Essays in Microeconomics

Hussain Hadah

4/13/2023

1. **The Impact of Hispanic Last Names and Identity on Labor Market Outcomes**

2. **The Effect of Racial and Ethnic Attitudes on Hispanic Identity in the U.S.**

Section 1

The Impact of Hispanic Last Names and Identity on Labor Market Outcomes

Subsection 1

Introduction

Research Questions

- Do Hispanics face discrimination in the labor market?

1. Does having a Hispanic last name affect a person's labor market outcomes?
   - Audit-studies studied the effect of an ethnic-sounding name on employer discrimination (Bertrand and Mullainathan 2004; Fryer and Levitt 2004)
2. What is the effect of identifying as Hispanic on labor market outcomes?
   - This is another approach I will use to study discrimination using how a person identifies similar to Akerlof and Kranton (2000) model of identity

I jump to the last slide

Motivation

- Native-born White Hispanic men earn 21% less than White men (Duncan and Trejo 2018)
- A substantial portion of the gap is due to educational differences between Hispanics and Whites (Duncan, Hotz, and Trejo 2006; Duncan and Trejo 2018)
- In this chapter, I examine the role of having a Hispanic last name and identifying as Hispanic on labor market outcomes

Contribution

- Audit-studies investigated the role of ethnic and racial names on employer discrimination (Bertrand and Mullainathan 2004; Fryer and Levitt 2004)
- A drawback to these studies is that they only observe callbacks, but not wages
- I use a method developed by Rubinstein and Brenner (2014) and compare the children of inter-ethnic couples.
- I compare the outcomes of children with a White father-Hispanic mother, and Hispanic father-White mother
- The labor market outcome I am focusing on is log annual earnings

Subsection 2

Data

I use two data sets for this paper

1. The Current Population Survey (CPS) Annual Social and Economic (ASEC) Supplement from 1994 to 2019.
2. The 1970 to 1990 censuses

Studying the Effect of Hispanic Ancestry

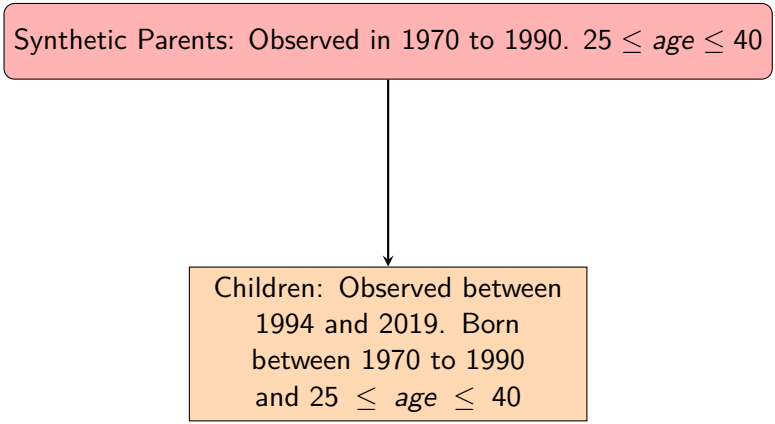
- I use the CPS for my main analysis.
- The sample includes:
  1. 1970 to 1990 birth cohorts
  2. Aged 25 to 40
  3. Native born White citizens
- I divide the sample into four groups, depending on the place of birth of parents.
  1. A parent is Hispanic if they were born in a Spanish-speaking country.
  2. White if they are native-born
- I do not observe parents' characteristics directly but impute from "synthetic" parents

Constructing synthetic parents

Following Rubinstein and Brenner (2014), I construct synthetic parents from the 1970-1990 censuses The sample includes:

1. Married couples
2. Whites
3. I assume that parents give birth between the ages of 25 and 40

Constructing synthetic parents (cont.)



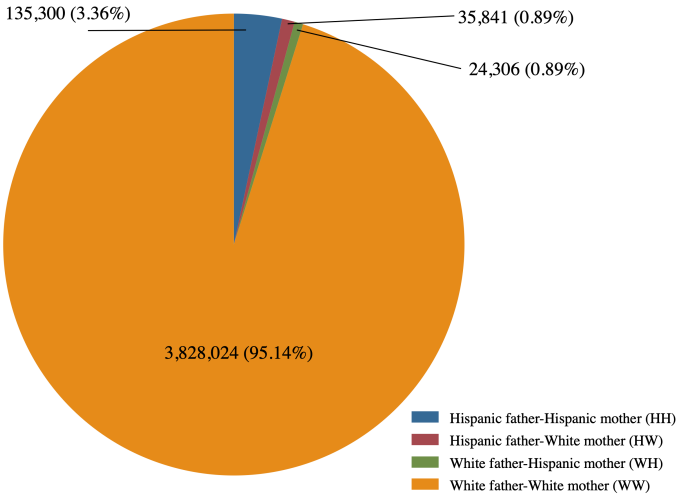
Defining Hispanics

- I introduce two alternative definitions of Hispanic:

1. Based on parent's country of birth (ancestry)
2. Based on the self-reported Hispanic identification

- Trejo (2017, 2019) has shown that those who self-identify as Hispanic have worse labor market outcomes

Distribution of the four groups



Tabulation

Table 1: Couples' Type

	Couples' Type			
	White Husband White Wife	White Husband Hispanic Wife	Hispanic Husband White Wife	Hispanic Husband Hispanic Wife
Observations	1,286,731 (0.97)	7,178 (0.01)	7,606 (0.01)	20,911 (0.02)

Educational outcomes of synthetic "parents" and children

Variables	Father's and Mother's Ethnicities				Differences	
	White Father White Mother (WW) (i)	White Father Hispanic Mother (WH) (ii)	Hispanic Father White Mother (HW) (iii)	Hispanic Father Hispanic Mother (HH) (iv)	HH - WW (v)	HW - WH (vi)
Panel A: Parent's						
Husband'seducation (Total Years)	13.05	12.32	10.65	8.93	-4.11**	-1.67**
	(2.44)	(3.33)	(4.39)	(4.41)	(0.02)	(0.04)
Wife'seducation (Total Years)	12.74	11.03	11.54	8.6	-4.13**	0.51**
	(2.12)	(3.92)	(3.12)	(4.13)	(0.02)	(0.04)
Total Household seducation (Total Years)	25.78	23.35	22.19	17.54	-8.25**	-1.16*
	(4.08)	(6.51)	(6.69)	(7.83)	(0.03)	(0.07)
Panel B: Education						
Men's education (Total Years)	13.91	13.58	13.21	12.91	-1.00***	-0.36**
	(2.39)	(2.35)	(2.32)	(2.26)	(0.01)	(0.03)
Women's education (Total Years)	14.29	13.87	13.42	13.27	-1.01***	-0.46**
	(2.41)	(2.47)	(2.35)	(2.37)	(0.01)	(0.03)

Summary statistics of labor market outcomes and self-reported Hispanic identity

Variables	Father's and Mother's Ethnicities				Differences	
	White Father White Mother (WW) (i)	White Father Hispanic Mother (WH) (ii)	Hispanic Father White Mother (HW) (iii)	Hispanic Father Hispanic Mother (HH) (iv)	HH - WW (v)	HW - WH (vi)
Panel C: Employment and Earnings						
Men's Employment Rate	0.95	0.94	0.92	0.93	-0.02***	-0.02***
	(0.22)	(0.23)	(0.26)	(0.26)	(0.00)	(0.00)
Women's Employment Rate	0.96	0.95	0.93	0.94	-0.02***	-0.02***
	(0.2)	(0.22)	(0.25)	(0.24)	(0.00)	(0.00)
Men's Log Hourly Earnings	2.48	2.41	2.4	2.41	-0.07***	-0.00**
	(0.45)	(0.45)	(0.44)	(0.43)	(0.01)	(0.02)
Women's Hourly Earnings	2.33	2.33	2.27	2.3	-0.02***	-0.06**
	(0.49)	(0.46)	(0.45)	(0.41)	(0.01)	(0.02)
Men's Log Annual Earnings	10.25	10.08	10.04	10.01	-0.25**	-0.04**
	(1.01)	(1.05)	(1.06)	(1.04)	(0.01)	(0.03)
Women's Hourly Earnings	9.46	9.54	9.47	9.53	0.07**	-0.07*
	(1.78)	(1.64)	(1.57)	(1.52)	(0.02)	(0.06)
Panel D: Hispanic Identity						
Men	0.05	0.81	0.88	0.97		
Women	0.06	0.85	0.87	0.97		

Subsection 3

Empirical Model & Results

Effect of Hispanic Last Name

$$Y_{ist} = \beta_1 HW_{ist} + \beta_2 WH_{ist} + \beta_3 HH_{ist} + X'_{ist}\pi + \gamma_t + \lambda s + \phi_{ist}$$

- Y_{ist} is the log annual earnings for person i at time t
- HW_{ist}, WH_{ist} and HH_{ist} are dummy variables for parents' ethnicities.
- X_{ist} is a vector of controls
- γ_t is time fixed effects
- ϕ_{ist} is the error term
- β_1, β_2 and β_3 are the parameters of interest
- They estimate the gaps between the groups and WW
- I restrict the analysis to full-time full year and waged and salaried males

Last name effect on log annual earnings

	(1) Log annual earnings	(2) Log annual earnings
WH_i	−0.14***	−0.09***
	(0.03)	(0.02)
HW_i	−0.20***	−0.11***
	(0.02)	(0.01)
HH_i	−0.24***	−0.12***
	(0.02)	(0.01)
$HW_i - WH_i$	-0.06**	-0.02
	(0.03)	(0.02)
Observations	129 359	129 359
State FE	X	X
Year FE	X	X
Controlling for:		
Hours Worked	X	X
Age	X	X
Education		X

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Last name effect on log annual earnings

	(1) Log annual earnings	(2) Log annual earnings
WH_i	−0.14***	−0.09***
	(0.03)	(0.02)
HW_i	−0.20***	−0.11***
	(0.02)	(0.01)
HH_i	−0.24***	−0.12***
	(0.02)	(0.01)
$HW_i - WH_i$	-0.06**	-0.02
	(0.03)	(0.02)
Observations	129 359	129 359
State FE	X	X
Year FE	X	X
Controlling for:		
Hours Worked	X	X
Age	X	X
Education		X

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Last name effect on log annual earnings

	(1) Log annual earnings	(2) Log annual earnings
WH_i	−0.14***	−0.09***
	(0.03)	(0.02)
HW_i	−0.20***	−0.11***
	(0.02)	(0.01)
HH_i	−0.24***	−0.12***
	(0.02)	(0.01)
$HW_i - WH_i$	-0.06**	-0.02
	(0.03)	(0.02)
Observations	129 359	129 359
State FE	X	X
Year FE	X	X
Controlling for:		
Hours Worked	X	X
Age	X	X
Education		X

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Effect of identifying as Hispanic

$$
\begin{aligned}
Y_{ist} = {} & \beta_1 HW_{ist} + \beta_2 WH_{ist} + \beta_3 HH_{ist} + \\
& \beta_4 WH_{ist} \cdot Hispanic_{ist} + \beta_5 HW_{ist} \cdot Hispanic_{ist} + \beta_6 HH_{ist} \cdot Hispanic_{ist} + \\
& X'_{ist}\pi + \gamma_t + \lambda s + \phi_{ist}
\end{aligned}
$$

Restrict the sample to HW and WH Where:

- Y_{ist} is the log hourly earnings for person i at time t
- HW_{ist}, WH_{ist} and HH_{ist} are dummy variables for parents' ethnicities
- $Hispanic_{ist} = \begin{cases} 1 & \text{if individual identifies as Hispanic} \\ 0 & \text{otherwise} \end{cases}$

Effect of identifying as Hispanic (cont.)

$$Y_{ist} = \beta_0 + \beta_1 HW_{ist} + \beta_2 WH_{ist} + \beta_3 HH_{ist} +$$
$$\beta_4 WH_{ist} \cdot Hispanic_{ist} + \beta_5 HW_{ist} \cdot Hispanic_{ist} + \beta_6 HH_{ist} \cdot Hispanic_{ist} +$$
$$X'_{ist} + \gamma_t + \phi_{ist}$$

- X_{ist} is a vector of controls
- γ_t is time fixed effects
- ϕ_{ist} is the error term
- β_4, β_5 and β_6 estimates the earnings gap of identifying as Hispanic
- I restrict the analysis to full-time full year and waged and salaried males

Results

	(1) Log annual earnings	(2) Log annual earnings
$WH_i \times Hispanic_i$	−0.14***	−0.08
	(0.05)	(0.05)
$HW_i \times Hispanic_i$	−0.18***	−0.12*
	(0.07)	(0.06)
$HH_i \times Hispanic_i$	−0.10*	−0.06
	(0.06)	(0.05)
$HW_i \times Hispanic_i - WH_i \times Hispanic_i$	-0.03	-0.04
	(0.07)	(0.06)
Observations	129 359	129 359
State FE	X	X
Year FE	X	X
Controlling for:		
Hours Worked	X	X
Age	X	X
Education		X

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Results

	(1) Log annual earnings	(2) Log annual earnings
$WH_i \times Hispanic_i$	−0.14***	−0.08
	(0.05)	(0.05)
$HW_i \times Hispanic_i$	−0.18***	−0.12*
	(0.07)	(0.06)
$HH_i \times Hispanic_i$	−0.10*	−0.06
	(0.06)	(0.05)
$HW_i \times Hispanic_i - WH_i \times Hispanic_i$	-0.03	-0.04
	(0.07)	(0.06)
Observations	129 359	129 359
State FE	X	X
Year FE	X	X
Controlling for:		
Hours Worked	X	X
Age	X	X
Education		X

* p < 0.1, ** p < 0.05, *** p < 0.01

Results

	(1) Log annual earnings	(2) Log annual earnings
$WH_i \times Hispanic_i$	−0.14***	−0.08
	(0.05)	(0.05)
$HW_i \times Hispanic_i$	−0.18***	−0.12*
	(0.07)	(0.06)
$HH_i \times Hispanic_i$	−0.10*	−0.06
	(0.06)	(0.05)
$HW_i \times Hispanic_i - WH_i \times Hispanic_i$	-0.03	-0.04
	(0.07)	(0.06)
Observations	129 359	129 359
State FE	X	X
Year FE	X	X
Controlling for:		
Hours Worked	X	X
Age	X	X
Education		X

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Conclusion

- I compare the children of inter-ethnic marriages to study the labor market impact of Hispanic last names
- While males born to White father-Hispanic mother earn less than males born to Hispanic father-White mother, this gap is entirely due to the education gap
- I do not find a significant effect of having a Hispanic last name
- I do find that men that identify as Hispanic earn significantly less than those that do not even when controlling for ancestry and education

Section 2

The Effect of Racial and Ethnic Attitudes on Hispanic Identity in the U.S.

The Role of Identity

- Identity matters in many economic contexts (Grossman and Helpman 2021)
- Identity could shift public opinions toward trade (Grossman and Helpman 2021)
- Racial and gender attitudes affect the racial and gender earnings gaps (Charles and Guryan 2008; Charles, Guryan, and Pan 2018)
- Person's identity has personal costs/benefits and social costs/benefits that affect economic outcomes (Akerlof and Kranton 2000)
- Thus, it is important to understand if and how ethnic identities are chosen and shaped by society

The Role of Identity

- Identity matters in many economic contexts (Akerlof and Kranton 2000)
  - A person's identity contributes to utility and affects decision-making (Akerlof and Kranton 2000)
- Identity could shift public opinions toward trade (Grossman and Helpman 2021)
- Racial and gender attitudes affect the racial and gender earnings gaps (Charles and Guryan 2008; Charles, Guryan, and Pan 2018)
- Thus, it is important to understand if and how ethnic identities are chosen and shaped by society

Research Question

- How do individual characteristics and social attitudes toward racial and ethnic minorities affect the self-reported identity of Hispanics in the United States?

Measuring Hispanic Identity

- In most datasets, ethnicity is self-reported, i.e. *subjective*
- A more *objective* measure would be based on ancestry, name, etc.
- Data on objective measures of Hispanic identity is not commonly available
- I use the *Current Population Surveys*, which report the country of birth of parents
- Three generations can be identified as young people still living with parents

Subsection 1

Data

Current Population Survey (CPS)

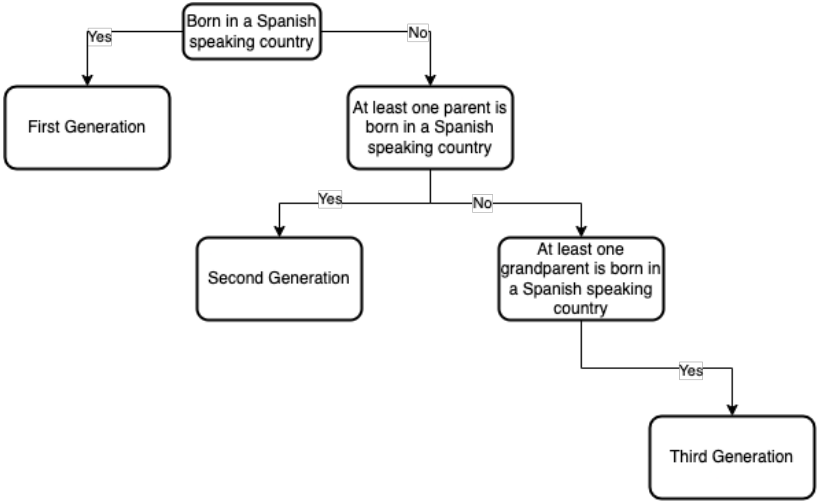
- Monthly survey of more than 65,000 households
- I link household members to each other
- Starting in 1994, CPS asked about the place of birth of parents
- This allows me to construct an objective measure of the Hispanic identity of minors under the age of 17 that live with their parents
- The sample is children 17-year-old and younger living with their parents between 2004 to 2021

Summary Statistics of CPS Sample

Characteristic	Overall	By Generation		
	All Sample N = 1,131,828	**First** N=119,778	**Second** N=761,450	**Third** N=254,699
Female	0.49	0.48	0.49	0.49
Hispanic	0.91	0.96	0.94	0.82
Age	8.6 (5.1)	11.5 (4.3)	8.3 (5.0)	7.9 (5.0)
College Graduate: Father	0.14	0.15	0.11	0.23
College Graduate: Mother	0.14	0.15	0.11	0.22
Total Family Income (1999 dollars)	39,882 (48,692)	31,927 (38,804)	36,726 (45,353)	53,000 (58,984)

* Mean (SD)

Identifying Three Generations of Hispanics



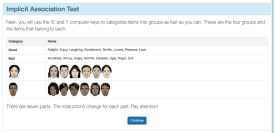
Implicit Association Test (IAT) as a Measure of Bias

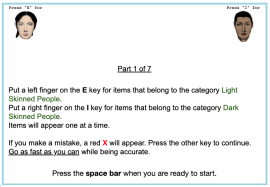
- An implicit association test measures how people associate:
  - Concepts as in dark-skinned people
  - Evaluations as in good, bad, or stereotypes
- The innovation of such the test that it could measure the attitudes and beliefs of people that they would be unwilling to report on a survey
- IAT was shown to be correlated with economic outcomes, voting behavior, and health (Chetty et al. 2020; Glover, Pallais, and Pariente 2017; Friese, Bluemke, and Wänke 2007; Leitner et al. 2016; Alsan, Garrick, and Graziani 2019)
- I use data from 2004 to 2021

Summary Statistics of IAT Sample

Characteristic	IAT N = 1,519,309	CPS N = 29,981,618
Age	28 (11)	38 (23)
Female	0.68	0.51
White	0.62	0.81
Non-Hispanic White	0.56	0.68
Hispanic	0.14	0.13
Education Levels		
Bachelor's degree	0.17	0.14
High school dropout	0.10	0.33
High school graduate	0.09	0.23
Master's degree	0.12	0.06
Other	0.48	0.21
Professional degree	0.05	0.02
Bias	0.30 (0.42)	

Implicit Association Test (IAT): Example





Subsection 2

Empirical Strategy

Estimating the Effect of Bias on Subjective Hispanic Identity

I am going to estimate the following effects separately for generation $g \in \{1, 2, 3\}$

$$H^g_{ist} = \beta^g_1 Bias_{st} + \beta^g_2 DadCollegeGrad_{ist} + \beta^g_3 MomCollegeGrad_{ist} + \beta^g_4 Woman_{ist} + X^g_{ist}\pi + \gamma_{rt} + \varepsilon_{ist}; \text{where } g \in \{1, 2, 3\}$$

Where for person i in state s interviewed at year t:

- H^g_{ist} is the subjective Hispanic identity of person from generation $g \in \{1, 2, 3\}$
- $Bias_{st}$ is the average bias in state s at year t
- X^p_{ist}, X^s_{ist} are vectors of parental characteristics and controls that include education, parental types, age, and sex
- γ_{rt} is region $\times$ time fixed effects

Estimating the Effect of Bias on Subjective Hispanic Identity

$$H^g_{ist} = \beta^g_1 Bias_{st} + \beta^g_2 DadCollegeGrad_{ist} + \beta^g_3 MomCollegeGrad_{ist} + \beta^g_4 Woman_{ist} + X^g_{ist}\pi + \gamma_{rt} + \varepsilon_{ist}; \text{where } g \in \{1, 2, 3\}$$

The coefficient of interest is

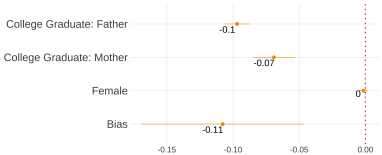
- β^g_1 that estimates the effect of bias on the subjective Hispanic identity

Subsection 3

Results

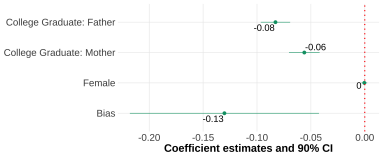
Relationship Between Self-Reported Hispanic Identity And Bias: By Generation

(a) All Generations

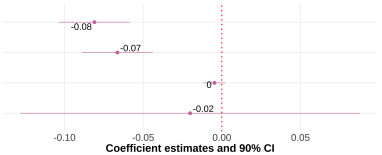


(b) First-Generation

(c) Second-Generation

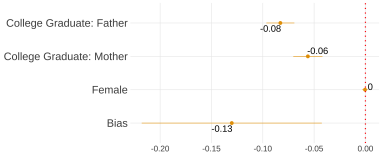


(d) Third-Generation

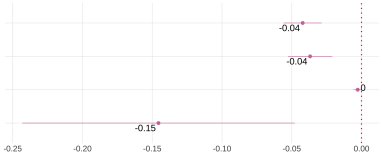


Relationship Between Self-Reported Hispanic Identity and Bias: By Parental Types

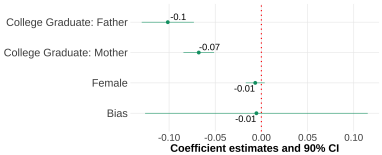
(a) Second-Generation (All Parental Types)



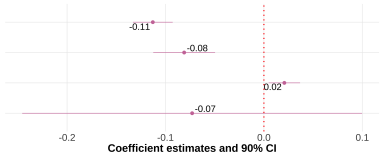
(b) Hispanic Fathers-Hispanic Mothers



(c) Hispanic Fathers-White Mothers



(d) White Fathers-Hispanic Mothers



Relationship Between Bias And Self-Reported Hispanic Identity Among Third-Generation Hispanic Immigrants: By Grandparental Type

	Number of Hispanic Grandparents			
	(1) One	(2) Two	(3) Three	(4) Four
Bias	−0.04	0.03	0.19	−0.14*
	(0.11)	(0.09)	(0.26)	(0.07)
Female	−0.01	0.00	−0.01	0.00
	(0.01)	(0.01)	(0.01)	(0.01)
College Graduate: Mother	−0.11***	−0.07***	0.02	−0.02
	(0.03)	(0.02)	(0.02)	(0.01)
College Graduate: Father	−0.11***	−0.08***	0.02	−0.03*
	(0.03)	(0.01)	(0.01)	(0.01)
N	55 051	74 100	12 194	57 646
Year × Region FE	X	X	X	X

Bias Negatively Affects Identity

- Attitudes toward ethnic minorities have a significant negative effect on the subjective identity of Hispanics
- A one-unit increase in bias is associated with a:
  - 14 p.p. decrease in the subjective Hispanic identity of first-generation Hispanic immigrants
  - 23 p.p. decrease in the subjective Hispanic identity of second-generation Hispanic immigrants
- A one-unit increase in bias is associated with a:
  - 37 p.p. decrease in the subjective Hispanic identity of the second-generation Hispanic immigrants of Hispanic fathers-Hispanic Mothers

References I

Akerlof, George A., and Rachel E. Kranton. 2000. "Economics and Identity." *Quarterly Journal of Economics* 115 (3): 715–53. https://doi.org/10.1162/003355300554881.

Alsan, Marcella, Owen Garrick, and Grant Graziani. 2019. "Does Diversity Matter for Health? Experimental Evidence from Oakland." *American Economic Review* 109 (12): 4071–111. https://doi.org/10.1257/aer.20181446.

Charles, Kerwin Kofi, and Jonathan Guryan. 2008. "Prejudice and Wages: An Empirical Assessment of Becker's The Economics of Discrimination." *Journal of Political Economy* 116 (5): 773–809. https://doi.org/10.1086/593073.

Charles, Kerwin Kofi, Jonathan Guryan, and Jessica Pan. 2018. "The Effects of Sexism on American Women: The Role of Norms Vs. Discrimination." Working {{Paper}}. Working Paper Series. National Bureau of Economic Research. https://doi.org/10.3386/w24904.

Chetty, Raj, Nathaniel Hendren, Maggie R Jones, and Sonya R Porter. 2020. "Race and Economic Opportunity in the United States: An Intergenerational Perspective*." *The Quarterly Journal of Economics* 135 (2): 711–83. https://doi.org/10.1093/qje/qjz042.

References II

Friese, Malte, Matthias Bluemke, and Michaela Wänke. 2007. "Predicting Voting Behavior with Implicit Attitude Measures: The 2002 German Parliamentary Election." *Experimental Psychology* 54 (4): 247–55. https://doi.org/10.1027/1618-3169.54.4.247.

Glover, Dylan, Amanda Pallais, and William Pariente. 2017. "Discrimination as a Self-Fulfilling Prophecy: Evidence from French Grocery Stores." *Quarterly Journal of Economics* 132 (3): 1219–60. https://doi.org/10.1093/qje/qjx006.

Grossman, Gene M, and Elhanan Helpman. 2021. "Identity Politics and Trade Policy." *The Review of Economic Studies* 88 (3): 1101–26. https://doi.org/10.1093/restud/rdaa031.

Leitner, Jordan B., Eric Hehman, Ozlem Ayduk, and Rodolfo Mendoza-Denton. 2016. "Racial Bias Is Associated with Ingroup Death Rate for Blacks and Whites: Insights from Project Implicit." *Social Science & Medicine* 170 (December): 220–27. https://doi.org/10.1016/j.socscimed.2016.10.007.