



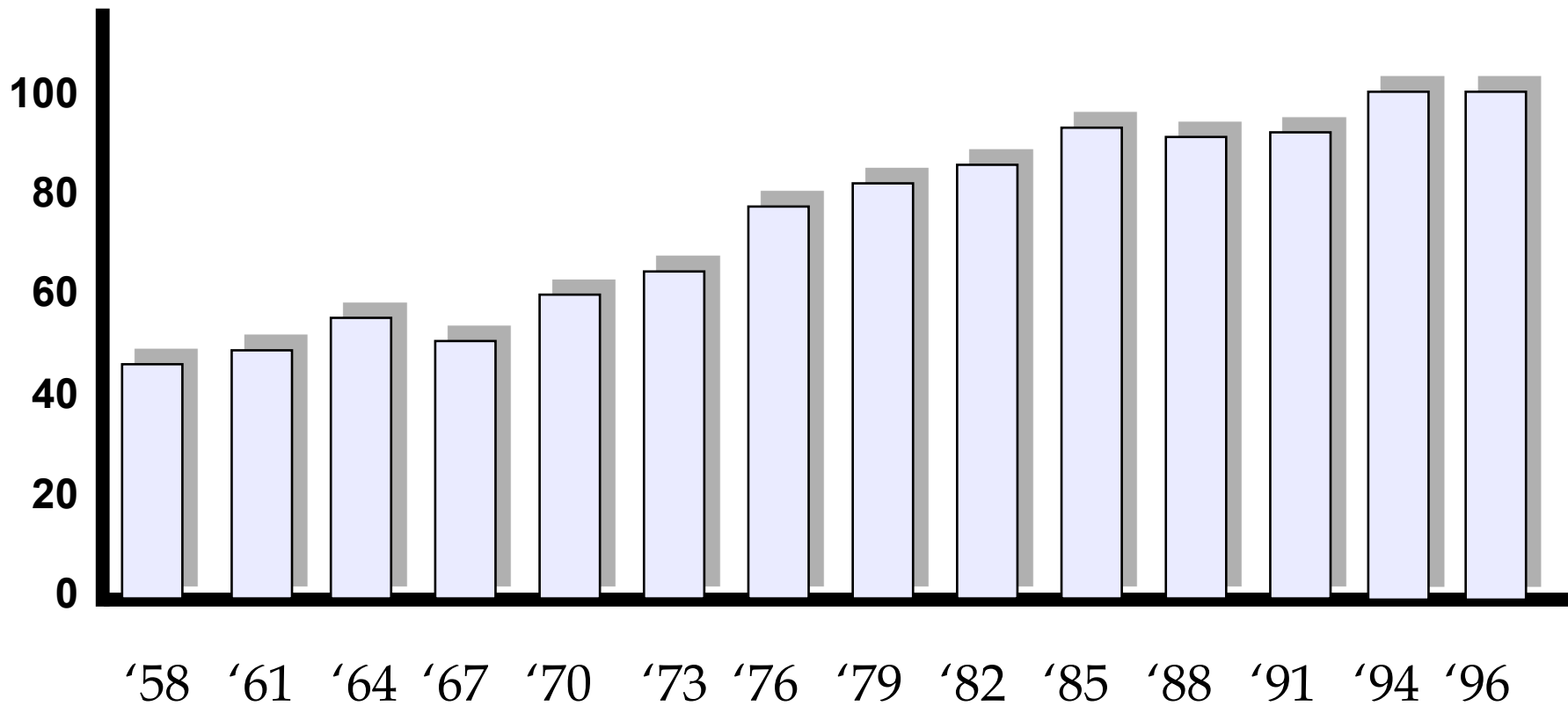
Implicit vs. Explicit Attitudes, Biases, and Stereotypes

The Science of Research on
Discrimination and Health
February 2-4, 2011
J. Dovidio
Yale University



Presidential Vote

Percent





Disparities in Health Care:

Outcomes (Beyond Access; Penner et al., 2010)

- Coronary heart disease: See specialist, prescribed medications, surgical procedures (Vaccarino et al., 2005)
- Prostate cancer: Screening and active treatment (Etzioni et al., 2002; Shavers et al., 2004; Underwood et al., 2004)
- Esophageal cancer: See surgeon, surgical procedures (Steyerberg et al., 2005)
- Greater for “high discretion” than for “low discretion” procedures (Geiger, 2003)





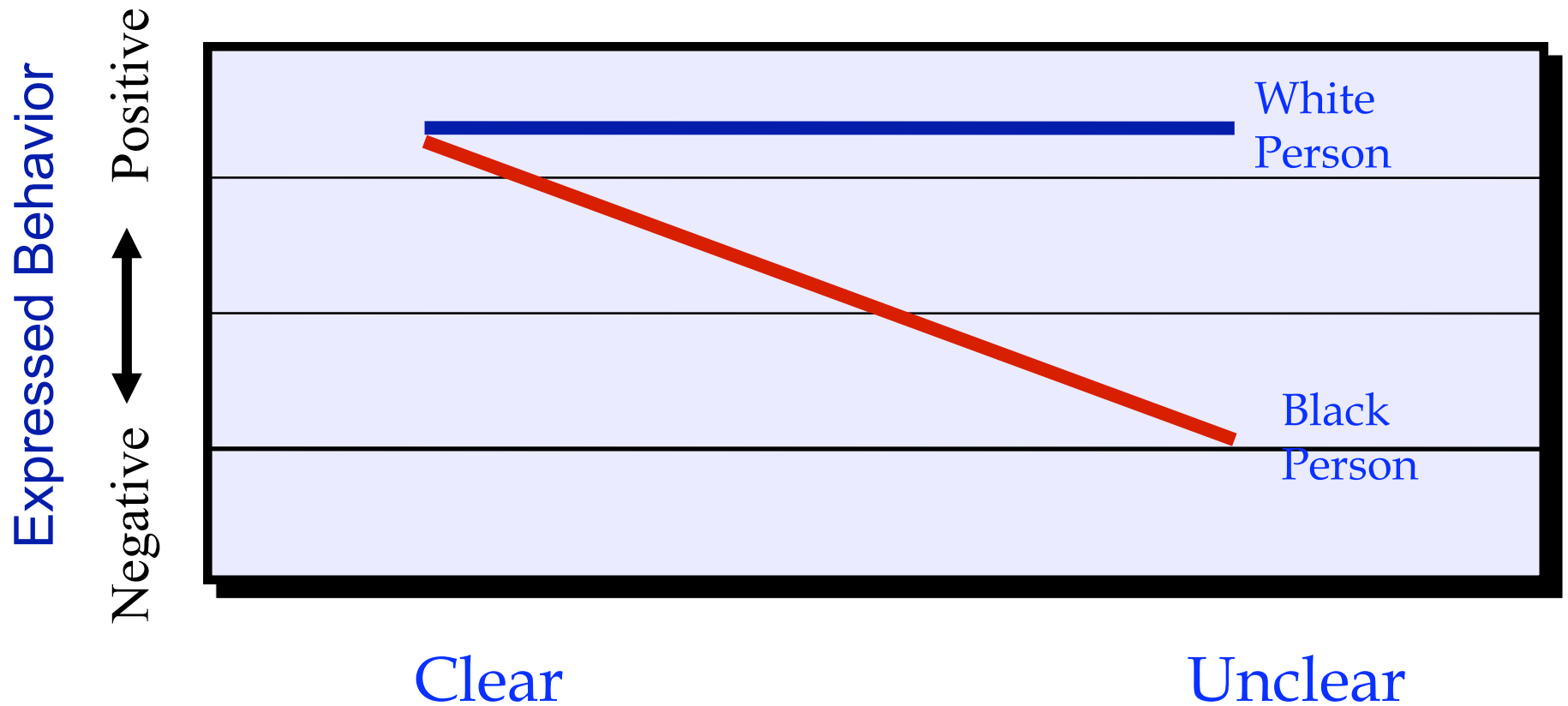
Factors Contributing to Bias

- Cognitive
 - social categorization
- Motivational
 - social dominance
- Sociocultural
 - cultural stereotypes

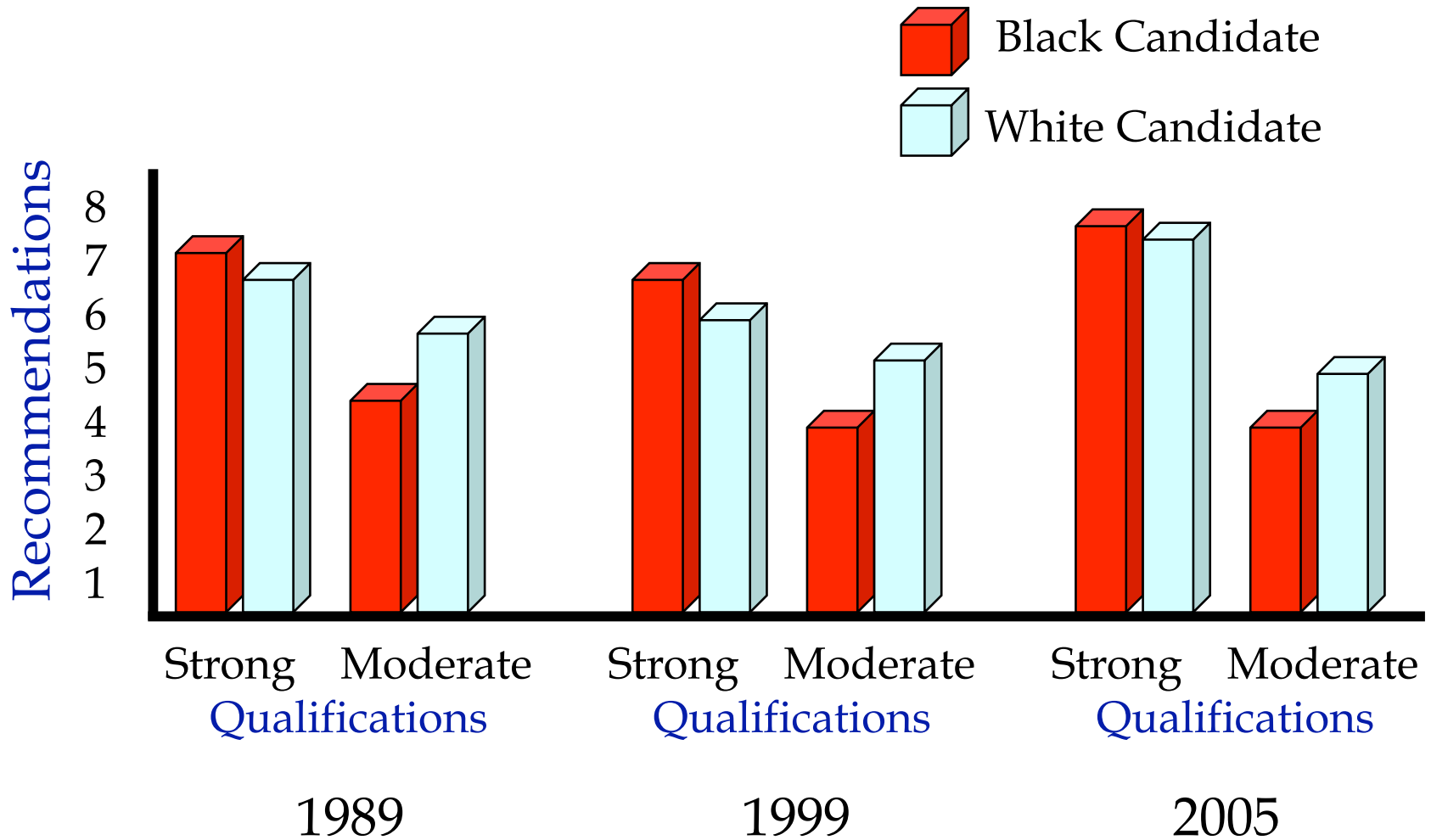





Outcomes: Subtle Bias



Personnel Decisions





Interaction, Subtle Bias, and Intergroup Relations: The Role of Explicit and Implicit Attitudes

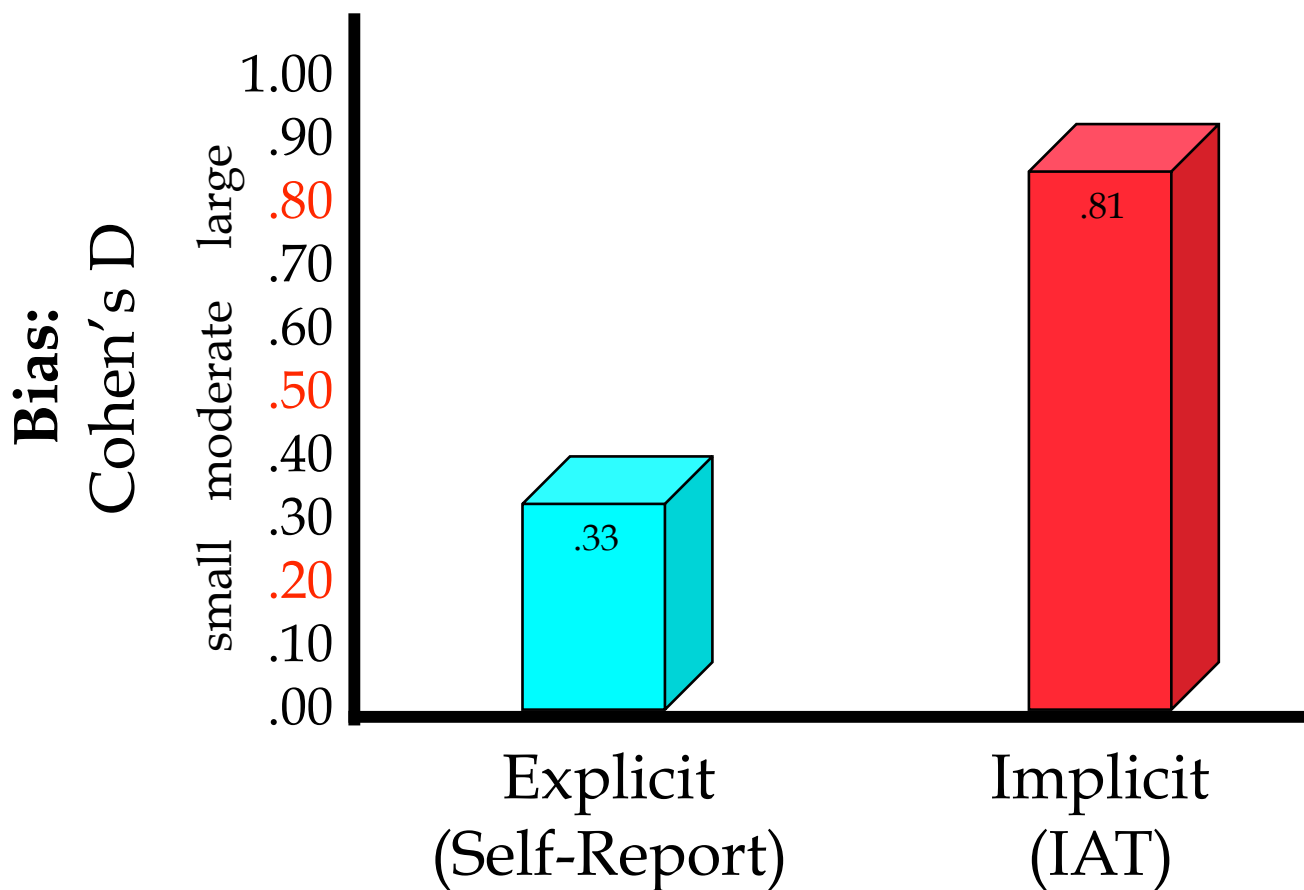
- Explicit Attitudes
 - Conscious
 - Deliberative
 - Social and Personal Values
 - Self-Report
- Implicit Attitudes
 - Unconscious
 - Spontaneous
 - Habit from Direct & Vicarious Experience
 - Response Latency (IAT: <https://harvard.implicit.edu>)





Explicit & Implicit Attitudes

Sabin, Nosek, Greenwald, & Rivara (2009; see also <https://implicit.harvard.edu>; n = 344,469)





Dissociation

<u>Study</u>	<u>Implicit Prejudice Measure</u>	<u>Explicit Prejudice Measure</u>	<u>Statistic (df, n, direction)</u>	<u>Effect size (r)</u>
Dasgupta et al. (1999)	IAT using names and pictures	Overall effect	r(73)=.145 {75}{+}	0.15
		Feelings thermometer	r(73)=.22	
		Semantic differential	r(73)=.31	
		Modern Racism	r(73)=-.055	
		Diversity scale	r(73)=.06	
Dovidio et al. (1997, study 1)	Evaluative race priming (Black vs. White faces; positive vs. negative adjectives)	Overall effect	r(22)=.215 {24}{+}	0.22
		Attitudes Toward Blacks	r(22)=.28	
		Modern racism Scale	r(22)=.15	
Dovidio et al. (1997, study 3)	Evaluative race priming (Black vs. White faces; positive vs. negative adjectives)	Overall effect	r(31)=-.03 {33}{-}	-0.03
		Modern Racism Scale	r(31)=.01	
		Old Fashioned Racism	r(31)=-.07	
Fazio et al. (1995, study 1)	Evaluative race priming (Black vs. White faces; positive vs. negative adjectives)	Modern Racism Scale	r(51)=.15 (53){-}	-0.15
Fazio et al. (1995, study 2)	Evaluative race priming (Black vs. White faces; positive vs. negative adjectives)	Modern Racism Scale	r(47)=.28 {49}{-}	-0.28





Influence of Implicit and Explicit Attitudes

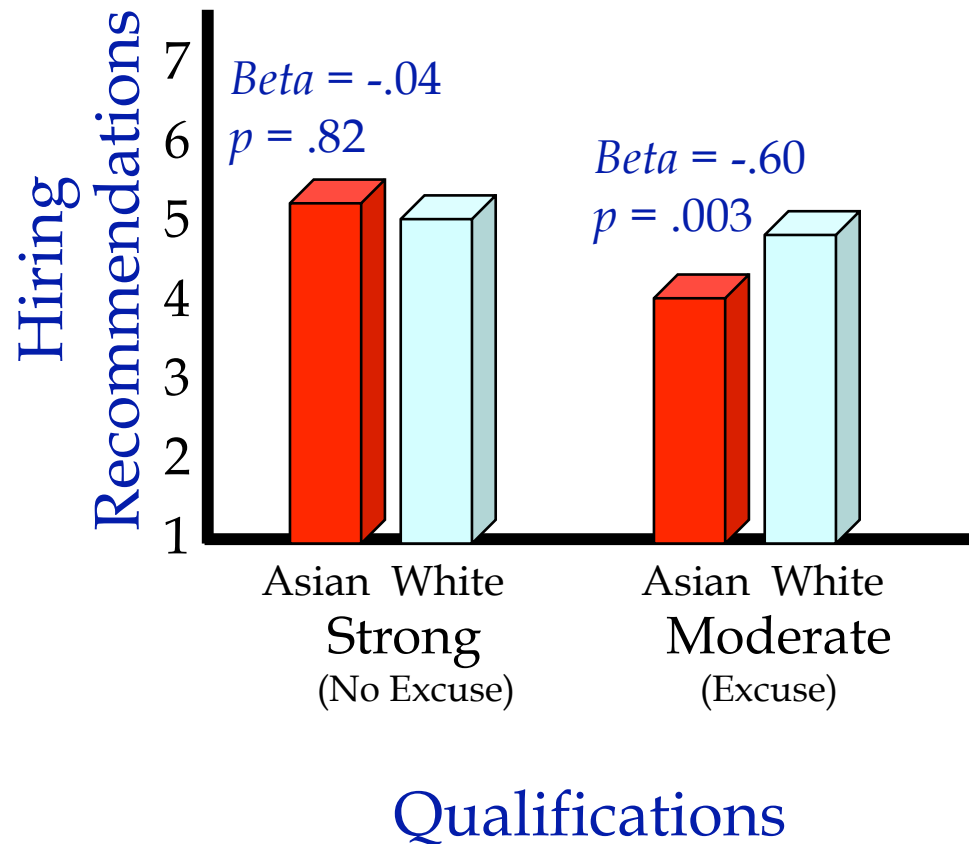
Behavior

		Behavior	
		Deliberative	Spontaneous
Attitudes	Explicit	Reflective Monitorable Controllable Overt	
	Implicit		“Reflexive” Unaware Uncontrollable Subtle



Implicit Bias and Hiring

(Son Hing et al., 2008)



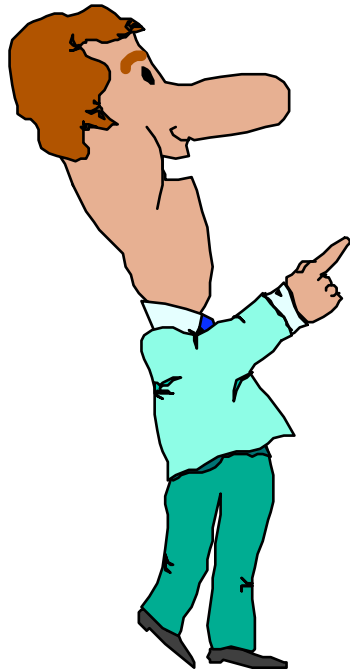


How friendly did
I behave?

Conscious attitude	.33*
Verbal behavior	.36*
Implicit Attitude	.09
Nonverbal Behavior	-.07

How friendly did
The White person behave?

Conscious attitude	-.14
Verbal behavior	-.17
Implicit Attitude	.40*
Nonverbal Behavior	.34*



White Actor



Black Observer





Implications for Health Disparities

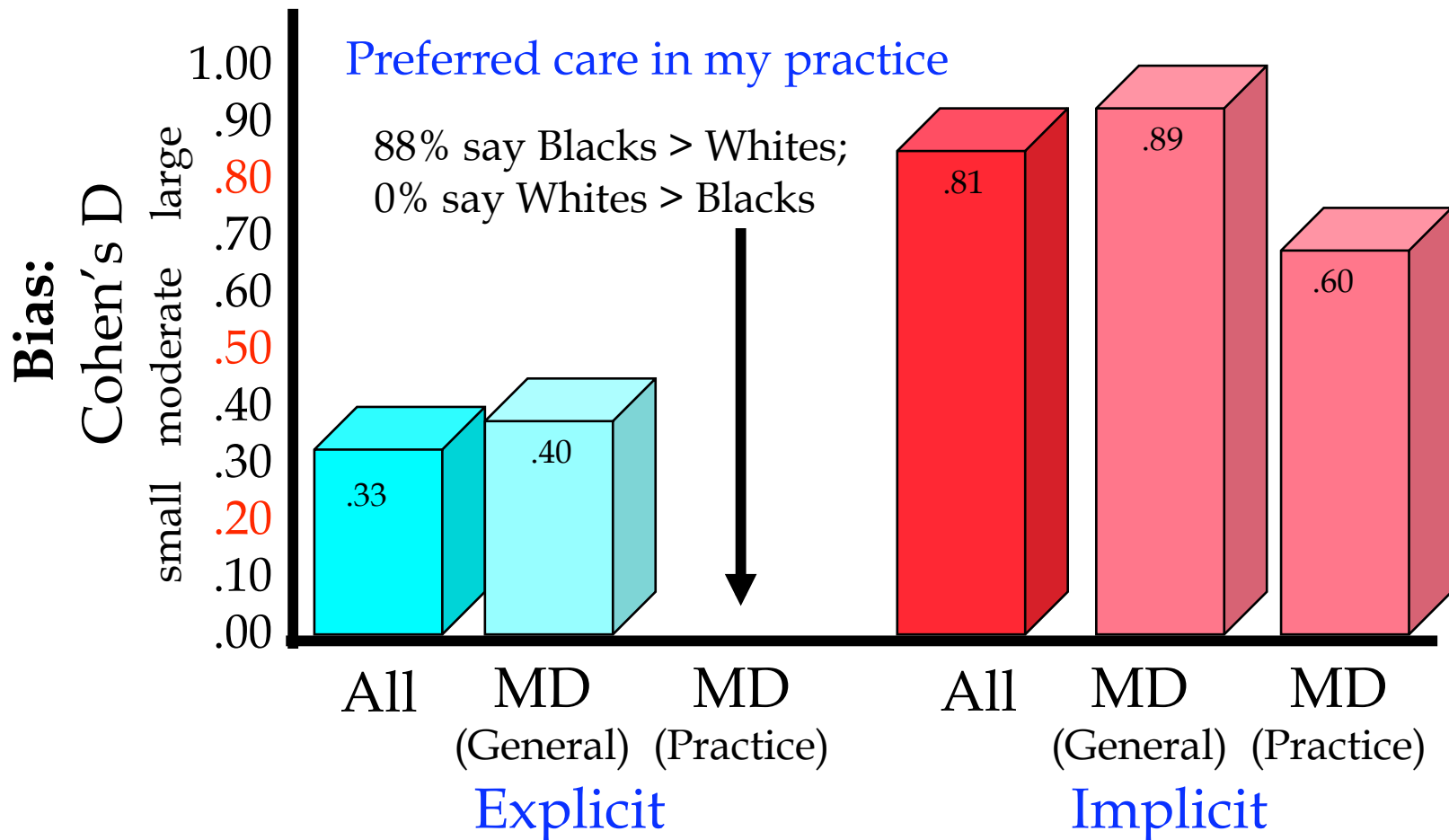
- Physician's Attitudes
- Physician's Decisions
- Physician-Patient Interaction





Physicians' Explicit & Implicit Attitudes

Sabin, Nosek, Greenwald, & Rivara (2009), Sabin, Rivara, & Greenwald (2008)





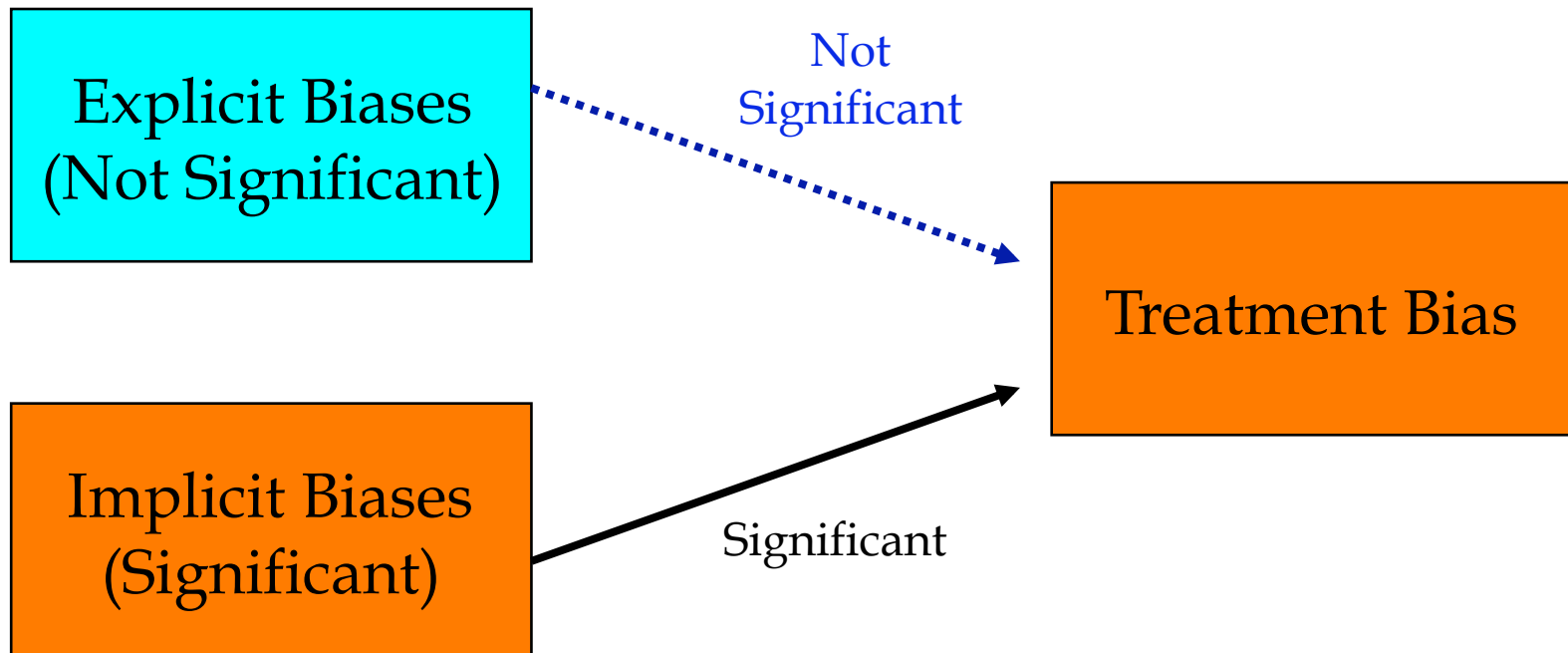
Subtle Bias and Health Care: Decision Making

(Green et al., 2007, JGIM)

- Vignette study of physicians' treatment (thrombolysis) of Black and White patients with symptoms of acute coronary syndrome.
- Assessed physicians' explicit and implicit attitudes and stereotypes (patient cooperativeness) and treatment (thrombolysis)



 *Green et al. (2007, JGIM)*





Disparities in Health Care: Interaction (Beyond Access)

- Race-discordant visits are shorter, involve less positive affect, and are less participatory (Albrecht et al., 2003; Cooper et al., 2003)
- 57% of Blacks say that discrimination occurs “often” or “very often” in interactions with White physicians (Malat & Hamilton, 2006)
- Blacks show lower levels of trust of their physician, and more *after* visit (Gordon et al., 2006; Halbert et al., 2006)
- Participation and trust related to patient satisfaction, seeking treatment, and adherence (Roter et al., 1997; Stewart, 2000)





Physician-Patient Interaction

(Penner, Dovidio, et al., 2010)

- **From the Doctor's Perspective:** How much did I try to involve the patient in decision making?

Doctor's explicit but not implicit bias

- **From the Patient's Perspective:** How warm and friendly was the doctor?

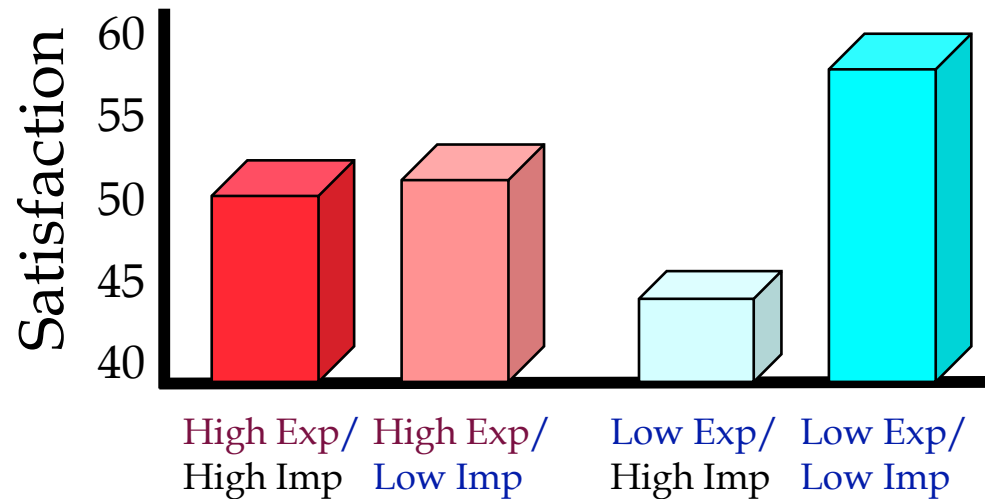
Doctor's implicit but not explicit bias





Physician-Patient Interaction

(Penner, Dovidio, et al., 2010)



Challenge: Eliminating Disparities

- Acknowledge the Role of Provider Bias
- Understand the Influence of Unconscious Bias
- Reduce Contextual Factors that Reduce Control (fatigue, cognitive demand, unfamiliarity)
- Help Good Intentions Translate into Positive Action





Thank You

