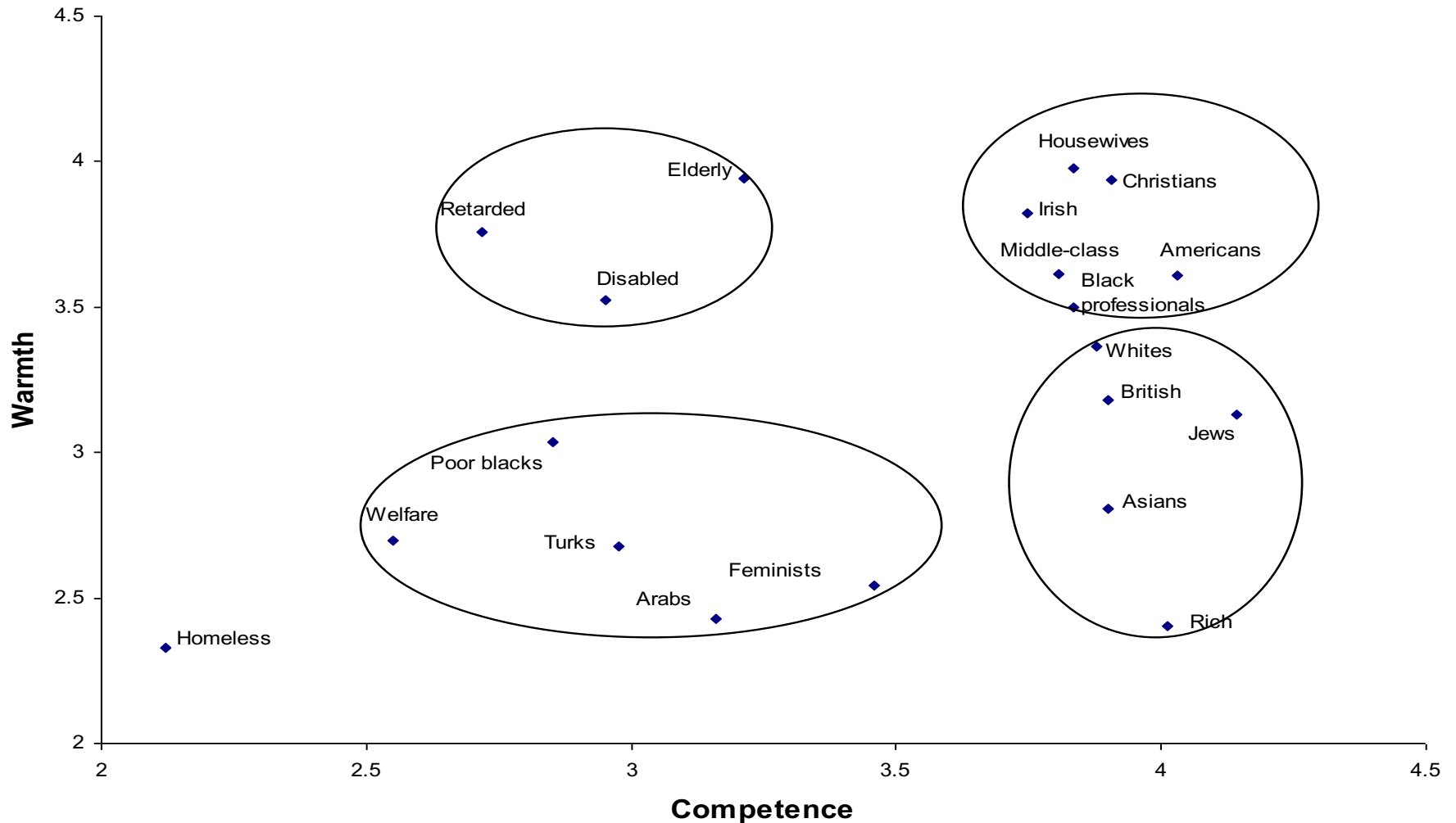
Correlational Method

- Phase I: Nominate society's groups
 - ~30 adults
 - [Translated and back translated]
 - Common groups (>15%)
- Phase 2: Rate (16-30) groups
 - 60-100 adults
 - ***In society's view:***
 - Warmth, competence
 - Competition, status
 - Emotions, behaviors
- Group is unit of analysis
 - Psychometrics: factors, reliability
 - Plot means in warmth x competence space
 - Cluster analysis

Generalization?

US Representative Sample

(Cuddy, Fiske, & Glick, *JPSP*, 2007)

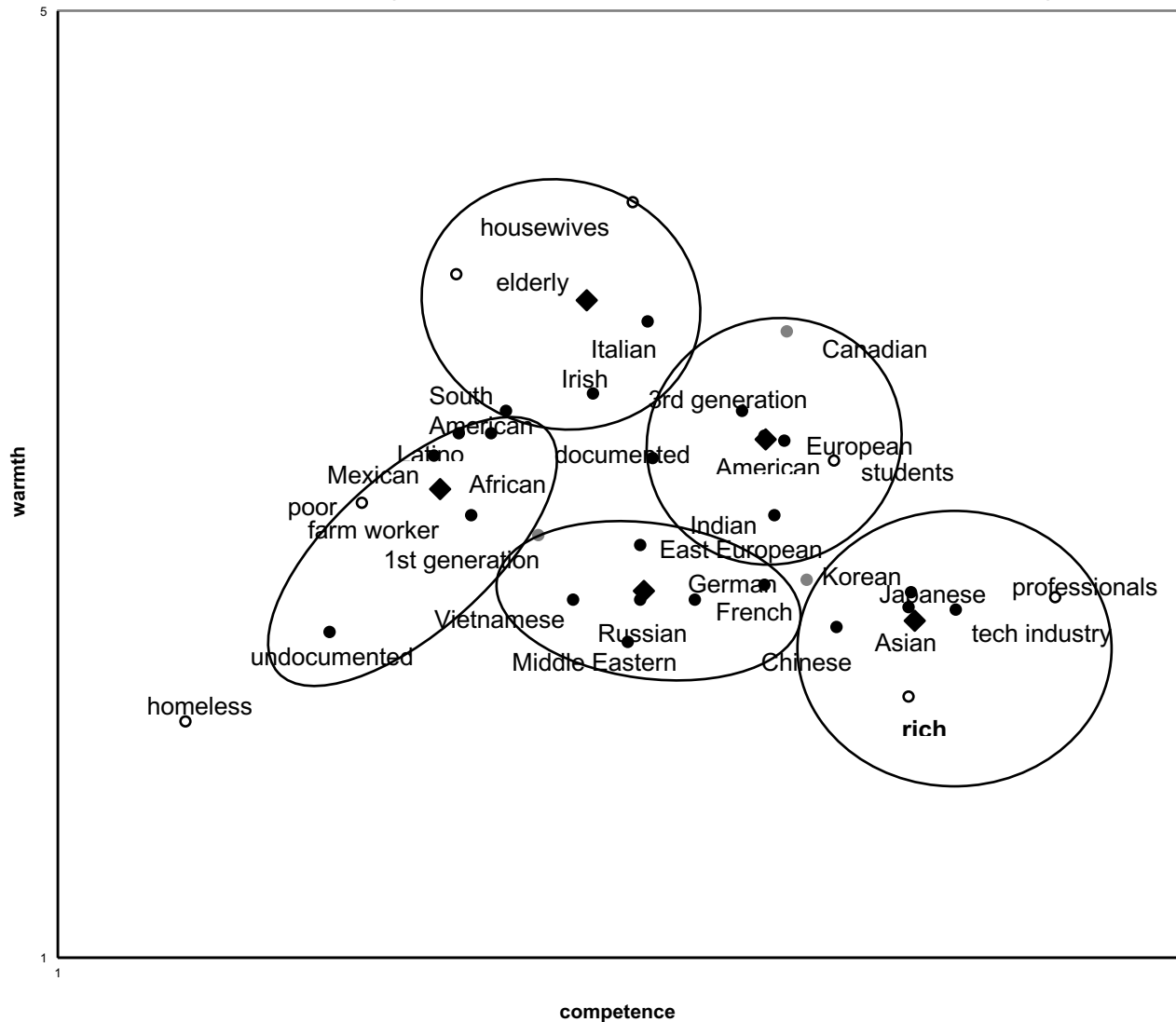




Generalization over Levels?

U.S. Immigrant Subtypes

(Lee & Fiske, *IJIR*, 2006)



(Cuddy et al., *BJSP*, 2009; Durante et al., *BJSP* 2012 & *PNAS* 2017)



Cuddy Durante Gelfand Bai Grigoryan



“Universal” Warmth & Competence?

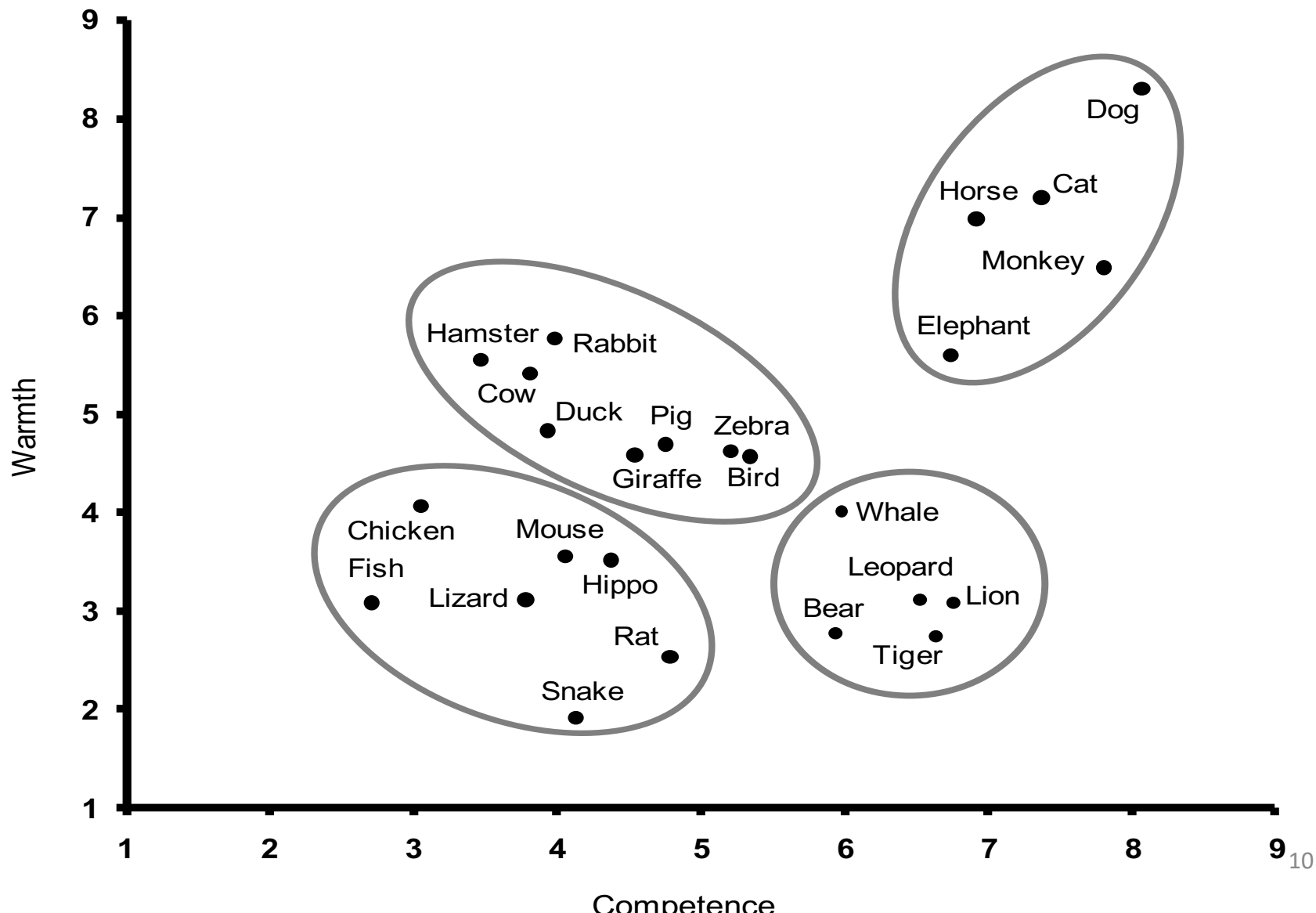
Generalizes:

- US samples
 - Convenience (Fiske et al., *JPSP*, 2002)
 - Online mTurk (Kervyn et al., *SP*, 2015)
 - Representative (Cuddy et al., *JPSP*, 2007)
- Over place
 - Each country’s own groups on 5 continents
(Cuddy et al., *BJSP*, 2009; Durante et al., *BJSP*, 2013; Durante et al., *PNAS*, 2017)
- Over time
 - Italian Fascists (Durante, Volpato, & Fiske, *EJSP*, 2010)
 - American students since Katz & Braly, 1933 (Bergsieker, Leslie, Constantine, & Fiske, *JPSP*, 2012)
- Over levels: Subtypes of
 - Women & men (Eckes, *PWQ*, 2002)
 - Gay men (Clausell & Fiske, *Soc Cog*, 2005)
 - Lesbians (Brambilla et al., *SP*, 2011)
 - Immigrants (Lee & Fiske, *IJIR*, 2006)
 - African Americans (Fiske, Bergsieker, Russell, & Williams, *DuBois Review*, 2009)
 - Native Americans (Burkely, Andrade, Durante, & Fiske, *CDEMP*, 2017)
 - Rich people (Wu, Bai, & Fiske, *JCP*, 2018)
 - Muslims (Saud & Fiske, in prep)
- Over species
 - Animals (Sevillano & Fiske, *JASP*, 2016)
 - Corporations (Kervyn, Fiske, & Malone, *JCP*, 2012)



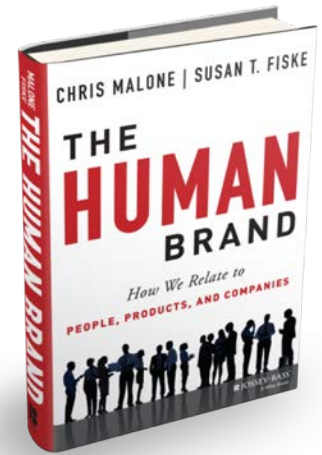
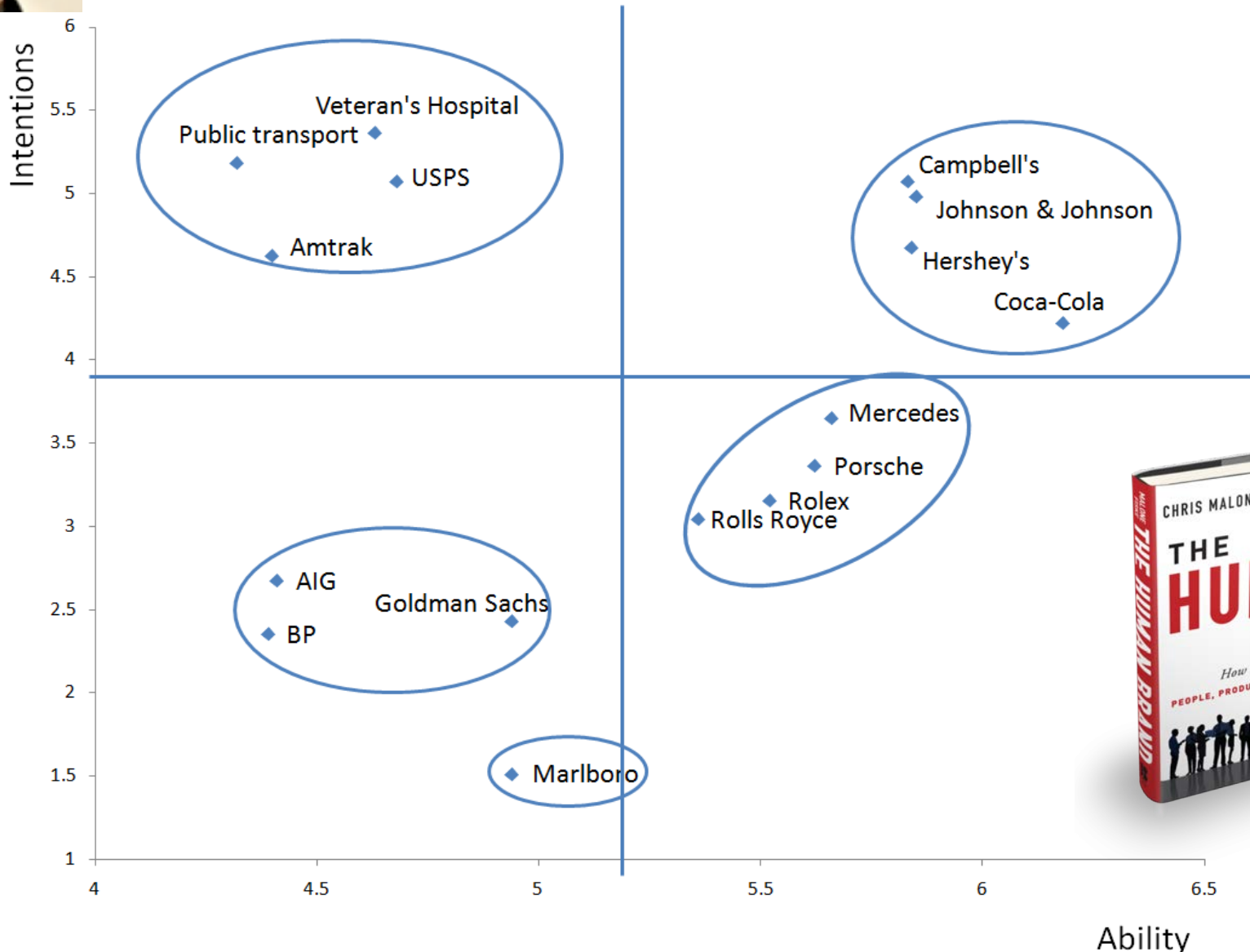
Over-humanizing? Animal Collectives

(Sevillano & Fiske, *JASP*, 2016)



Brands as Intentional Agents

(Kervyn, Fiske, & Malone, *JCP*, 2012)



Structure → Stereotype Content

Correlational & Experimental
Methods

Overall Causal Model

Social Structure
(Competition,
Status)



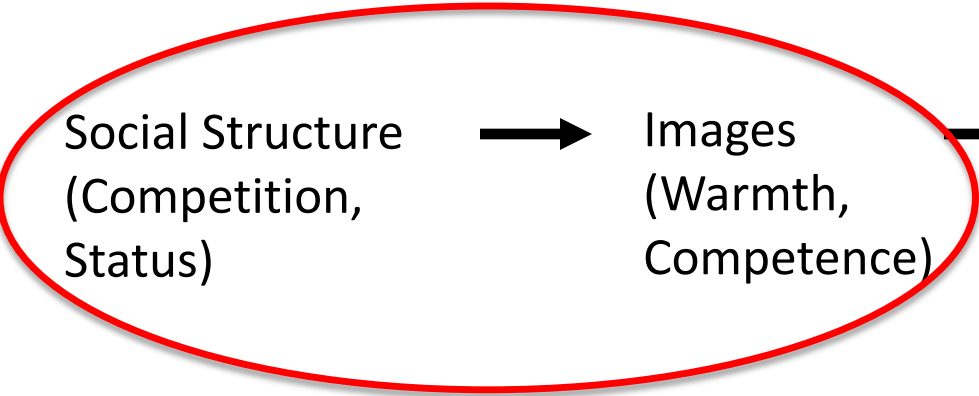
Images
(Warmth,
Competence)



Emotions
(Disgust, Pity,
Envy, Pride)



Behavior
(Active,
Passive
Help &
Harm)





Structure–Stereotype Correlations

(Kervyn, Fiske, & Yzerbyt, *SP*, 2015)

Averaged across 25 nations (36 samples; Durante et al.)

- Status-Competence $r = .90$
- Competition-Warmth $r = -.32$
 - Measured competition over resources only
 - --> **symbolic competition over values**
 - Measured warmth variously
 - friendly, sociable
 - --> **trustworthy, moral**
- New Competition-Warmth regressions
 - Old $b = -.30$
 - New $b = -1.11$



Structure → Stereotypes

(Caprariello, Cuddy, & Fiske, *GPIR*, 2009)

Support for A.

Fiske, Xu, Cuddy, & Glick (1999)

– correlational data

Fiske et al. (2002)

– correlational data

Eckes (2002)

– correlational data

Cuddy et al. (2009)

– cross-cultural correlational data

Support for B.

Fiske et al. (2002)

– correlational data

Cuddy et al. (2007)

– correlational data

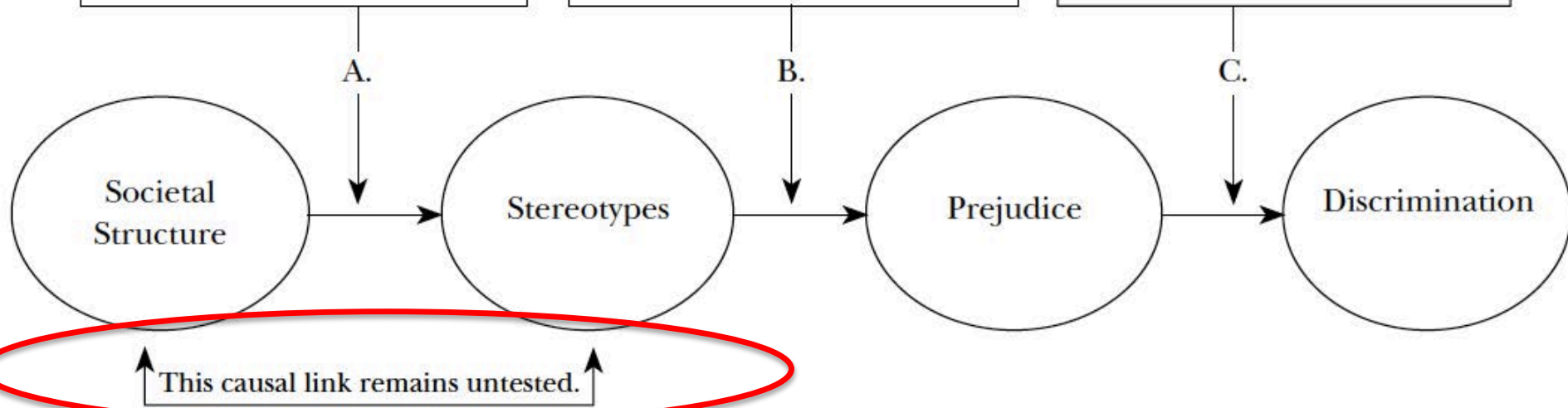
– experimental data

Support for C.

Cuddy et al. (2007)

– correlational data

– experimental data



Structure → Stereotypes

IVs

- Status
- Cooperation/
Competition

DVs

- Competence
- Warmth

Due to political and economic circumstances, demographers predict waves of immigration in the next few years from an ethnic group outside our borders called Wallonians. In their home country, members of this group typically have **prestigious jobs, and are well educated and economically successful** [low-status jobs, and are uneducated and economically unsuccessful]. However, they also **take power and resources from** [share power and resources with] members of other groups. When members of this ethnic group arrive here, to what extent will people here be likely to view incoming group members in the following ways?

Structure → Stereotypes

Table 1. Mean competence and warmth ratings by condition

Status	Competition	Competence	Warmth
High	High	4.58 (1.39)	3.47 (1.26)
High	Low	4.83 (1.35)	4.13 (1.44)
Low	High	2.80 (1.03)	3.35 (0.95)
Low	Low	3.21 (1.21)	3.84 (1.20)

Note: Bolded means significantly differ from other column means at $p < .05$. Standard deviations are in parentheses.



Going Micro: Structure → Stereotypes

(Russell & Fiske, *EJSP*, 2008)

- Princeton students in lab
- IVs
 - Cooperation/competition
(Team Game/Winner Takes All)
 - Status
(SES in Study 1; Roles in Study 2)
- Play
 - Study 1 “partner”: tit for tat
 - Study 2 live partner
- DVs
 - Expected traits (Study 1)
 - Perceived traits (Study 2)
- Cooperation → warmth
- Status → competence



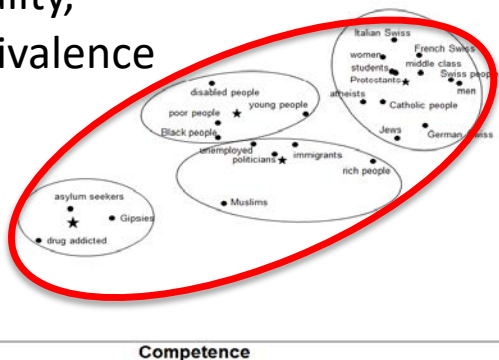
Going Macro: Structure → Stereotypes

(Durante et al., *BJSP*, 2013)

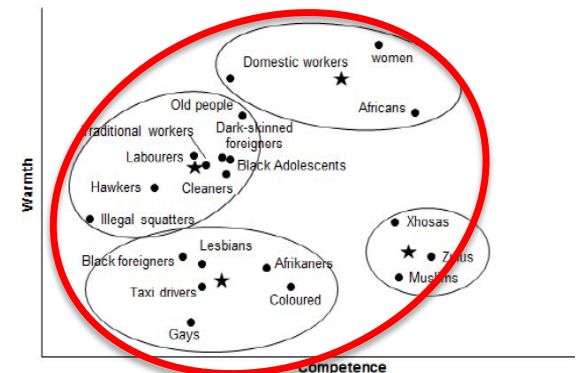
N=37 national samples

- Average Warmth-Competence $r = .40$
 - Some ambivalence
 - Range $-.19$ to $.91$
 - What explains this?
- Ambivalence correlates with inequality
 - W-C r correlates with Gini, $r = -.34$

French Swiss:
hi equality,
lo ambivalence



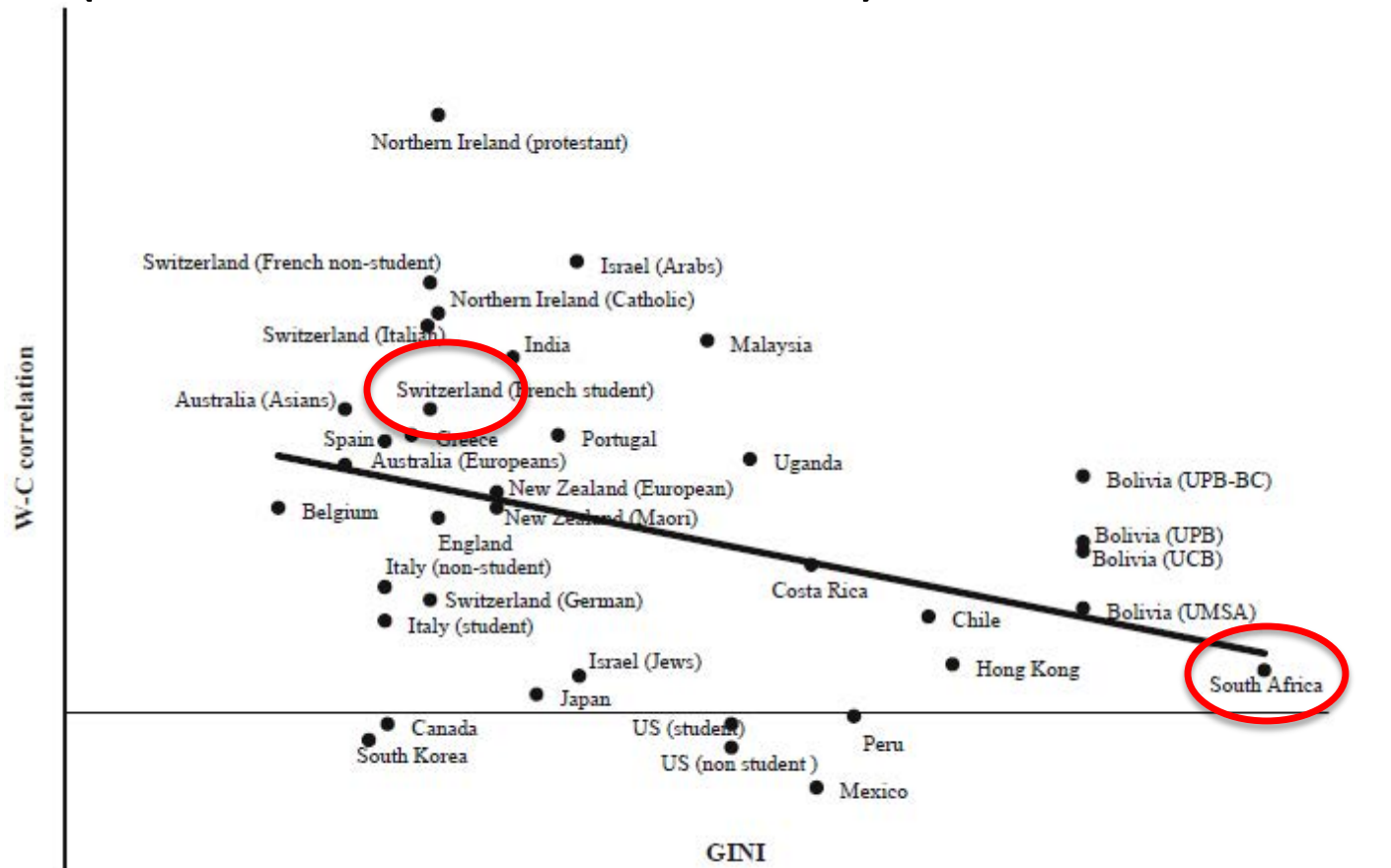
South Africa:
hi inequality,
hi ambivalence



Structural Inequality Predicts Stereotype Ambivalence

(Durante et al., *BJSP*, 2013)

Less ambivalent



More ambivalent

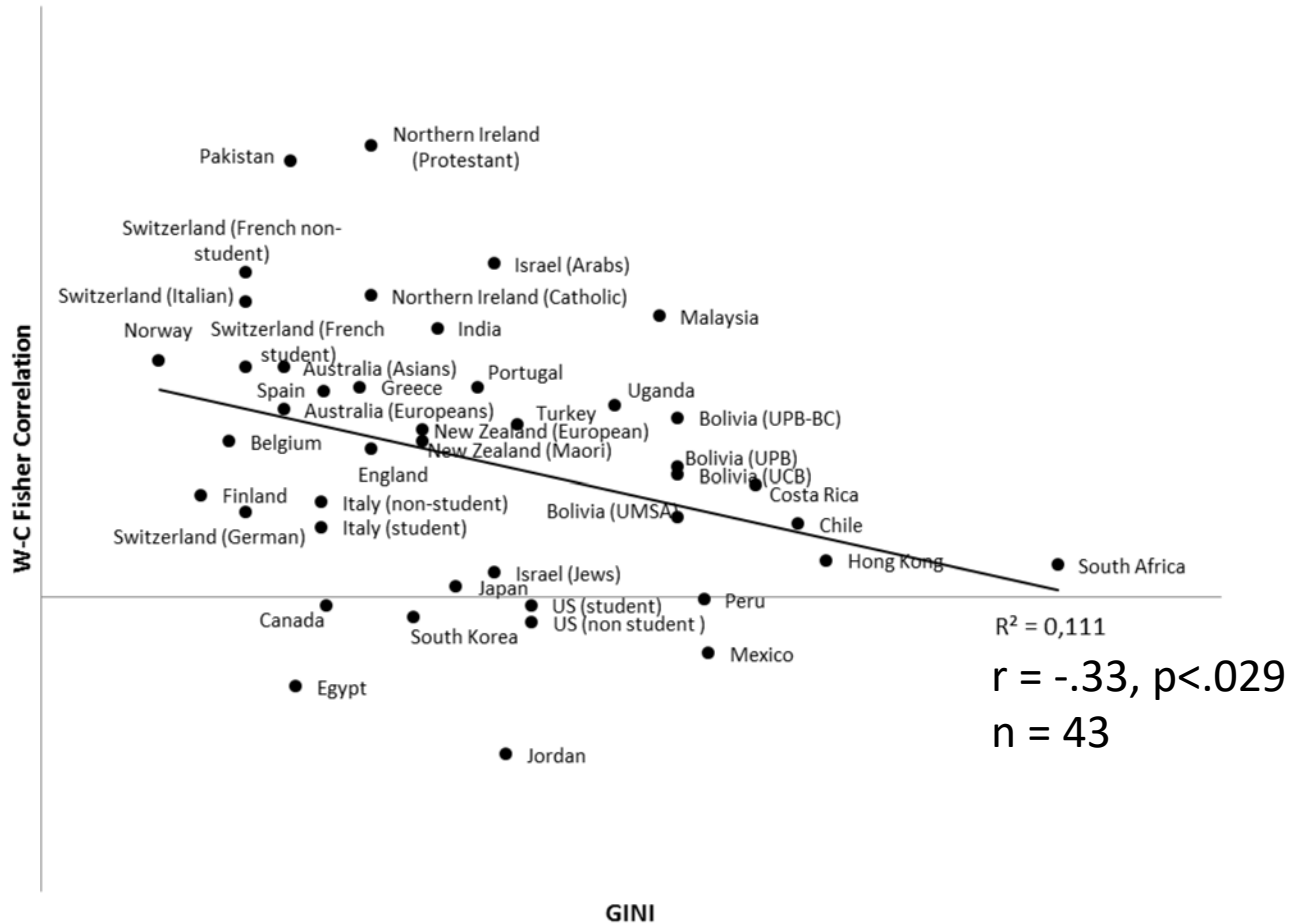
$N = 37;$
 $r(35) = -.34,$
 $p < .05$

More unequal

Structure → Stereotypes

- SCM's structural predictors
 - Status predicts competence, $r = .90$
 - Competition predicts less warmth, $r = -.32$ [$\sim .70$]
- Gini correlates with competition-warmth, $r = .48$
 - *More equality: Competitive groups aren't warm*
- Gini correlates with an unpredicted link
 - Competition-competence, $r = .26$
 - Gini with that, $r = .49$, $p < .01$
 - *More equality: Competition is not competence*
- W-C ambivalence r correlates with n of groups in
 - HW-LC ($r = -.48$, $p < .01$), pity
 - Not LW-HC (.09, ns), envy
 - *So equality moves pitied groups into the ingroup*

Updated Inequality Data



Convergence?

Big Two Dimensions in Social Cognition

- Asch, 1946
- Bales, 1950
- Foa, 1961
- Bakan, 1966
- Rosenberg, Nelson, & Vivekananthan, 1968
- Zanna & Hamilton, 1972
- Abelson, Kinder, Fiske, & Peters, 1982
- Peeters, 1993, 2002
- Wojciszke, 1994; et al., 1994, 1998, 2005, 2007
- Vonk, 1996, 1999
- Phalet & Poppe, 1997
- Fiske, 1998
- Alexander, Brewer, & Hermann, 1999
- Abele, 2003; Abele et al., 2016
- Judd, James-Hawkins, Yzerbyt, & Kashima, 2005
- **Adversarial Synthesis**
- Abele, Ellemers, Fiske, Koch, & Yzerbyt
- Shared Horizontal & Vertical Evaluative Dimensions
- H = Communion, Warmth
 - Sociality
 - Morality
- V = Agency, Competence
 - Ability
 - Assertiveness



Challenges to SCM

- Maybe not 2 dimensions
 - What about morality?
 - What about beliefs? Politics? Religion?
 - Maybe just one = evaluation? Similarity?
- SCM selected dimensions
 - From literature & theory
 - Functional approach: “Thinking is for doing”
 - Not spontaneous



Data-driven Free Response

(Nicolas, Bai, & Fiske, in prep)



- Spontaneous generation studies (1-3)
 - Present groups one at a time
 - Ask for free responses (e.g., characteristics)
 - Use natural language analyses for content
 - Response order, timing
- Information-seeking studies (1-2)
 - Describe context, new, unknown group
 - Arriving in neighborhood or nation
 - Moving to their neighborhood or nation

Spontaneous Generation Studies 1-3

- S1-3: N = 392, 242, 400, online adults
- Groups (from lit)
- S1: 87 groups, each P saw all
 - 3 responses per group
 - Code own response
- S2: 87 groups, each P saw 30
 - 2 responses per group, 2 blocks (PxG)
 - Fast responses requested, recorded RT
- S3: 43 groups, each participant saw 6
 - 6 responses per group
 - Order
 - Warmth and competence scales
 - Ingroup identity

Study 1

Please list 3 characteristics that you spontaneously think about the following type of person (please use single words if possible, and not more than two per box)

People who are [.....]

--	--	--

Mentally Handicapped	Middle-class
Elderly	Rich
Blind	Lawyers
Disabled	CEOs
Unemployed	Politicians
Farmers	Vegan
Stutterers	Ivy-leaguers
Drug addicts	Republican
Homeless	German
Welfare recipients	Home-schooled
Undocumented immigrants	Nerds
Prostitutes	Hackers
Criminals	Engineers
Obese	Scientists
Christian	Accountants
White	Investors
American	Bankers
Asian	Middle-eastern
Gay	Black
Teachers	Hispanic
Nurses	Crossdressers

Which of the following characteristics fits best what you meant by [...]

- | | |
|--|---|
| <input type="radio"/> Traditional/Conservative | <input type="radio"/> Progressive/Liberal |
| <input type="radio"/> Confident/Assertive | <input type="radio"/> Not confident/Not assertive |
| <input type="radio"/> Competent/Skilled | <input type="radio"/> Incompetent/Unskilled |
| <input type="radio"/> Wealthy/High-status | <input type="radio"/> Poor/Low-status |
| <input type="radio"/> Friendly/Sociable | <input type="radio"/> Unfriendly/Unsociable |
| <input type="radio"/> Trustworthy/Honest | <input type="radio"/> Untrustworthy/Dishonest |
| <input type="radio"/> NONE OF THE ABOVE | |

Responses Captured by Dictionaries

- After preprocessing
 - Cleaning
 - Spell check
 - Lemmatization
- Self-coding agrees with dictionary topics
- 13 Dictionaries account for
 - 87-88% of total responses
 - 57-66% of unique responses

Studies 1-3: Counts on Main Topics

Studies 1-3:	Out of 3 responses	Out of 2 responses	Out of 6 responses	Mean %
Ability	.50	.35	.92	
Agency	.45	.37	.90	
Competence	.94	.62	1.82	31%
Morality	.50	.33	1.16	
Sociability	.45	.23	.92	
Warmth	.86	.50	1.86	28%
Beliefs	.21	.15	.26	
Politics	.15	.09	.18	
Religion	.06	.06	.08	
Status	.29	.23	.55	

Teaser: Information Seeking Studies

- Which dimensions when?
 - Neighborhood/nation
 - Psychology/sociology
- Warmth (Sociability, Morality) always among top
 - Especially in SCM/Personal: x 3 studies
 - Relatively, in Distant: Beliefs x 3, Competence x 2

Stereotype Content: Beyond Valence

- Warmth x competence space
- Structure → Stereotypes
(→ Prejudice → Discrimination)

Multiple Methods

- Surveys' correlational data
- Generalization over place, time, levels
- Experiments, online & lab
- Cross-national patterns re inequality (conflict)
- (Neural signatures)
- Spontaneous natural language

Thank you!



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Intergroup relations, social cognition, and social neuroscience

